

MINE
ACTION
REVIEW

CLEARING THE MINES 2022

A REPORT BY MINE ACTION REVIEW FOR THE TWENTIETH MEETING
OF STATES PARTIES TO THE ANTI-PERSONNEL MINE BAN CONVENTION

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Other information

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CONTENTS

KEY FINDINGS	1	STATES PARTIES	23
OVERVIEW	3	Afghanistan	24
Summary of Progress	3	Angola	39
Global Mine Contamination	4	Bosnia and Herzegovina	55
States that Have Completed Mine Clearance since 1997	7	Cambodia	74
Mine Clearance in 2021	7	Cameroon	88
Clearance Deadlines and Progress in Article Implementation	10	Chad	91
Programme Performance in Mine-Affected States Parties	15	Colombia	99
Gender and Diversity	19	Croatia	118
Environmental Policies and Action in Affected States Parties	20	Cyprus	129
Outlook	21	Democratic Republic Of Congo	134
		Ecuador	141
		Eritrea	148
		Ethiopia	154
		Guinea-Bissau	164
		Iraq	173
		Mali	189
		Mauritania	193
		Niger	202
		Nigeria	207
		Oman	214
		Palestine	219
		Peru	225
		Senegal	232
		Serbia	238
		Somalia	248
		South Sudan	262
		Sri Lanka	272
		Sudan	289
		Tajikistan	300
		Thailand	314
		Türkiye	324
		Ukraine	336
		Yemen	351
		Zimbabwe	362

STATES NOT PARTY **381**

Armenia	382
Azerbaijan	389
China	401
Cuba	404
Egypt	406
Georgia	409
India	419
Iran	422
Israel	426
Kyrgyzstan	431
Lao PDR	433
Lebanon	441
Libya	457
Morocco	467
Myanmar	471
North Korea	477
Pakistan	479
Russia	482
South Korea	486
Syria	489
Uzbekistan	499
Vietnam	502

OTHER AREAS **511**

Kosovo	512
Nagorno-Karabakh	521
Western Sahara	526

ANNEX **531**

Annex 1: Article 5 of the Anti-Personnel Mine Ban Convention	532
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ABBREVIATIONS AND ACRONYMS **533**

KEY FINDINGS

- **In 2021, a global total of more than 152 square kilometres of mined area was cleared of anti-personnel mines, with the destruction of over 157,000 anti-personnel mines.** This represents a slight decrease on the 153.4km² cleared in 2020. It is nonetheless an impressive achievement, especially given the continued impact of COVID-19 in many countries.
- No States Parties to the 1997 Anti-Personnel Mine Ban Convention (APMBC) declared fulfilment of their Article 5 clearance obligations in the course of 2021. In June 2021, **Guinea-Bissau**, which had declared completion of mine clearance in 2012, reported that it had discovered previously unrecorded mined areas on its territory.
- Since the adoption of the APMBC in 1997, clearance has been completed in 33 States (all States Parties except for Nepal) and one other area (Taiwan).¹

In 2020, the United Kingdom reported fulfilment of its Article 5 clearance obligations, after the conclusion of demining operations in the Falkland Islands/Malvinas. **Argentina**, however, has not accepted this declaration and has said that it continues to be prevented from accessing the territory and cannot verify or endorse the United Kingdom's demining. It has therefore submitted a request for a three-year extension to its Article 5 deadline for consideration at the Twentieth Meeting of States Parties, on the basis of the jurisdiction it asserts over the islands. Since anti-personnel mine clearance on the islands was completed in 2020, Mine Action Review does not consider Argentina to be mine-affected.
- As of 1 October 2022, **56 States and 3 other areas** (territories not generally recognised as States) **were contaminated with anti-personnel mines.**²

Of the 56 affected States around the world, 34 are party to the APMBC. As at 1 October 2022, **three of these States Parties (Cameroon, Eritrea, and Mali) did not have a legal Article 5 deadline in force** even though each has ongoing survey and clearance obligations under the Convention.
- Based on Mine Action Review's assessment of the extent of contamination in affected States Parties, **Afghanistan, Cambodia, and Iraq are massively contaminated** (defined as covering more than 100km² of land), while **heavy contamination** (covering more than 20km²–100km²) **exists in Angola, Bosnia and Herzegovina (BiH), Thailand, Türkiye, and Yemen.** In other affected States Parties, the extent of anti-personnel mine contamination is medium or light.
- Total global clearance recorded for 2021 was only a 1 per cent reduction on clearance output in 2020, owing to a huge increase in clearance in State not party Azerbaijan. Large reductions were recorded in States Parties Croatia (a drop of more than 15km²), Afghanistan (a drop of over 6.5km²), and Cambodia (a drop of almost 6.3km²).
- **The largest clearance output was reported for Cambodia**, which recorded more than 43km² of clearance in 2021, followed by Croatia, which recorded more than 34km² in 2021, and Afghanistan, which recorded more than 24km² of clearance; despite the drop in respective clearance output in all three States compared to 2020. **The greatest number of anti-personnel mines destroyed in 2021** in a single country was in **Zimbabwe (26,534)**, followed by Sri Lanka (23,266).

Some 85% of global anti-personnel mined area cleared in 2021 was in States Parties to the APMBC. The proportion of clearance in States not party was significantly increased by the large amount of mine clearance in **Azerbaijan** which, through the 2020 conflict with Armenia, regained vast areas of territory contaminated with anti-personnel mines and explosive remnants of war.
- The extent of implementation of Article 5 clearance obligations varies widely between States Parties. **Of the 34 mine-affected States Parties as at 1 October 2022, only two were believed to be firmly on track to meet their respective treaty deadlines: Oman** (February 2025) and **Sri Lanka** (June 2028). Peru (end 2024) and Zimbabwe (end 2025) were still just on track to meet their deadlines, but with Zimbabwe's ability to meet its deadline largely contingent on securing sufficient funding. It remained unclear, however, whether Croatia would complete clearance by its extended Article 5 deadline of March 2026.

The other 29 States Parties with an Article 5 deadline in place were either not on track to fulfil Article 5 in time or were in violation of their obligations under the Convention.

1 States Parties: Albania, Algeria, Bhutan, Bulgaria, Burundi, Chile, Rep. of Congo, Costa Rica, Denmark, Djibouti, France, The Gambia, Germany, Greece,* Guatemala, Honduras, Hungary, Jordan, Malawi, Montenegro,* Mozambique, Nicaragua, Republic of North Macedonia, Palau,* Rwanda, Suriname, Swaziland, Tunisia, Uganda, United Kingdom, Venezuela, and Zambia. In addition, State not Party, Nepal, and "other area", Taiwan, have also completed mine clearance. * indicates States Parties that are not listed on the AMPBC Implementation Support Unit (ISU)'s list, "States Parties That Have Completed Article 5", at: <http://bit.ly/30xgu9r>, presumably because they did not officially report having mined areas under the APMBC and/or have not made a formal declaration of fulfilment of their clearance obligations under the Convention.

2 **Afghanistan, Angola, Armenia, Azerbaijan, Bosnia and Herzegovina, Cambodia, Cameroon, Chad, China, Colombia, Croatia, Cuba, Cyprus, DR Congo, Ecuador, Egypt, Eritrea, Ethiopia, Georgia, Guinea-Bissau, India, Iraq, Iran, Israel, Kosovo, Kyrgyzstan, Lao People's Dem. Rep., Lebanon, Libya, Mali, Mauritania, Morocco, Myanmar, Nagorno-Karabakh, Niger, Nigeria, North Korea, Oman, Pakistan, Palestine, Peru, Russia, Senegal, Serbia, Somalia, South Korea, South Sudan, Sri Lanka, Sudan, Syria, Tajikistan, Thailand, Türkiye, Ukraine, Uzbekistan, Vietnam, Western Sahara, Yemen, and Zimbabwe.** States Parties to the APMBC are in bold. Other areas are in italics.

- **Eritrea** is in serious violation for having failed to extend its clearance deadline which expired on 31 December 2020, as well as on the basis of its wilfully insufficient progress in clearing mined areas under its jurisdiction or control. States Parties should now initiate the formal process envisaged in Article 8 of the Convention by seeking a clarification of compliance through the Secretary-General of the United Nations.
- **Cameroon and Mali** are in violation of their obligations under the Convention as neither has submitted a request to extend their already expired respective Article 5 deadlines to address new use of anti-personnel mines of an improvised nature by non-State armed groups on sovereign territory, which has occurred since their respective deadlines expired.
- **Senegal's** compliance with Article 5 is in serious doubt, as it has so far failed to address the issue of a mined area located between one its military bases and a non-State armed group against which it is involved in hostilities. Unjustified delays in clearing military bases, borders, or other "sensitive areas" of all anti-personnel mines constitute not only a violation of Article 5 of the Convention, but also potentially amount to prohibited use under Article 1.
- A major issue with respect to the application of the Convention in **Afghanistan** has occurred in the aftermath of the takeover by the Taliban in August 2021. It is important to understand that the Taliban regime is bound directly by the prohibitions on production, stockpiling, transfer, or use under Article 1 of the APMBC as well as by the duty to destroy or ensure the destruction of anti-personnel mines in Afghanistan under Article 5 and the duty to report on progress under Article 7. Under international law, it is the entity that is in effective control of sovereign territory and the armed forces that represents any State in question for the purpose of the APMBC (and other disarmament treaties to which Afghanistan is a party, such as the 1992 Chemical Weapons Convention or the 2008 Convention on Cluster Munitions). That is so, notwithstanding whether that governmental authority is recognised as such by other States or the United Nations.
- The situation with respect to the border between **Cambodia** and **Thailand** is also raising growing concern. Failure by Thailand and Cambodia to jointly conclude a bilateral cooperation agreement to enable survey and clearance of all mined areas along the shared border, including the particularly sensitive areas not demarcated, will be brought into increasingly sharp focus in the next year or two, as Thailand completes clearance of all other mined areas and is left with only the border minefields to release.
- **No clearance was recorded or reported for 2021 in 12 States Parties:** Cameroon, Cyprus, Ecuador, Eritrea, Ethiopia, Guinea-Bissau, Mali, Niger, Nigeria, Oman, Palestine, and Senegal.
- As at 1 October 2022, six mine-affected States Parties—Cameroon, Eritrea, Mali, Nigeria, Palestine, and Somalia—have failed to provide information on implementation of their Article 5 obligations through their Article 7 transparency reports for two or more consecutive years (i.e. with respect to the 2020 and 2021 reporting periods, or even longer).
- In **Mine Action Review's assessment of national mine action performance in 2021**, only Zimbabwe was rated Very Good. Angola, Cambodia, Sri Lanka, and Thailand were all rated Good, as was the case the previous year. Afghanistan, Bosnia and Herzegovina, Colombia, Croatia, Iraq, Mauritania, Oman, Peru, Serbia, South Sudan, Sudan, Tajikistan, and Türkiye were all ranked as Average. Chad, DR Congo, Ecuador, Ethiopia, Guinea-Bissau, Somalia, Ukraine, and Yemen were all rated Poor. Eritrea, Niger, Nigeria, and Senegal were all ranked as Very Poor. The greatest improvement in programme performance in 2021 was registered in Angola, Colombia, Iraq, Sudan, and Ukraine. The greatest drop in programme performance compared to 2020 was registered in Eritrea, Ethiopia, and South Sudan.
- We encourage readers to also refer to Mine Action Review's ***Guide to the Oslo Action Plan and results of 2022 monitoring: survey and clearance***, which is available on the Mine Action Review website. This separate report details the latest results of Mine Action Review's assessment of progress in implementation of the Oslo Action Plan, with respect to 24 indicators which are relevant to survey and clearance.
- The importance of environmental considerations is also becoming increasingly prominent in mine action as it is across all sectors. This year, for the first time, Mine Action Review has included a section on **Environmental Policies and Action** in each of our country reports. The section contains information on whether States have a national mine action standard (NMAS) on the environment; whether national authorities and their implementing partners have an environmental management system in place; and how, if at all, is the environment taken into consideration during the planning and tasking process for survey and clearance of mines, in order to minimise potential harm from demining activities. A policy brief on **Mitigating the Environmental Impacts of Explosive Ordnance and Land Release**, published in 2021, is also available on the Mine Action Review website.

OVERVIEW

SUMMARY OF PROGRESS

As of 1 October 2022, 56 States and 3 other areas (territories not generally recognised as States) were contaminated with anti-personnel mines. No State Party to the 1997 Anti-Personnel Mine Ban Convention (APMBC) declared fulfilment of its Article 5 clearance obligations in the course of 2021. In June 2021, Guinea-Bissau, which had declared completion of mine clearance in 2012, reported that it had discovered previously unrecorded mined areas on its territory.

Global mine clearance output in 2021 was slightly down on the previous year, with a total of over 152 square kilometres released through clearance in 2021 compared to more than 153 square kilometres of clearance in 2020. This is an impressive achievement, especially given the continued impact of COVID-19 in many countries. That said, a significant decrease in clearance output was recorded in States Parties Afghanistan, Cambodia, and Croatia, which was only compensated for by a massive increase in reported clearance in State not party Azerbaijan. Mine clearance operations and explosive ordnance disposal (EOD) spot tasks in 2021 destroyed a combined total of over 157,000 anti-personnel mines, including those of an improvised nature. The total recorded mined area cleared and anti-personnel mines destroyed for 2021 also understates the true level of clearance given that detailed or disaggregated results in some affected countries such as Iran, Israel, and Syria have not been made public.

Of the 56 affected States around the world, 34 are party to the APMBC. As at 1 October 2022, three of these States Parties (Cameroon, Eritrea, and Mali) did not have an Article 5 deadline in force.

Eritrea was in serious violation of its clearance obligations under the Convention as of 1 October 2022, having made wilfully insufficient progress in clearing mined areas under their jurisdiction or control. Clearance must occur "as soon as possible" according to the terms of Article 5. Moreover, Eritrea's Article 5 deadline expired on 31 December 2020 and it has not submitted a request for an extension. Eritrea's individual failure is also the collective failure of the States Parties to the Convention to ensure its implementation by Eritrea. As a consequence, States Parties should now initiate the formal process envisaged in Article 8 of the Convention by seeking a clarification of compliance through the Secretary-General of the United Nations. If this does not elicit a satisfactory response, they must mandate a fact-finding mission to Eritrea in a Special Meeting of the States Parties with a view to supporting Eritrea's swift return to compliance.

For Cameroon and Mali, their Article 5 obligations result from new use of anti-personnel mines of an improvised nature by

non-State armed groups on areas under their jurisdiction, which has occurred since their respective deadlines expired. Each of these States Parties must request a new Article 5 deadline and submit Article 7 reports detailing contamination and plans to clear all anti-personnel mines, including those of an improvised nature. States in a position to provide assistance should support the development of sustainable national capacities in Cameroon and Mali so they are able to collect, disaggregate, and record contamination data correctly, and accurately report anti-personnel mines of an improvised nature under the APMBC.

Also of serious concern is Senegal. Unjustified delays in clearing military bases, borders, or other "sensitive areas" of all anti-personnel mines is not just a violation of Article 5 of the Convention, but also potentially constitutes prohibited use under Article 1. Senegal acknowledged in 2020, after claiming for several years that all of its military bases had been cleared, that mines were laid between one of its bases and a non-State armed group against which it is involved in hostilities. Senegal stated that the identity of the user of the mines "remained to be determined". It did not specify when the mines were laid.¹ Taking operational advantage of existing mined areas in armed conflict, even when laid by another party, constitutes prohibited use of anti-personnel mines.² Senegal has failed to address this issue, including in its statement to the APMBC Intersessional Meetings in June 2022.³

The situation with respect to the border between Cambodia and Thailand is also raising growing concern. A decision by Cambodian authorities in July 2020 to halt clearance by international operators on the K5 mine belt⁴ along the border, later extended to a seven kilometre-wide zone along all international borders, appears to have contributed to the major drop in area released through clearance by Cambodia in 2021 and delays clearance of the country's densest contamination. Thailand has requested a thirty-eight month extension to its Article 5 deadline through to 31 December 2026, for consideration and approval at the Twentieth Meeting of States Parties in November 2022. During this requested extension period, Thailand plans to release all accessible mined areas and to tackle the remaining 14.31km² of areas for demarcation. Failure by Thailand and Cambodia to jointly conclude a bilateral cooperation agreement to enable survey and clearance of all mined areas along the shared border, including the particularly sensitive areas not demarcated, will be brought into increasingly sharp focus in the next year or two, as Thailand completes clearance of all other mined areas and is left with only the border minefields to release.

1 "Clarifications du Senegal aux questions du comité d'examen de la 3Eme demande d'extension", 22 September 2020, Reply to Question 4.

2 See, e.g., ICBL, "Treaty in Detail", at: <https://bit.ly/3ns6oTd>.

3 See Statement of Senegal, Intersessional Meetings, Geneva, 21 June 2022, at: <https://bit.ly/3BJjh25>.

4 The K5 mine belt, which was installed along the border with Thailand in the mid-1980s in an effort to block infiltration by armed opposition groups, ranks among the densest mine contamination in the world.

A total of seven affected States Parties were seeking an extension to their respective Article 5 deadlines for consideration at the Twentieth Meeting of States Parties in November 2022: Afghanistan (two-year interim extension), Ecuador (three-year extension), Guinea-Bissau (two-year interim extension), Serbia (twenty-two month interim extension), Sudan (four-year extension), Thailand (thirty-eight month extension), and Yemen (five-year interim extension). In addition, Argentina, was also seeking a three-year extension of its deadline through to 1 March 2026, despite the United Kingdom having reported fulfilment of its Article 5 clearance obligations with respect to the Falkland Islands in 2020. Argentina has said that it continues to be prevented from accessing the territory of the Malvinas Islands in order to comply with the obligations assumed under the Convention and that it cannot verify or endorse the unilateral British demining tasks.⁵

GLOBAL MINE CONTAMINATION

As at 1 October 2022, 56 States and 3 other areas were contaminated by anti-personnel mines globally, as listed in Table 1. Asia (including the Middle East) is the most affected continent by number of countries, with 23 mine-contaminated States. Most are not party to the APMBC. Across Asia (including the Middle East), Afghanistan, Cambodia, Iraq, Oman, Palestine, Sri Lanka, Tajikistan, Thailand, and Yemen are all States Parties. China, India, Iran, Israel, Kyrgyzstan, the Lao People's Democratic Republic (Lao PDR), Lebanon, Myanmar, the Democratic People's Republic of Korea (North Korea), Pakistan, the Republic of Korea (South Korea), Syria, Uzbekistan, and Vietnam are all States not party.

Africa is the second most affected region with 19 States and Western Sahara (the Sahrawi Arab Democratic Republic, an African Union member) remaining contaminated with anti-personnel mines. Angola, Cameroon, Chad, the Democratic Republic of Congo (DR Congo), Eritrea, Ethiopia, Guinea-Bissau, Mali, Mauritania, Niger, Nigeria, Senegal, Somalia, South Sudan, Sudan, and Zimbabwe are all States Parties to the APMBC. Egypt, Libya, and Morocco are States not party, along with Western Sahara.

In Europe, 10 States and Kosovo and Nagorno-Karabakh are still mine-affected. The six States Parties are: Bosnia and Herzegovina, Croatia, Cyprus, Serbia, Türkiye (formerly known as Turkey), and Ukraine. Affected States not party are Armenia, Azerbaijan, Georgia, and Russia, as well as other areas Kosovo and Nagorno-Karabakh.

In the Americas, only four States remain affected by anti-personnel mines: States Parties Colombia, Ecuador, and Peru; and State not party Cuba.

In addition, State Parties Burkina Faso and Mozambique may also be newly contaminated by victim-activated improvised explosive devices (IEDs) that meet the definition of an anti-personnel mine under the APMBC. The UN Mine Action Service (UNMAS) deployed to Burkina Faso in September

2019. In 2021, the majority of explosive accidents occurred "along roads", placing migrant populations at particular risk.⁶ Despite difficulties with data, the increasing number and frequency of victim-activated devices likely includes some whose design or effects fall within the definition of the APMBC. A full country report on Burkina Faso is likely to be included in next year's *Clearing the Mines* report. Furthermore, neighbouring Benin, Côte d'Ivoire, and Togo have also seen incidents involving IEDs, but there is a scarcity of publicly available data and it is unclear whether or not the devices in question were victim-activated. Benin, Côte d'Ivoire, and Togo have not submitted an APMBC Article 7 transparency report since 2008, 2014, and 2003, respectively.

In Mozambique, the UN Children's Emergency Fund (UNICEF) reported in October 2021 that small-scale attacks and use of IEDs by insurgents were seen with increasing frequency.⁷ The Zimbabwe Mine Action Centre (ZIMAC) also reported that a single anti-personnel mine was destroyed in 2021 across the border in Mozambique, in an EOD task performed by APOPO, a non-governmental organisation (NGO) operating in Zimbabwe.⁸

There was also reported mine-laying in Venezuela by Colombian non-State armed groups in 2021. In April 2021, the Venezuelan government requested technical on-the-ground assistance from the United Nations (UN) to deactivate an undisclosed number of anti-personnel mines that had been discovered in the state of Apure, on the border with Colombia. Venezuela reported that two soldiers had died from anti-personnel mine blasts and another nine were injured, but it also said that armed groups had "detonated" the mines,⁹ which would indicate that they were remotely controlled. If so, they would not fall within the APMBC, which covers only victim-activated devices. In a statement to the APMBC Intersessional Meetings in June 2021, Venezuela reported that its territory remained free of anti-personnel mine contamination.¹⁰

5 Argentina Article 5 deadline extension request, 25 March 2022.

6 UNMAS, "Burkina Faso", last updated January 2022, at: <https://bit.ly/3fpBYMz>.

7 UNICEF, "Mozambique Humanitarian Situation Report", October 2021, at: <https://uni.cf/3BwKi80>, p. 2.

8 Email from Maj. Cainos Tamanikwa, Operations Officer, ZIMAC, 15 August 2022.

9 UN Security Council, "Identical notes verbales dated 5 April 2021 from the Permanent Mission of the Bolivarian Republic of Venezuela to the United Nations addressed to the Secretary-General and the President of the Security Council", UN docs. A/75/844-S/2021/330, 13 April 2021, at: <https://bit.ly/3yX8gpG>; Insight Crime, "Guerrillas colombianas exportan tácticas de minas terrestres a Venezuela", 22 April 2021, at: <https://bit.ly/3AJ4lbc>; and Reuters, "Venezuela dice que dos militares mueren por mina antipersonal cerca de frontera con Colombia", 2 April 2021, at: <https://reut.rs/3sl7Reg>.

10 Statement of Venezuela, Completion and Sustainable National Capacities, Intersessional Meetings (held virtually), 24 June 2021.

Table 1: Mine-Affected States and Other Areas (at 1 October 2022)

States Parties		States not party		Other areas
Afghanistan	Niger	Armenia	Pakistan	Kosovo
Angola	Nigeria	Azerbaijan	Russia	Nagorno-Karabakh
Bosnia and Herzegovina	Oman	China	Syria	Western Sahara
Cambodia	Palestine	Cuba	Uzbekistan	
Cameroon*	Peru	Egypt	Vietnam	
Chad	Senegal	Georgia		
Colombia	Serbia	India		
Croatia	Somalia	Iran		
Cyprus	South Sudan	Israel		
DR Congo	Sri Lanka	North Korea		
Ecuador	Sudan	South Korea		
Eritrea*	Tajikistan	Kyrgyzstan		
Ethiopia	Thailand	Lao PDR		
Guinea-Bissau	Türkiye	Lebanon		
Iraq	Ukraine	Libya		
Mali*	Yemen	Morocco		
Mauritania	Zimbabwe	Myanmar		
34 States Parties		22 States Not Party		3 Other Areas

* Has not yet submitted a request to extend its already expired Article 5 deadline.

Table 2 overleaf summarises what is known or reasonably believed about the extent of contamination in affected States Parties. It is therefore an independent assessment by Mine Action Review of the extent of anti-personnel mine contamination based on available evidence.

Every State should establish a national baseline of contamination as soon as security permits. This is the basis for effective planning. A number of States Parties to the APMBC still do not have a comprehensive baseline despite having adhered to the APMBC more than two decades ago. Once a national baseline has been established, release through evidence-based non-technical and technical survey is a critical focus. Such survey serves to confirm specific areas that contain mine contamination, and which require clearance, on the basis of evidence and significantly reduce the size of hazardous areas from exaggerated estimates.

Clearing suspected mined areas without also employing survey continues to occur with respect to far too many mined areas that prove to contain no anti-personnel mines (or any

other explosive ordnance). In 2021, this concerned especially Angola, Colombia, and Croatia among States Parties to the APMBC. In Angola, one third of the total of 4km² of clearance for the country failed to find any anti-personnel mines, a disturbing failure of survey and tasking. In Colombia, HALO Trust cleared 39 minefields—measuring half of the total extent of its clearance for the year—without a single mine being found. In Croatia, mined areas that did not contain anti-personnel mines accounted for more than 20 per cent of all clearance in 2021 (although the national mine action authorities said that the area cleared where no explosive ordnance was found accounted for only 3.1 per cent of all demined land for the year).

In accordance with good practice in land release, full mine clearance should only occur on land where firm evidence exists that contamination is present.

Table 2: Extent of Anti-Personnel Mined Areas in Affected States Parties (at 1 October 2022)

Massive (>100km ²)	Heavy (>20–100km ²)	Medium (2–20km ²)	Light (<2km ²) or extent of contamination unclear
Afghanistan	Angola	Chad	Cameroon
Cambodia	Bosnia and Herzegovina	Colombia	Cyprus
Iraq	Thailand	Croatia	DR Congo
	Türkiye	Eritrea	Ecuador
	Yemen	Ethiopia	Guinea-Bissau
		Mauritania	Mali
		Palestine	Niger
		Somalia	Nigeria
		South Sudan	Oman
		Sri Lanka	Peru
		Sudan	Senegal
		Tajikistan	Serbia
		Ukraine	
		Zimbabwe	

ANTI-PERSONNEL MINES OF AN IMPROVISED NATURE

While use by States has almost ended globally, significant numbers of anti-personnel mines, especially those of an improvised nature, continued to be laid by non-state armed groups in 2021, including in Afghanistan, Colombia, Mali, Nigeria, and Yemen. Improvised munitions are both captured by and prohibited under the APMBC whenever they are designed to be exploded by the presence, proximity, or contact of a person. It does not matter under the Convention how these weapons were produced or employed, nor by whom they were laid; if they are located within the jurisdiction or control of a State Party, all of the Convention's provisions apply.

In 2021, more than 10,000 improvised anti-personnel mines were recorded as having been destroyed in Afghanistan, Colombia, Iraq, Syria, and Türkiye. In Iraq, of the at least 13,255 mines reportedly destroyed in 2021, at least 9,657 were of an improvised nature.¹¹ In Yemen, Project Masam reported clearing 10.8km² of mined area in 2021

and destroying 1,704 conventionally manufactured anti-personnel mines and 46,076 improvised anti-personnel mines. However, because the data were not statistically verifiable they are not recorded by the National Authorities in the national Information Management System for Mine Action (IMSMA) database¹² or included in Yemen's APMBC Article 7 report, and are not reflected in Mine Action Review's reporting for 2021.

The obligations to clear mined areas and report on progress under Article 5 and Article 7, respectively, apply to anti-personnel mines of an improvised nature just as they do to conventionally manufactured landmines.¹³ Technical guidance on how to dispose of IEDs, including anti-personnel mines of an improvised nature, has been incorporated into the International Mine Action Standards (IMAS).¹⁴ Reporting guidelines that encompass improvised anti-personnel mines have also been adopted under the IMAS.¹⁵

11 Iraq APMBC Article 7 Report (covering 2021), p. 22.

12 UNDP Annual Report on Mine Action in Yemen 2021, p. 6.

13 See Paragraph 6 of the 2019 Oslo Declaration, adopted by States Parties to the APMBC at the final plenary meeting on 29 November 2019 during the Fourth Review Conference of the Convention, at: <http://bit.ly/2DFNrQY>.

14 IMAS 09.31: "Improvised Explosive Device Disposal", First Edition, February 2019, at: <https://bit.ly/37eG12P>.

15 IMAS 05.10: "Information Management for Mine Action", Second Edition, Last amended 1 February 2020, available at: <http://bit.ly/3bRG1aP>.

STATES THAT HAVE COMPLETED MINE CLEARANCE SINCE 1997

Since the adoption of the APMBBC in 1997, clearance has been completed by 33 States (see Table 3), 32 of which are party to the Convention, as well as in one other area (Taiwan). In 2020, the United Kingdom reported fulfilment of its Article 5 clearance obligations, after the conclusion of demining operations in the Falkland Islands/Malvinas. Argentina, however, has not accepted this declaration, stating that it continues to be prevented from accessing the territory and cannot verify or endorse the United Kingdom's demining. It has therefore submitted a request for a three-year extension to its Article 5 deadline on the basis of the jurisdiction it asserts over the islands. Since anti-personnel mine clearance on the islands was completed in 2020, Mine Action Review does not consider Argentina to be mine-affected.

Mauritania and Nigeria were removed from the list of States having completed anti-personnel mine clearance in 2020 and Guinea-Bissau was removed in 2021, as each of these reported newly discovered mined areas under their respective jurisdiction or control. Under the Convention's agreed framework, in the event mined areas are discovered after the expiry of a State Party's Article 5 deadline, it should immediately inform all other States Parties of this discovery and undertake to destroy or ensure the destruction of all anti-personnel mines as soon as possible. If, however, a State Party believes that it will be unable to destroy or ensure the destruction of all anti-personnel mines in the mined area before the next Meeting of the States Parties or Review Conference (whichever falls earlier), it should submit

a request for an extended deadline, which should be as short as possible and no more than ten years. The process proposed at the Twelfth Meeting of States Parties was accepted unanimously by the participating States Parties,¹⁶ and the request should follow the obligations for ordinary extension requests in Article 5.

Following the submission of a new Article 5 deadline extension request, Mauritania has been granted a new Article 5 deadline of 31 December 2026. In November 2020, prompted by the growth of a jihadist insurgency making extensive use of improvised anti-personnel mines in northern states, Nigeria was granted a one-year extension until 31 December 2021 in which to prepare a detailed assessment of contamination and propose steps to address it. In 2021, at the Nineteenth Meeting of States Parties, Nigeria was granted a further extension until the end of 2025. Guinea-Bissau, whose interim deadline of the end of 2022 was approved at the Nineteenth Meeting of States Parties, submitted a further extension request in 2022 seeking another interim extension to 31 December 2024. The request will be considered at the Twentieth Meeting of States Parties.

Twelve of the States that completed clearance are from Africa; nine are from Europe; seven are from the Americas; and five are from Asia (including the Pacific and the Middle East). Nepal is the only State not party to have completed mine clearance on its territory.

Table 3: The 33 States That Have Completed Clearance Since 1999 (at October 2022)

Albania	Costa Rica	Guatemala	Nepal***	Tunisia
Algeria	Denmark	Honduras	Nicaragua	Uganda
Bhutan	Djibouti	Hungary	North Macedonia	United Kingdom
Bulgaria	France	Jordan	Palau*	Venezuela
Burundi	The Gambia	Malawi	Rwanda	Zambia
Chile	Germany	Montenegro*	Suriname	
Republic of Congo	Greece	Mozambique**	Swaziland	

*States Parties not listed on the AMPBC Implementation Support Unit (ISU)'s list, "States Parties That Have Completed Article 5", at: <https://bit.ly/30xgu9r>, presumably because they did not officially report having mined areas under the APMBBC and/or have not made a formal declaration of fulfilment of their clearance obligations under the Convention.

** Mozambique has four very small suspected mined areas that remain underwater. *** State not party to the APMBBC.

MINE CLEARANCE IN 2021

Total global clearance recorded for 2021 was 152.04km², which represents only a 1 per cent reduction on clearance output compared to 2020, owing to a huge increase in clearance in State not party Azerbaijan. Large reductions in clearance output were recorded in States Parties Croatia (a drop of more than 15km²), Afghanistan (a drop of over 6.5km²), and Cambodia (a drop of almost 6.3km²).

The situation in Afghanistan is attributable to the change of government regime in August 2021 and the difficult

transition for the mine action programme in the months following. The reduction in Cambodia is partially the result of the government decision not to continue clearance in the K5 mine belt close to the border with Thailand. It is very hard to see how this political decision is compatible with Cambodia's international legal obligations under Article 5 of the APMBBC. In Croatia, a significant proportion of the total reduction compared to the previous year is attributable to climatic conditions and internal bureaucratic requirements.

¹⁶ Final Report of the Twelfth Meeting of States Parties, APMBBC doc. APLC/MSP.12/2012/10, 21 January 2013, para. 28.

Thus, the mine action authorities have indicated that Croatia would have met its clearance target for the year of 42km² but adverse weather conditions in December 2021 delayed the geodetic (land surveying) measurement of cleared areas and the issuance of official certificates of land release.

In 2021, the largest clearance output was, as per the previous year, recorded in Cambodia. Despite the significant drop in clearance compared to 2020, Cambodia still recorded more than 43km² of clearance in 2021. The second highest clearance output was in Croatia, which still recorded more than 34km² in 2021, despite the drop compared to the previous year. Afghanistan recorded 17.7km² of clearance in 2021, a reduction of more than 25 per cent on output in

2020, following a 13 per cent drop in clearance year on year compared to 2019. The greatest number of mines destroyed in a single country (26,534) was in Zimbabwe, followed by Sri Lanka (23,266). Of the 15 States that cleared 1km² or more of mined area in 2021, only Azerbaijan and Syria were States not party to the APMBC. Some 85% of global anti-personnel mined area cleared in 2021 was in States Parties to the APMBC. The proportion of clearance in States not party was significantly increased by the large amount of mine clearance in Azerbaijan which, through the 2020 conflict with Armenia, regained vast areas of territory contaminated with anti-personnel mines and explosive remnants of war.

Table 4: Anti-Personnel Mine Clearance in 2021

States Parties	Area cleared in 2021 (km ²)	Anti-personnel mines destroyed in 2021*	Comparison to 2021 clearance (+/- km ²)	Comments
Afghanistan	17.71	7,656	-6.53	Article 7 report covering 2021 had yet to be submitted as at 1 October 2022.
Angola	4.00	3,698	+2.23	
Bosnia and Herzegovina	0.69	1,717	+0.16	Article 7 report covering 2021 had yet to be submitted as at 1 October 2022.
Cambodia	43.73	18,770	-6.26	
Cameroon	0.00	0	0.00	
Chad	1.45	19	+1.24	
Colombia	1.27	270	+0.19	
Croatia	34.48	1,462	-15.18	
Cyprus	0.00	0	0.00	
DR Congo	0.04	17	+0.03	Partial report based on operator data.
Ecuador	0.00	0	0.00	
Eritrea	0.00	0	0.00	Article 7 report covering 2021 had yet to be submitted as at 1 October 2022.
Ethiopia	0.00	0	0.00	
Guinea-Bissau	0.00	0	0.00	
Iraq	11.60	13,255	+3.90	

States Parties	Area cleared in 2021 (km ²)	Anti-personnel mines destroyed in 2021*	Comparison to 2021 clearance (+/- km ²)	Comments
Mali	0.00	0	0.00	
Mauritania	1.20	0	+1.20	Article 7 report covering 2021 had yet to be submitted as at 1 October 2022. ¹⁷
Niger	0.00	0	0.00	
Nigeria	0.00	0	0.00	Article 7 report covering 2021 had yet to be submitted as at 1 October 2022.
Oman	N/R	0	-0.23	Article 7 report covering 2021 had yet to be submitted as at 1 October 2022.
Palestine	0.00	0	-0.02	
Peru	0.01	188	+0.01	
Senegal	0.00	0	0.00	
Serbia	0.29	9	+0.02	
Somalia	2.52	74	+0.20	Based on operator data. Article 7 report covering 2021 had yet to be submitted as at 1 October 2022.
South Sudan	0.25	53	-0.46	
Sri Lanka	4.37	23,266	-0.22	
Sudan	0.03	22	-0.32	
Tajikistan	0.21	1,526	-0.46	
Thailand	0.53	19,002	-0.39	
Türkiye	0.41	14,176	+0.27	
Ukraine	1.26	11	+0.43	Based on operator data. Article 7 report covering 2021 had yet to be submitted as at 1 October 2022.
Yemen	**1.50	1,676	+0.50	**Estimated figure for clearance. Does not include results of Project Masam mine clearance operations.
Zimbabwe	2.44	26,534	+0.03	
Sub-totals	129.99	133,401		

¹⁷ Mauritania submitted its Article 7 report (covering 2021), on 16 October 2022.

States not party and other areas	Area cleared in 2021 (km ²)	Anti-personnel mines destroyed in 2021*	Comparison to 2020 clearance (+/- km ²)	Comments
Azerbaijan	18.38	4,388	+18.28	Estimated figure for clearance.
Georgia	0.40	66	-0.35	
Kosovo	0.10	72	-0.04	
Lebanon	0.25	17,879	-0.10	
Nagorno-Karabakh	0.01	4	-0.04	
Syria	2.91	191	+2.89	
Other States not party and other areas ¹⁸	0.00	1,466	-1.46	Includes 56 anti-personnel mines reported to have been destroyed in Lao PDR; 1,286 in Morocco; and 121 in Vietnam.
Sub-totals	22.05	24,066		
GRAND TOTALS	152.04	157,467		

* Includes mines destroyed in spot tasks and during technical survey.

CLEARANCE DEADLINES AND PROGRESS IN ARTICLE 5 IMPLEMENTATION

While all affected States and territories are obligated under international human rights law to clear anti-personnel mines as soon as possible on the basis of their duty to protect life, States Parties to the APMBC have specific time-bound deadlines. Article 5 of the APMBC requires affected States Parties to complete mine clearance **as soon as possible, but not later than ten years** from becoming party to the Convention.

The extent of implementation of Article 5 clearance obligations varies widely between States Parties. Of the 34 mine-affected States Parties as of 1 October 2022, only two were believed to be firmly on track to meet their respective treaty deadlines: Oman (February 2025 deadline) and Sri Lanka (June 2028 deadline). Peru (end 2024) and Zimbabwe (end 2025) were still just on track to meet their deadlines, but with Zimbabwe's ability to meet its deadline largely contingent on securing sufficient funding. It remained unclear, however, whether Croatia would complete clearance by its extended Article 5 deadline of March 2026. But given the significant drop in clearance in 2021 and the failure to meet its annual target, it is seeming increasingly unlikely that it will do so.

The other 29 States Parties with an Article 5 deadline in place were either not on track to fulfil Article 5 in time or were in violation of their obligations under the Convention. Cameroon and Mali are in violation of their obligations under the Convention as neither has submitted a request to extend their already expired respective Article 5 deadlines to address new contamination; and Eritrea is in serious violation for having failed to extend its clearance deadline which expired on 31 December 2020. No clearance was recorded or reported for 2021 in 12 States Parties: Cameroon, Cyprus, Ecuador, Eritrea, Ethiopia, Guinea-Bissau, Mali, Niger, Nigeria, Oman, Palestine, and Senegal. This is an unacceptably high level of failure among States Parties to implement Article 5 clearance obligations.

Table 5 sets forth the Article 5 deadlines for all affected States Parties in alphabetical order, assessing the level and status of implementation of their international legal obligations. Those whose deadline has expired—and are therefore in violation of the Convention—are marked in bold.

18 Lao PDR, Morocco, Vietnam. No anti-personnel mine clearance or destruction of anti-personnel mines was recorded or reported in Armenia, China, Cuba, Egypt, India, Iran, Kyrgyzstan, Libya, Myanmar, North Korea, Pakistan, Russia, South Korea, Uzbekistan, and other area Western Sahara in 2021. Israel did report under the Convention on Certain Conventional Weapons (CCW) that it had conducted clearance in 2021, but it did not disaggregate anti-personnel mines from other ordnance.

Table 5: Progress in Implementing Article 5 Obligations

State Party	Article 5 Deadline	Status of progress	Implementation priorities
Afghanistan	1 March 2023	Not on track – two-year interim Article 5 deadline extension requested to 1 March 2025	Ensure no use of anti-personnel mines, including those of an improvised nature, in accordance with Article 1 of the APMBC, and support and maintain the national mine action programme.
Angola	31 December 2025	Not on track	Ensure application of land release principles to ensure evidence-based clearance and reduce clearance of uncontaminated areas.
Bosnia and Herzegovina	1 March 2027	Not on track	Ensure consistent application by all relevant stakeholders (both national authorities and international and national clearance entities) of evidence-based land release principles to reduce clearance of uncontaminated areas and strengthen all aspects of the mine action programme: legal, managerial, operational, and strategic. Bosnia and Herzegovina should also fully embrace the “Country Coalition” approach, in partnership with Germany, to improve coordination and identify and overcome challenges.
Cambodia	31 December 2025	Not on track	Conclude a bilateral cooperation agreement with Thailand to enable survey and clearance of all mined areas along the shared border and lift existing restrictions on clearance in border areas.
Cameroon	1 March 2013	In violation. Needs to inform other States Parties of the discovery of any newly mined areas, request an extension to its Article 5 deadline, and submit an annual Article 7 report, including information on anti-personnel mines of an improvised nature.	Request a new Article 5 deadline in order to return to compliance with the Convention and seek to mobilise assistance to put in place sustainable national capacity to address newly mined areas and respond to any future residual risk or new use of anti-personnel mines of an improvised nature.
Chad	1 January 2025	Not on track	Intensify and report on resource mobilisation with a view to securing funding and attracting international technical and operational support.
Colombia	31 December 2025	Not on track	Conduct an evidence-based baseline survey to determine the location and extent of mine contamination and establish a national mine action platform to ensure regular dialogue among all stakeholders, including donors.
Croatia	1 March 2026	Unclear whether on track	Increase survey capacity in order to meet the targets outlined in its revised work plan 2022–2026 and conduct survey to confirm mine contamination before embarking on full clearance of an area.
Cyprus	1 July 2025	Not on track (lack of control of mined areas)	The Republic of Cyprus and the Turkish Cypriot authorities in the north should comply with the UN Security Council’s call for an agreed work plan to complete the demining of Cyprus.
DR Congo	31 December 2025	Not on track	Elaborate new annual work plans and timelines that take into account the increased estimate of contamination. Conduct the long-delayed survey of Aru in Ituri province and Dungu in Haut-Uele province and engage proactively with potential donors.
Ecuador	31 December 2022	Not on track – three-year Article 5 deadline extension requested to 31 December 2025	Ecuador should prioritise non-technical survey to determine accurately its baseline of contamination and inform its completion planning.
Eritrea	31 December 2020	In serious violation. Needs to request extension to Article 5 deadline without delay.	Submit an Article 5 deadline extension request, initiate clearance operations, and re-engage with the Convention machinery.

Table 5 continued

State Party	Article 5 Deadline	Status of progress	Implementation priorities
Ethiopia	31 December 2025	Not on track	Elaborate and submit the updated work plan requested by States Parties in accordance with its 2019 Article 5 deadline extension. This should include, among other things, revised estimates of contamination, annual survey and clearance targets, and a detailed budget.
Guinea-Bissau	31 December 2022	Not on track – two-year interim Article 5 deadline extension requested to 31 December 2024	Ensure funding and capacity to survey suspected mined areas, ensuring that the national survey clearly disaggregates areas that contain anti-personnel mines from areas containing other explosive ordnance.
Iraq	1 February 2028	Not on track	Establish a National Mine Action Platform (NMAP) for regular dialogue among all stakeholders, including donors, to collectively discuss progress, challenges, and support for Article 5 implementation and support implementation of the new national mine action strategy for 2022–28.
Mali	1 March 2009	In violation. Needs to inform other States Parties of the discovery of any newly mined areas, request an extension to its Article 5 deadline, and submit an annual Article 7 report, including information on anti-personnel mines of an improvised nature.	Submit an Article 5 extension request in order to return to compliance with the Convention. Set up a national mine action centre with UN and NGO support to coordinate the humanitarian response to mine contamination, including seeking to put in place sustainable national capacity to address newly mined areas and respond to any future residual risk or new use of anti-personnel mines of an improvised nature.
Mauritania	31 December 2026	Not on track	Proceed swiftly to mobilise funds to put in place sustainable national capacities that will be able to survey and clear remaining mined areas within its jurisdiction or control and respond to any future residual risk.
Niger	31 December 2024	Not on track	Elaborate a detailed work plan with realistic targets for survey and clearance and provide details of its resource mobilisation strategy, including seeking to put in place sustainable national capacity to address remaining mined areas and respond to any future residual risk or new use of anti-personnel mines of an improvised nature.
Nigeria	31 December 2025	Not on track and compliance with Article 5 in doubt	Accelerate action to establish a national mine action centre to provide direction, coordination, and momentum for the mine action sector in Nigeria. Develop a national mine action strategy in consultation with implementing partners, including plans to determine a more accurate picture of contamination. Nigeria should, as a matter of urgent priority and with the support of international partners and donors, build domestic capacities to enable mine clearance to be conducted when the security environment permits.
Oman	1 February 2025	On track	Establish a national mine action centre to oversee survey and clearance and ensure release of all mined areas as by its Article 5 deadline. Ensure timely submission of its Article 7 reports.
Palestine	1 June 2028	Not on track (lack of control of mined areas)	Support The HALO Trust to complete clearance of the three priority minefields in the West Bank as soon as possible.
Peru	31 December 2024	Just on track	Survey outstanding mined areas to develop an accurate baseline of contamination and systematically apply evidence-based land release methodologies.

Table 5 continued

State Party	Article 5 Deadline	Status of progress	Implementation priorities
Senegal	1 March 2026	Not on track and compliance with Article 5 in serious doubt	Immediately clear the minefield around its military cantonment in the village of Djirak and clarify who laid the minefield and when. As soon as possible, complete survey to establish a comprehensive baseline of contamination.
Serbia	1 March 2023	Not on track – 22-month interim Article 5 deadline extension requested to 31 December 2024	Survey the contamination newly discovered in 2019 and 2021 in order to determine the size of the mined area and mobilise the necessary resources to release all remaining contamination.
Somalia	1 October 2027	Not on track	Elaborate a new multiyear national mine action strategic plan and associated annual work plans. Issue its capacity development plan and resource mobilisation strategy.
South Sudan	9 July 2026	Not on track	Publish updated work plans through to 2026 matched with a detailed budget and resource mobilisation plan. Increase national financial support for mine action as well as to the National Mine Action Authority (NMAA).
Sri Lanka	1 June 2028	On track	Complete the process of developing a comprehensive baseline of remaining contamination. Finalise and adopt a new national mine action strategy as soon as possible and ensure the national mine action database is accurate and up to date.
Sudan	1 April 2023	Not on track – four-year Article 5 deadline extension requested to 1 April 2027	Apply, and report accurately on, land release while basing decisions to clear land on evidence-based survey. Update and issue a new multiyear national mine action strategic plan.
Tajikistan	31 December 2025	Not on track	Expedite survey in order to establish a clear national baseline of mine contamination.
Thailand	31 October 2023	Not on track – thirty-eight month Article 5 deadline extension requested to 31 December 2026	Conclude a bilateral cooperation agreement with Cambodia to enable survey and clearance of all mined areas along the shared border and improve local priority setting.
Türkiye	31 December 2025	Not on track	Accelerate the pace of clearance. Plan, implement, and report on mine clearance in areas controlled by Turkish forces in northern Cyprus and northern Syria.
Ukraine	31 December 2023	Not on track	Ensure the national mine action authority is fully functioning and, as soon as conditions allow, undertake a baseline survey of anti-personnel mine contamination in areas that can be safely accessed.
Yemen	1 March 2023	Not on track – five-year interim Article 5 deadline extension requested to 1 March 2028	Houthi authorities and the forces that support them should cease emplacement of mines and improvised devices and conform to the obligations of the APMBC. Mine action authorities in the North and South should develop plans with clear targets for survey and clearance, build operational capacity, and ensure all operators provide independently verified data.
Zimbabwe	31 December 2025	Just on track	Prioritise efforts to secure additional national and international funding to meet its 2025 clearance completion deadline and start elaborating a demobilisation strategy.

As of 1 October 2022, only Oman, Palestine, and Sri Lanka were still within their respective original 10-year clearance deadline. All other States Parties had either been granted one (or more) extension periods or were currently in violation of the Convention. In 2022, the Twentieth Meeting of States Parties was due to decide whether to grant further extensions to eight States Parties: Afghanistan, Argentina, Ecuador, Guinea-Bissau, Serbia, Sudan, Thailand, and Yemen. Cameroon, Eritrea, and Mali each needed to submit (and be granted) an Article 5 deadline extension request to return to compliance with the APMBC.

As at 1 October 2022, six mine-affected States Parties—Cameroon, Eritrea, Mali, Nigeria, Palestine, and Somalia—have failed to provide information on implementation of their Article 5 obligations through their Article 7 transparency reports for two or more consecutive years (i.e. with respect to the 2020 and 2021 reporting periods, or even longer). In addition, as at 1 October, Afghanistan, Bosnia and Herzegovina, Mauritania,¹⁹ Oman, and Ukraine had yet to submit their Article 7 report in 2022 (covering 2021), but did submit it in 2021 (covering 2020). Reporting under Article 7 is a legal obligation under the Convention. As per Action number 49 of the Oslo Action Plan, any State Party implementing Article 5 obligations that “has not submitted an Article 7 report detailing progress in implementing these obligations each year will provide in close cooperation with the ISU an annual update on the status of implementation in line with Article 7 and will provide information to all States Parties in the most expeditious, comprehensive and transparent manner possible. If no information on implementing the relevant obligations for two consecutive years is provided, the President will assist and engage with the States Parties concerned in close cooperation with the relevant Committee.”

A major issue with respect to the application of the Convention in Afghanistan has occurred in the aftermath of the takeover by the Taliban in August 2021. The comprehensive change in governing regime means that Afghanistan as a State Party to the APMBC is now represented by the Taliban authorities. Since the change of regime, the Islamic Emirate of Afghanistan (IEA) has affirmed its commitment to fulfilling its obligations in relation to the Convention on Cluster Munitions (CCM) and other international conventions to which Afghanistan is already a State Party,²⁰ which includes the APMBC. It also informed Mine Action Review that it intended to request an extension of its APMBC

Article 5 deadline in 2022.²¹ Afghanistan's ambassador in Geneva, appointed by the previous government, also informed the APMBC in May 2022 that Afghanistan would submit an extension request.²²

Afghanistan's Permanent Mission in Geneva submitted an extension request in July 2022 asking for a two-year interim extension until 1 March 2025 to provide time for achieving greater clarity on Afghanistan's situation and circumstances, “including allowing for more time for understanding how the mine action sector in Afghanistan will develop in terms of institutional arrangements and continued support from donors.” The Permanent Mission also committed Afghanistan to working with all stakeholders to develop a detailed extension request by 31 March 2024.²³ The Directorate of Mine Action (DMAC)'s Director informed Mine Action Review in August 2022 that it had not prepared the extension request but accepted it as “the best possible solution for continuing mine clearance operations in Afghanistan in the current circumstances.”²⁴

The Permanent Mission in Geneva no longer represents the State of Afghanistan and therefore, a priori, the extension request it submitted was not valid under the APMBC or general international law. That said, under international law, conduct that is not ordinarily attributable to a State may be considered an act of that State “if and to the extent that the State acknowledges and adopts the conduct in question as its own”.²⁵ DMAC is a directorate under the Afghan National Disaster Management Authority, which was established by Presidential Decree in 1973 as the Department of Disaster Preparedness²⁶ (and later renamed as the Afghan National Disaster Management Authority, ANDMA), and is therefore an organ of the Afghan State.²⁷ The request may therefore be considered to have been submitted by Afghanistan as a State Party to the APMBC.

It is important to understand that the Taliban regime is bound directly by the prohibitions on production, stockpiling, transfer, or use under Article 1 of the APMBC as well as by the duty to destroy or ensure the destruction of anti-personnel mines in Afghanistan under Article 5 and the duty to report on progress under Article 7. Under international law, it is the entity that is in effective control of sovereign territory and the armed forces that represents any State in question for the purpose of the APMBC (and other disarmament treaties to which Afghanistan is a party, such as the 1992 Chemical Weapons Convention or the 2008 Convention on Cluster Munitions).²⁸ That is so,

19 Mauritania submitted its Article 7 report (covering 2021), on 16 October 2022.

20 Afghanistan statement to the Convention on Cluster Munitions (CCM) Intersessional Meeting, 16 May 2022.

21 Interview with Qari Nooruddin Rustamkhail, DMAC, 4 June 2022.

22 Preliminary Observations, Committee on Article 5 Implementation, Intersessional Meeting, 20 June 2022.

23 Letter from the Permanent Mission of Afghanistan to the United Nations in Geneva to the APMBC Committee on Article 5 Implementation, 4 July 2022.

24 Email from Qari Nooruddin Rustamkhail, DMAC, 1 August 2022.

25 Art. 11, International Law Commission (ILC) Draft Articles on the Responsibility of States for Internationally Wrongful Acts, 2001.

26 Presidential Decree 56 of 16 February 1973.

27 Art. 4(1), 2001 Draft Articles on the Responsibility of States for Internationally Wrongful Acts.

28 H. Kelsen, *General Theory of Law and State*, trans. A. Wedberg, Lawbook Exchange, Clark NJ, 2011 Edn, pp. 220–21. See similarly L. Ferro and T. Ruys, “The Military Intervention in Yemen's Civil War”, Chap. 65 in T. Ruys and O. Corten (eds.), *The Use of Force in International Law: A Case-Based Approach*, 1st Edn, Oxford University Press, Oxford, 2018, 899–911, at p. 908. This also remains the legal position of the United Kingdom in relation to the law on inter-State use of force. For instance, it expressed the following in relation to former Ukrainian President Victor Yanukovich who was removed from power—possibly in violation of domestic law—and left the country: “We are talking about a former leader who abandoned his office, his capital and his country; whose corrupt governance brought his country to the brink of economic ruin.... The idea that his pronouncements now convey any legitimacy whatsoever is far-fetched.... The Government in Kyiv is legitimate and has been overwhelmingly endorsed by the Ukrainian Parliament”. Statement of Sir Mark Lyall Grant before the UN Security Council, UN doc. S/PV7125, 3 March 2014, p. 7.

notwithstanding whether that governmental authority is recognised as such by other States or the United Nations.²⁹

Mine Action Review has sought clarity from UNMAS on which entity—the Taliban regime or the former regime—it believes is bound directly by the APMBBC as the State of Afghanistan.³⁰ This would clarify the duties of UNMAS and other UN entities with respect to the Taliban regime in all disarmament treaties since such treaties are directed to States Parties and not to non-State actors. Accordingly, since as a matter of international law, only States are directly prohibited from using the prohibited weapons and required to report to the United Nations, UNMAS would be far better placed to support the implementation of the Convention, in accordance with its strategic plan.³¹ UNMAS requested guidance on this critical legal issue from the Department of Political and Peacebuilding Affairs (DPPA). According to UNMAS, the view of the DPPA is that “conventions are concluded by States not governments, so the obligation remains regardless of who is in authority”.³² This does not clarify the fundamental issue, and the DPPA is not a UN entity with specialist international legal expertise. As at the time of writing, UNMAS had not requested guidance from the UN Office of Legal Affairs (OLA), despite pledging to do so in discussions with Mine Action Review.³³ Obtaining a clear international legal response from the UN on which entity represents the State of Afghanistan and is legally bound by the APMBBC is critical as the Taliban regime, before taking power in August 2021, continued to use anti-personnel mines prohibited under the APMBBC, especially mines of an improvised nature.

According to the commentary to Rule 81 of the 2005 International Committee of the Red Cross (ICRC) Study of Customary International Humanitarian Law (IHL), a prohibition of the use of anti-personnel landmines has not crystallised in customary international law. Rule 81 stipulates that when landmines are used, “particular care must be taken to minimise their indiscriminate

effects”.³⁴ A second customary rule provides that at the end of active hostilities, a party to an armed conflict which has used landmines “must remove or otherwise render them harmless to civilians, or facilitate their removal”.³⁵ No deadline is given for this to occur.

Complications resulting from the change of regime are posing a challenge for Afghanistan’s meaningful engagement as a State Party to the APMBBC. As at writing, there was no clear means through which DMAC, on behalf of the Taliban government, could provide updates on Afghanistan’s Article 5 implementation, or indeed on any other provision of the Convention, to other States Parties. Afghanistan’s Article 5 deadline extension request submitted by the Permanent Mission in Geneva, which will be considered at the Twentieth Meeting of States Parties in November 2022, contains no substantive information on Article 5 implementation in what is one of the world’s most heavily mined states and one where the humanitarian impact of anti-personnel mines is very significant. Until this year, Afghanistan had submitted comprehensive Article 7 transparency reports annually since becoming a State Party in 2003. Afghanistan has yet to submit a transparency report in 2022 (covering 2021), as at time of writing.

The issue of recognition/non-recognition of the Taliban government by States Parties and the UN, should not prevent the application of international law and ability of the IEA to fulfill its legal obligations under the APMBBC, including through Article 7 transparency reporting and through updates during treaty meetings. This will also be crucial in preparation of Afghanistan’s follow-on Article 5 deadline extension request, which will be due to be submitted by the end of March 2024.

For more detailed information on the status and structure of the mine action programme in Afghanistan, please refer to the *Clearing the Mines 2022* country report on Afghanistan.

PROGRAMME PERFORMANCE IN MINE-AFFECTED STATES PARTIES

A performance scoring system is used by Mine Action Review to help affected States Parties and their partners focus their capacity development and technical assistance efforts on areas that require strengthening, in order to optimise efficiency and effectiveness of survey and clearance programmes. The scoring criteria were developed in consultation with the Mine Action Review’s Advisory Board Members (The HALO Trust, Mines Advisory Group (MAG), and Norwegian People’s Aid (NPA)), and with input from the Geneva International Centre for Humanitarian Demining (GICHD), including its Gender and Mine Action Programme (GMAP).

For their survey and clearance work in 2021, affected States Parties were scored on the basis of seven criteria: Understanding of contamination; National ownership and programme management; Gender and diversity; Information management and reporting; Planning and tasking; Land release system; and Land release outputs and Article 5 compliance. In the scoring, given their relative importance, additional weighting is accorded to Understanding of contamination; Land release system; and Land release outputs and Article 5 compliance. An average is then calculated that determines the overall score. Table 7 outlines the seven programme performance criteria and key factors affecting scoring in detail.³⁶

29 This rule applies under international law, so long as the governing entity has not been put in place by an act of aggression by a foreign State.

30 Meeting between representatives from Mine Action Review and UNMAS Headquarters, virtual meeting via Microsoft Teams, 14 October 2022.

31 See UNMAS Strategic Plan 2019–2023, Strategic Outcome 4.

32 Email from Dmitri Alechkevitch, Team Leader Policy, Policy, Advocacy, Donor Relations and Outreach, UNMAS, 21 October 2022.

33 Meeting between representatives from Mine Action Review and UNMAS Headquarters, virtual meeting via Microsoft Teams, 14 October 2022.

34 ICRC Customary IHL Rule 81: “Restrictions on the Use of Landmines”, at: <https://bit.ly/3xOyJL>.

35 ICRC Customary IHL Rule 83: “Removal or Neutralization of Landmines”, at: <https://bit.ly/3z7hVNs>.

36 We encourage readers to also refer to Mine Action Review’s Guide to the *Oslo Action Plan and results of 2022 monitoring: survey and clearance*, which is available on the Mine Action Review website. This separate report details the latest results of Mine Action Review’s assessment of progress in implementation of the Oslo Action Plan, with respect to 24 indicators which are relevant to survey and clearance.

A score of 8 or more is ranked Very Good. A score of 7.0–7.9 is ranked Good. A score of 5.0–6.9 is ranked Average. A score of 4.0–4.9 is ranked Poor. A score of less than 4 is ranked Very Poor. The results of the scoring for 2021 are summarised in Table 6. The country-specific assessments of the seven criteria, which should be viewed alongside the Recommendations for Action in the country reports, are intended as an implementation tool, offered in the spirit of openness and constructive dialogue, to assist States Parties to identify and overcome challenges and fulfil their Article 5 obligations as efficiently as possible.

In 2021, only Zimbabwe was rated Very Good. Angola, Cambodia, Sri Lanka, and Thailand were all rated Good, as was the case the previous year. Afghanistan, Bosnia and Herzegovina, Colombia, Croatia, Iraq, Mauritania, Oman, Peru, Serbia, South Sudan, Sudan, Tajikistan, and Türkiye were all ranked as Average. Chad, DR Congo, Ecuador, Ethiopia, Guinea-Bissau, Somalia, Ukraine, and Yemen were all rated Poor. Eritrea, Niger, Nigeria, and Senegal were all ranked as Very Poor. The greatest improvement in programme performance in 2021 was registered in Angola, Colombia, Iraq, Sudan, and Ukraine. The greatest drop in programme performance compared to 2020 was registered in Eritrea, Ethiopia, and South Sudan.

Four affected States Parties were not ranked: Cyprus and Palestine (not assessed due to issues related to jurisdiction or control of mined areas); and Cameroon and Mali (not assessed due to insufficient information available for performance in 2021).

Table 6: Mine Action Programme Performance in Affected States Parties in 2021

State Party	Performance Rating in 2021	Score in 2021	Change from 2020 Score
Afghanistan	Average	5.8	-1.1
Angola	Good	7.5	+0.4
Bosnia and Herzegovina	Average	5.4	No change
Cambodia	Good	7.0	No change
Chad	Poor	4.4	+0.1
Colombia	Average	6.1	+0.8
Croatia	Average	6.5	No change
DR Congo	Poor	4.6	-0.1
Ecuador	Poor	4.4	+0.1
Eritrea	Very Poor	2.1	-0.3
Ethiopia	Poor	4.0	-0.3
Guinea-Bissau	Poor	4.0	Not scored for 2020
Iraq	Average	6.2	+0.7
Mauritania	Average	5.2	No change
Niger	Very Poor	3.8	-0.1
Nigeria	Very Poor	2.6	Not scored for 2020
Oman	Average	5.8	-0.1
Peru	Average	5.3	+0.2
Senegal	Very Poor	3.9	+0.1
Serbia	Average	5.7	No change
Somalia	Poor	4.6	+0.2
South Sudan	Average	6.7	-0.2
Sri Lanka	Good	7.0	No change
Sudan	Average	6.9	+0.4
Tajikistan	Average	6.2	No change
Thailand	Good	7.7	No change
Türkiye	Average	6.0	No change
Ukraine	Poor	4.4	+0.4
Yemen	Poor	4.6	+0.2
Zimbabwe	Very Good	8.0	No change

Table 7: Mine Action Review Criteria to Assess Mine Action Programme Performance of APMBC States Parties

Criterion	Key Factors Affecting Scoring
UNDERSTANDING OF AP MINE CONTAMINATION (20% of overall score)	<ul style="list-style-type: none"> ■ Has a national baseline of anti-personnel mine contamination been established and is it up to date and accurate? ■ If no national baseline, or only a partial or inaccurate baseline, exists, is survey and/or re-survey being conducted or is it planned? ■ Are mined areas disaggregated from areas with other types of explosive ordnance (e.g. other explosive remnants of war (ERW) such as submunitions)? ■ Is contamination classified into suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs), based on whether there is indirect or direct evidence of mines, respectively? ■ Is there a high ratio of CHAs to SHAs?
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	<ul style="list-style-type: none"> ■ Is there a national entity, such as a national mine action authority, overseeing mine action? ■ Is there a national mine action centre coordinating operations? ■ Are the roles and responsibilities in mine action clear and coherent within the national programme? ■ Is the mine action centre adequately staffed and skilled? ■ Are clearance operators involved in key decision-making processes? ■ Does national legislation, or other suitable administrative measures, effectively underpin the mine action programme? ■ Have the authorities created an enabling environment for mine action? ■ Has the government facilitated the receipt and efficient use of international assistance? ■ Is there political will for timely and efficient implementation of Article 5 of the APMBC? ■ Does the affected State contribute national resources to support the cost of the mine action centre and/or survey and clearance of mined areas? ■ Does the affected State have a resource mobilisation strategy in place for Article 5 implementation?
GENDER AND DIVERSITY (10% of overall score)	<ul style="list-style-type: none"> ■ Does the national mine action programme have a gender policy and implementation plan? Do the main mine action operators have one? ■ Is gender mainstreamed in the national mine action strategy and national mine action standards? ■ Are women and children in communities affected by mined areas consulted during survey and community liaison activities? ■ Are survey and community liaison teams inclusive and gender balanced, to facilitate access and participation by all groups, including women and children? ■ Are the needs of women and children in communities affected by mined areas considered in the prioritisation, planning, and tasking of survey and clearance activities? ■ Are ethnic or minority groups in communities affected by mined areas consulted during survey and community liaison activities? ■ Do survey, clearance, and community liaison teams include representatives from different ethnic or minority groups, to facilitate access and participation by all groups? ■ Are the needs of ethnic or minority groups in communities affected by mined areas considered in the prioritisation, planning, and tasking of survey and clearance activities? ■ Is relevant mine action data disaggregated by gender and age? ■ Is there equal access to employment for qualified women and men in survey and clearance teams, including for managerial level/supervisory positions?

Table 7 continued

Criterion	Key Factors Affecting Scoring
<p>INFORMATION MANAGEMENT AND REPORTING (10% of overall score)</p>	<ul style="list-style-type: none"> ■ Is there a national information management system in place (e.g. IMSMA), and is the data accurate and reliable? ■ Are data collection forms consistent and do they enable collection of the necessary data? ■ Is data in the information management system disaggregated by type of contamination and method of land release? ■ Is the data in the information management system accessible to all operators? ■ Are ongoing efforts being made to ensure or improve the quality of data in the mine action database? ■ Does the affected State Party submit accurate and timely annual Article 7 reports on Article 5 progress? ■ Are Article 5 deadline extension requests of a high-quality and submitted in a timely manner? ■ Is the survey and clearance data reported by the affected State Party (e.g. in Article 7 reporting) accurate and disaggregated by type of contamination (i.e. mines from ERW) and method of land release? ■ Does the affected State Party report on progress in Article 5 implementation at the Meetings of States Parties and Intersessional Meetings and is reporting accurate and consistent between reporting periods?
<p>PLANNING AND TASKING (10% of overall score)</p>	<ul style="list-style-type: none"> ■ Is there a national mine action strategy in place and does it include realistic goals for land release? ■ Is there a realistic annual work plan in place for land release? ■ Are there agreed and specified criteria for prioritisation of tasks? ■ Are key stakeholders meaningfully consulted in planning and prioritisation? ■ Is clearance of anti-personnel mines tasked in accordance with agreed prioritisation? ■ Are task dossiers issued in a timely and effective manner? ■ Where relevant, is there a plan for dealing with residual risk and liability? Is it realistic and sustainable?
<p>LAND RELEASE SYSTEM (20% of overall score)</p>	<ul style="list-style-type: none"> ■ Does the affected State have national mine action standards in place for land release? ■ Do the standards enable or impede efficient evidence-based survey and clearance? ■ Are national standards reflected in SOPs? ■ Are standards and SOPs periodically reviewed against IMAS and international best practice, in consultation with clearance operators? ■ Is there an effective and efficient: i) non-technical survey capacity, ii) technical survey capacity, iii) clearance capacity in the programme? Does this include national capacity? ■ Are areas being cleared that prove to have no mine contamination? ■ Where relevant, is there national survey and clearance capacity in place to address mines discovered after the release of mined areas or post completion? ■ Is there an appropriate range of demining assets (manual, mechanical, and animal detection systems) integrated into land release operations? ■ Is there an effective quality management system in place for survey and clearance operations? ■ Where an accident has occurred within a mine action programme, was there an effective investigation? Were lessons learned shared between operators?
<p>LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)</p>	<ul style="list-style-type: none"> ■ Is the affected State seeking to clear all anti-personnel mines from territory under its jurisdiction or control, including along national borders, in and around military installations, and in hard to access areas? ■ Have national mine action authorities set a target date for the completion of mine clearance and is this within the State Party's Article 5 deadline? ■ Is the target date for completion ambitious, yet realistic, based on existing capacity? ■ What were the outputs of survey and clearance of mined area in 2021, and were they greater or lesser than the previous year and why? ■ Are survey and clearance outputs in line with plans and Article 5 obligations? ■ Is the affected State on track to meet the target completion date and/or Article 5 deadline?

GENDER AND DIVERSITY

Both gender and especially diversity continue to be under-addressed in mine action although more concrete efforts to mainstream gender are now being seen in several countries. The mainstreaming of gender and diversity is in line with Action 3 of the APMBC Oslo Action Plan for all States Parties to: “Ensure that the different needs and perspectives of women, girls, boys and men are considered and inform all areas of Convention implementation and mine action programmes, in order to deliver an inclusive approach. Strive to remove barriers to full, equal and gender balanced participation in mine action and in Convention meetings.”

A workshop on “Best practices and lessons learned from practical mainstreaming of gender and diversity in mine action” took place in May 2022, hosted by the Gender and Diversity Working Group (of which Mine Action Review is a member), and co-sponsored by Colombia and the United Kingdom in their respective capacity as president of the APMBC Twentieth Meeting of States Parties and the CCM Tenth Meeting of States Parties. The workshop examined how gender and diversity considerations can be better mainstreamed in survey and clearance, risk education, victim assistance and international cooperation and assistance. It also sought to understand how to overcome the obstacles to full, equal, and meaningful women’s participation in mine action operations and Convention meetings, and to raise awareness of the intersection between gender and factors of vulnerability and exclusion (e.g. age, religion, ethnicity, language, and disability). The summary report of the workshop, that is available online,³⁷ contains some of the key findings and recommendations.

A selection of examples from Mine Action Review’s research on affected States Parties is included below, but for additional information please see the “Gender and Diversity” section of the individual *Clearing the Mines 2022* country reports.

Mine Action Review scored Cambodia as the highest ranking State Party for its performance in 2021 with respect to implementing gender and diversity considerations in its survey and clearance programme, providing a good example to other mine-affected States Parties on what efforts can be taken to mainstream gender. The Cambodian Mine Action and Victim Assistance Authority (CMAA) has developed a Gender Mainstreaming in Mine Action Plan (GMAP) in line with the objectives of the National Mine Action Strategy 2018–2025. This includes approaches for developing implementation of GMAP guidelines through monitoring and evaluation of the performance of Mine Action Planning Units (MAPUs) and operators; building capacity of CMAA gender teams, MAPUs, and operators, and collecting data on the mine action needs of women; and promoting inclusive participation in mine action, including through collecting sex-, age- and disability-disaggregated data (SADDD), developing a National Mine Action Standard on gender mainstreaming, and advocating for the inclusion of more women in decision-making positions. The latest National Mine

Action Strategy three-year Implementation Plan (2021–23) sets out activities in support of these goals. A CMAA Gender Mainstreaming Team was established to coordinate with the Technical Reference Group on Gender (TRG-G), one of eight TRGs ensuring coordination of the sector. The group is composed of representatives from the CMAA, relevant ministries and institutions, and national and international operators.

Iraq’s new 2022–28 strategic plan recognises the different impact of contamination shaped by gender, age, and ethnic or religious affiliations, and requires specific activities targeting related needs, for which disaggregated data is a prerequisite. The Directorate for Mine Action (DMA), which first created a gender unit in 2017, adopted its first Gender Unit Action Plan in early 2021 and the DMA’s director, who has advocated for employment of more women in mine action, approved the concept of a Gender Task Force in early 2021.

In Sudan, a new gender and diversity policy was developed and endorsed in 2021 and gender mainstreamed in the national mine action strategic plan for 2019–23 (which was under review and awaiting approval) and in the national mine action standards. An emphasis is placed on gender-balanced survey teams and the employment of women in the mine action programme. Sudan does, however, acknowledge difficulties in employing women in operational roles due to local customs and traditions.

Some demining NGOs have also made significant progress in promoting action to achieve gender equality. In Cambodia, for instance, women continued to make up 38 per cent of HALO Trust’s programme, including 43 per cent of operational staff. Half of all HALO Trust deminers in Cambodia are now women. While the proportion of women in managerial and supervisory positions drops to 30 per cent, this is a significant increase on the 18 per cent in 2020 and 9 per cent the year before. Women were less than half (45 per cent) of NPA’s total employees in Cambodia in 2021, but close to two thirds (64 per cent) of its operations personnel in Cambodia, including its operations supervisor and an operations officer.

Major challenges remain, however. Gender policies need to be adopted, implemented, and mainstreamed in all affected States. Too often, reality does not meet the rhetoric (or even the law). It is still the case in Angola, for instance, that while gender and diversity are included as a cross-cutting issue in the national mine action strategy, there are no outcomes or targets related to these critical issues in the latest work plan. Among operators, NPA Angola appointed gender and diversity focal points within its programme and prepared an implementation plan for gender equality policy. But in 2021, only 14% of NPA’s employees were women and women held only 16% of operational and 20% of managerial positions.

In Bosnia and Herzegovina, the National Mine Action Strategy 2018–2025 supports the 2003 Law on Gender Equality, which demands equal treatment and equality of opportunity between men and women, and prohibits direct

37 Summary report of virtual workshop on “Best practices and lessons learned from the practical mainstreaming of gender and diversity in mine action”, 30–31 May 2022, at: <https://bit.ly/3MtdLUW>.

and indirect discrimination on the grounds of gender. Within the national mine action centre (BHMACH) itself, as well as in the programmes of clearance operators, women make up only a small proportion of the total number of staff and an even smaller proportion of operations staff in the field. For example, of MAG's 80 total staff in Bosnia and Herzegovina in 2021, only ten (13 per cent) were women, including seven (9 per cent) of its survey and clearance personnel, and four (22 per cent) of its managerial/supervisory positions.

Even more work is needed to meaningfully start mainstreaming diversity considerations into mine action programmes. Mine action can and should counteract systemic discrimination based on diversity factors such as race, ethnicity, language, religion, disability, sexual orientation, social class, and age, and should ensure that diversity is mainstreamed alongside gender in mine action programmes. Components of a person's identity interrelate and therefore taking an intersectional approach can help identify where different diversity aspects are overlapping and creating interdependent systems of discrimination.

Steps are being taken in some mine action programmes to factor in diversity considerations, as the following examples illustrate. In Angola, operators employ nationals from all ethnic groups who are able to communicate in local languages as well as Portuguese. In Colombia, where almost one in seven of the population come from an indigenous or ethnic minority group, data are disaggregated by ethnicity as well as by gender and age. Operators involve local ethnic minority communities in the liaison process ahead of any field operations, working with them to map contamination and prioritise tasks. Similarly, ethnic identity is taken into account within survey and clearance teams in South Sudan, to ensure safe access and acceptance by the respective local communities. MAG tries to recruit team members from the more than 60 ethnic groups within the country and to ensure that at least one team member speaks the local language of the planned area of deployment. While welcome, the paucity of concrete examples across States Parties shows just how far programmes and operators have to go in making diversity an integral part of their work.

ENVIRONMENTAL POLICIES AND ACTION IN AFFECTED STATES PARTIES

Environmental considerations are steadily and rightly gaining increased prominence and awareness in the mine action sector, although this varies considerably between national authorities, clearance organisations, and donors. Every mine action programme should be considering the environmental impact of both contamination and clearance. Clearance programmes have a responsibility to "do no harm" to the communities in which they work, which includes identifying and where possible mitigating the negative environmental impact of their activities and systematically integrating environmental assessments into the planning process.

The consequences for the environment should be taken into consideration at the earliest possible stages before land release takes place, including during the planning and tasking process, as well as throughout survey and clearance operations, and after completion of land release. Clearing ordnance inevitably has an environmental impact, but employing efficient and effective land release methods minimises this impact by ensuring that assets are only used on contaminated land.

In 2021, Mine Action Review published a Policy Brief on **Mitigating the Environmental Impacts of Explosive Ordnance and Land Release**, outlining the key environmental impacts of landmine and cluster munition remnants (CMR) contamination and land release operations; the relevant regulatory frameworks and treaty commitments; and the importance of environmental management. The Policy Brief, which is available to download on the Mine Action Review website, includes examples and case studies from different regions of the world, illustrating how mine action programmes can have a positive impact on the environment and how environmental management can help mitigate

potentially negative impacts of land release operations. In 2022, for the first time, Mine Action Review has also included a **subsection on environmental policies and action** in each country report. The *Clearing Cluster Munition Remnants 2022* report published in August and this *Clearing the Mines 2022* report together provide a global snapshot of how national authorities and their implementing partners are taking into account the environment in survey and clearance programmes. We hope to see increased and improved information become available over the coming years.

IMAS 07.13 concerns environmental management in mine action. As the IMAS notes, the protection of the environment receives growing attention from national governments and international institutions, and is reflected in the increasingly rigorous demands of national legislation in many countries and the terms of international treaties. Poor environmental management during mine action operations can generate short- and long-term adverse impacts on land, water, soil, and air and the communities living in the vicinity of mine action work sites and result in harm to people as well as damage to the environment. IMAS 07.13 sets a number of generic and minimum requirements for environmental management in the mine action sector.³⁸

As per the IMAS, having an environmental management system is a requirement for national authorities and clearance operators, which are also required to establish, review, and maintain an environmental policy. Furthermore, national authorities are also required to define and communicate environmental obligations in national mine action standards (NMA). Some national authorities and implementing partners are meeting these responsibilities and requirements, and in some instances exceeding them,

38 IMAS 07.13: Environmental Management in Mine Action, 1st Edn, 14 March 2017, p. v.

but many others are falling well short in the application of the IMAS requirements in their mine action programmes. This also applies for donors, whose responsibilities are also outlined in IMAS 07.13. In its June 2022 meeting, the IMAS Steering Group approved by consensus a proposal by NPA to conduct a review and revision of IMAS 07.13. As at writing, a Terms of Reference (ToR) was being elaborated for the review, which will likely be concluded by the end of 2023.

In addition, every State Party to the APMBBC that seeks an extension to its Article 5 deadline is obligated to describe the environmental implications of that extension.³⁹ Many State Parties that have sought extension requests to date have not complied with that duty.

There has, however, been considerable progress in environmental management recorded by some affected States Parties either in national programmes as a whole or at the least among individual clearance operators. Several States Parties, such as Afghanistan, Cambodia, Sudan, and Zimbabwe, now have a dedicated NMAS on environmental management, while Tajikistan's NMAS contains a chapter on the environment, health, and safety.

In Bosnia and Herzegovina, the use of certain machines has been banned from clearing agricultural areas to protect the soil and in mountain pastures to protect against removal of layers of grasses that have taken many years to grow. NPA in Bosnia and Herzegovina has a dedicated environment and climate country policy in place. As land release operations are often conducted in forested areas, NPA also maintains close cooperation with relevant forest administrations, helping prevent unintended environmental consequences and reducing deforestation. MAG is increasingly examining the interaction between wildfires, landslides, and explosive ordnance contamination. In Bosnia and Herzegovina, the high contamination by explosive items exacerbates the human, environmental, and socio-economic impact of wildfires, hinders the response to tackling fires, and increases the risk of landslides.

In accordance with the 2015 Act on Mine Action (as amended), mine action operations in Croatia are to minimise adverse impact on the environment. Furthermore, planning for mine action operations must identify and assess relevant environmental issues and determine appropriate and effective mitigation measures. For EU and international

projects targeting Natura 2000⁴⁰ Ecological Network areas or nature or national park areas, particularly recent projects financed by the EU Cohesion Fund, the environmental considerations are more complex. Every clearance project is subject to a comprehensive environmental study, which details specific measures that must be performed prior, during, and after clearance.

In Serbia, the national mine action centre has been committed to taking environmental aspects into account and minimising potential harm from demining activities ever since its foundation. It reported that for each survey or clearance project task there is an obligation on the contractor (the demining operator) to include in its execution plan an environmental protection and a fire protection plan, together with a plan for health and safety at work.

Thailand does not have a national mine action standard on the environment but the issue is on the agenda. The annual meeting of mine action stakeholders in December 2021 included sessions dedicated to environmental issues and a workshop on Environmental Assessment and Management (EMA) and environment training. NPA introduced an environmental policy and management system in its Thailand operation in 2022.

In Türkiye, in order to minimise potential environmental harm, mines found during clearance are transported to a central area for destruction. This central destruction area is determined according to international standards, including considerations such as proximity to water resources and agricultural land.

Clearance operators also have environmental policies and management systems in place at their headquarters and sometimes also in country programmes too, although the comprehensiveness of these varies across operators. Some international clearance operators, such as HALO Trust and NPA, now have dedicated personnel working on the environment at head office level.

The Environment in Mine Action (EIMA) working group, currently co-chaired by the Conflict and Environment Observatory (CEOBS) and Mine Action Review, has met every two months over the last year to discuss pertinent issues for the sector and hear presentations from experts on a variety of topics. The working group is open to any interested stakeholder in the sector.

OUTLOOK

This year marks the 25th anniversary of the historic adoption and signing of the APMBBC. Huge progress has been made in the intervening years, both in implementation of Article 5 and in the practices of the mine action sector more broadly. Multiple updates to various IMAS chapters have captured how best practice has evolved and improved, including with respect to land release methodologies and information management. Gone are the days of the Landmine Impact Survey (LIS), which has been replaced by the application of targeted and evidence-based non-technical and technical

survey to accurately identify and confirm mined areas, saving millions of dollars on wasted clearance of uncontaminated land. Innovations in technology, such as the use of unmanned aerial vehicles/drones, are also increasingly contributing to the efficiency of survey and clearance operations. Gender and diversity, together with the environment, while barely referenced in original Convention text, are increasingly and rightly being mainstreamed in national mine action programmes. National ownership has been recognised as being critical to successful Article 5 implementation.

39 Art. 5(4)(c), APMBBC.

40 Natura 2000 is a network of protected areas covering Europe's most valuable and threatened species and habitats.

Use of conventionally manufactured mines was once prevalent, and while such factory-produced mines are still being used in a small number of States, it is the use of anti-personnel mines of an improvised nature by non-State armed groups that has increasingly become the primary explosive threat in many countries. The sector has, however, adopted the necessary methods and systems to address and record these victim-activated devices under the APMBC. The development of sustainable national capacities will be essential to deal with this new use of anti-personnel mines of an improvised nature, including enabling national authorities to collect, disaggregate, and record contamination data correctly under the APMBC. This is especially important in the Sahel, where use of improvised munitions is gradually spreading. Sustainable national capacity will also be essential to address any residual contamination.

The five-year Oslo Action Plan (OAP), adopted at the Fourth Review Conference in 2019, captures the lessons learned over the last quarter of a century, and serves as a blueprint for implementation of the Convention today. The Action Plan is a key tool in supporting States Parties and their implementing partners reach completion in the best way possible – efficiently, effectively, safely, and inclusively. The obligations in Article 5 and the guidance provided by the OAP must be integrated into national strategies, annual work plans, information management systems, and national mine action standards. The sector should use the monitoring of the OAP indicators, including Mine Action Review's monitoring of those related to survey and clearance, but such monitoring alone is not enough. We encourage States Parties and their implementing partners to use the results of the monitoring to identify where indicators are not being met, and to put in place measures to address this, so that meaningful progress can be achieved and reported on by the time of the Fifth Review Conference of the APMBC.

That Fifth Review Conference, which will take place in less than two years' time, in 2024, will reveal how successfully States Parties have implemented the Convention and tackled mine contamination. As things stand, very few affected States Parties will meet the target set by the 2014 Maputo Review Conference and to which they recommitted at the 2019 Oslo Review Conference, for a world free of anti-personnel mines by the end of 2025. Only Oman, and potentially also Peru and Zimbabwe, are likely to have fulfilled their Article 5 obligations by that date.

If, however, programme performance improved and sufficient funding were provided, Chad, Croatia, DR Congo, Ecuador, Guinea-Bissau, Niger, Peru, Serbia, Sri Lanka, Sudan, and Tajikistan could also be cleared of anti-personnel mines within the Maputo and Oslo target. The Fifth Review Conference should aim to ensure that not only are all of these States free of mines by 2030, but so too are Angola, Bosnia and Herzegovina, Cambodia, Cameroon, Colombia, Cyprus, Eritrea, Ethiopia, Mali, Mauritania, Nigeria, Senegal, South Sudan, Thailand, and Türkiye. Such an agenda is ambitious, but it is also achievable. In the case of Afghanistan, Iraq, Somalia, Ukraine, and Yemen, another decade or more may be needed to complete clearance, along with a significant change for the better in the security situation.

STATES PARTIES

The background of the page is composed of several overlapping, semi-transparent geometric shapes in various shades of orange and red. The shapes are primarily triangles and quadrilaterals, creating a dynamic, layered effect. The colors range from a deep, dark red to a bright, light orange. The overall composition is abstract and modern.

ARTICLE 5 DEADLINE: 1 MARCH 2023
TWO-YEAR INTERIM EXTENSION REQUESTED TO 1 MARCH 2025

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

NATIONAL DATABASE ESTIMATE AT END 2021

191 KM²

AP MINE CLEARANCE IN 2021

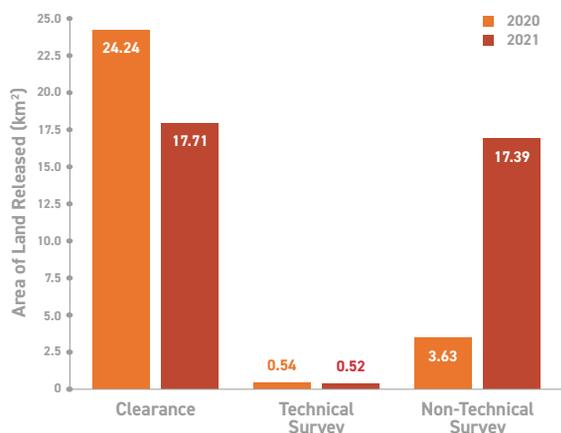
17.71 KM²

AP MINES DESTROYED IN 2021

7,656

(INCLUDING 352 IMPROVISED ANTI-PERSONNEL MINES)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

The Taliban took power in August 2021 as the Islamic Emirate of Afghanistan (IEA) but the new regime did not receive international recognition and came under international sanctions that crippled the economy and cut off funding to national mine action authorities. International donors continued to provide funds to implementing partners bilaterally or through the United Nations Mine Action Service (UNMAS) and ITF Enhancing Human Security. The IEA retained the existing mine action institutional structure with the Afghan National Disaster Management Authority (ANDMA) overseeing the sector and the Directorate of Mine Action (DMAC) in charge of operational management and coordination, but lack of funding caused an exodus of staff from DMAC, limiting its capacity to discharge its responsibilities.

UNMAS set up the UN Emergency Mine Action Coordination Centre for Afghanistan (UN-EMACCA), later re-established as the UN Humanitarian Mine Action Coordination for Afghanistan (UN-HMACCA), to provide mine action coordination and support. The DMAC terminated the arrangement in March 2022 amid tensions with UNMAS linked to international non-recognition of the de facto authorities. In agreement with DMAC, UNMAS established a Liaison Office funded by the UN, in June 2022 with 15 staff to facilitate humanitarian mine action in Afghanistan and provide coordination and information management to the Mine Action Programme of Afghanistan (MAPA). DMAC expressed the IEA's commitment to upholding Afghanistan's treaty obligations and informed Mine Action Review that it intended to request an extension to its March 2023 Article 5 deadline. A two-year interim extension request submitted by the Permanent Mission to the United Nations in Geneva, representing the former regime, was not initially valid but DMAC's Director subsequently informed Mine Action Review in August 2022 that it had not prepared the extension request but accepted and endorsed it.

Mine Action Review has sought clarity from UNMAS on which entity—the Taliban regime or the former regime—it believes is bound directly by the Anti-Personnel Mine Ban Convention (APMBC) as the State of Afghanistan.¹ This would clarify the duties of UNMAS and other UN entities with respect to the Taliban regime in all disarmament treaties since such treaties are directed to States Parties and not to non-State actors. Accordingly, since as a matter of international law, only States are directly prohibited from using the prohibited weapons and required to report to the United Nations, UNMAS would be far better placed to support the implementation of the Convention, in accordance with its strategic plan.² UNMAS has requested guidance on this issue from the Department of Political and Peacebuilding Affairs (DPPA). According to UNMAS, the view of the DPPA is that "conventions

1 Meeting between representatives from Mine Action Review and UNMAS Headquarters, virtual meeting via Microsoft Teams, 14 October 2022.

2 See UNMAS Strategic Plan 2019–2023, Strategic Outcome 4.

are concluded by States not governments, so the obligation remains regardless of who is in authority”.³ This does not clarify the fundamental issue, and the DDPA is not a UN entity with specialist international legal expertise. As at the time of writing, UNMAS had not requested guidance from the UN Office of Legal Affairs (OLA), despite pledging to do so in discussions with Mine Action Review.⁴ Obtaining a clear international legal response from the UN on which entity represents the State of Afghanistan and is legally bound by the APMBC is critical as the Taliban regime, before taking power in August 2021, continued to use anti-personnel mines prohibited under the APMBC, especially mines of an improvised nature.

RECOMMENDATIONS FOR ACTION

- Afghanistan should accelerate survey, prioritising areas previously inaccessible due to insecurity.
- The MAPA should establish a definitive baseline estimate of improvised mine contamination.
- DMAC should prepare a detailed work plan that would also support preparation of a more comprehensive Article 5 deadline extension request to follow-on from the interim two-year request submitted by representatives of the former Afghan regime in 2022.
- Afghanistan should resume regular submission of comprehensive Article 7 reports.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	6	Afghanistan has a good, but still incomplete, knowledge of pre-2001 or “legacy” anti-personnel mine contamination and continues to add significant amounts of previously unrecorded mined area to the database. There is only rudimentary knowledge of post-2001 contamination, including mines of an improvised nature, which may now pose the greater threat to civilians.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	8	The MAPA is nationally managed but heavily dependent on international funding, which previously covered most DMAC salaries. Diplomatic isolation and international sanctions targeting the Taliban government which took power in August 2021 caused an exodus of DMAC staff, leaving only a skeleton management team in place with minimal capacity to discharge its management and coordination functions. DMAC opposed interim coordination mechanisms put forward by UNMAS until June 2022 when, in agreement with DMAC, UNMAS set up a Liaison Office funded by the UN to coordinate mine action on a temporary basis.
GENDER AND DIVERSITY (10% of overall score)	5	7	Until August 2021, DMAC was committed to mainstreaming gender, which was one of four main goals in the 2016–20 strategic plan. Progress implementing it was slow although most implementing partners (IPs) had gender focal points, hired some women in community liaison and risk education and in rare cases for clearance. After August 2021, stringent IEA regulations sharply reduced public space for women but IPs were able to continue to employ women in office and field (risk education and community liaison) roles.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	8	Information management suffered major disruption after the change of government. DMAC has an Information Management System for Mine Action (IMSMA) database but lost its IM personnel after the end to international funding. IPs continued to report operating results to DMAC but database operations largely halted after August 2021. The UN-HMACCA resumed data processing early in 2022 but this was terminated at the end of March. The Liaison Office established by UNMAS in June 2022 took on information management for the MAPA.
PLANNING AND TASKING (10% of overall score)	6	8	DMAC planning and tasking of the MAPA suffered disruption after the August 2021 change of government but survey and clearance continued on a project-by-project basis as international donors continued to fund IPs bilaterally or through UNMAS and the UN Voluntary Trust Fund for Mine Action.
LAND RELEASE SYSTEM (20% of overall score)	6	6	The MAPA has national mine action standards (AMAS) in Dari and English that are subject to regular review and in 2019 it introduced new standards for clearance of mines of an improvised nature. International experts believe the AMAS need comprehensive updating. Land release is achieved largely by full clearance, underscoring weaknesses in IP application of non-technical survey. Upheavals in DMAC after August 2021 disrupted its quality management, which has continued but only sporadically.

3 Email from Dmitri Alechkevitch, Team Leader Policy, Policy, Advocacy, Donor Relations and Outreach, UNMAS, 21 October 2022.

4 Meeting between representatives from Mine Action Review and UNMAS Headquarters, virtual meeting via Microsoft Teams, 14 October 2022.

Criterion	Score (2021)	Score (2020)	Performance Commentary
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	7	The MAPA has released an average of more than 25km ² a year through clearance over the last five years and despite the security challenges and political upheavals in 2021 overall land release dropped only 5% compared with the previous year. The IEA affirmed its commitment to fulfilling Afghanistan's APMBC treaty obligations and in July 2022 the Permanent Mission of Afghanistan to the UN in Geneva submitted a request for a two-year extension.
Average Score	5.8	6.9	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Afghanistan National Disaster Management Authority (ANDMA)
- Directorate of Mine Action Coordination (DMAC)

NATIONAL OPERATORS

- Afghan Technical Consultants (ATC)
- Agency for Rehabilitation and Energy Conservation in Afghanistan (AREA)
- Demining Agency for Afghanistan (DAFA)
- Mine Clearance Planning Agency (MCPA)
- Mine Detection and Dog Centre (MDC)
- Organisation for Mine Clearance and Afghan Rehabilitation (OMAR)
- 18 commercial companies accredited in 2021, but only Assad Brothers Demining reported active in anti-personnel mine clearance

INTERNATIONAL OPERATORS

- Danish Refugee Council (DRC) Humanitarian Disarmament and Peacebuilding Sector (formerly Danish Demining Group, DDG)
- Swiss Foundation for Mine Action (FSD)
- The HALO Trust

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)
- Norwegian People's Aid (NPA)
- Artios Global

UNDERSTANDING OF AP MINE CONTAMINATION

Afghanistan estimated its contamination from anti-personnel mines, including improvised mines, as covering 191km² at the end of 2021 (see Table 1).⁵ That represented a rise of 11% over estimated contamination a year earlier but the figure looked set to rise in 2022. The end of widespread active hostilities after the change of government in August 2021 has allowed survey in large swathes of the country that were previously inaccessible due to insecurity. For the first time, this has generated the opportunity to assess the extent of contamination by improvised mines widely used by Taliban forces in conflict areas.

Table 1: Mined area by contamination type (at end 2021)

Contamination type	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Anti-personnel mines	1,622	118,508,095	108	28,984,387	147,492,482
Improvised mines	643	28,773,183	40	14,999,597	43,772,780
AP mine total	2,265	147,281,278	148	43,983,984	191,265,262
Anti-vehicle mines	1,019	178,572,568	207	115,298,702	293,871,270
Total mined area	3,284	325,853,846	355	159,282,686	485,136,532

CHA = Confirmed hazardous area SHA = Suspected hazardous area

Most of Afghanistan's conventional anti-personnel mine contamination resulted from the decade-long war of resistance that followed the Soviet invasion of 1979, the 1992-96 internal armed conflict, and the 1996-2001 fighting between the Taliban and the Northern Alliance. Afghanistan estimated the area affected by these so-called "legacy" mines dating from before 2001 amounted to 147km² at the end of 2021, a small (3%) reduction from the previous year's estimate. This included big concentrations in the central and north-eastern areas of the country (see Table 2) but operators say some of the survey carried out in the past lacked rigour resulting in inflated suspected hazardous areas (SHAs) that will require significant amounts of cancellation in the future.⁶ After decades of demining, however, the remaining confirmed hazardous areas (CHAs) are increasingly located in remote and difficult mountainous terrain that has slowed the pace of clearance.

⁵ Email from Olivier Demars, Information Management Advisor, UNMAS, 24 April 2022.

⁶ Interview with Farid Homayoun, Country Director, HALO Trust, 4 June 2022.

Table 2: Anti-personnel mine contamination by region, excluding improvised mines (at end 2021)⁷

Region	CHAs	Area (m ²)	SHAs	Area (m ²)
Central	414	27,633,981	24	3,782,208
East	164	13,698,889	5	534,900
North	184	4,445,023	0	0
North East	558	36,940,897	12	8,682,246
South	66	6,019,485	49	7,416,182
South East	109	9,500,144	13	1,967,151
West	127	20,269,676	5	6,601,700
Total	1,622	118,508,095	108	28,984,387

Despite decades of mine clearance in Afghanistan, operators continue to find previously unrecorded mined areas. Survey in 2021 located a further 9.6km² of mined area that was added to the national database (see Table 3). Some 3.6km² of improvised mine contamination was also recorded in 2021.⁸ Additional anti-personnel mined area finds may have been reported but not yet uploaded to the database as a result of disruption and delays experienced in Afghanistan's information management after August 2021.

Table 3: Newly recorded contamination 2021⁹

Contamination type	Mined areas	Area (m ²)	Provinces affected
Anti-personnel mines	70	4,710,000	9
Anti-vehicle mines	40	4,913,661	9
Totals	110	9,623,661	9
Improvised mines	133	3,648,415	7
Sum totals	243	13,272,076	9

Afghanistan is just beginning to get to grips with the extent of improvised mine contamination, made possible by the cessation of active hostilities in most parts of the country after the change of government. In contrast to Afghanistan's conventional mined areas, improvised mine contamination was mostly emplaced after 2017¹⁰ and is located in areas that experienced intense conflict, often close to inhabited areas. Before the August 2021 change of government, Taliban authorities only permitted survey and clearance of what have been officially named as Abandoned Improvised Mines (AIM) in locations which were no longer areas of ongoing hostilities. This prevented an accurate determination of the full extent of the problem. Data available at the end of 2021 pointed to close to 44km² of AIM contamination, mostly in the south (see Table 4).¹¹ However, the understanding of improvised contamination has changed rapidly since August 2021 as operators have gained access to areas where they were previously unable to work because of conflict and insecurity.

Table 4: Improvised mine contamination by region (at end 2021)¹²

Region	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Central	9	812,375	0	0	812,375
East	256	8,022,464	4	111,973	8,134,437
North	29	1,254,778	3	50,188	1,304,966
North East	23	915,903	8	100,236	1,016,139
South	231	15,887,241	25	14,737,200	30,624,441
South East	37	127,642	0	0	127,642
West	58	1,752,780	0	0	1,752,780
Totals	643	28,773,183	40	14,999,597	43,772,780

7 Email from Olivier Demars, UNMAS, 24 April 2022.

8 Ibid.

9 Email from Olivier Demars, UNMAS, 24 April 2022.

10 Interview with Ahmadullah Saalari, Chief of AIM Division, HALO Trust, 9 June 2022.

11 Email from Olivier Demars, UNMAS, 24 April 2022.

12 Ibid.

The HALO Trust, the lead agency tackling improvised mines, confirmed 14km² of improvised mine hazardous areas in 13 provinces in 2021, half of it in Kandahar.¹³ By June 2022, it had raised the estimate of contamination to well over 100km² but the figures were increasing every month as a result of rapid survey, aided by requests for support from many affected communities and the information provided by some Taliban fighters on the location or general area where they had emplaced improvised mines. In June 2022, HALO reported CHAs totalling 52.21km² and SHAs of 18.08km². It also recorded a further 46.21km² of initial hazardous area (IHA) resulting from remote survey. It believed roughly 70% of IHAs would subsequently be identified as SHAs.¹⁴

Information from Taliban supporters since August 2021 has increased understanding of device types, switches, and how they were deployed. By June 2022, HALO Trust had located and examined 13 improvised mine factories in southern Afghanistan. HALO Trust found that around 90% of devices were initiated by pressure plates and the remainder were activated by remote command or timers (meaning they are

not mines under international law). Most were home-made but around 10% employed conventional ammunition as a main charge.¹⁵

Afghanistan also has extensive areas of anti-vehicle mine contamination, much of it a low-priority threat scattered over wide areas of sparse population. Since the change of government, however, implementing partner (IP) access to areas previously shut off by insecurity has also revealed anti-vehicle mined areas inside villages that are high priority for clearance.¹⁶

Afghanistan has massive contamination by explosive remnants of war, including at least around 10km² of cluster munition-contaminated area¹⁷ and a wide range of other unexploded ordnance (UXO) (see Mine Action Review's *Clearing the Cluster Munition Remnants* report on Afghanistan for further information). The UN reported that Afghanistan had 39 former NATO firing ranges covering 681km² to be cleared of UXO, of which one, covering 51km², was being addressed.¹⁸

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Taliban takeover of Afghanistan's government in August 2021 brought little formal change to the MAPA management structure but disrupted its ability to function. The Islamic Emirate of Afghanistan retained Afghanistan's National Disaster Management Authority in the role of a mine action authority setting policy, while DMAC was responsible for managing and coordinating operations, information management, and quality management (QM). The IEA-appointed director of DMAC said that the only change resulting from the change of government was in the personnel running it.¹⁹

The lack of international recognition of the IEA and financial sanctions imposed by the United States and Western governments has severely limited DMAC's ability to function. DMAC completed the transition from being a project of UNMAS to national management in June 2018. From its headquarters in Kabul and seven regional offices, DMAC coordinated the work of national and international implementing partners, prepared strategic plans and annual work plans, set priorities and standards, accredited operators, conducted quality assurance, managed the mine action database, and liaised with international donors.²⁰

However, DMAC remained almost entirely dependent on international financing. By 2021, the Government of Afghanistan paid salaries of only 15 of DMAC's 155 staff, the rest being paid by UNMAS and ITF Enhancing Human Security.²¹ After August 2021, international sanctions imposed on the IEA halted cooperation between UNMAS and DMAC, and DMAC staff on internationally funded salaries transferred to UNMAS. As of June 2022, DMAC's active staff consisted of the director and 15 other staff, including the heads of planning and operations and an information management officer.²²

DMAC's director has maintained close contact with IPs and engaged proactively to support MAPA operations, intervening to resolve occasional difficulties between IPs and local authorities or to facilitate equipment imports. DMAC has acknowledged it lacks capacity to conduct previous levels of coordination and management. Its regional offices closed and although QM staff were able to conduct visits to IP operating sites to accredit teams and mechanical assets this occurred only sporadically. IPs continued to submit progress reports to DMAC but the Directorate lacked capacity to upload them into the database.²³

13 Email from Farid Homayoun, HALO Trust, 12 May 2022.

14 Interview with Ahmadullah Saalari, HALO Trust, 9 June 2022.

15 Interview with Ahmadullah Saalari, HALO Trust, 9 June 2022.

16 Interview with Farid Homayoun, HALO Trust, 4 June 2022.

17 Email from Olivier Demars, UNMAS, 24 April 2022.

18 UNMAS, "Humanitarian Mine Action in Afghanistan", 10 February 2022.

19 Interview with Qari Nooruddin Rustamkhail, Director, DMAC, 4 June 2022.

20 Email from Mohammad Wakil Jamshidi, Chief of Staff, UNMAS/DMAC, 16 May 2017.

21 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

22 Interview with Qari Nooruddin Rustamkhail, DMAC, 4 June 2022; and email, 15 June 2022.

23 Interviews with international and national implementing partners, Kabul, 4–10 June 2022.

In September 2021, UNMAS set up the UN Emergency Mine Action Coordination Centre for Afghanistan (UN-EMACCA) to serve as a temporary coordination body on an emergency basis and acting independently of the government, tasking IPs that were bilaterally funded, as well as providing QM and information management for these projects.²⁴ In early November, the UN-EMACCA was dissolved and re-established as the UN Humanitarian Mine Action Coordination Centre for Afghanistan (UN-HMACCA), still separate from the DMAC. By the end of the year, it was operating with 114 national staff.²⁵ As a result of discussions between UNMAS and the DMAC on division of responsibilities DMAC continued to set the national mine action strategy, act as custodian of national mine action standards, sign and issue the final certification of land release, oversee adherence to international treaties, and regulate the mine action sector's commercial and development-focused actors. Working within the parameters of the United Nations Transitional Engagement Framework (TEF),²⁶ UNMAS took the lead in humanitarian mine action managing implementation of the strategy, planning, and priorities. It would also support the process of accreditation and land release, data collection and information management, research, training, and public relations, including resource mobilisation.²⁷ The formula proved unacceptable to DMAC, leading to the termination of UN-HMACCA at the end of March and ending the employment of 118 national staff.²⁸

Further negotiations between DMAC and UNMAS led in June 2022 to agreement on the creation of a Liaison Office, funded by the UN, located in a separate building from DMAC offices and UNMAS offices. This became operational by the end of that month.²⁹ DMAC described the office as a temporary facility to support coordination of the MAPA until the removal of international sanctions. DMAC emphasised that it remained the primary point of contact for IPs for data sharing, disseminating information, planning, operational activities, and QM. It agreed that the Liaison Office would manage the MAPA's Information Management System for Mine Action

(IMSMA) database, processing survey and clearance results, completion reports, new hazard reports, risk education results, and accident reports. DMAC also required support for QM,³⁰ and regional liaison offices were also established. The Liaison Office was due to have a staff of 25, employing national staff on a salary linked to non-governmental organisation (NGO) pay scales, higher than government rates but below UN salaries.³¹ In addition to information management, it would undertake tasking and prioritisation of humanitarian mine action in consultation with DMAC.³²

Mine Action Review has sought clarity from UNMAS on which entity—the Taliban regime or the former regime—it believes is bound directly by the APMBC as the State of Afghanistan.³³ This would clarify the duties of UNMAS and other UN entities with respect to the Taliban regime in all disarmament treaties since such treaties are directed to States Parties and not to non-State actors. Accordingly, since as a matter of international law, only States are directly prohibited from using the prohibited weapons and required to report to the United Nations, UNMAS would be far better placed to support the implementation of the Convention, in accordance with its strategic plan.³⁴ UNMAS has requested guidance on this issue from the Department of Political and Peacebuilding Affairs (DPPA). According to UNMAS, the view of the DPPA is that "conventions are concluded by States not governments, so the obligation remains regardless of who is in authority".³⁵ This does not clarify the fundamental issue, and the DPPA is not a UN entity with specialist international legal expertise. As at the time of writing, UNMAS had not requested guidance from the UN Office of Legal Affairs (OLA), despite pledging to do so in discussions with Mine Action Review.³⁶ Obtaining a clear international legal response from the UN on which entity represents the State of Afghanistan and is legally bound by the APMBC is critical as the Taliban regime, before taking power in August 2021, continued to use anti-personnel mines prohibited under the APMBC, especially mines of an improvised nature.

ENVIRONMENTAL POLICIES AND ACTION

DMAC has had a national standard for environmental protection in mine action (AMAS 07.06) since 2017 which sets out policy and lays down a standing operating procedure (SOP). The Standard aims to ensure that mine action operations "leave the environment in a status that is similar to, or where possible better than, before mine action operations commenced, and that permits the intended use of land once mine action operations have been completed." The AMAS calls for environmental protection to be incorporated into operational plans and consultation with local communities on issues relating to burning or clearing vegetation, as well as on noise and dust.³⁷ In addition, individual operators, such as the Danish Refugee Council (DRC) and The HALO Trust, have institutional policies in place at headquarters level.

24 Email from Sohaila Hashemi, Communications and Advocacy Officer, UNMAS, 23 February 2022; UNMAS, Humanitarian Mine Action in Afghanistan, MASG, 9 April 2022.

25 Email from Sohaila Hashemi, UNMAS, 23 February 2022.

26 'United Nations Transitional Engagement Framework (TEF) for Afghanistan', 26 January 2022, at: <https://bit.ly/3SNGIgh>.

27 UNMAS, "Humanitarian Mine Action in Afghanistan", 10 February 2022.

28 Interview with Paul Heslop, Chief of Mine Action Programme, UNMAS, 7 June 2022; UNMAS, "Humanitarian Mine Action in Afghanistan", 9 April 2022.

29 Email from Qari Nooruddin Rustamkhail, DMAC, 15 June 2022.

30 Interview with Qari Nooruddin Rustamkhail, DMAC, 4 June 2022; and email, 15 June 2022.

31 Interview with Paul Heslop, UNMAS, 7 June 2022.

32 Ibid.

33 Meeting between representatives from Mine Action Review and UNMAS Headquarters, virtual meeting via Microsoft Teams, 14 October 2022.

34 See UNMAS Strategic Plan 2019–2023, Strategic Outcome 4.

35 Email from Dmitri Alechkevitch, Team Leader Policy, Policy, Advocacy, Donor Relations and Outreach, UNMAS, 21 October 2022.

36 Meeting between representatives from Mine Action Review and UNMAS Headquarters, virtual meeting via Microsoft Teams, 14 October 2022

37 Afghanistan Mine Action Standards – AMAS 07.06, Environmental Management in Mine Action, March 2017.

GENDER AND DIVERSITY

Prior to August 2021, Afghanistan had taken initial steps to develop more inclusive mine action within limits imposed by a deeply conservative society. DMAC's 2016–20 strategic plan included gender mainstreaming as one of four main goals. It stated that "achievable targets, reflecting prevailing circumstances and conditions, will be adopted to support and encourage progress wherever possible."³⁸ After August 2021, Taliban rules imposed stricter regulation on women and girls condemned by the UN as the "institutionalised systematic oppression of women"³⁹ but DMAC has said it remained possible for women to work in the MAPA.⁴⁰ UNMAS convened the first post-regime-change meeting of a Gender and Diversity Technical Working Group in February 2022⁴¹ and IPs have continued to employ female staff in office and field jobs.⁴² UNMAS also provided grants to four Afghan IPs (AREA, DAFA, MDC, and OMAR) early in 2022 to support equality and inclusion mainstreaming.⁴³

Despite the commitment to promoting gender and inclusion in mine action, employment of women remained low. The MAPA, with a total workforce of close to 6,000 in 2020, had increased the number of women employees from 170 near the end of 2019 to 212 in the last quarter of 2020.⁴⁴ DMAC acknowledged in 2021 that women made up only 4% of MAPA personnel and persons with disabilities 1%.⁴⁵ In early 2021, DMAC's 155 staff still included only four women employees, consisting of a female human resources assistant and three interns for the gender and diversity, information management, and risk education departments.⁴⁶

DMAC had taken a number of measures to raise awareness of gender issues and promote compliance by implementing partners. In October 2020, after a gap of six months, it appointed a new gender focal point who trained the gender focal points of implementing partners as well as some training on non-technical survey for male and female staff of DMAC and IPs.⁴⁷ DMAC reported that all vacancy

announcements were gender sensitive and that a woman is present in all recruitment panels, and that women candidates' scores are automatically accorded extra points.⁴⁸

After August 2021, conditions for female employees varied in different locations, but women NGO staff still worked across the country.⁴⁹ Afghanistan's first female clearance team, set up by DRC in Bamyan province in 2018 and taken on by OMAR for battle area clearance (BAC) tasks in the same province in 2020, no longer exists and some of its members have reportedly left the country. However, some IPs reported employing more women in 2022 than before the Taliban takeover. Females employed in operations largely worked in mixed teams with a male family member and almost exclusively in risk education and community liaison. IPs noted this added to operating costs requiring separate vehicles, office space, and accommodation.⁵⁰

DRC, the first IP to deploy an all-female manual clearance team in 2018, had 21 women employees including one international in its staff in 2021, four of them working in managerial positions, and the remainder working in risk education teams. In 2022, DRC hired more women and as of April 2022 had 23 female staff working in the field on risk education and expected to deploy more mixed gender risk education/non-technical survey teams in each of the five main regions by the end of the year.⁵¹ The Swiss Foundation for Mine Action (FSD)'s total staff of 99 in 2021 included five women, two of whom worked in financial management positions in the head office in Tajikistan with the other three in Afghanistan in FSD's programme of support to mine victims. Since the change of government, these staff have been working from home.⁵² The HALO Trust reported it employed 15 women before August 2021 and by June 2022 had increased the number to 46 working in mixed gender teams with family members. In most teams, HALO Trust said it gave women the position of team leader.⁵³

38 DMAC, "National Mine Action Strategic Plan 1395–1399 (2016–2020)", State Ministry for Disaster Management and Humanitarian Affairs, undated but 2016, p. 17.

39 Statement of Michelle Bachelet, UN High Commissioner for Human Rights, to the UN Human Rights Council, 15 June 2022.

40 Interviews with Qari Nooruddin Rustamkhail, Director, 4 June 2022; Soeren Adser Soerensen, Head of Humanitarian Disarmament, DRC, 6 June 2022; Farid Homayoun, HALO Trust, 4 June 2022; and with Awal Khan, QA Manager, OMAR, and Zarina Omar, EORE Manager & Gender Focal Point, OMAR, 8 June 2022.

41 Email from Sohaila Hashemi, UNMAS, 23 February 2022.

42 Interviews with international and national implementing partners, Kabul, 4–10 June 2022.

43 Email from Sohaila Hashemi, UNMAS, 6 March 2022.

44 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

45 Convention on Cluster Munitions (CCM) Article 4 deadline Extension Request, 3 August 2021, p. 4.

46 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

47 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

48 Ibid.

49 Email from Soeren Adser Soerensen, DRC, 27 March 2022.

50 Interviews with Farid Homayoun, HALO Trust, 4 June 2022; and with Awal Khan, QA Manager, OMAR, and Zarina Omar, EORE Manager & Gender Focal Point, OMAR, 8 June 2022.

51 Email from Soeren Adser Soerensen, DRC, 27 March 2022.

52 Email from Din Mohammad Nickwah, Country Director, FSD, 23 March 2022.

53 Interviews with Farid Homayoun, HALO Trust, 4 June 2022.

INFORMATION MANAGEMENT AND REPORTING

DMAC had embarked in 2021 on upgrading its national database from the New Generation version to IMSMA Core, but had expected the process of cleaning up data to be uploaded into the new system to last into 2023.⁵⁴ The MAPA's information management suffered severe disruption in 2021 after the change of government in August and the loss of staff experienced by DMAC as a result of international sanctions against the IEA.⁵⁵ As at September 2022, Afghanistan had still to submit its Article 7 transparency report covering 2021.

Between August 2021 and the end of the year, IPs continued to submit operating results to DMAC and UNMAS but reports were not uploaded systematically into the database.⁵⁶ UNMAS set up a small IMSMA cell early in 2022, which first uploaded operating data for UNMAS-funded projects and then moved onto the other IPs' results.⁵⁷ The termination of UN-HMACCA at the end of March 2022 led to another interruption in data processing. DMAC and UNMAS subsequently agreed that UNMAS would run the IMSMA database in the Liaison Office providing a duplicate data set to DMAC.⁵⁸

UNMAS pursued a number of other initiatives to enhance access to data and strengthen IP reporting. These include working towards launching the Global Information Management System, digitally capturing data imported from IPs and humanitarian agencies and presenting it on a dashboard. This will provide operators, donors, and other stakeholders with easy access to an updated snapshot that includes explosive ordnance contamination estimates, the status of current operations, and donor funding.⁵⁹ UNMAS is also promoting use of electronic tablets by IP survey and clearance teams to facilitate and improve the quality of reporting from the field. UNMAS started distributing the tablets in May 2022 and by early June had delivered 120. It planned to roll out the programme to all IPs it funded in the course of the year.⁶⁰

PLANNING AND TASKING

Until the middle of 2021, Afghanistan was working with the support of the Geneva International Centre for Humanitarian Demining (GICHD) to develop a new strategic plan for Afghan years 1400-1404 (April 2021–March 2026). This set out five strategic goals which included integrating mine action into development planning, promoting gender and inclusivity in MAPA operations and land release and strengthening advocacy for humanitarian mine action as an enabler of sustainable development, peace, and security.⁶¹ DMAC was still finalising the document when the government changed in August 2021.

Since August 2021, IPs have continued to report to, and coordinate operations with, DMAC as the national authority but also with the UNMAS coordination mechanisms operational between September 2021 and the end of March 2022 when DMAC criticisms of the cost of the UN-HMACCA led to its closure. Subsequent discussions between DMAC and UNMAS produced agreement on the creation of a Liaison Office at the end of June 2022, which took on the roles of coordinating and tasking IPs and information management, including management of the IMSMA database.⁶²

As the MAPA navigated political change and international sanctions, UNMAS sought to mobilise international funding to support six priorities:⁶³

- **Coordination:** compared with more than 100 staff coordinating mine action in DMAC before August 2021 and in interim UN bodies up to March 2022, the Liaison Office had 25 staff and funding through UNMAS only until the end of August 2022.
- **National survey:** in April 2022 IPs started conducting survey in four provinces that experienced the most casualties in the last five years: Helmand, Kandahar, Kunduz, and Uruzgan. UNMAS advocated for a full national survey taking advantage of improved security and access to previously inaccessible districts in order to establish a baseline estimate of contamination that could inform an Afghanistan's APMB Article 5 deadline extension request.
- **Large-scale clearance:** at the start of 2022 UNMAS had hoped to raise some \$75 million for the MAPA for the year, aiming among other priorities to increase the number of Quick Response Teams matching post-conflict needs for emergency explosive ordnance disposal (EOD) call-outs, survey and clearance.

⁵⁴ Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

⁵⁵ Interviews with international and national implementing partners, Kabul, 4–10 June 2022.

⁵⁶ Interview with Farid Homayoun, HALO Trust, 4 June 2022.

⁵⁷ Email from Mohammad Wakil Jamshidi, Acting Head of Project/CoOPS Unit, UNMAS, 16 February 2022.

⁵⁸ Interview with Qari Nooruddin Rustamkhail, DMAC, 4 June 2022.

⁵⁹ Interview with Paul Heslop and Malcom MacDonald, Senior Technical Advisor, UNMAS, Kabul, 7 June 2022.

⁶⁰ Ibid.

⁶¹ Emails from Akhbar Oriakhil, DMAC, 11 April and 1 June 2021.

⁶² Interviews with Qari Nooruddin Rustamkhail, DMAC, 4 June 2022, and Paul Heslop, UNMAS, Kabul, 7 June 2022.

⁶³ Interview with Paul Heslop and Malcom MacDonald, Senior Technical Advisor, UNMAS, Kabul, 6 June 2022.

- **Increased risk education:** broadening nationwide messaging, learning from the success of a BBC Media Action series,⁶⁴
- **Expanding regional communications and community-level engagement.**
- **Hostile environment training** for humanitarian organisations and NGOs to address risks from widespread improvised mine contamination. Aid organisations had shown strong interest and a first course was due to take place in July 2022.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The MAPA has comprehensive national mine action standards that are compliant with the International Mine Action Standards (IMAS). Before the change of government in August 2021 and the disruption to MAPA management, DMAC had reviewed them annually and amended them in consultation with IPs. No further updates of AMAS or SOPs has occurred since August 2021.⁶⁵

The GICHD noted in a 2019 capacity assessment that DMAC is "proactive in introducing new AMAS as and when needed" but commented that it had not updated them regularly. It noted that most of the AMAS were developed between 2011 and 2013 and said some chapters needed to be reviewed and updated to promote greater efficiency.⁶⁶ The persistently high percentage of land released through full clearance—averaging 78% between 2018 and 2020—calls into question the efficiency of the MAPA's survey and land release practices. In 2021, the percentage of full clearance fell to below half (48%) but primarily as a result of the HALO Trust's cancellation of land affected by improvised mines.

The GICHD's assessment observed that the emphasis on costs-per-square-metre cleared in tendering and contractual arrangements did not encourage operators to apply the full range of land release options, including survey. It recommended operations should be based on stronger

evidence-based decision-making and that a review of land release applications should probe the reasons for the high percentage of full clearance and consider possible alternatives. To increase efficiency, it also recommended standardised training in non-technical survey and technical survey.⁶⁷ Plans for DMAC and the GICHD to review and revise land release standards to strengthen non-technical survey and increase operational efficiency⁶⁸ were overtaken by the change of government.

In 2019, Afghanistan became the first country programme to release a standard for tackling mines of an improvised nature. AMAS 06.10 (Abandoned Improvised Mine Clearance) was released in March 2019, emphasising the neutrality of humanitarian mine action. The standard was reviewed in a series of technical working group meetings and a revised version issued in 2020. The standard requires operators to secure prior written consent from local authorities and other "key local stakeholders", including armed opposition groups, and confirmation by the party that laid devices that they are abandoned and that clearance may proceed. It stipulates clearance should take place only in a rural or semi-rural setting. All action to neutralise AIMS should be conducted remotely or semi-remotely, and where possible devices should be destroyed in situ.⁶⁹

OPERATORS AND OPERATIONAL TOOLS

Afghanistan had 40 humanitarian and commercial companies engaged in mine action at the start of 2021, of which 31 were accredited for survey and clearance and the remainder for victim assistance, explosive ordnance risk reduction, and monitoring.⁷⁰ However, three international and six national IPs are responsible for virtually all mine and improvised mine clearance. In January 2021, DMAC accredited a seventh national humanitarian IP, the Justice and Peace Organisation (JAPO), to conduct non-technical and technical survey, manual and mechanical mine clearance, BAC, and explosive ordnance risk education (EORE) but it does not appear to have been active.⁷¹

64 BBC Media Action prepared a 16-episode radio drama incorporating explosive hazard messaging broadcast three times daily in Dari and Pushto. The first broadcast reportedly attracted an audience of 600,000 people; the second, an audience of 6 million.

65 Email from Soeren Adser Soerensen, DRC, 27 March 2022.

66 GICHD, Integrated Capacity Assessment Report, 5 July 2019 (draft), p. 7.

67 Ibid., pp. 7–9, 28.

68 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

69 AMAS 06.10, March 2019, p. 5; Article 7 Report (covering 2020), Form F, p. 15.

70 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

71 Ibid.

MAPA operating results for 2021 show that four national IPs, ATC, DAFA, MCPA and OMAR, were active clearing mines.⁷² ATC deployed nine manual teams, an EOD team, and a mechanical demining unit working in Maydan Wardak on a US-funded project for clearing conventional mines and other capacity working on BAC tasks but the priority for 2022 was tackling improvised mines. ATC reported it had 16 deminers trained by Artios for clearing improvised mines and another 10 people undergoing training. It said it was developing proposals for clearing improvised mines in the Musa Qala and Nad Ali districts of Helmand province.⁷³

DAFA had a total staff of 412 working in 2021, including 12 manual teams with 120 deminers alongside seven BAC teams and four mechanical demining units. DAFA was the only IP conducting cluster munition clearance in 2021 but also carried out clearance of legacy mine contamination in Baghlan, Nuristan, and Kandahar provinces under a grant from the US Department of State that ran until September 2021. In 2022 it had 16 manual teams and a mechanical team with an excavator tackling improvised mines in Kandahar and Helmand provinces as well as four demining teams, a survey team, and two EORE teams working on legacy anti-personnel mines in Baghlan province's Dih Salah district. Later in the year, DAFA expected to move operations to Nangahar province.⁷⁴

DRC underwent significant expansion early in 2021 with support from the Dutch Mine Action & Cluster Munitions Programme for 2022-2024. This enabled it to increase the number of clearance teams from 12 to 16 and the number of deminers from 130 to 170, and it also added a five-person Survey-EOD team and two mechanical demining units (MDU) consisting of six people and two machines, including a front-end loader and a rotary mine comb.⁷⁵ DRC planned to increase its MDU teams to seven in 2022 and to recruit an international technical adviser to manage its mechanical capacity. It planned to recruit a second international technical adviser to support wider operations. In 2021, DRC operated mainly in the northern province of Balkh and on a smaller scale in the central provinces of Kabul and Maydan Wardak, tackling conventional anti-personnel mines and UXO. After reviewing its operations in early in 2022, DRC planned to focus resources on areas experiencing the highest casualties, including notably southern Helmand province, and to move into clearance of improvised mines. DRC trained a total of 28 staff on improvised mine clearance in 2021 and expected them to deploy in Helmand by the end of the year.⁷⁶

FSD has worked for years conducting survey and clearance in northern Badakshan province, an area contaminated mainly with Soviet-era butterfly mines. Until July 2021, FSD maintained its headquarters in Tajikistan's border town of Kalai Khumb for better access to the minefields in Badakshan, a remote area with poor communications links to the rest of Afghanistan. Tajikistan closed the border with Afghanistan in July 2021 and in 2022 FSD opened a new operating base in Kunduz city.⁷⁷ In the first half of 2021, FSD worked with five demining teams and 79 deminers, but after a deterioration in security FSD temporarily suspended operations in late July. From mid-August, one donor suspended funding for three demining teams as well as two EORE and a Mine Victim Assistance (MVA) team. The donor agreed to continue its support and those teams were expected to return to operations if a channel for delivering funds could be identified.⁷⁸

The HALO Trust is much the biggest operator in the MAPA with a total staff of just over 3,000 people in 2021. It still represented close to 60% of total MAPA manpower in mid-2022 although it expected the number of staff to drop slightly in the course of the year. HALO Trust's capacity included 64 manual teams employing 1,716 deminers who conducted clearance in nine provinces in 2021 and backed by 19 mechanical demining units operating 75 machines employing more than 100 personnel. HALO also led on tackling improvised mines and by 2022 had a total of 410 staff assigned to AIM survey and clearance. This included 32 manual teams, 9 mechanical demining units, and 18 teams conducting non-technical survey and quick reaction call-outs. A total of 241 deminers were assigned to improvised mine survey and clearance.⁷⁹

For improvised mine clearance, HALO Trust aims to deploy an excavator to each site working double shifts alongside alternating manual teams. A problem for all IPs, however, has been a shortage of the Wirehound and Minehound detectors employing ground penetrating radar that have proved effective (but which are also prone to software failure). To avoid the complications of shipping detectors to Europe for repair, HALO Trust arranged with Vallon, the manufacturer, to host a visit by technicians to carry out repairs in Kabul.⁸⁰

MCPA ranked as the national IP with the most assets active in 2021 with 11 manual demining teams and 154 deminers working in Kunduz province in 2021 as well as seven quick response teams with 28 personnel. MCPA also conducted non-technical survey funded by the US Department of State

72 Email from Olivier Demars, UNMAS, 24 April 2022.

73 Interview with Abdul Qahir Rahmanzai, ATC, Kabul, 8 June 2022.

74 Interview with Bismillah Haqmal, Planning Manager, DAFA, Kabul, 8 June 2022; and email, 17 July 2022.

75 Email from Soeren Adser Soerensen, Head of Humanitarian Disarmament, DRC, 27 March 2022.

76 Interview with Soeren Adser Soerensen, DRC, Kabul, 6 June 2022.

77 Email from Din Mohammad Nickwah, Country Director, FSD, 23 March 2022; and interview with Matthew Wilson, Head of Operations, FSD, 13 July 2022.

78 Ibid.

79 Emails from Farid Homayoun, HALO Trust, 12 May and 20 June 2022; and interview, Kabul, 4 June 2022.

80 Interview with Farid Homayoun, HALO Trust, 4 June 2022.

and fielded nine non-technical survey teams which it reported conducted survey in 13 provinces⁸¹ in 2021. In October 2021, MCPA started a six-month project funded by UNOPS for clearance of improvised mines in Kunduz province for which it deployed four manual teams and mechanical demining unit.⁸²

Norwegian People's Aid (NPA), with a team of 18 people (including an international country director, an international financial director, four international, and seven national technical advisers), provides third-party monitoring of all US Department of State's Bureau of Political-Military Affairs (PM/WRA) grants to IPs in Afghanistan. In 2021, these included 18 grants with an estimated value of \$12.5 million

that spanned mine and cluster munition remnants (CMR) clearance as well as weapons and ammunition disposal, conventional weapons destruction, stockpile security and management, and community survey, in addition to post-clearance impact assessments. Apart from a short hiatus in MAPA operations in August 2021, NPA's activities continued throughout the year involving more than 400 visits to projects. Most sites visited had achieved the necessary standards and none of the sites declared to have been cleared had subsequently recorded items founds or accidents.⁸³

Table 5: Operational clearance capacities deployed in 2021

Operator	Manual teams	Total deminers	Machines	Comments
ATC	9	80	1	
DAFA	12	120	1	
DRC	16	170	12	
FSD	5	79	0	
HALO Trust	101	1,957	75	Includes 64 demining teams with 1,716 deminers and 37 AIM teams with 241 deminers
OMAR	16		1	
MCPA	15	170	6	Includes 4 AIM teams with 16 deminers
Totals	174	2,576	96	

DEMINER SAFETY

An attack on HALO Trust's camp in Baghlan province on 8 June 2021 resulted in the deaths of 10 deminers and injured 16, representing the worst ever recorded violence against HALO Trust and the mine action community in Afghanistan. Islamic State – Khorasan Province later claimed responsibility for the attack, which was condemned by the UN Security Council. HALO Trust, which has worked in Afghanistan since 1988, pledged to continue operations and is investigating the incident.⁸⁴

An ammunition explosion at a former Soviet logistics depot at Hairatan in northern Afghanistan in February 2021 injured four HALO Trust staff, three of whom subsequently died of their injuries. The accident occurred as employees were moving ammunition recovered from BAC to a planned demolition site and a team member unloaded a sack containing ammunition. The incident was investigated, including by an external third party, and corrective action taken.⁸⁵

81 Provinces in which MCPA conducted non-technical survey in 2021 included Badakhshan, Balkh, Farah, Ghor, Herat, Helmand, Jawzjan, Kunar, Kunduz, Logar, Nangahar, Nuristan, and Zabul.

82 Interview with Mir Mohammad, Operations Manager, MCPA, 8 June 2022 and email 18 July 2022.

83 Interview with Russell Bedford, Country Director; Mats Hektor, Senior Technical Advisor; and Nermin Mujcinovic, Senior Technical Advisor, NPA, 5 June 2022; and emails from Sayed Wali, Information Manager, NPA, 9 June 2022; and Mats Hektor, NPA, 1 July 2022 and 17 August 2022.

84 Video statement by James Cowan, Chief Executive, HALO Trust, 9 June 2021; email from Farid Homayoun, HALO Trust, 12 May 2022; UN Security Council statement, 12 June 2021. See also Emma Graham-Harrison, "Gunmen kill 10 mine-clearance workers in Afghanistan," *The Guardian*, 9 June 2021, and N. Rahim and M. Ives, "Attack in Afghanistan kills 10 from charity that clears land mines," *The New York Times*, 9 June 2021; email from Farid Homayoun, HALO Trust, 11 August 2021.

85 Email from Farid Homayoun, HALO Trust, 12 May 2022.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

The MAPA released a total of more than 35.6km² of mined area through survey and clearance in 2021,⁸⁶ a drop of only 5% from the year before.⁸⁷ The outcome was helped by a sharp jump in the amount of land cancelled through non-technical survey as operations tackling improvised mine contamination started to gather momentum. Afghanistan's output included a total of 17.91km² released through survey (see Tables 6 and 7) and 17.71km² through clearance of conventionally manufactured anti-personnel mines and improvised anti-personnel mines (see Tables 8 and 9).

IPs faced intensifying conflict in the first half of the year and political upheavals in the second half but were generally able to keep operating where donor funding continued. The HALO Trust, the biggest operator, progressively suspended operations starting in Kandahar in May 2021 and finished in Samangan in August but by the end of September was still 70% operational. FSD moved teams to safer locations in June and then brought forward planned leave, suspending work in late July. MCPA also halted non-technical survey operations in the south in July and August due to the conflict while ATC paused operations for several days. Since August 2021, IPs have reported a more permissive environment, with better security and access to almost all parts of the country, an end to the demands for "taxes" previously faced from field commanders and local authorities in areas outside central government control, faster and corruption-free procedures for importing equipment, and support from DMAC in tackling issues in encountered in government bureaucracy or interceding to resolve problems encountered with local authorities in the provinces.⁸⁸

SURVEY IN 2021

The total mined area cancelled rose sharply to 17.39km² in 2021 (see Table 6) from 3.63km² the previous year as a result of operations addressing improvised mine contamination. Five IPs released a further 0.52km² through technical survey (see Table 7).⁸⁹

Cancellation through non-technical survey has accounted for only a small proportion of land release in Afghanistan and that continued to apply to operations targeting area suspected of contamination by conventional or "legacy" anti-personnel mines. Non-technical survey of these areas resulted in cancellation of 4.72km² in 2021 but only two of the seven IPs active in 2021 cancelled any area, while one IP, HALO Trust, accounted for more than 80% of it (see Table 6).⁹⁰

Systematic survey of areas contaminated by improvised mines also became possible in 2021 with the cessation of active hostilities in many areas after the Taliban's takeover of the government in August 2021 and the access that then became possible to some of the worst affected areas. Before the change of government, authorities in areas controlled by the Taliban had previously only allowed clearance of abandoned improvised mines. Since then, the new authorities have recognised the serious threat of improvised mines and encouraged their clearance. The HALO Trust noted that the de facto authorities have often provided valuable information on locations and design of improvised mines, on occasion requesting assistance to clear buildings where they were made and stored.⁹¹ HALO Trust surveyed and confirmed hazardous areas totalling 14.03km² in 13 provinces in 2021. It also cancelled 12.66km² of suspected improvised mine-affected areas, mostly in Helmand (3.1km²), Kandahar (6.6km²) and Uruzgan (2.9km²) provinces and mostly between August and the end of the year.⁹²

86 Email from Olivier Demars, UNMAS, 24 April 2022.

87 Article 7 Report (covering 2020), Form F.

88 Interviews with Abdul Qahir Rahmanzai, ATC, 8 June 2022; Soeren Adser Soerensen, DRC, 6 June 2022; Farid Homayoun, HALO Trust, 4 June 2022; Mir Mohammad, MCPA, 8 June 2022; and email from Din Mohammad Nickwah, FSD, 23 March 2022.

89 Email from Olivier Demars, UNMAS, 24 April 2022.

90 Email from Ajmal Babak, MIS Data Processor, MAPA Liaison Office, 18 July 2022.

91 Email from Farid Homayoun, HALO Trust, 12 May 2022 and interview with Ahmadullah Salari, HALO Trust, 9 June 2022.

92 Email from Farid Homayoun, HALO Trust, 12 May 2022.

Table 6: Non-technical survey of anti-personnel mined areas in 2021⁹³

Operator	Province	Area cancelled (m ²)
Legacy AP mines		
HALO Trust ⁹⁴	Kapisa, Zabul	3,845,578
MCPA	Ghazni, Herat, Maydan Wardak	878,991
Sub total		4,724,569
Improvised mines		
HALO Trust	Helmand, Kandahar, Kunduz, Nangahar, Samangan, Uruzgan	12,664,104
Total		17,388,673

Table 7: Technical survey of anti-personnel mined areas in 2021⁹⁵

Operator	Province	Area reduced through TS (m ²)
ATC	Faryab, Laghman	272,907
DAFA	Kandahar, Nuristan	24,886
DRC	Balkh, Kabul	152,846
HALO Trust	Kabul	54,214
OMAR	Nimroz	11,775
Total		516,628

CLEARANCE IN 2021

Mined area cleared in Afghanistan in 2021 fell nearly 30% from the previous year to 16.69km² (see Table 8), although the 7,304 anti-personnel mines destroyed was 55% up on the 4,716 destroyed in 2020 clearance operations.⁹⁶ Clearance in 2021 of areas with improvised anti-personnel mines covered a further 1.02km², destroying 352 mines (see Table 9).

Table 8: Anti-personnel mine clearance in 2021⁹⁷

Operator	Province/district	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
ATC	Kabul, Faryab, Laghman, Khost	1,476,623	96	0	380
DAFA	Kandahar, Nuristan	2,735,060	145	3	130
DRC	Balkh, Kabul	865,107	263	0	1,215
FSD	Baghlan	169,736	1,061	0	30
HALO Trust	Baghlan, Kabul, Logar, Parwan, Samangan, Takhar	7,627,327	2,250	10	140
MCPA	Kunduz, Nimroz	3,645,925	3,475	1,600	46
OMAR	Laghman, Nimroz	171,270	14	0	0
Totals		16,691,048	7,304	1,613	1,941

⁹³ Email from Ajmal Babak, MAPA Liaison Office, 18 July 2022.

⁹⁴ HALO Trust reported that it cancelled 2,223,300m² of legacy AP mined area in 2021. Email from Farid Homayoun, HALO Trust, 12 May 2022.

⁹⁵ Email from Olivier Demars, UNMAS, 24 April 2022.

⁹⁶ Emails from Olivier Demars, UNMAS, 24 April 2022, and Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

⁹⁷ Email from Olivier Demars, UNMAS, 24 April 2022.

Table 9: Clearance of improvised mines in 2021⁹⁸

Operator	Province/district	Areas cleared	Area cleared (m ²)	Improvised mines destroyed
HALO Trust ⁹⁹	Helmand, Kandahar, Nangahar	48	1,001,003	350
MCPA	Kunduz	4	16,950	2
Totals		52	1,017,953	352

Clearance of improvised mines, although triple the level in the previous year, remained on a modest scale in 2021, releasing a little over 1km² and destroying 352 devices (see Table 9). However, clearance was expected to accelerate sharply in 2022. HALO Trust reported it cleared 212 improvised mines in March 2022 compared with 161 in March 2021, and the number had risen to 350 in May 2022.¹⁰⁰ By June 2022, it reported it was clearing around 300,000m² of improvised mine-affected areas a month.¹⁰¹

One factor aiding the acceleration has been the flow of information provided by serving or former Taliban fighters on locations where they had placed improvised mines and by former improvised explosive device (IED) makers on their design and switches.¹⁰² At the same time, most IPs were preparing to deploy or increase assets for improvised mine clearance, particularly in areas previously inaccessible due to conflict. HALO Trust, which increased the number of personnel working on improvised mines by 16 to 37 in 2021, expected to increase that capacity further in 2022.¹⁰³ A clearance project started by MCPA in Kunduz province in October 2021 carried on into 2022,¹⁰⁴ and DAFA deployed 16 teams and a mechanical asset in 2021 to clear a 239,666m² task in the Arghanbad district of Kandahar.¹⁰⁵ DRC dispatched an assessment team to the same provinces to prepare for deploying clearance assets later in the year.¹⁰⁶

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the 10-year extension granted by States Parties in 2013), Afghanistan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2023.

Since the change of regime, the IEA has affirmed its commitment to fulfilling its obligations in relation to the Convention on Cluster Munitions (CCM) and other international conventions to which Afghanistan is already a State Party,¹⁰⁷ which includes the APMBC. It also stated it would request an extension of its Article 5 deadline in 2022.¹⁰⁸ Afghanistan's ambassador in Geneva, appointed by the previous government, also informed the APMBC in May 2022 that Afghanistan would submit an extension request.¹⁰⁹ DMAC said in early June that it planned to submit an Article 5 deadline extension request in one or two months. At the time it had not started work on the request and was awaiting the establishment of a Liaison Office with UNMAS to collaborate on preparation of the request.¹¹⁰

98 Email from Olivier Demars, UNMAS, 24 April 2022.

99 HALO recorded clearing 1,055, 842 and destroying 418 CMRs. Email from Farid Homayoun, HALO Trust, 12 May 2022.

100 Interview with Farid Homayoun, HALO Trust, 4 June 2022.

101 Interview with Ahmadullah Salari, HALO Trust, 9 June 2022.

102 Interviews with Farid Homayoun, HALO Trust, 4 June 2022 and Ahmadullah Salari, HALO Trust, 9 June 2022.

103 Email from Farid Homayoun, HALO Trust, 12 May 2022.

104 Interview with Mir Mohammad, MCPA, 8 June 2022 and email 18 July 2022.

105 Interview with Bismillah Haqmal, DAFA, 8 June 2022, and email 17 July 2022.

106 Interview with Soeren Adser Soerensen, DRC, 6 June 2022.

107 Afghanistan statement to the CCM Intersessional Meeting, 16 May 2022.

108 Interview with Qari Nooruddin Rustamkhail, DMAC, 4 June 2022.

109 Preliminary Observations, Committee on Article 5 Implementation, Intersessional Meeting, 20 June 2022.

110 Interview with Qari Nooruddin Rustamkhail, DMAC, 4 June 2022.

Afghanistan's Permanent Mission in Geneva submitted an extension request in July 2022 asking for a two-year interim extension until 1 March 2025 to provide time for achieving greater clarity on Afghanistan's situation and circumstances, "including allowing for more time for understanding how the mine action sector in Afghanistan will develop in terms of institutional arrangements and continued support from donors." The Permanent Mission also committed Afghanistan to working with all stakeholders to develop a detailed extension request by 31 March 2024.¹¹¹ DMAC's Director informed Mine Action Review in August 2022 that it had not prepared the extension request but accepted and endorsed it as "the best possible solution for continuing mine clearance operations in Afghanistan in the current circumstances."¹¹²

The Permanent Mission in Geneva no longer represents the State of Afghanistan and therefore, a priori, the extension request it submitted was not valid under the APMBC or general international law. That said, under international law, conduct that is not ordinarily attributable to a State may be considered an act of that State "if and to the extent that the State acknowledges and adopts the conduct in question as its own".¹¹³ DMAC is a directorate under the Afghan National Disaster Management Authority, which was established by Presidential Decree in 1973 as the Department of Disaster Preparedness¹¹⁴ (and later renamed as the Afghan National Disaster Management Authority, ANDMA), and is therefore an organ of the Afghan State.¹¹⁵ The request may therefore be considered to have been submitted by Afghanistan as a State Party to the APMBC.

Table 10: Five-year summary of anti-personnel mine clearance (2017–21)*

Year	Area cleared (km ²)
2021	17.71
2020	24.24
2019	28.01
2018	30.90
2017	28.12
Total	128.98

* Including improvised mines

111 Letter from the Permanent Mission of Afghanistan to the United Nations in Geneva to the APMBC Committee on Article 5 Implementation, 4 July 2022.

112 Email from Gari Nooruddin Rustamkhail, DMAC, 1 August 2022.

113 Art. 11, International Law Commission (ILC) Draft Articles on the Responsibility of States for Internationally Wrongful Acts, 2001.

114 Presidential Decree 56 of 16 February 1973.

115 Art. 4(1), 2001 Draft Articles on the Responsibility of States for Internationally Wrongful Acts.

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

**ANTI-PERSONNEL (AP)
MINE CONTAMINATION: HEAVY**

MINE ACTION REVIEW ESTIMATE

40KM²

AP MINE
CLEARANCE IN 2021

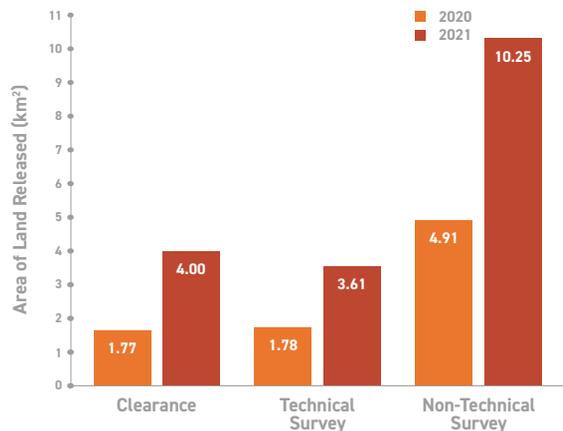
4KM²

AP MINES
DESTROYED IN 2021

3,698

(INCLUDING 51 DESTROYED
DURING SPOT TASKS)

LAND RELEASE OUTPUT¹



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Angola made considerable progress in its mine action programme and accelerated its anti-personnel mine survey and clearance operations during 2021. Angola exceeded the land release target set out in its Article 5 work plan and more than doubled its clearance output in 2021 compared to the previous year. Nearly 77% of the anti-personnel contamination released in 2021 was through survey as Angola continues to apply a combination of different methods since the completion of its national non-technical survey in 2019. Angola's mine action infrastructure improved as the National Intersectoral Commission on Demining and Humanitarian Assistance (CNIDAH) completed its transition into the National Mine Action Agency (ANAM).

RECOMMENDATIONS FOR ACTION

- Angola should continue to impress upon all operators the importance of applying proper land release principles to reduce clearance of uncontaminated areas.
- Angola should replace its draft resource mobilisation strategy and increase its international advocacy to attract new and former donors.
- Angola should finalise its national strategy on the management of residual contamination.
- Angola should formally approve its National Mine Action Strategy 2020–2025.
- Angola should include measurable gender and diversity targets in its Article 5 Implementation Work Plan.
- Angola should continue developing and applying its National Mine Action Standards (NMAS).

¹ There is a discrepancy between land release data reported by operators and data reported in Angola's Article 7 transparency report. According to the latter, Angola released a total of 8.7km² of anti-personnel mined area in 2021, of which 1.25km² was cancelled through non-technical survey; 1.56km² was reduced through technical survey; and 5.9km² was cleared. The total number of anti-personnel mines destroyed during 2021 as reported by Angola is 3,104. ANAM attributed the discrepancy in the reported figures to potential data entry errors or to mistaken operator reports, and said it will continue working with operators to reconcile land release figures.

- Angola should accelerate the integration of mine action data from the Executive Commission for Demining (CED) into the ANAM national database.
- The Government of Angola should continue to mobilise financial resources to improve ANAM's quality management (QM) capacity to allow it to function effectively across provinces.
- Angola should facilitate the granting of visas for international mine action staff and ensure that no taxes are imposed on equipment imported by international operators to carry out mine action operations.
- Angola should declare as completed each province where land release of all mined areas has been achieved.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	8	Angola has completed its nationwide re-survey of anti-personnel mine contamination and there is a high ratio of confirmed hazardous areas (CHAs).
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	7	6	CNIDAH completed the transition of its legal status from a commission to a national agency, becoming ANAM. With this transition, it is expected that this will resolve longstanding issues in coordination and information sharing between CNIDAH and the CED. It is estimated that Angola has a funding shortfall of \$200 million through to the end of 2025. A resource mobilisation strategy was drafted in 2018, but was never finalised. ANAM intends to work on a new resource mobilisation strategy to replace the draft.
GENDER AND DIVERSITY (10% of overall score)	6	6	Gender and diversity are included as a cross-cutting issue in Angola's new National Mine Action Strategy but there are no outcomes or targets related to gender or diversity in the updated work plan.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	8	Improvements continued to be made to the national database in 2021 to maintain data quality. It was planned that CED tasks would be integrated into the database as of 2021, but the data continues to be excluded as their land release methods are not International Mine Action Standards (IMAS) compliant. Angola has submitted timely Article 7 reports in recent years. In 2021, however, there was a big discrepancy in land release data between Angola's official figures and operators data, and Angola did not classify its hazardous areas into suspected and confirmed as per the IMAS best practices.
PLANNING AND TASKING (10% of overall score)	7	7	Angola has adopted an Article 5 implementation Work Plan 2022–2025, but its new National Mine Action Strategy 2020–2025 has yet to be formally approved by the government. A new tasking, prioritisation, and planning system has been implemented in Angola with a review conducted in 2021. A workshop was planned for 2022 to discuss the prioritisation criteria and produce a master plan and an annual task list until 2025 for all operators.
LAND RELEASE SYSTEM (20% of overall score)	7	6	Ten chapters of NMAS were completed and fully adopted in 2021. Three others were drafted and are awaiting approval. Quality management continues to be a challenge for ANAM due to a lack of financial resources. In 2021, operators reported some improvements compared to the previous year. Quality assurance (QA) and quality control (QC) activities took place across seven provinces.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	9	8	Land release output more than doubled in 2021 compared to the previous year due to increased survey and clearance outputs. Angola exceeded its land release target for 2021 by 2.77km ² . CNIDAH estimated in early 2021 that completion of clearance could take ten years, far exceeding its current Article 5 deadline of end 2025, although this time could be substantially reduced with sound and strict land release principles. During 2021, Angola held sensitisation workshops in five provinces nearing completion, or already completed, to advance understanding on residual risk and prepare provincial authorities for potential declarations of completion.
Average Score	7.5	7.1	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Mine Action Agency (Agência Nacional de Acção Contra as Minas, ANAM), formally known as The National Intersectoral Commission for Demining and Humanitarian Assistance (Comissão Nacional Intersectorial de Desminagem e Assistência Humanitária, CNIDAH)
- Executive Commission for Demining (Comissão Executiva de Desminagem, CED) – (dissolved in 2022)

NATIONAL OPERATORS

- National Demining Institute (Instituto Nacional de Desminagem, INAD)
- Angolan Armed Forces
- Demining Brigades of the Security Unit of the President of the Republic
- Brigades of the Angolan Border Guard Police (under the CED – dissolved in 2022)

- The Association of Angolan Mine Professionals (Associação de Profissionais Angolanos de Acção Contra Minas, APACOMINAS) (NGO)
- The national demining centre (Centro nacional de Desminagem) – created in 2022

INTERNATIONAL OPERATORS

- APOPO
- The HALO Trust
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

As at the end of 2021, according to ANAM, a total of 1,097 anti-personnel mined areas with an estimated size of 71.5km² remained to be addressed in 16 of Angola's 18 provinces (see Table 1). Cuando Cubango and Moxico are believed to be the most heavily contaminated. Clearance in Malange and Huambo provinces has been completed, but Angola has not yet declared these provinces to be free of all mined areas. Unlike previous years, Angola did not classify contaminated land in its reports into suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs).

Table 1: Anti-personnel mined area by province (at end 2021)²

Province	Hazardous areas with anti-personnel mines	Area (m ²)
Bengo	56	3,234,614
Benguela	46	2,697,983
Bié	132	5,526,594
Cabinda	27	1,230,321
Quando Cubango	247	17,302,084
Cuanza Norte	10	2,256,120
Cuanza Sul	112	8,652,618
Cunene	44	2,575,367
Huíla	36	3,339,594
Luanda	9	1,121,211
Lunda Norte	59	554,636
Lunda Sul	70	8,431,178
Moxico	241	13,127,777
Namibe	3	155,100
Uíge	1	206,350
Zaire	4	1,079,234
Totals	1,097	71,490,781

2 Article 7 Report (covering 2021), Form C.

This is a 12.9km² reduction in the overall amount of anti-personnel mined area from the 84.4km² reported at the end of 2020.³ In addition, a total of 6.6km² of anti-personnel mined area was added to the database in 2021. Of this, Norwegian People's Aid (NPA) identified and recorded four new CHAs covering an estimated 181,022m² in Cuanza Norte province and one new CHA of 30,929m² in Bengo province; Mines Advisory Group (MAG) identified 17 new areas totalling 552,419m²; APOPO identified 10 new areas totalling 1,749,806m², and HALO found 52 new mined areas totalling 4,112,695m²: 4 in Benguela province, 22 in Bié province, 23 in Cuando Cubango province, and 3 in Moxico province.⁴

As at the end of 2021, all known mined areas in Huambo had been released. Five provinces (Uige, Cuanza Norte, Malange, Namibe, and Zaire) are very close to completion. Malange province has been determined to contain only residual contamination, but the declaration of completion has been delayed due to challenges in interpretation of residual contamination by provincial leadership. This is hoped to be addressed in ANAM's anticipated residual contamination strategy (see section below, Planning for Management of Residual Contamination).⁵

In 2019, non-technical survey of all 18 provinces across the country was completed, ensuring that previously inflated mined areas have now largely been redefined or cancelled. ANAM, together with the international operators unanimously agree that Angola now has its most accurate baseline of anti-personnel mine contamination ever.⁶ Yet, one operator believes that additional survey/resurvey is still needed to cancel some hazardous areas from the national database.⁷ According to The HALO Trust, mine contamination in Angola is well documented, and new minefields are generally discovered on an ad-hoc basis often in close proximity to existing areas known to be contaminated with mines. That not all mined areas have yet been identified is understandable given the size and remoteness of some areas of the country.⁸ NPA has emphasised the need to continue evidence-based survey in order to provide more accurate information on the type of contamination and to further increase the proportion of CHAs.⁹

In the updated Article 5 Implementation Work Plan 2020–2025, ANAM states that non-technical survey will remain an integral component of all operations and will be conducted in areas that may need additional verification during the

work plan implementation period. In addition, ANAM acknowledges the gap in coordination and monitoring of CED operations at provincial level, and that areas cleared by the CED-coordinated entities may need further assessment and verification before they can be removed from the database.¹⁰ It is also expected that, as people return to previously uninhabited areas, previously unrecorded mined areas will be added to the database and that new areas of contamination will be found as operators revisit more remote areas and address minefields where clearance has yet to begin.¹¹

Overall, Angola's progress in land cancelled and reduced through the national re-survey has resulted in huge land release, with nearly 150km² released between 2017 and 2020 and the cancellation of more than 90% of SHAs recorded as a result of inflated estimates from the 2004–07 Landmine Impact Survey (LIS). It is, however, important to note that most of the land released has been due to cancellation through non-technical survey and with the completion of non-technical survey in all provinces and more well-defined minefields, there could be less cancellation from now on. This has been stipulated in ANAM's Article 5 implementation Work Plan of 2020–2025. In 2021, however, operators continued to release the majority of land through survey. Indeed, in 2021, nearly 14km², or 77% of the total anti-personnel mine contamination, was released other than through clearance, and 10.25km², or 60% of total land released, resulted from non-technical survey.¹²

Besides the national re-survey with standardised reporting formats compatible with the Information Management System for Mine Action (IMSMA), data clean-up efforts also led to deletion of hazardous areas from the national database. This further contributed to the reliability of the national contamination baseline. Angola's Mine Action Strategy emphasises that ANAM and operators will continue with systematic analysis of existing survey reports to ensure that the classification of hazardous areas into SHA and CHA has been done in accordance with the national mine action standards (NMAS). According to the Geneva International Centre of Humanitarian Demining (GICHD), the accuracy of the data and information given in the strategy and the related work plan should be verified and updated. This includes the calculation of the extent of the remaining contamination, projected completion dates, and the costs involved to complete the job.¹³

3 Article 7 Report (covering 2020), Form C; and email from Robert Iga Afedra, Capacity Development Advisor, Norwegian People's Aid (NPA), on behalf of CNIDAH, 22 March 2021.

4 Emails from Jeanette Dijkstra, Country Director, MAG, 22 March 2022; Miroslav Pisarević, Programme Manager, NPA, 10 March 2022; Manuel João Agostinho, Programme Manager, APOPO, 14 March 2022; and Daniel Richards, Programme Officer, HALO Trust, 25 June 2022.

5 ANAM Updated Article 5 Implementation Work Plan 2020–2025, June 2021, pp. 9–10.

6 *Ibid.*, p. 4; and emails from Robert Iga Afedra, NPA, on behalf of CNIDAH, 1 April 2020; Ralph Legg, Programme Manager, HALO Trust, 30 March 2020; Jeanette Dijkstra, MAG, 20 May 2020; and 22 March 2022; Miroslav Pisarević, NPA, 28 March 2020 and 10 March 2022; Christelle Mestre, Programme Officer, GICHD, 4 May 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

7 Email from Manuel João Agostinho, APOPO, 14 March 2022.

8 Email from Daniel Richards, HALO Trust, 25 June 2022.

9 Emails from Miroslav Pisarević, NPA, 28 March 2020 and 10 March 2022.

10 ANAM, updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 5; and telephone interview with Robert Iga Afedra, NPA, 22 February 2021.

11 Email from Ralph Legg, HALO Trust, 30 March 2020.

12 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, June 2021, pp. 4 and 11.

13 Email from Christelle Mestre, GICHD, 4 May 2022; and National Mine Action Strategy 2020–2025, p. 19.

Angola's contamination is the result of more than 40 years of internal armed conflict that ended in 2002, during which a range of national and foreign armed movements and groups laid mines, often in a sporadic manner. Historically, the most affected provinces have been those with the fiercest and most prolonged fighting, such as Bié, Huambo, Cuando Cubango, and Moxico. In addition to its anti-personnel mine contamination, at the end of 2020 Angola had 1.02km² of anti-vehicle mine contamination.¹⁴ As at May 2021, Angola had an estimated 3,702km of roads contaminated with mines, of which, 3,167km are CHAs and 535km are SHAs.¹⁵

Many minefields contain a mix of anti-personnel and anti-vehicle mines. Operators have also reported finding stacking of mines with anti-personnel mines being used as triggers for larger devices linked with detonating cord.¹⁶ HALO found a total of 18 improvised mines in 2021: 17 in Bié and 1 in Moxico province. Of these, 6 were anti-personnel mines and 12 were anti-vehicle mines.¹⁷

Angola also has a significant problem of explosive remnants of war (ERW), especially unexploded ordnance (UXO).¹⁸ In addition, evidence suggests that Angola contains a residual threat from cluster munition remnants (CMR) (see Mine Action Review's *Clearing Cluster Munition Remnants 2022* report on Angola for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Angola's mine action programme is managed by the newly established ANAM. ANAM is a government agency formerly known as CNIDAH. CNIDAH received approval in April 2021 to change its legal status from a commission to a national agency.¹⁹ This was endorsed by a presidential decree 171/21 on 7 July 2021. The aim of this transition was to define the legal framework of the regulatory body of mine action, and to improve the coordination between the bodies that intervene in the mine action sector. The purpose of ANAM is to regulate and supervise mine action work by public and private institutions, as well as non-governmental organisations (NGOs). ANAM is subject to the oversight of the Head of State through the Minister of State and Chief of Staff,²⁰ and is mandated to ensure the implementation of the national strategic and normative mine action framework by all mine action actors in the country.²¹

In previous years, there were tensions between CNIDAH and the Executive Commission for Demining (Comissão Executiva de Desminagem, CED), the other national coordination body whose main role was to manage four national operators: the Demining Brigades of the Security Unit of the President of the Republic, the Angolan Armed Forces, the National Demining Institute (INAD), and the Brigades of the Angolan Border Guard Police. There were overlaps and ambiguities as to the exact division of labour and the related roles and responsibilities between the two entities with CED reporting to the Ministry of Social Action, Family, and Women's

Promotion (MASFAMU).²² This has made it difficult for Angola to detail accurately the extent of land released over the years as the CED operators were not accredited by CNIDAH, nor are their activities quality assured in line with IMAS.²³ ANAM reported in September 2022 that the CED, together with all the operators that have been working under it, had been dissolved.²⁴

According to the GICHD, the transition to ANAM has strengthened Angola's oversight of mine action, which is now overseen and regulated solely by ANAM. The CED remains responsible for operational coordination of national public operators, which are predominantly involved in confirming that the land is safe for government infrastructure development projects.²⁵ According to MAG, the restructuring from CNIDAH to ANAM took longer than expected as the appointment of staff to leadership roles took over seven months. ANAM's leadership team was finally announced in February 2022.²⁶ The HALO Trust has observed improved efficiency since the transition from CNIDAH to ANAM.²⁷

In 2021, two physical meetings were held between ANAM and operators, of which one was with current and potential donors. The aim of the meetings was to evaluate what has been done, to have an overview of the remaining contamination, share best practices, and agree on the way forward.²⁸ In addition, with the presence of operations and management staff, ANAM held a workshop with operators to present and discuss the updated NMAS in 2021.²⁹

14 Comprising 934,525m² across 89 CHAs and 84,235m² across 21 SHAs. Article 7 Report (covering 2020), Form C.

15 Email from Robert Iga Afedra, NPA, on behalf of CNIDAH, 28 May 2021.

16 Emails from Jeanette Dijkstra, MAG, 27 April 2021 and 22 March 2022; and Rob Syfret, HALO Trust, 26 April 2021.

17 Email from Daniel Richards, HALO Trust, 25 June 2022.

18 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email, 17 May 2016.

19 Telephone interview with Robert Iga Afedra, NPA, 22 February 2021; and email, 28 April 2021.

20 Article 7 Report (covering 2021), Form A.

21 Email from Christelle Mestre, GICHD, 4 May 2022.

22 Angola National Mine Action Strategy 2020–2025, pp. 5–6.

23 Email from Robert Iga Afedra, NPA (on behalf of CNIDAH), 14 July 2020.

24 Email from Mário Nunes (on behalf of ANAM), NPA, 14 September 2022.

25 Email from Christelle Mestre, GICHD, 4 May 2022.

26 Email from Jeanette Dijkstra, MAG, 22 March 2022.

27 Email from Daniel Richards, HALO Trust, 25 June 2022.

28 Emails from Miroslav Pisarević, NPA, 10 March 2022; and Manuel João Agostinho, APOPO, 14 March 2022.

29 Email from Manuel João Agostinho, APOPO, 14 March 2022.

The HALO Trust, NPA, MAG, and APOPO have all reported being consulted in key decision-making processes by the national authorities through participation at coordination meetings and other channels.³⁰ MAG added, though, that 2021 saw a slower than usual communication due to the COVID-19 impact on the availability of ANAM staff in the capital, Luanda, and the transition from CNIDAH to ANAM. In addition, appointment of staff leadership positions took longer than expected.³¹ All operators participated actively in the elaboration of the National Mine Action Strategy 2020–2025 and Article 5 Implementation Work Plan 2020–2025.³²

NPA is supporting ANAM to develop its capacity to better manage the national mine action programme, including in key areas such as information and quality management.³³ The UK Foreign, Commonwealth and Development Office (FCDO)-funded consortium project, alongside HALO Trust and MAG, was discontinued in March 2021, but using funds from the Norwegian Ministry of Foreign Affairs (NMFA), the capacity development project kept going in 2021 and is expected to continue.³⁴ The focus of the first two years of the project has been to put management systems in place and the relevant documentation, while the next stage will focus on implementation.³⁵ Angola reported that notable achievements of the capacity development support project to date include: improved coordination of the mine action sector; establishment of the national mine action strategy; creation of the NMAS; establishment of a national tasking and prioritisation system; improved consistency in reporting and information sharing; and updating and reconciliation of the IMSMA database.³⁶ In addition, NPA was planning to conduct an explosive ordnance disposal (EOD) training to the Angolan military and police in 2022 as part of its capacity development project.³⁷

During 2021, the GICHD delivered a workshop on “all reasonable effort (ARE)” approach in land release. It also initiated its first ARE country assessment with Angola, seeking to analyse the management of land release operations in conformance with IMAS requirements, and to provide key recommendations.³⁸

Angola's mine action programme has faced critical challenges in securing financial resources in recent years. According to its latest projections and based on an estimate of a remaining mine contamination of 71km², Angola is still seeking approximately US\$200 million to complete its mine clearance through to the end of 2025.³⁹ In 2021, according to NPA, the Government of Angola allocated approximately US\$15.7 million to support activities of the mine action sector.⁴⁰ In 2019–21, the Government of Angola committed approximately US\$55.6 million towards the demining sector, with a similar contribution expected for 2022–2025. The funding targets the activities of the three government agencies (ANAM, CED, and INAD), mainly covering administrative overheads and salaries. Part of the funding allocated for CED and INAD will be used for verification and clearance of approximately 4,384 kilometres of road infrastructure across the country.⁴¹

Additionally, the government has committed to fund The HALO Trust in a \$60 million, five-year project to release more than 15km² across 153 minefields in Cuando Cubango province, with \$20 million paid out in 2020, followed by a second tranche of \$10 million in 2021.⁴² The project is designed to release land in Angola's portion of the Kavango Zambezi Transfrontier Region (KAZA), which spans parts of Angola, Botswana, Namibia, Zambia, and Zimbabwe, and which is home to the Okavango delta. This project will employ 840 Angolans and allow the government to develop the area for conservation and eco-tourism. This is an unprecedented commitment by the Angolan government to support demining.⁴³

In 2018, a draft resource mobilisation strategy was developed but was never finalised. ANAM intends to work on a new resource mobilisation strategy instead of approving the drafted one, but it is not known when this is expected to occur.⁴⁴ According to Objective 5 of the National Mine Action Strategy 2020–2025, the resource mobilisation strategy should have been developed and approved before the end of 2020 with CNIDAH taking the lead in its development.⁴⁵ In 2018, Angola participated in the Anti-Personnel Mine Ban

30 Emails from Jeanette Dijkstra, MAG, 22 March 2022; Christelle Mestre, GICHD, 4 May 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

31 Email from Jeanette Dijkstra, MAG, 22 March 2022.

32 Email from Manuel João Agostinho, APOPO, 22 March 2021.

33 Article 7 Report (covering 2021), Form J; and email from Robert Iga Afedra (on behalf of CNIDAH), 1 April 2020.

34 Emails from Robert Iga Afedra, NPA, on behalf of CNIDAH, 28 May 2021; and Miroslav Pisarević, NPA, 10 March 2022.

35 Interview with Robert Iga Afedra, NPA, 22 February 2021.

36 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 6.

37 Email from Miroslav Pisarević, NPA, 10 March 2022.

38 Email from Christelle Mestre, GICHD, 4 May 2022.

39 Article 7 Report (covering 2021), Form J.

40 Email from Miroslav Pisarević, NPA, 10 March 2022.

41 ANAM, updated Article 5 Implementation Work Plan 2020–2025, June 2021, p.8.

42 Ibid.; and email from Daniel Richards, HALO Trust, 25 June 2022.

43 ANAM, updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 8; and emails from Ralph Legg, HALO Trust, 30 March 2020; and Rob Syfret, HALO Trust, 26 April 2021.

44 Emails from Robert Iga Afedra (on behalf of CNIDAH), 1 April 2020; and Mário Nunes (on behalf of ANAM), NPA, 14 September 2022.

45 Angola National Mine Action Strategy 2020–2025, pp. 29–31.

Convention (APMBC) Individualised Approach following which donor support was increased with funding from Belgium, Japan, Norway, the United Kingdom, and the United States along with private sector funding from, among others, British Petroleum (BP).⁴⁶ The Belgian and Japanese governments committed funding to APOPO's 2021 operations.⁴⁷

Operators continue to report smooth collaboration with the Angolan authorities. Two longstanding challenges persisted in 2021: the long and cumbersome visa process, and the need for NGOs to secure tax-exempt status.⁴⁸ APOPO reported improvements on these two fronts as ANAM dedicated focal points and engaged with the Ministry of Interior and operators in an effort to address these challenges. As a result, APOPO managed to receive two dog handlers on a one-year visa, and benefited from some tax exemption to import equipment in 2021.⁴⁹ HALO's application for tax exemptions, however, was still being considered by the Angolan authorities as at June 2022.⁵⁰ NPA faced extended visa delays in 2021, and saw its mine detection dogs (MDD) handler training delayed for several months as a consequence.⁵¹ It is hoped that Angola will continue its efforts to expedite and improve the visa processes for international mine action personnel.

ENVIRONMENTAL POLICIES AND ACTION

There are no policies related to environmental management that are specific to mine action in Angola.⁵²

APOPO considers environmental protection as a cross-cutting issue, which is taken into consideration during planning and tasking. APOPO conducts an impact assessment prior to using machines for ground preparation in any area. Machine interventions are also communicated and agreed upon with the authorities based on the post-clearance use of the land.⁵³

HALO initiated a mine action and conservation project in 2022, alongside its existing programme, that aims to understand and explore the linkages between humanitarian mine action and environmental protection in coordination with local conservation partners. Through this project, HALO seeks to identify partnership projects and systemic changes to practices that can mitigate identified negative environmental effects brought about by mine action work.⁵⁴

HALO ensures that it meets Angolan environmental regulations and has launched several projects to reduce its' environmental impact, including the introduction of solar systems into field camps and the testing of clean cook stoves to reduce deforestation and pollution. Standard operating procedures (SOPs) and policies contain environmental guidance, rather than there being a stand-alone environmental policy.⁵⁵

MAG has multiple environmental policies such as leaving trees standing as much as possible, combining mechanical assets with manual demining, and recycling and using hybrid systems in the base, office, staff house, and field camps. MAG also has solar panels and cooks on gas bottles as much as possible.⁵⁶

NPA concluded its environmental modular SOPs and expects to implement them in the first quarter of 2022. NPA also planned to develop its environmental policy for the programme in 2022.⁵⁷

GENDER AND DIVERSITY

Gender and diversity are integrated into Angola's National Mine Action Strategy 2020–25 as a cross-cutting issue. The strategy recognises that mine action activities need to reflect the distinct needs of different ages, genders, and other diverse groups through targeted design with the collection, analysis and reporting of data disaggregated by sex and age a key precursor for this. Disaggregated data collection requirements have been integrated into all relevant standing operating procedures, forms, and other data collection tools.⁵⁸ However, while the Strategy pledges that Angola's mine action programme will ensure that gender and diversity are taken into consideration in the planning, implementation, and monitoring of all mine action projects, it does not say how this will be done.

46 Email from Robert Iga Afedra, NPA, on behalf of CNIDAH, 22 March 2021.

47 Article 7 Report (covering 2021), Form J.

48 Emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

49 Email from Manuel João Agostinho, APOPO, 14 March 2022.

50 Email from Daniel Richards, HALO Trust, 25 June 2022.

51 Email from Miroslav Pisarević, NPA, 10 March 2022.

52 Emails from Jeanette Dijkstra, MAG, 22 March 2022; Christelle Mestre, GICHD, 4 May 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

53 Email from Manuel João Agostinho, APOPO, 14 March 2022.

54 Email from Daniel Richards, HALO Trust, 25 June 2022.

55 Email from Robert Syfret, Programme Manager, HALO Trust, 14 September 2022.

56 Email from Jeanette Dijkstra, MAG, 22 March 2022.

57 Email from Miroslav Pisarevic, NPA, 10 March 2022.

58 Email from Robert Iga Afedra (on behalf of CNIDAH), 1 April 2020.

Angola's updated Article 5 Implementation Work Plan 2020–2025 states that the demining sector will take gender and equality into account and that the national authority will continue to advocate to ensure fair employment for both men and women, and that data disaggregated by gender and age are collected and reported during land release processes.⁵⁹ However, there are no specific targets nor measurable outcomes in place.

International NGO operators stated that gender-, age-, and diversity-related concerns are taken into account during survey and clearance to ensure the different groups are reflected in demining operations.⁶⁰ Operators employ Angolan nationals from all ethnic groups who are able to communicate in local languages as well as Portuguese.⁶¹

APOPO strongly encourages women to apply for roles and include gender and diversity perspectives when planning and implementing its demining operations as one of its core values.⁶² Gender and diversity considerations are taken into account during non-technical survey, impact assessments, identification of beneficiaries, and EORE activities. APOPO continued to promote the integration of female staff in its clearance teams in 2021 and managed to employ two additional female deminers. In 2021, 10% of APOPO's employees were women. Women also held 10% of operational positions. APOPO did not have women in managerial positions, though.⁶³

The HALO Trust works to improve the representation of women throughout its workforce, including in senior leadership and decision-making positions. In addition to proactive recruitment of women, steps are being taken to encourage them to move up in the organisation. In 2021,

several capacity building trainings were held: these are a prerequisite for promotion. For example, two female senior operations staff completed an EOD III training course and have been promoted as a result. Additional steps are being taken to improve inclusivity, including the adoption of policies and benefits packages to support women in the workforce, to remove barriers to mothers of young children, and to improve retention of staff after maternity leave. This includes the recently implemented childcare stipend for mothers of children up to age seven.⁶⁴

HALO survey and community liaison teams continue to include both men and women. In 2021, 35% of HALO's national staff and 31% of its international staff were female. Women held 39% of operational positions and 21% of managerial positions.⁶⁵

MAG keeps records of beneficiary data that are disaggregated by gender and age for each area cleared and conducts a post-clearance impact assessment to document the impact. All community members are consulted on an equal basis. In 2021, 32% of MAG's employees were women. Women held 46% of operational positions and 1.5% of managerial positions.⁶⁶

NPA organises gender sensitivity training for its staff and, whenever possible, gender equality is raised with the national and provincial authorities. NPA ensures that job opportunities are accessible to women and men equally, and do not contain requirements that unnecessarily discourage female applicants or preclude their employment.⁶⁷ NPA Angola appointed gender and diversity focal points within its programme and prepared an implementation plan for gender equality policy. All NPA data are disaggregated by gender. In 2021, 14% of NPA's employees were women. Women held 16% of operational and 20% of managerial positions.⁶⁸

INFORMATION MANAGEMENT AND REPORTING

ANAM manages a national IMSMA database which is now considered to be a reliable source of information as it has been fully reconciled with operators' data, and the previous data backlog and inflated contamination figures have been cleared.⁶⁹ In previous years, Angola's mine action programme suffered from significant problems with information management, in particular the poor quality of the national database. As noted above, since 2018 an NPA Capacity Development Adviser has been embedded in CNIDAH, now ANAM, and focused on establishing an up-to-date and accurate mine contamination database, with assistance

from operators. As part of the improvements to information management, a monthly data-sharing mechanism between CNIDAH and operators has been in place since 2018 as part of the mine action and information management coordination meetings.⁷⁰ NPA continued to support the database maintenance in 2021. NPA's information management officers (IM) have visited the operator's main offices in the provinces and worked with the respective IM officers on data reconciliation. NPA intends to continue its support to the database maintenance and operator's data reconciliation throughout 2022.⁷¹ Operators have reported that data

59 Article 5 Implementation Work Plan 2020–2025, pp. 11–12.

60 Emails from Ralph Legg, HALO Trust, 30 March 2020; Manuel João Agostinho, APOPO, 9 March 2020; Miroslav Pisarević, NPA, 28 March 2020; and Jeanette Dijkstra, MAG, 20 May 2020.

61 Emails from Miroslav Pisarević, NPA, 5 April 2021; Jeanette Dijkstra, MAG, 27 April 2021; and Rob Syfret, HALO Trust, 26 April 2021.

62 Email from Manuel João Agostinho, APOPO, 22 March 2021.

63 Email from Manuel João Agostinho, APOPO, 14 March 2022.

64 Email from Daniel Richards, HALO Trust, 25 June 2022.

65 Ibid.

66 Email from Jeanette Dijkstra, MAG, 22 March 2022.

67 Email from Miroslav Pisarević, NPA, 5 April 2021.

68 Email from Miroslav Pisarević, NPA, 10 March 2022.

69 Email from Robert Iga Afedra, NPA, on behalf of CNIDAH, 22 March 2021; Statement by Angola on Article 5 implementation, Fourth APMB Review Conference, Oslo, November 2019.

70 Emails from Robert Iga Afedra, NPA, 3 June 2019; Ralph Legg, HALO Trust, 30 March 2020; and Jeanette Dijkstra, MAG, 20 May 2020.

71 Email from Miroslav Pisarević, NPA, 10 March 2022.

collection forms are consistent and enable collection of the necessary data.⁷²

Throughout 2021, database cleaning and updating took place to maintain data quality.⁷³ In 2021, ANAM introduced revised IMSMA completion forms and non-technical survey forms that included a standardised prioritisation of a task or CHA.⁷⁴

According to the National Mine Action Strategy 2020–2025, CED started reporting its tasks to CNIDAH, as of 2020. However, CED's land release methods have been non-compliant with IMAS, making it difficult to reflect their productivity output into the IMSMA. In some instances, CED's clearance statistics were not reported to ANAM, creating information gaps.⁷⁵ This should no longer be an issue since the dissolving of CED and its operator bodies in 2022.

ANAM's information management system does not yet gather all mine action data across the country, but this issue has been discussed with the public operators and challenges to the verification and integration of historic data had yet to be mastered.⁷⁶ According to the GICHD, ANAM should also evaluate whether an upgrade to IMSMA Core is appropriate.⁷⁷

Transparency and reporting of mine action activities in Angola has certainly improved in recent years with timely and accurate submission of its most recent Article 7 reports and Article 5 statements at APMB meetings. Angola's most recent Article 7 report (covering 2021), however, did not classify its anti-personnel mined area into SHAs and CHAs as per the IMAS best practices, and contained big discrepancies in land release figures reported by Angola and these reported by operators.

PLANNING AND TASKING

Angola's National Mine Action Strategy 2020–2025 was developed by CNIDAH, in 2019, with support from the GICHD. As at May 2022, the strategy had yet to be formally approved by the Government of Angola.⁷⁸

There are five objectives within the strategy, three of which relate to completion of Angola's Article 5 obligations and which contain specific outcomes and targets:

STRATEGIC OBJECTIVE 1: LAND RELEASE

That appropriate land release activities result in the release of safe land and the facilitation of sustainable development. All hazardous areas are to be addressed by 31 December 2025 in line with the Article 5 extension request work plan. The programme's key strategic orientation for achieving its land release objective will focus on developing and fully implementing IMAS-compliant NMAS on land release, including by defining "all reasonable effort".

STRATEGIC OBJECTIVE 4: MANAGEMENT OF RESIDUAL CONTAMINATION

A national strategy on the management of residual contamination will be developed by the end of 2020 under the lead of CNIDAH and the CED with the participation of all relevant actors. A national capacity to manage residual contamination was to be trained within the first quarter of 2021.⁷⁹ As at May 2022, this had still to happen (see section, Planning for residual risk after completion, for further information).

STRATEGIC OBJECTIVE 5: ADVOCACY, COMMUNICATION, AND COORDINATION

Effective coordination and information sharing are stated to be pre-conditions for achieving all strategic objectives. In addition to the twice-yearly coordination meetings with relevant stakeholders that began in 2019, ANAM will take the lead in developing a communications plan on the completion process by the middle of 2021, to facilitate effective information sharing.⁸⁰ This communication plan, however, has yet to be developed as at June 2022.

In June 2021, Angola released an updated work plan which includes an updated list of all areas confirmed or suspected to contain explosive ordnance, annual clearance projections and milestones, and revised funding projections. The updated land release targets, set out in Table 2, are based on an estimate of outstanding anti-personnel mine contamination as at June 2021. In 2021, the majority of land release was planned to take place in Bié, Cuando Cubango, Cuanza Norte, Cuanza Sul, Lunda Sul, and Moxico, with a land release target of 17.1km².⁸¹

72 Emails from Manuel João Agostinho, APOPO, 22 March 2021; Miroslav Pisarević, NPA, 5 April 2021; Jeanette Dijkstra, MAG, 27 April 2021; and Rob Syfret, HALO Trust, 26 April 2021.

73 Emails from Robert Iga Afedra, NPA (on behalf of CNIDAH), 22 March 2021, Miroslav Pisarević, NPA, 10 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

74 Email from Jeanette Dijkstra, MAG, 22 March 2022.

75 ANAM updated Article 5 Implementation Work Plan 2020–2025, June 2021, pp. 5 and 7.

76 Email from Christelle Mestre, GICHD, 4 May 2022.

77 Email from Christelle Mestre, GICHD, 4 May 2022.

78 Email from Christelle Mestre, GICHD, 4 May 2022.

79 Angola National Mine Action Strategy 2020–2025, pp. 27–29.

80 Ibid., pp. 29–31.

81 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 10.

Table 2: Annual targets for release of mined area in 2021–25⁸²

Year	Targets (m ²)
2021	17,075,262
2022	17,075,262
2023	15,672,399
2024	14,288,955
2025	7,826,779
Total	71,938,657

CNIDAH has acknowledged that its tasking, prioritisation, and planning procedures were inadequate, and that the effective implementation of the work plan depended heavily on these processes being strengthened.⁸³ In 2020, CNIDAH planned to re-establish its authority regarding the coordination of

tasking in individual provinces, working closely with operators to ensure there is no duplication of effort in any areas of the country, and that all operators are clearly tasked.⁸⁴ Guidelines for a new tasking and prioritisation system were developed in 2020 and have been adopted in 2021.⁸⁵

A key feature of the new prioritisation system is that provinces are assigned to operators giving them responsibility over that province.⁸⁶ This is to avoid crowding of operators in provinces, improve accountability, and monitoring of performance over time.

A workshop was planned in April 2022, but then postponed to the last quarter of 2022, to further discuss the prioritisation criteria among stakeholders and ANAM. The workshop also aimed to produce a tasking master plan, which provides a comprehensive list of all hazardous areas that have been registered in the national database, in addition to an annual task list, that provides an annual list of the tasks that will be cleared for each operator until 2025.⁸⁷

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no specific national mine action legislation in Angola.⁸⁸

Ten chapters of NMAS were completed and fully adopted in 2021.⁸⁹ These chapters are expected to bring uniformity to approaches within the mine action sector. Clearance operators are expected to review their internal SOPs and align them with the national standards.⁹⁰ Three additional standards have been drafted—on animal detection systems, EOD, and residual contamination management—with the support of the GICHD.⁹¹ These standards have been translated into Portuguese, and will be shared with the review board and eventually sent to ANAM for approval.⁹² Angola’s NMAS are considered adequate and cover the main topics related to land release.⁹³

ANAM held a workshop to present and discuss the updated NMAS in 2021, where ANAM and operators jointly discussed and clarified some issues related to the NMAS, for example, recording and reporting operations results, application of the land release concept, and approach to residual risk.⁹⁴

NPA conducted a second QM training course for four ANAM senior management staff in November 2021, reinforcing the QM country system. Two additional QM courses, using internal capacities in the country, were conducted for ANAM quality assurance (QA) and quality control (QC) officers per region.⁹⁵ NPA intends to provide training to ANAM’s QM personnel on the use of drones as a non-technical survey tool.⁹⁶

ANAM is responsible for undertaking external QA and QC of mine action activities, including QC of all completed tasks prior to handover of land to beneficiaries. With the limited government funding of ANAM, the presence of QA and QC monitoring personnel during field operations remains insufficient and largely dependent on the capacity development project being implemented by NPA. Angola hoped that the formation of ANAM will lead to improved funding of QM activities.⁹⁷

82 Ibid.

83 Angola National Mine Action Strategy 2020–2025, p. 10.

84 Email from Ralph Legg, HALO Trust, 30 March 2020.

85 Email from Robert Iga Afedra, NPA, 4 July 2021.

86 Interview with Robert Iga Afedra, NPA, 22 February 2021.

87 Emails from Miroslav Pisarević, NPA, 10 March and 14 September 2022; and CNIDAH, Minefield Tasking, Planning, and Prioritisation Guideline, 2021.

88 Email from Robert Iga Afedra, NPA, 3 June 2019.

89 Article 7 Report (covering 2021), Form J.

90 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 10.

91 Article 7 Report (covering 2021), Form J; and emails from Christelle Mestre, GICHD, 4 May 2022; and Miroslav Pisarević, NPA, 10 March 2022.

92 Email from Miroslav Pisarević, NPA, 10 March 2022.

93 Email from Christelle Mestre, GICHD, 4 May 2022.

94 Email from Manuel João Agostinho, APOPO, 14 March 2022.

95 Email from Miroslav Pisarević, NPA, 10 March 2022.

96 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, June 2021, pp. 6–7.

97 Ibid, p. 7.

Improvements in ANAM's QM capacity were indeed confirmed by operators in 2021, and a total of 6 QA and 41 QC activities were conducted by ANAM monitoring teams, targeting seven provinces: Benguela, Bié, Cuando Cubango, Cuanza Norte, Cuanza Sul, Moxico, and Uíge.⁹⁸ APOPO operations were visited regularly by ANAM teams to undertake QC, monitoring, and accreditation of the detection animals. No significant changes in terms of issuing completion certificates were observed though.⁹⁹

ANAM conducted visits to HALO's minefields across its area of operations, including visits to the three accident sites for investigations (see section, Deminer safety, for further information).¹⁰⁰ MAG received ANAM's QA and QC liaison approximately on a weekly manner at the base and very regularly in the active minefields. All active and completed minefields were visited and approved.¹⁰¹

OPERATORS AND OPERATIONAL TOOLS

Four international NGOs conducted demining for humanitarian purposes in Angola in 2021: APOPO, The HALO Trust, MAG, and NPA. INAD was the only active national operator in 2021.¹⁰² As at September 2022, ANAM reported that the CED, and all operators working under it, have been decommissioned. A new national operator, the national demining centre, was created in 2022, and is expected to be operational in 2023.¹⁰³

Table 3: Operational clearance capacities deployed in 2021¹⁰⁴

Operator	Manual teams	Total deminers*	Animal detection capacity	Machines**	Comments
APOPO	1	18	9 handlers, 9 rats	2 (One machine from APOPO and one from INAD).	Increase by 12 deminers, 3 handlers, and 1 machine from 2020. Deminers also conduct survey.
HALO Trust	67	635	0	2	Increase from 33 teams and 296 deminers in January 2021.
NPA	4	30	10 handlers	5 (2 MMW-240 and 3 Casspir).	Decrease by 26 deminers from 2020. 10 deminers under MDD handler training in Oct-Dec 2021.
MAG	11	93	0	7	Increase by 16 deminers from 2020.
Totals	83	776	19 handlers, 9 rats	16	

* Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters.

APOPO almost doubled its capacity from 26 staff in 2020 to 48 staff in 2021. APOPO deployed one team of two personnel for its non-technical survey. For technical survey and clearance, APOPO deployed one team of 18 deminers, one mine detection rats (MDR) team of seven handlers and nine rats, and one technical survey dog (TSD) team of two handlers and two dogs. The technical survey dogs were deployed for the first time in Angola. Funds permitting, APOPO expected to maintain the same structure in 2022.¹⁰⁵

The HALO Trust increased its number of staff across all operational teams throughout 2021 as per the contract with the government of Angola. New staff were recruited and trained in Cuando Cubango province, increasing the capacity by 82% between December 2020 and December 2021. By the end of 2022, HALO expected an additional 300 staff to have been recruited and trained, principally under its contract with the Angolan government, as well as on the basis of a large private donor contract also focused on Cuando Cubango province. HALO deployed four five-person teams totalling 20 personnel for its non-technical survey operations in Angola in 2021.¹⁰⁶

HALO conducted drone trials in 2021. These drones were fitted with thermal cameras and light detection and ranging (LiDAR) sensors. Thermal data was used to identify surface level anti-vehicle mines, and LiDAR data was used to identify man-made features such as trenches. Furthermore, the US Night Vision and Electronic Sensors Directorate (NVESD) is working with HALO to reintroduce the Handheld Standoff Mine Detection System (HSTAMIDS) detectors in early 2022. HSTAMIDS detectors are designed to discriminate between "clutter" (small, simple pieces of metal) and metal surrounded by "mass" (the body of

98 Article 7 Report (covering 2021), Form J.

99 Email from Manuel João Agostinho, APOPO, 14 March 2022.

100 Email from Daniel Richards, HALO Trust, 25 June 2022.

101 Email from Jeanette Dijkstra, MAG, 22 March 2022.

102 Article 7 Report (covering 2021), Form J.

103 Email from Mário Nunes (on behalf of ANAM), NPA, 14 September 2022.

104 Emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

105 Email from Manuel João Agostinho, APOPO, 14 March 2022.

106 Email from Rob Syfret, HALO Trust, 28 September 2022.

a mine). Their successful deployment will see clearance rates improve. HSTAMIDS training was completed in January and February 2022, and teams have been deployed to Cuando Cubango under supervision to test these new detectors in the field.¹⁰⁷

MAG increased its number of teams as funding from the US Office of Weapons Removal and Abatement (WRA) was secured for 39 months. In 2021, MAG deployed two non-technical survey teams of 10 personnel and added two new mechanical assets: a PT300 and another CAT excavator to the program, each with their own follow-up team.¹⁰⁸

NPA decreased its manual teams due to cuts in funding in 2021, but doubled its non-technical survey capacity to two teams of two, and added one more Casspir machine to support a potential geographical expansion to other provinces in north-west Angola. NPA also accredited and deployed MDD capacities in March 2022 following a handler training course in October–December 2021.¹⁰⁹

In terms of innovation, further to the MDD capacities introduced by APOPO and NPA, and the drones trials initiated by HALO, NPA also introduced drones into its operations in 2021 as an additional tool to support non-technical survey and operational planning. NPA plans to use the drones in 2022 for the internal quality management system. NPA also plans to test the information collection of the Vallon VMH-4 detectors including the global positioning system (GPS) that can track the daily productivity per deminer, among other data. Such data will be collected through daily operations reports, incorporated within the information management system, and further analysed to potentially improve operational results, programme efficiency, and safety.¹¹⁰

DEMINER SAFETY

The HALO Trust reported three incidents by R2M2 anti-personnel mines during clearance operations in 2021, resulting in three casualties with minor injuries. The accidents were initially investigated by programme staff, with the findings reviewed by HALO's global capability group which is not affiliated with the programme. ANAM staff visited all cases and conducted their own investigations in which HALO cooperated fully.¹¹¹

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

According to operator data, a total of nearly 18km² of mined area was released in 2021: 4km² through clearance, 3.6km² through technical survey, and 10.3km² through non-technical survey.¹¹² This data, however, does not corroborate with what was reported by Angola in its Article 7 report to the APMBC, according to which, only 8.7km² of land was released by international operators in 2021: 1.25km² cancelled through non-technical survey; 1.55km² reduced through technical survey; and 5.9km² cleared.¹¹³ ANAM attributed the discrepancy in the reported figures to potential data entry errors or to mistaken operator reports, and said it will continue working with operators to reconcile land release figures.¹¹⁴

According to data reported by the CED operators outside the IMSMA system, a total area of 15.23km² along with huge lengths of roads, power lines, and pipelines was cleared in 2021, during which a total of 513 anti-personnel mines, 51 anti-vehicle mines, and 39,559 items of UXO have been destroyed.

SURVEY IN 2021

ANAM and international operators reported release of nearly 14km² through survey in 2021: cancelling 10.25km² through non-technical survey (see Table 4) and reducing 3.6km² through technical survey (see Table 5).¹¹⁵ This represents more than double the 6.69km² released by survey in 2020.¹¹⁶ In its Article 7 report covering 2021, however, Angola reported the release of only 2.8km² through survey in 2021, of which 1.25km² was cancelled through non-technical survey, and 1.55km² reduced through technical survey.¹¹⁷

107 Email from Daniel Richards, HALO Trust, 25 June 2022.

108 Email from Jeanette Dijkstra, MAG, 22 March 2022.

109 Emails from Miroslav Pisarević, NPA, 10 March and 14 September 2022.

110 Ibid.

111 Email from Daniel Richards, HALO Trust, 25 June 2022.

112 Article 7 Report (covering 2021), Form F; and emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

113 Article 7 Report (covering 2021), Form F.

114 Email from Mário Nunes (on behalf of ANAM), NPA, 14 September 2022.

115 Ibid.; and emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

116 Article 7 Report (covering 2020), Form F; and emails from Manuel João Agostinho, APOPO, 22 March 2021; Miroslav Pisarević, NPA, 5 April 2021; Jeanette Dijkstra, MAG, 27 April 2021; and Rob Syfret, HALO Trust, 26 April 2021.

117 Article 7 Report (covering 2021), Form F.

Survey continues to account for the majority of land released in Angola. This, however, varied largely from one area to another and across the operators. Land released through survey accounted for 99% of the total released by each of APOPO and NPA, nearly 50% of land released by HALO, and 9% of land released by MAG. Furthermore, 86% of land cancellation in 2022 happened in two provinces only: Cuanza Sul (by APOPO) and Zaire (by NPA). Neither HALO nor MAG expects large cancellations in their area of operation in the years to come.¹¹⁸ Considering the national survey that has been completed in 2019, ANAM and operators believe that the remaining contamination should be released through a combined application of technical survey and clearance, with the expectation that the ratio of land cleared to that released by survey will increase over time.¹¹⁹

Table 4: Cancellation through non-technical survey in 2021 (operator data)¹²⁰

Province	Operator	Area cancelled (m ²)
Cuanza Sul	APOPO	1,161,408
Bié	HALO Trust	28,999
Cuando Cubango	HALO Trust	841,114
Moxico	MAG	3,402
Bengo	NPA	50,570
Cuanza Norte	NPA	393,225
Uíge	NPA	113,800
Zaire	NPA	7,656,347
Total		10,248,865

Table 5: Reduction through technical survey in 2021 (operator data)¹²¹

Province	Operator	Area reduced (m ²)
Cuanza Sul	APOPO	1,457,428
Benguela	HALO Trust	196,211
Bié	HALO Trust	156,564
Quando Cubango	HALO Trust	836,753
Cuanza Sul	HALO Trust	9,734
Lunda Norte	INAD	4,000
Moxico	MAG	81,500
Lunda Sul	MAG	85,000
Kassai Ponto ¹²²	MAG	11,000
Cuanza Norte	NPA	691,582
Uíge	NPA	79,497
Total		3,609,269

CLEARANCE IN 2021

ANAM and operators reported clearing a total of 4km² of mined areas in 2021, destroying in the process 3,647 anti-personnel mines (in addition to a further 51 anti-personnel mines destroyed during spot tasks), 726 anti-vehicle mines, and 2,221 items of UXO (see Table 6 for details).¹²³ This is more than double the 1.77km² of mined area cleared in 2020.¹²⁴ The increase in area cleared in 2022 is largely attributed to the better use of machines and other clearance assets, along with the benefit of additional funds secured and additional teams deployed in 2021.

The number of square metres cleared for every anti-personnel mine destroyed has nearly decreased fourfold: from 4,166m² per mine in 2020 to 1,081m² per mine in 2021. The increase in the number of anti-personnel mines recovered per square metre is largely due to the density of contamination in some of the areas that have been worked on and that have witnessed intense hostilities and greater mine-laying.¹²⁵

118 Emails from Jeanette Dijkstra, MAG, 6 September 2022; and Robert Syfret, HALO Trust, 14 September 2022.

119 Emails from Mário Nunes on behalf of ANAM, NPA, 14 September 2022; Manuel João Agostinho, APOPO, 6 September 2022; Miroslav Pisarević, NPA, 14 September 2022; Jeanette Dijkstra, MAG, 6 September 2022; and Robert Syfret, HALO Trust, 14 September 2022.

120 Emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March and 14 September 2022; Manuel João Agostinho, APOPO, 14 March and 6 September 2022; and Daniel Richards, HALO Trust, 25 June 2022. In its Article 7 report covering 2021, Angola reports the area cancelled in Cuanza Sul by APOPO to be 868,637m²; areas cancelled by HALO in Bié and Cuando Cubango provinces to be 0; areas cancelled by NPA in Cuanza Norte and Uíge provinces to be 375,225m² and 0, respectively. Angola did not report on non-technical surveys in Bengo or Zaire provinces.

121 Article 7 Report (covering 2021), Form F; and emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022. In its Article 7 report covering 2021, Angola reports the area reduced by APOPO in Cuanza Sul to be 444,979m²; area reduced by HALO Trust in Benguela, Bié, Cuando Cubango, and Cuanza Sul provinces to be 43,710m², 182,475m², 0, and 0, respectively; area reduced by MAG in Moxico and Lunda Sul provinces to be 85,500m² and 79,000m² respectively; and area reduced by NPA in Uíge and Cuanza Norte provinces reported as 26,135m² and 687,264m², respectively.

122 Kassai Ponto is the bridge over the river separating Luanda Sul and Moxico provinces, which is being cleared by MAG.

123 Article 7 Report (covering 2021), Form F; and emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022.

124 Article 7 Report (covering 2020), Form F; and emails from Manuel João Agostinho, APOPO, 22 March 2021; Miroslav Pisarević, NPA, 5 April 2021; Jeanette Dijkstra, MAG, 27 April 2021; and Rob Syfret, HALO Trust, 26 April 2021.

125 Emails from Mário Nunes on behalf of ANAM, NPA, 14 September 2022; and Robert Syfret, HALO Trust, 14 September 2022.

Table 6: Mine clearance in 2021 (operator data)¹²⁶

Province	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Cuanza Sul	APOPO	25,625	56	0	152
Cuanza Sul	HALO Trust	7,135	5	0	2
Benguela	HALO Trust	482,049	213	0	92
Bié	HALO Trust	546,591	179	17	85
Cuando Cubango	HALO Trust	1,031,653	1,958	684	109
Moxico	HALO Trust	50,677	1	0	2
Moxico	MAG	1,134,498	208	25	460
Lunda Sul	MAG	594,856	265	0	150
Uige	NPA	71,347	3	0	231
Kwanza Norte	NPA	58,518	759	0	938
Spot tasks			51		
Totals		4,002,949	3,698	726	2,221

AP = Anti-personnel AV = Anti-vehicle

A total of 51 anti-personnel mines (included in Table 6) were destroyed during spot tasks: 4 by APOPO, 8 by HALO, 3 by NPA, and 36 by MAG. A further 22 anti-personnel mines were destroyed by HALO's weapons and ammunition destruction teams. These mines were held by the police having been handed in by the public or otherwise recovered.¹²⁷

Land release output has more than doubled in 2021 compared to 2020. Land cancellation accounted for almost 60% of the total land released in 2021. Clearance and technical survey output both significantly increased from 2020.

APOPO significantly upscaled its survey and clearance activities thanks to increased funding, deploying of additional deminers, as well as starting the application of technical survey dogs for the first time.¹²⁸

HALO tripled the amount of land cleared and reduced in 2021 compared to 2020, and there was an 8% increase in the amount of area cancelled. The largest contributor to this increase is the realisation of the contract with the government of Angola, which saw procurement of equipment in late 2020 and the training and deployment of new teams throughout 2021. The HALO programme expanded from a total of 601 staff in January 2021 to 1,088 by December, with particular increases in the numbers of manual clearance and survey personnel.¹²⁹

MAG doubled its clearance in 2021 compared to 2020 after WRA allowed MAG to invest in a PT300 machine and 2 CAT excavators. MAG has advocated with the national authorities the need to increase the use of bigger mechanical clearance and ground preparation assets with 100% manual follow up. In 2021, of the 1.8km² cleared by MAG, more than 1km² was ground prepared by the machines.¹³⁰

NPA increased the amount of mined area cancelled, using the same evidence-based approach and capacities established in 2020, and expanding its area of operation to new provinces: Zaire and Bengo. NPA also increased its area cleared by more than 100% due to large number of anti-personnel mines found on the tasks, while the area reduced decreased slightly compared to the previous year.¹³¹

126 Article 7 Report (covering 2021), Form F; and emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022. In its Article 7 report covering 2021, Angola reported the area cleared by APOPO in Cuanza Sul to be 22,684m², and the number of mines destroyed to be 45; area cleared by HALO in Benguela to be 479,861m² and number of mines destroyed to be 220; in Bié province to be 578,395m², 160 mines destroyed; in Cuando Cubango 1,038,623m², 1886 mines destroyed, In Moxico 50,677m², 2 mines destroyed; area cleared by MAG in Moxico province to be 1,114,313m², 194 mines destroyed; and in Luanda Sul 504,736m², 269 mines destroyed; area cleared by NPA in Uige province to be 71,226m², 2 mines destroyed; and in Cuanza Norte to be 50,650m², 320 mines destroyed.

127 Emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; Daniel Richards, HALO Trust, 25 June 2022; and Robert Syfret, HALO Trust, 14 September 2022.

128 Email from Manuel João Agostinho, APOPO, 14 March 2022.

129 Emails from Daniel Richards, HALO Trust, 25 June 2022; and Robert Syfret, HALO Trust, 14 September 2022.

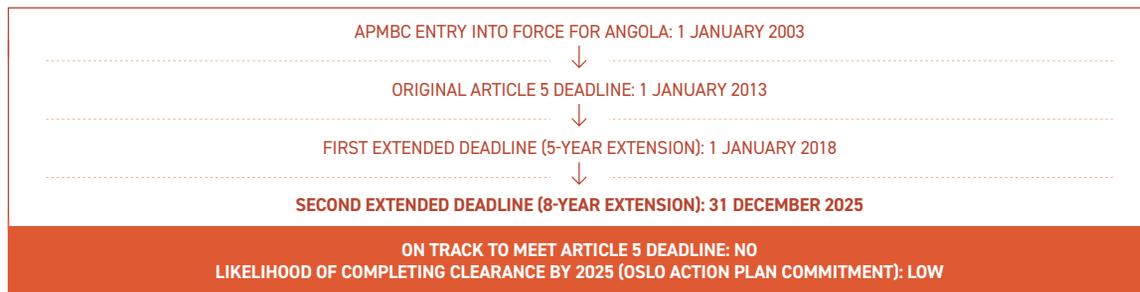
130 Email from Jeanette Dijkstra, MAG, 22 March 2022.

131 Email from Miroslav Pisarević, NPA, 10 March 2022.

As at the end of 2021, all known mined areas in Huambo had been released. Five provinces (Uige, Cuanza Norte, Malange, Namibe, and Zaire) are very close to completion. Indeed, after years of clearance operations in Malange by both national and international operators, it was thought that all mined areas in the province had been cleared. However, CNIDAH received reports from the CED at the beginning of 2020 of newly discovered mined areas.¹³² It has now been determined that this is likely residual contamination and that all known mined areas in Malange province registered in the national IMSMA database have indeed been released. The declaration of completion has been delayed due to challenges with the interpretation and understanding of residual contamination by provincial leadership. This will be addressed as part of ANAM's residual contamination strategy (see Planning for residual risk after completion).¹³³

Completion of the remaining three minefields in Namibe province was pending at the time of writing as operators have yet to be deployed, but it is expected that clearance will be completed no later than December 2022. Completion of Zaire, Uige, and Cuanza Norte provinces was also expected by the end of 2022.¹³⁴

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMB (and in accordance with the eight-year extension granted by States Parties in 2017), Angola is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. It is unlikely to meet this deadline.

The year 2021 saw Angola exceed its Article 5 work plan land release target of 17.1km² by 2.77km². This is a great improvement from 2020 where Angola was 8.7km² under its land release target of 17.2km².¹³⁵ Based on contamination figures provided as at June 2021, Angola will need to release nearly 17.1km² of anti-personnel mined area in 2022, going down to nearly 15.7km² in 2023, 14.3km² in 2024, and 7.8km² in 2025 to meet its Article 5 deadline.¹³⁶ ANAM had anticipated in 2020 that after the completion of non-technical survey in all provinces and better definition of minefields sizes, there would be reduced cancellation on the remaining mined areas across the country.¹³⁷

Considering the positive developments in Angola's mine action structures and the significant improvements in land release outputs in 2021, Angola needs to maintain the pace of its progress and continue to apply sound and rigorous land

release techniques in order to meet its Article 5 deadline of 31 December 2025. However, with more than 50% of land released in 2021 resulting from cancellation, and if indeed most of the remaining contamination is expected to be dealt with through clearance and technical survey activities, Angola will likely need to request a further extension to its Article 5 deadline.

CNIDAH stated in early 2021 that it would take ten years for Angola to achieve completion of clearance of anti-personnel mines. However, if capacity is increased and operators implement efficient and effective land release methodologies then this timeline could be significantly reduced.¹³⁸ Angola has indeed accelerated its land release by investing additional resources and deploying sound land release methodology throughout 2021, and will need to maintain this pace if it has any chance of meeting its 2025 Article 5 deadline. While funding has increased in Angola in recent years, as at May 2022, Angola still had a funding shortfall of \$200 million for the period through to the end of 2025.¹³⁹

ANAM has reported that strict implementation of land release principles during clearance has improved operational efficiency of demining in Angola. Operational assets are

¹³² Emails from Robert Iga Afedra (on behalf of CNIDAH), 1 April 2020 and 28 May 2021.

¹³³ ANAM Updated Article 5 Implementation Work Plan 2020–2025, June 2021, pp. 9–10.

¹³⁴ Ibid.

¹³⁵ CNIDAH, "Detailed work plan for the implementation of Article 5 of the Convention (2019–2025)", Annex 1; and emails from Jeanette Dijkstra, MAG, 22 March 2022; Miroslav Pisarević, NPA, 10 March 2022; Manuel João Agostinho, APOPO, 14 March 2022; and Daniel Richards, HALO Trust, 25 June 2022

¹³⁶ ANAM, Updated Article 5 Implementation Work Plan 2020–2025, p. 10.

¹³⁷ Ibid., p. 5.

¹³⁸ Email from Robert Iga Afedra, NPA, on behalf of CNIDAH, 22 March 2021.

¹³⁹ Article 7 Report (covering 2021), Form J.

being effectively used on clearance and technical survey with improved results. Effective implementation of non-technical survey has ensured considerable cancellations, which has saved time and financial resources.¹⁴⁰ In 2021, APOPO cleared three areas totalling 977,848m² with no mines found.¹⁴¹ HALO worked on 30 areas, totalling 403,533m², which proved to contain no mines.¹⁴² NPA released four areas totalling 262,930m² which contained no anti-personnel mines, although three areas were released through technical survey with minimum of clearance and only one area, a road, was completely cleared.¹⁴³ MAG did not clear any areas without mines in 2021.¹⁴⁴

Table 7: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	4.0
2020	1.8
2019	1.6
2018	1.0
2017	1.2
Total	9.6

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

In accordance with Strategic Objective 4 of the draft National Mine Action Strategy 2020–2025, CNIDAH and the CED, with the participation of all relevant actors, aimed to establish a national strategy on the management of residual contamination by the end of 2020. This was delayed due to movement restrictions imposed by COVID-19.¹⁴⁵ As at July 2021, Angola was the process of establishing a national strategy for the management of residual contamination with the support of NPA. Residual contamination is initially planned to be managed by INAD and subsequently handed over to the police under the Ministry of Interior. A national standard on residual contamination management has also been developed by the GICHD for the transition phase. This includes process maps that outline the responsibilities of the currently involved stakeholders.¹⁴⁶ Under its ongoing capacity development project, NPA planned to train the Angolan military and police on management of residual contamination of explosive ordnance.¹⁴⁷

ANAM recognises the importance of establishing a residual contamination strategy because Angola lacks procedures for the declaration of completion within provinces and there is no

common understanding of residual risk. CNIDAH prioritised the provinces of Huambo, where clearance has been completed, Malange, and Namibe, which are approaching completion, and in 2021, continued to hold sensitisation meetings with the provincial leadership in Cuanza Norte, Huambo, Malange, Namibe, and Uíge provinces to prepare them for the potential declaration of their provinces clear of all known mined areas, and allay fears about job losses within the demining sector.¹⁴⁸ As at September 2022, however, none of these areas had been declared mine-free. According to ANAM, in Uíge province, only one road remains to be demined, which had not been possible due to the lack of access. ANAM expected that three of the four clearance tasks in Zaire province would be completed by the end of 2022, leaving only one remaining in 2023. Cuanza Norte province is considered the most complex due to the high density of contamination, but ANAM hoped that fulfilling Angola's Article 5 obligations is still possible following the planned deployment in 2023 of its newly created national operator, the national demining centre, and expected that this will significantly reinforce the demining capacity.¹⁴⁹

140 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, June 2021, p. 6.

141 Email from Manuel João Agostinho, APOPO, 14 March 2022.

142 Email from Daniel Richards, HALO Trust, 25 June 2022.

143 Email from Miroslav Pisarević, NPA, 10 March 2022.

144 Email from Jeanette Dijkstra, MAG, 22 March 2022.

145 Telephone interview with Robert Iga Afedra, NPA, 8 June 2021; and ANAM, Updated Article 5 Implementation Work Plan 2020–2025, p. 8.

146 Email from Christelle Mestre, GICHD, 4 May 2022.

147 Email from Miroslav Pisarević, NPA, 10 March 2022.

148 Article 7 Report (covering 2021), Form J.

149 Email from Mário Nunes (on behalf of ANAM), NPA, 14 September 2022.

BOSNIA AND HERZEGOVINA

MINE ACTION REVIEW

CLEARING THE MINES 2022

ARTICLE 5 DEADLINE: 1 MARCH 2027
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION: HEAVY

MINE ACTION REVIEW ESTIMATE

50 km²

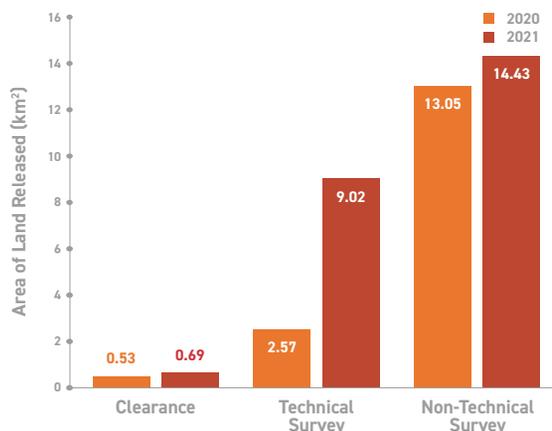
AP MINE
CLEARANCE IN 2021

0.69 km²

AP MINES
DESTROYED IN 2021

1,717

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Bosnia and Herzegovina (BiH) continued to make progress in Article 5 implementation in 2021, releasing more mined area through clearance, technical survey, and non-technical survey compared to the previous year. However, the total land release output of more than 18km² achieved in 2021 (0.69km² through clearance; 3.23km² through reduction; and 14.43km² through cancellation), is far below the annual land release 2021 target of 91.3km² in BiH's 2020 Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request.

Regrettably, the Bosnia and Herzegovina Mine Action Centre (BHMAC) failed to take full advantage of the Country Coalition established with Germany in 2020, and no meeting of the coalition took place in 2021.

RECOMMENDATIONS FOR ACTION

- The amended demining law drafted in 2017, which had still to be adopted as of writing, should be revised further and re-submitted to Parliament for adoption. Liability policy and clearly defining "all reasonable effort" in the context of BiH should be discussed in parallel with the revision of the amended draft law.
- BiH should implement the recommendations of both the 2015 United Nations Development Programme (UNDP) Mine Action Governance and Management Assessment, and the 2016 performance audit report of the Audit Office of the Institutions of BiH,¹ both of which remain valid. In particular, BiH should continue strengthening the governance and management of the mine action programme.
- BHMAC should fully adopt international best practice in land release and ensure that all stakeholders, in all parts of BiH (including BHMAC's regional offices), consistently use evidence-based survey to confirm and delineate areas of actual contamination prior to clearance.

¹ UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015; and Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", No. 01-02-03-10-16-1-1101/16, 4 November 2016, p. 22.

- As part of efforts to enhance efficiency and effectiveness of land release operations, BHMAL should review and update in a collaborative manner relevant national mine action standards (NMAAS) to bring them in line with the International Mine Action Standards (IMAS). To facilitate this process, BHMAL should consider re-establishing technical working groups (TWGs).
- BHMAL should develop a detailed, costed, and multi-year Article 5 work plan with achievable and measurable milestones, and update its national mine action strategy for 2018–25 accordingly.
- BiH should fully embrace the “Country Coalition” approach, in partnership with Germany, which can provide a forum for regular dialogue among all mine action stakeholders to improve coordination and identify and overcome challenges.
- BHMAL should report more accurately and consistently on the extent of anti-personnel mine contamination, including using the classification of suspected hazardous area (SHA) and confirmed hazardous area (CHA) in a manner consistent with IMAS.
- BHMAL should detail the steps it plans to take to further mainstream gender and diversity within its mine action programme and improve gender balance in the sector, at the least by meeting the target of 40% female staff set by the 2003 Law on Gender Equality.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	5	The European Union (EU)-funded “country assessment” project completed in May 2020 groups SHAs and CHAs together into logical units/polygons known as “Mine Suspected Areas” (MSAs), which are then each tasked for land release. While the results of the country assessment facilitate planning and tasking, the understanding and accuracy of BiH’s baseline of remaining anti-personnel mine contamination did not markedly improve, with less than 10% of mined area cancelled during implementation of the project. Many of the SHAs within these MSAs are believed to be still significantly inflated and clearance of confirmed anti-personnel mined area likely amounts to only a small percentage of the overall SHA. The creation of “MSAs” appears to have confused the actual size of remaining mined area.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	5	National ownership of mine action in BiH falls under the responsibility of the Demining Commission and BHMAL. The mandate of the most recent Commission ended on 30 April 2022 and a new Commission was appointed on 28 July 2022. BiH’s National Mine Action Strategy 2018–2025 was adopted in January 2019, but as at July 2022, the amended demining law (2017) was still awaiting parliamentary adoption. Governance of the national mine action programme needs to be strengthened and Article 5 implementation better coordinated. Regrettably, the Country Coalition established between BiH and Germany in 2020 to strengthen coordination of APMBC Article 5, and to monitor progress against the 2018–25 strategy, did not meet in 2021.
GENDER AND DIVERSITY (10% of overall score)	4	5	The National Mine Action Strategy 2018–2025 supports the 2003 Law on Gender Equality. Within BHMAL’s own programme, and those of clearance operators too, women make up only a small proportion of the total number of staff, and an even smaller proportion of operations staff in the field. This is despite BHMAL’s pledge to ensure that all relevant actors in the national programme will include gender in all phases of all mine action activities.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	6	5	BHMAL is in the process of migrating from its own information management system to the new web-based system, IMSMA (Information Management System for Mine Action) Core. The first stage of the migration has been completed, having incorporated data from the EU-funded “country assessment” project, with the support of UNDP and the Geneva International Centre for Humanitarian Demining (GICHD). In a positive development, BHMAL disaggregated mined area released through non-technical survey, technical survey, and clearance in its 2021 data provided to Mine Action Review – a notable improvement on previous years.
PLANNING AND TASKING (10% of overall score)	7	7	The EU-funded “country assessment” project resulted in the creation of 478 “MSAs” (groups of SHAs and CHAs), which are then tasked to operators as single units for land release. The results of the project inform the planning, prioritisation, and realisation of the Mine Action Strategy 2018–2025 and of BiH’s future Article 5 implementation, as outlined in its 2020 extension request. A first revision of BiH’s Mine Action Strategy for 2018–25 was scheduled for 2020, but is now said to have been delayed until 2023.

Criterion	Score (2021)	Score (2020)	Performance Commentary
LAND RELEASE SYSTEM (20% of overall score)	7	7	There is considerable national and international demining capacity, and the full demining toolbox is deployed. It is now essential that all implementing partners, in all parts of the country, including BHMAL regional offices, consistently apply efficient, evidenced-based land release methodology. In particular, non-technical and technical survey must be used to help confirm and better delineate mined areas prior to clearance. Only BHMAL can formally conduct and cancel area through non-technical survey, with operators restricted to release through technical survey and clearance only. Despite plans to do so, BHMAL did not review its national mine action standards in 2021.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	4	In 2020, BiH was granted a six-year extension to its Article 5 deadline to 1 March 2027. This target is only achievable with existing capacity if efficient land release methodology is applied routinely by all operators and annual targets are met. In 2021, BiH cleared under 0.69km ² of mined area, an increase on the previous year but below the unambitious 0.9km ² annual clearance target in BiH's extension request targets. In 2021, cancellation through non-technical survey (14.43km ²) and reduction through technical survey (9.02km ²), were also higher than the previous year, but fell far short of the extension request targets of 75.1km ² and 15.4km ² , respectively. The shortfall in the amount cancelled, however, could be due to the fact that BHMAL only cancels mined area upon completion of each MSA.
Average Score	5.4	5.4	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- The Demining Commission (representatives from three ministries (Civil Affairs, Security, and Defence) elected to represent BiH's three main ethnic groups (Bosniaks, Croats, and Serbs))
- Bosnia and Herzegovina Mine Action Centre (BHMAL)

NATIONAL OPERATORS

- Armed Forces of BiH
- BHMAL
- Civil Protection Administration of Republika Srpska (CPA RS)
- Federal Administration of Civil Protection (FACP)
- Non-governmental organisations:
 - DEMIRA
 - Mine Detection Dog Centre (MDDC)
 - Pro Vita
 - Stop Mines

- Commercial demining companies:

- Detector
- Heksogen d.o.o
- In Demining N.H.O
- N&N Ivsa
- Udruga "Pazi mine"
- UEM d.o.o (UEM is also an NGO)

INTERNATIONAL OPERATORS

- Norwegian People's Aid (NPA)
- Mines Advisory Group (MAG)

OTHER ACTORS

- European Union Force Bosnia and Herzegovina (EUFOR)
- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

BiH is heavily contaminated with mines, primarily as a result of the 1992–95 conflict related to the break-up of the Socialist Federal Republic of Yugoslavia. All warring factions in BiH laid mines, primarily between confrontation lines.² More than twenty-five years after the end of the conflict, BiH is still one of the most heavily mined countries in Europe. The country is also contaminated with explosive remnants of war (ERW), including cluster munition remnants (CMR) (see Mine Action Review's *Clearing Cluster Munition Remnants* report on BiH for further information).

Minefields in BiH generally contain relatively small numbers of mines, which are typically either "in groups or randomly laid". The quality of approximately 30% of minefield records was not sufficiently accurate for the identification of the precise minefield location and shape. Furthermore, it seems that approximately 40% of minefield records were never made or handed over, and records were often destroyed or lost for several reasons, such as the death or emigration of the persons who created the

2 2020 Revised Article 5 deadline Extension Request, August 2020, p. 4.

minefield records.³ In its Article 7 report submitted in 2021, BiH reported that it had collected 70% of minefield records to-date.⁴ Physical changes to mined areas (such as in vegetation), and a lack of witnesses to the laying of the mines, pose additional challenges.⁵

BHMAC reported that as January 2022, there was more than 922km² of mined area remaining in BiH (see Table 1), including more than 19km² of CHA.⁶ This is a decrease compared to the 956km² of mined area remaining in BiH as at the end of 2020, and is only partly explained by the 18km² released through survey and clearance in 2021. It is also a reduction on the 933km² of remaining mined area (which equated to 1.82% of its total territory), as reported by BiH at the Nineteenth Meeting of States Parties in November 2021.⁷

Table 1: Anti-personnel mined area by Category (at end 2021)⁸

Canton	Category I (km ²)	Category II (km ²)	Category III (km ²)	Total (km ²)
Unsko-Sanki	38.39	36.35	18.97	93.47
Posavski	3.11	9.63	1.86	14.60
Tuzlanski	14.04	18.14	45.96	78.14
Zenicko-Dobojski	27.77	11.67	72.94	112.38
Bosansko-Podrinjski	3.01	8.15	32.89	44.05
Srednje-Bosanski	24.52	38.91	47.34	110.77
Hercegovacko-Neret	13.47	24.55	106.94	144.97
Zapadno Hercegovacki	0.00	0.00	0.82	0.82
Sarajevo	14.63	11.71	26.71	53.05
Canton 10	9.22	12.22	53.59	75.03
BiH Federation	148.16	171.33	408.02	727.28
Brcko district	0.90	9.20	2.81	12.90
Republika Srpska	57.73	64.48	60.00	182.20
Totals	206.79	245.01	470.83	922.38

A 2016 national audit office report on the efficiency of the demining system in BiH concluded that: "Twenty years after the war ended, the Mine Action Centre still does not have complete information on the locations of landmines in BiH, which is to say it does not know the total suspected hazardous area."⁹ Similarly, a 2015 UNDP evaluation reported that BHMAC is aware that not all of the SHA is actually mined, but "without more efficient non-technical survey and technical survey procedures the exact extent of the problem cannot be quantified."¹⁰

During 2017, plans were formalised between BHMAC, clearance operators, and the European Union (EU) for a country assessment to establish a more accurate baseline of mine contamination and improve the efficiency of clearance operations.¹¹ The resultant "Country assessment of mine-suspected areas in Bosnia and Herzegovina 2018-2019" project (hereafter, the "country assessment" project), was conducted between 16 August 2018 and 15 May 2020, and involved nationwide non-technical survey of mined areas conducted by BHMAC (nine non-technical survey teams), the Armed Forces of BiH (two teams), and Norwegian People's Aid (NPA, three teams). The project processed data for 143 municipalities, in which the mined areas were confirmed in 118.¹² The project did not involve any technical interventions, so no area was reduced or cleared as part of it.

3 2018 Article 5 deadline Extension Request, p. 8.

4 Article 7 report (covering 2020), Form C.

5 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, p. 26.

6 BiH draft Mine Action Report for 2021, undated, p. 5.; and emails from Ljiljana Ilić, Interpreter, BHMAC, 15 April 2022 and Mirjana Marić, Senior officer for analysis and reporting, BHMAC, 21 September 2022.

7 Statement of BiH on Article 5, APBMC 19th Meeting of States Parties (virtual meeting), 15 to 19 November 2021.

8 Emails from Ljiljana Ilić, BHMAC, 15 April 2022 and Mirjana Marić, BHMAC, 21 September 2022; and BiH draft Mine Action Report for 2021, undated, p. 5. In the Table provided by BHMAC and included in its draft Mine Action Report for 2020, the Category III total was reported as 470.82km² and the total mined area as 922.37km². This is most likely due to rounding issues.

9 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, p. 5.

10 UNDP, Draft Mine Action Governance and Management Assessment for Bosnia and Herzegovina, 13 May 2015, p. 17.

11 Interviews with Darvin Lisica, then Programme Manager and Regional Director, NPA, Sarajevo, 8 May 2017; Fotini Antonopoulou, EU, Sarajevo, 8 May 2017; and Tarik Serak BHMAC, Sarajevo, 10 May 2017.

12 BiH draft Mine Action Report for 2020, undated draft, p. 11.

A total of 103km² was released during the period of implementation of the County Assessment Project. Total mined area fell from 1,069km² in 2018 to 966m² at project completion (15 May 2020), with an estimated 180,000 mines and unexploded ordnance (UXO) remaining to be cleared.¹³ As a result of the non-technical survey, the GEO position of 1,151 minefields was corrected, 300 new minefield records were collected, and 6,023 minefield records were deleted from the database.¹⁴

The mined area remaining at the end of the country assessment project was subdivided into 478 MSAs, averaging 1.94km² in size.¹⁵ MSA is a BiH-specific term, not consistent with IMAS. It is defined by BHMAL as "an area made up of SHAs and CHAs which encompasses one or more impacted communities and due to economic, cultural or geographical and other reasons is selected as a logical unit".¹⁶ MSAs have been selected by BHMAL in close cooperation with municipal authorities. It is hoped that their creation will simplify the tasking process by assigning clearance operators a larger geographical area in which to conduct land release operations (i.e. survey and clearance of the SHAs and CHAs within the MSAs), with MSAs each averaging 1.7/2.5km² in size.¹⁷ However, the creation of MSAs has also created some confusion in terms of the size of the actual remaining mined area.¹⁸

The country assessment was entirely based on non-technical survey, however it did not result in a significant amount of cancellation, as had been the external expectation of the international community. In fact the 93.5km² cancelled during the assessment was less than 10% of the total mined area at the start of the project.¹⁹ Significant further cancellation of uncontaminated land is therefore expected during land release of the MSAs and it is crucial that non-technical survey is used effectively to identify the location of mine contamination more accurately, before technical survey is subsequently conducted. However, current national mine action standards (NMAS) and standing operating positions (SOPs) in BiH stipulate that only BHMAL can formally conduct non-technical survey and formally cancel land – something which it does at the end of the process, once technical survey and clearance of all hazardous areas within each MSA has been completed.²⁰ The Mines Advisory Group (MAG) and NPA do, however, provide supplementary information collected during survey and community liaison to support BHMAL's non-technical survey.²¹

The intended use of the remaining mined area in BiH is as follows: 70% forest, 19% agriculture, 2% infrastructure, 1% water resources, and 8% other usages.²²

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Demining Commission, under the BiH Ministry of Civil Affairs, supervises the State-wide BHMAL and represents BiH in its relations with the international community on mine-related issues.²³ The Demining Commission is composed of representatives from three ministries (Civil Affairs, Defence, and Security) elected to represent BiH's three main ethnic groups (Bosniaks, Croats, and Serbs). Whereas the Minister for Civil Affairs remains ultimately responsible for mine action, the Demining Commission is the body responsible for setting mine action policy, and it proposes the appointment of BHMAL senior staff, for approval by the Council of Ministers.²⁴ The mandate of the most recent Commission ended on 30 April 2022, and a new Commission was appointed on 28 July 2022.²⁵ BHMAL is responsible for regulating mine action and implementing BiH's survey and clearance plans.²⁶ BHMAL operates from its headquarters in Sarajevo, two main offices in Sarajevo and Banja Luka, and eight regional offices (Banja Luka, Bihac, Brčko, Mostar, Pale, Sarajevo, Travnik, and Tuzla).²⁷

Since 2008, efforts have been made to adopt new mine action legislation in BiH with a view to creating a stable platform for mine action funding by the government and local authorities. As at June 2020, however, an amended text from 2017 was still awaiting parliamentary adoption, and in July 2021, BHMAL reported that the process had been suspended.²⁸ The Geneva

13 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 5 and 10–11; BiH draft Mine Action Report for 2020, undated draft, pp. 3 and 13; and Article 7 Report (covering 2020), Form C.

14 Email from Jonas Zachrisson, Country Director, NPA, 26 March 2020.

15 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 5 and 10–11; BiH draft Mine Action Report for 2020, undated draft, pp. 3 and 13; and Article 7 Report (covering 2020), Form C.

16 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 6 and 16.

17 Ibid., p. 11.

18 Email from GICHD, 27 April 2022.

19 Based on BiH's draft Mine Action Report for 2020, undated draft, p. 11. In BiH's 2020 Revised Article 5 extension request, August 2020, the amount of mined area cancelled was reported to be nearly 966.7km² (p. 5), but this figure is believed to be an error, given that 1,030km² mined area was addressed during the country assessment (p. 11) and remaining mined area as at the beginning of 2020 was nearly 966.7km² (p. 16 and Annex 2). The 966.7km² referred to incorrectly as cancelled on p. 5 is believed by Mine Action Review to refer to the total remaining mined area as at the end of the assessment at the beginning of 2020, as indicated on pp. 7 and 16, and in Annex 2.

20 Emails from Clement Meynier, Country Director, MAG, 14 March 2022; and Charles Frisby, Country Director, NPA, 11 April 2022.

21 Emails from Clement Meynier, MAG, 14 March 2022; and Charles Frisby, NPA, 11 April 2022.

22 "Draft Demining plan in BiH for 2020", Annex 5 to the 2020 Revised Article 5 deadline extension request, August 2020, p. 4.

23 BHMAL Organisational chart, accessed 6 May 2022 at: <http://bit.ly/2Ycj4xl>.

24 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 22.

25 Email from Mirjana Marić, BHMAL, 21 September 2022.

26 Bosnia and Herzegovina Official Gazette, Sarajevo, 17 March 2002.

27 BiH, National Mine Action Strategy 2018–2025, p. 8.

28 Email from Ljiljana Ilić, BHMAL, 2 July 2021.

International Centre for Humanitarian Demining (GICHD) believes the amended demining law should be revised further and re-submitted for adoption, with the topics of "All Reasonable Effort" and liability discussed in parallel to the revision.²⁹ Clearer legislation on liabilities related to mine action activities would be beneficial to all mine action stakeholders in BiH.

The governance of BiH's mine action programme needs to be strengthened and would benefit from improved communication and coordination with clearance operators, including through the re-establishment of technical working groups (TWGs), which provide a platform for operators to discuss, learn from each other, and work in synergies on matters related to operations.

After a 10-year hiatus, Board of Donors meetings resumed in September 2015.³⁰ BiH's new National Mine Action Strategy 2018–2025 specifies that at least two such meetings should be organised every year.³¹ In a positive development, a Board of Donors meeting took place in April 2022,³² after a significant gap since its last meeting in November 2017.³³ The next Board of Donors meeting was scheduled for the end of 2022.³⁴

Although official Board of Donor meetings have not taken place in recent years, before 2022, a number of important multi-stakeholder workshops have. Among others, a workshop on BiH's Article 5 planning took place on 6 March 2020, organised by BHMBC in cooperation with the Implementation Support Unit (ISU) of the APMBBC, and attended by State institutions, clearance operators, and non-governmental organisations (NGOs), and representatives of international organisations.³⁵ However, aside from this meeting, there was no further consultation with implementing partners during BiH's elaboration of its 2020 Article 5 extension request.

In its 2020 Article 5 extension request, BHMBC and the Demining Commission committed to strive to increase their interaction with the donor community to ensure that partners are kept informed of progress in implementation of plans.³⁶ It had been hoped that the "Country Coalition", established between BiH and Germany, would provide a forum for regular dialogue among all mine action stakeholders, help

demonstrate national ownership, strengthen coordination of APMBBC Article 5 and CCM Article 4 implementation, identify and overcome challenges, and monitor progress against the 2018–25 strategy. The first Country Coalition meeting, convened jointly by BiH and Germany, took place on 13 October 2020. The online forum was attended by over 40 participants including representatives from a wide range of mine action stakeholders, including NGO clearance operators and donors.³⁷ Unfortunately, no Country Coalition meeting took place in 2021, and as at July 2022, no further Country Coalition meetings had yet been convened.

BiH's second goal, in its National Mine Action Strategy 2018–2025, is that the "Mine action programme in BH is promoted on both national and international level to increase its visibility and improve liability, commitment and support of the state", and the strategy includes operational objectives linked to this strategic goal.³⁸ As committed to in its national mine action strategy, BiH published a separate financial plan for implementation of the BiH mine action strategy for 2018–25. The plan sees BiH commit a national budget of BAM 4.5 million (over US\$2.4 million) per annum for the Armed Forces and almost BAM 5.95 million (US\$3.1 million) per annum for BHMBC, for 2019 and 2020. These amounts were forecast to increase to a total of BAM 21.55 million (over US\$11.4 million, at current exchange rates) per annum in 2025.³⁹ This national funding is in addition to forecast international funding, which is also budgeted in BiH's financial plan.⁴⁰

In order to fulfil its Article 5 obligations by 1 March 2027, BiH claims to require a total of BAM 336 million as at 2020.⁴¹ According to a statement of the Demining Commission in November 2020, the ratio of donor funds was 55% compared to 45% from national funding.⁴² Of the national contributions, funds for non-technical survey activities by BHMBC will be ensured from the budgets of BiH's institutions, and implemented through operational activities of BHMBC. Budgets of BiH's institutions will also ensure funds for technical survey and mine clearance activities, to be implemented by Armed Forces. Entity governments' budgets will also ensure funds for technical survey and mine clearance operations, to be implemented by entity civilian protections. In addition, national funding will be provided from Brčko District, cantons and municipalities,

29 Email from GICHD, 14 May 2021.

30 Interview with Tarik Serak, BHMBC, Sarajevo, 10 May 2017; and emails from Fotini Antonopoulou, EU, 19 June 2017; and Suad Baljak, Mine Action Officer, UNDP, 15 June 2017; and UNDP BiH, "Mine Action Board of Donors Meeting", 31 March 2016, at: <http://bit.ly/300f4lp>.

31 BiH, National Mine Action Strategy 2018–2025, p. 20.

32 BHMBC website, "Board of Donors for Mine Action", 11 April 2022, at: <https://bit.ly/3BYuc8a>.

33 Emails from Suad Baljak, UNDP, 14 July 2020; and Jonas Zachrisson, NPA, 17 July 2020.

34 BHMBC website, "Board of Donors for Mine Action", 11 April 2022, at: <https://bit.ly/3BYuc8a>.

35 BHMBC website, "Workshop "Article 5 of the Convention on the Prohibition of the Use, Production, Stockpiling and Transfer of AP Mines", 6 March 2020, at: <http://bit.ly/3hVCAZO>; and BiH Mine Action Report for 2020, undated draft, p. 27.

36 2020 Revised Article 5 deadline Extension Request, August 2020, p. 25.

37 BHMBC website, "Embassy of the Republic of Germany in Bosnia and Herzegovina in cooperation with the BiH Ministry of Civil Affairs, organized online Country Coalition conference", 14 October 2020, at: <http://bit.ly/2NwxatH>; and Statement of Germany, Second CCM Review Conference (Part 1), virtual format, 25–27 November 2020.

38 BiH, National Mine Action Strategy 2018–2025, pp. 1 and 19–20.

39 BiH, Financial Plan for Implementation of the BiH Mine Action Strategy 2018–25, pp. 6–7.

40 Ibid.

41 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 6–7, and 23.

42 Statement of BiH, APMBBC 18th Meeting of States Parties, 16 to 20 November 2020.

and public and private companies.⁴³ According to BiH, as at 2020, available financial resources had not met the projected funding of the Mine Action Strategy 2018–2025, which may not allow “full realisation” of the goals set.⁴⁴

In 2021, BHMAC was funded by BiH to the sum of almost BAM 5.57 million (almost US\$3 million): BAM 3.34 million for planning and nearly BAM 2.23 million for quality assurance (QA). In addition, nearly BAM 9.58 million were allocated by domestic institutions for demining in 2021 (almost BAM 2.58 million by the BiH Armed Forces; BAM 3.60 million by FACP; more than BAM 3.17 million by the CPA RS; and more than BAM 0.23 million by the Government of Brčko District of BiH.⁴⁵

ENVIRONMENTAL POLICIES AND ACTION

BiH does not have a NMAS on environmental management. However, BHMAC said that, in general, existing humanitarian demining procedures (methods for vegetation removal, removal of metals and waste, use of machinery, etc.) contribute to the management and protection of the environment. BHMAC also said that, in certain cases, procedures are modified in order to protect the environment and that when approving demining execution plans, it consults the local community where necessary. The use of threshing machines has been banned on agricultural areas, because the machines disturb soil deeper than 20cm and compact the soil, leaving it impermeable to water and preventing sowing for up to three years. BHMAC also does not use machines on mountain pastures in order to help protect against removal of layers of grasses that have taken many years to grow and which do not renew fully after machines have been used. In forested areas, as part of its procedures to ensure the use of metal detectors at the required height, BHMAC consults landowners regarding which vegetation can be removed, and what density and type of trees should be left untouched.⁴⁶

MAG is increasingly examining the interaction between wildfires, landslides, and explosive ordnance contamination. In BiH, the high contamination by explosive items exacerbates the human, environmental, and socio-economic impact

of wildfires, hinders the response to tackling fires, and increases the risk of landslides. MAG is working alongside affected municipalities to help them promote MSAs most vulnerable to wildfires and landslides up to high priority for clearance. In addition, MAG BiH coordinates with BHMAC in instances when a MSA contains tree species identified as protected. This information is taken into account during operations and during quality control (QC). In addition, MAG BiH does not cut down trees that are over 10cm in diameter.⁴⁷

NPA is implementing an Environmental Assessment and Management System (EAM) for its country programmes, starting with assessing offices and administration. In addition, NPA's BiH country programme has an Environment and Climate Country Policy in place.⁴⁸ NPA BiH follows its “do no harm” principle and said that it takes seriously environmental considerations in the deployment of operational assets and strives to minimise its environmental footprint. NPA safely disposes all of non-degradable waste found in its area of operations, including all materials and tools used. All human waste and rubbish are regularly cleared and deposited in pre-designed areas. As land release operations are often conducted in forested areas, NPA also maintains close cooperation with relevant forest administrations, helping prevent unintended environmental consequences and reducing deforestation.⁴⁹

GENDER AND DIVERSITY

The National Mine Action Strategy 2018–2025 specifies that: “Under the leadership of BHMAC, relevant actors will include gender and diversity into all phases of planning, realisation and follow-up of all mine activities”.⁵⁰ The mine action strategy considered and supported the 2003 Law on Gender Equality in BiH, which includes equal treatment of the genders and equality of opportunity, and prohibits direct and indirect discrimination on the grounds of gender. The Law on Gender Equality determines that equal representation of men and women exists when the percentage of either gender in bodies at all levels in BiH (State, entity, cantonal, and municipality level) is at least 40%. BiH's national mine action strategy also considered the 2017 Gender Equality Action Plan.⁵¹ However, as at April 2022, only 21% of BHMAC's employees were female (37 of 171 employees), with women employed in 16% of managerial/supervisory positions (4 of 25) and 18% of operational positions (25 of 139).⁵² BHMAC reported having a gender and diversity policy in place and stated that BHMAC upholds the Law on Gender Equality and routinely includes it in the development of strategies and standards.⁵³ A new Demining Commission was appointed on 28 July 2022, in which one of the three new members is female.⁵⁴

43 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 23–24.

44 Ibid., p. 7.

45 Email from Ljiljana Ilić, BHMAC, 22 March 2022; and BiH draft Mine Action Report for 2021, undated, p. 32.

46 Email from Ljiljana Ilić, BHMAC, 22 March 2022.

47 Email from Clement Meynier, MAG, 14 March 2022.

48 Email from Charles Frisby, NPA, 19 March 2022.

49 Ibid.

50 BiH, National Mine Action Strategy 2018–2025, p. 14.

51 Ibid.

52 Email from Ljiljana Ilić, BHMAC, 22 March 2022.

53 Email from Ljiljana Ilić, BHMAC, 24 April 2019.

54 Email from Mirjana Marić, BHMAC, 6 October 2022.

BHMAC consults all groups affected by mines, including women and children, during survey and community liaison activities, and BHMAC's survey and community liaison teams are inclusive with a view to facilitating this. BHMAC also reported that relevant mine action data are disaggregated by gender and age.⁵⁵ However, BiH's Article 5 deadline extension request, granted in 2020, did not contain information on what steps BHMAC plans to take to mainstream gender and diversity within its survey and clearance programme.

The CPA RS reported that nearly 24% of its staff were female, including 30% of managerial/supervisory positions. It has six female medics, but none of its operations staff is a woman.⁵⁶ During survey and community liaison activities, it cooperates with the local population, regardless of ethnicity, and where needed has representatives from different ethnic groups.⁵⁷

As at July 2022, the Demining Battalion of the Armed Forces of BiH had a workforce of 455 personnel, including 28 women (6% of the total). This included 1 (2%) of the 55 managerial/supervisory positions and 27 (7%) of the 391 operations positions.⁵⁸

FACP reported that of its 204 employees deployed in demining and destruction of UXO, 41 (20%) are women, including five (42%) of the twelve managerial/supervisory positions, and 17 (11%) of the 153 operational positions.⁵⁹

MAG has a gender policy and equal employment opportunities for suitably qualified females and males.⁶⁰ However, of MAG's 80 total staff in BiH in 2021, only 10 (13%) were women, including 7 (9%) of its survey and clearance personnel (including medics), and 4 (22%) of its managerial/supervisory positions.⁶¹ With the support of MAG's community liaison team and impact assessments conducted on completed tasks,

MAG BiH has developed a better understanding of gender dynamics in the field. While task dossiers from BHMAC generally list mostly men as key informants for the tasks, MAG also interviews women living in those communities. MAG systematically involves women in its community liaison work as they often provide valuable and different insights and perspectives about the risk in those areas, based on their knowledge, use of land, and appreciation of key landmarks in the locations (trees, cemeteries, rocks, rivers, etc.)⁶²

NPA reported that the overall gender split of its staff as at March 2022 was 13% female, with women only accounting for 10% of operational staff deployed in the field, a minor increase on the previous year. However, some 40% of managerial positions in NPA's BiH programme are held by women. NPA said it would continue its work to ensure that a gender balanced workplace policy is in place as well as to ensure that the needs of all staff are accommodated with access to equal opportunities regardless of gender, age, ethnic and religious backgrounds.⁶³

Mixed gender representation is an obligation for NPA teams conducting community liaison and risk education.⁶⁴ NPA said its explosive risk ordnance education (EORE)/community liaison team continuously implements activities in a gender and diversity sensitive and responsive way to respond to the diverse needs within affected communities and target minority ethnic groups, women, persons with disabilities, and people of different age groups. Through its focal points, NPA planned to liaise with local associations/organisations working in the field of Gender, Equality, Diversity and Inclusion in 2022, to share experience and knowledge for stronger gender mainstreaming. It also planned two all-staff Gender and Diversity training sessions for the year.⁶⁵

INFORMATION MANAGEMENT AND REPORTING

BHMAC currently uses its own paradox-based information management system, the Bosnia and Herzegovina Mine Action Information System (BHMAIS),⁶⁶ but implementation of Information Management System for Mine Action (IMSMA) Core has been ongoing since 2019. The first phase of IMSMA Core implementation was completed with support from UNDP and the GICHD, and financing from the EU, and created a system capable of managing data from the EU-funded "country assessment" project, which was completed in May 2020.⁶⁷ A contract with the German Federal Foreign Office for a new project to migrate the remaining data and workflows from BHMAIS to IMSMA Core was signed in August 2022 and was expected to take around 18 months to implement.⁶⁸

55 Emails from Ljiljana Ilić, BHMAC, 24 April 2019; and Goran Šehić, NPA, 25 February 2019; and BiH, National Mine Action Strategy 2018–2025, p. 52.

56 Emails from Milisav Pantic, on behalf of Dragan Kos, Assistant Director, Civil Protection Administration of Republika Srpska (CPA RS), 3 June 2021 and 12 September 2022.

57 Emails from Dragan Kos, CPA RS, 2 April 2020; and Milisav Pantic, CPA RS, 12 September 2022.

58 Email from Brig. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, 13 July 2022.

59 Email from Muamer Husilović, Federal Administration of Civil Protection (FACP), 7 July 2022.

60 Email from Clement Meynier, MAG, 3 April 2020.

61 Email from Adam Komorowski, Regional Director, MAG, 7 September 2022.

62 Email from Clement Meynier, MAG, 14 March 2022.

63 Email from Charles Frisby, NPA, 19 March 2022.

64 Email from Goran Šehić, NPA, 25 February 2019.

65 Email from Charles Frisby, NPA, 19 March 2022.

66 Email from Ljiljana Ilić, BHMAC, 22 March 2022.

67 2020 APMBC Article 5 deadline Extension Request, p. 5; and email from GICHD, 27 April 2022.

68 Emails from Ljiljana Ilić, BHMAC, 22 March 2022; Charles Frisby, NPA, 19 March and 7 September 2022; and GICHD, 27 April 2022.

While the country assessment project contributed to updating much of the data in BHMAIS, BiH's national information management system still needs to be improved in terms of accuracy and sustainability. During the implementation and migration from BHMAIS to IMSMA Core, the data quality will be checked and improved wherever feasible. Data-collection forms will be also reviewed and improved as part of the process.⁶⁹ BHMAL has said that the migration to IMSMA Core will fully enable "operational works" and provide a better and more transparent system.⁷⁰ NPA believes that IMSMA Core will help ensure BiH has accurate, transparent, and reliable mine action data stored and managed by BHMAL. It will also contribute to better operational planning, including with respect to BiH's APMBL and CCM treaty commitments.⁷¹

In addition, UNDP has developed a Geographic Information System (GIS) mobile application, which was released in November 2020. This allows the general public to access information on the location of hazardous areas, as well as other features, through Android and Apple iOS devices.⁷²

At present, while clearance operators do have access to data on specific tasks being undertaken, they do not have access to BHMAL's full Information Management database.⁷³

As at September 2022, BHMAL had yet to submit its APMBL Article 7 transparency report covering the 2021 reporting period. However, in data provided to Mine Action Review, BHMAL disaggregated mined area released through non-technical survey, technical survey, and clearance in 2021 – a notable improvement on previous years. Cancellation of mined area can only be reported by BHMAL itself, at the end of the process, once technical survey and clearance have been completed.⁷⁴

PLANNING AND TASKING

In 2017, BiH developed a new national mine action strategy for 2018–25, with support from the GICHD, which addresses all mine and cluster munition remnant contamination. The strategy was formally adopted in January 2019.⁷⁵ The BiH previous Mine Action Strategy for 2009–19, adopted by the Council of Ministers in 2008,⁷⁶ set the target of the country becoming free of mines by 2019. It failed by some distance to meet this target.

The new Strategy contains a general plan and timeframe for the completion of mine clearance, as well as for cluster munition remnants. BHMAL planned to have the first revision of the Strategy at the end of 2020, based on the results of the country assessment project and progress in implementation of the strategy to date,⁷⁷ and according to the strategy, a second revision is planned for 2023.⁷⁸ In November 2020, the Demining Commission reported that a request would be sent to the Council of Ministers to initiate a first revision of the Mine Action Strategy for 2018–25, in line with the latest information.⁷⁹ However, BHMAL subsequently reported that the *first* revision was only expected to be completed in 2023.⁸⁰

BHMAL also elaborates and implements annual work plans, which are adopted by the Demining Commission. Political

issues can result in delay in adoption of annual work plans, for example the six-month delay in the appointment of the new Demining Commission from October 2019 to April 2020.

A three-day multi-stakeholder workshop took place on 28–30 January 2020 in Sarajevo, to present the preliminary results of the EU-funded country assessment project and discuss how they inform mid-term planning for Article 5 implementation.⁸¹ During the workshop, working groups elaborated three mid-term action plans for 2020–25, based on low, medium, and high scenarios for Article 5 implementation (with completion targets of 2029, 2027, and 2026 respectively), based on different projected capacities.⁸² BiH elected to request an Article 5 deadline extension to 2027, in its extension request which was granted in 2020.

According to BiH's 2020 Article 5 deadline extension request, from 2020 to 2027 BiH plans to release a total of 967km²: 816.6km² through cancellation; 141.7km² through reduction; and 7.8km² through clearance.⁸³ Annually, BiH planned to release 71.8km² in 2020; 91.3km² in 2021; 110.3km² in 2022; 126.4km² in 2023; 145.5km² in 2024; 155.7km² in 2025; 131.4km² in 2026; and 134.6km² in 2027. While BiH did disaggregate the amount cancelled, reduced, and cleared

69 Email from GICHD, 27 April 2022.

70 Statement of BiH on Article 5, APMBL 19th Meeting of States Parties (virtual meeting), 15–19 November 2021.

71 Email from Charles Frisby, NPA, 19 March 2022.

72 Email from Suad Baljak, UNDP, 18 February 2021.

73 Emails from Kristina Duric, NPA, 30 July 2021; and Clement Meynier, MAG, 30 July 2021.

74 Email from Jonas Zachrisson, NPA, 14 March 2021.

75 BHMAL website, "Bosnia and Herzegovina Mine Action Strategy 2019–2025 adopted by the Council of Ministers", available at: <http://bit.ly/2VnPNDj>.

76 CCW Protocol V Article 10 Report (covering 2015), Form B.

77 2020 Revised Article 5 deadline Extension Request, August 2020, p. 7.

78 BiH, "National Mine Action Strategy 2018–2025", p. 34.

79 Statement of BiH, APMBL 18th Meeting of States Parties, 16 to 20 November 2020.

80 Email from Ljiljana Ilić, BHMAL, 2 July 2021.

81 BHMAL website, "Workshop on Definitions of Productivity Indicators and Resources Required for Implementation of the Land Release Method and Development of a Medium-Term Action Plan", 30 January 2020, at: <http://bit.ly/37WS3UN>.

82 Interview with Saša Obradovic, BHMAL, Geneva, 11 February 2020.

83 2020 Revised Article 5 deadline Extension Request, August 2020, p. 24.

each year, in its operational plan, the totals in several columns did not correctly sum to the annual total.⁸⁴ BiH has fallen well behind the land release targets in 2020 and 2021.

The 478 MSAs created through the country assessment project, are intended to enable mine action operations to better respond to the needs of the community through the strengthening of community liaison and by ensuring that community needs are better prioritised and addressed.⁸⁵ During the country assessment, local administrations and BHMAC agreed upon the size and priority of MSAs. In its extension request, BiH describes its prioritisation system for releasing MSAs, which is said to accord with humanitarian, developmental, and safety needs of municipality and local communities, as well as the level of threat (high, medium, or low).⁸⁶ Of the 478 MSAs created, 189 were high-risk MSAs, 274 medium-risk MSAs, and 15 low-risk MSAs.⁸⁷ Conversion of MSAs from "classic" to "land release" projects can reportedly take months at a central level.⁸⁸ BHMAC has not yet completed the preparation of project documentation/

task dossiers for all 478 MSAs created during the country assessment.⁸⁹

In 2021, non-technical/general survey activities were performed on an area of 40.12km² and a total of 24 new projects were prepared ready for land release.⁹⁰ Operators are assigned whole MSAs by BHMAC, inside of which BHMAC then designates specific areas (CHA or SHA polygons) for either systematic technical survey or targeted technical survey, and clearance (if contamination is confirmed). Officially, only BHMAC can conduct non-technical survey and release mined area through cancellation.⁹¹ The FACP said that task dossiers are not always provided in a timely manner, as the BHMAC regional offices do not have sufficient personnel to issue project documentation.⁹² NPA reported that while MSAs were tasked in a timely manner, task dossiers did not always contain comprehensive non-technical survey information required for efficient technical survey and clearance operations.⁹³ (See section on 'Standards and land release efficiency' for further details).

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Results of mine action in BiH show that the applied land release model was efficient in the period 2005–09, and prior to 2009, BHMAC cancelled significant amounts of land annually through non-technical survey.⁹⁴ Since then, however, non-technical survey output has declined, but there remains very significant potential for further reduction in the size of the SHA through survey.

In recent years, various land release projects, which have included use of systematic technical survey and technical survey with targeted investigation, have revealed around 90% of mined area can be cancelled through non-technical survey; around 8 or 9% reduced through technical survey; and less than 2% cleared.⁹⁵ These and previous land release data indicate that actual anti-personnel mine contamination in BiH is only a small proportion of the total hazardous area currently on the database and deployment of clearance assets will therefore only be required for relatively small areas.⁹⁶

No changes were made to the NMAS during the year.⁹⁷ In 2020, BHMAC organised a TWG, with representatives from different demining organisations, with regards to the development of a new NMAS chapter on QA and QC, but no agreement on elaboration of the new chapter was reached.⁹⁸ No further progress was reported in respect to QA and QC NMAS, as at April 2022.⁹⁹ BHMAC did, however, say that an update of the NMAS was currently underway in order to comply with current IMAS and apply good practices.¹⁰⁰ Any revision to the NMAS should be clearly written, so that all implementing partners in all parts of BiH can update their SOPs accordingly, and a QA process is required to ensure NMAS are being applied in all instances. The review and updating of the relevant NMAS need not be a protracted process and should not prevent efficient release of mined areas in the interim.

84 Ibid., Table, p. 24.

85 Ibid., p. 11; and BiH draft Mine Action Report for 2020, undated draft, p. 11.

86 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 6 and 19–22.

87 Article 7 Report (covering 2020), Form C.

88 Email from Clement Meynier, MAG, 11 March 2021.

89 Email from Mirjana Marić, BHMAC, 21 September 2022.

90 Email from Ljiljana Ilić, BHMAC, 15 April 2022.

91 Emails from Muamer Husilović, FACP, 12 March 2021; Clement Meynier, MAG, 11 March 2021; and Jonas Zachrisson, NPA, 14 March 2021.

92 Email from Muamer Husilović, FACP, 18 March 2022.

93 Emails from Jonas Zachrisson, NPA, 14 March 2021; and Charles Frisby, NPA, 2022.

94 Email from Suad Baljak, UNDP, 15 September 2017; and Darvin Lisica, "Application of targeted technical survey in Bosnia and Herzegovina: development of advanced techniques for data collection and assessment, standard operating procedures and building of national capacities", NPA, undated.

95 2018 Article 5 deadline Extension Request, pp. 5 and 10; and 2020 Revised Article 5 deadline Extension Request, August 2020, p. 7.

96 BiH, National Mine Action Strategy 2018–2025", pp. 6 and 11; and 2020 Revised Article 5 deadline Extension Request, August 2020, p. 17.

97 Emails from Clement Meynier, MAG, 28 July 2021; and Charles Frisby, NPA, 11 April 2022.

98 Email from Jonas Zachrisson, NPA, 14 March 2021.

99 Email from Charles Frisby, NPA, 11 April 2022.

100 Email from Ljiljana Ilić, BHMAC, 15 April 2022.

NPA BiH said it will continue to work to promote the IMAS and compliance of the NMAS on land release, and to advocate for further development of national procedures to increase operational efficiency and increase confidence in the land release process itself.¹⁰¹ MAG believed that in general, the NMAS in BiH are suitable to enable the conduct of efficient land release. However, it continued to notice differences in the processes and approach to land release between the BHMAL regional offices.¹⁰² NPA also reported noticing differences in the understanding of the land release process between the three BHMAL regional offices which oversee NPA's land release activities in 2021.¹⁰³

NPA believes it is crucial that the NMAS reflect the best practices in land release, and the need to ensure that they are implemented in a consistent manner throughout BiH. It is important that land release workshops are organised at all levels, including BHMAL headquarters and all BHMAL regional offices, to ensure consistent application of land release methodology.¹⁰⁴ International operators believe a renewed dialogue among the mine action community would strengthen the sector, including through TWG meetings between operators, the BHMAL, and its regional offices, sharing lessons learned, challenges, and successes across the different parts of BiH.¹⁰⁵

BHMAL has stated previously that it will ensure through quality management (QM) that all organisations accredited for technical survey and clearance comply with the principles of land release.¹⁰⁶ On 24–26 January 2022, BHMAL organised a workshop on improving the process of non-technical survey in BiH, in cooperation with UNDP and funded by Germany. The workshop, attended by BHMAL staff from head office and regional offices, included survey, QC and QA.¹⁰⁷

As previously mentioned, operators are assigned whole MSAs by BHMAL, and within an MSA BHMAL then designates specific areas (CHA or SHA polygons) for technical survey and clearance, and only BHMAL can conduct non-technical survey and release mined area through cancellation.¹⁰⁸ However, task dossiers for release of MSAs often lack fully comprehensive information. INGOs have found they also need to conduct additional survey/community liaison to collect and analyse additional or missing information to help provide additional information to BHMAL to supplement that contained in the task dossiers received.¹⁰⁹ Upon completion of technical survey and clearance by the operators, BHMAL then cancels uncontaminated area.¹¹⁰

NPA stressed the importance of BHMAL enabling operators to effectively plan and implement land release projects in line with international best practice. NPA believes this requires further development and adaptation of QA procedures for the overall land release process and the adaptation of non-technical survey procedures, where BHMAL should consider the possibility of allowing operators with adequate capacity and experience to take responsibility for cancellation through non-technical survey.¹¹¹

MAG said introduction of non-technical survey capacities, as an additional and required tool in the land release toolbox of operators, could possibly benefit the efficiency of the land release process, by alleviating the strain on critical BHMAL resources currently in charge of non-technical survey, including the preparation of land release projects. MAG believes operators should make recommendations for cancellation to the BHMAL, with the latter formally approving and therefore taking responsibility for the cancellation, as part of the overall site completion and handover process.¹¹²

OPERATORS AND OPERATIONAL TOOLS

In 2021, a total of 26 organisations are accredited for mine action in BiH: four government organisations (Armed Forces of BiH, Federal Administration of Civil Protection (FACP), Civil Protection Administration of Republika Srpska, and Brčko District Civil Protection); the Red Cross Society of BiH; nine commercial organisations (all national); and twelve NGOs (10 national and 2 international). Overall demining capacity totalled 1,200 persons in accredited organisations, comprising 850 deminers and 350 others (including team leaders, site leader, operational officers, QA officers, and dog trainers). The accredited organisations also have at their disposal a total of 28 accredited machines (for vegetation removal, ground disturbance, and removal of debris), 1,109 metal detectors, and 52 accredited mine/explosive detection dogs (MDDs). In addition, BHMAL has at its disposal 44 surveyors (i.e. 22 survey teams for non-technical survey and emergency marking), 8 officers for planning non-technical survey operations, and 12 inspectors and 28 senior clerks for QC/technical supervision/inspection.¹¹³

101 Email from Charles Frisby, NPA, 11 April 2022.

102 Email from Clement Meynier, MAG, 28 July 2021/14 March 2022.

103 Email from Charles Frisby, NPA, 11 April 2022.

104 Ibid.

105 Emails from Clement Meynier, MAG, 11 March 2021; and Jonas Zachrisson, NPA, 14 March 2021.

106 Draft Demining plan in BiH for 2020, Annex 6 to the 2020 Revised Article 5 deadline extension request, August 2020, p. 20.

107 BHMAL website, "Workshop on improving the process of non-technical survey in BiH", 26 January 2022, at: <https://bit.ly/3PfvM8G>.

108 Emails from Muamer Husilović, FACP, 12 March 2021; Clement Meynier, MAG, 11 March 2021; and Jonas Zachrisson, NPA, 14 March 2021.

109 Email from Jonas Zachrisson, NPA, 14 March 2021.

110 Emails from Kristina Duric, NPA, 30 July 2021; and Clement Meynier, MAG, 11 March 2021.

111 Email from Charles Frisby, NPA, 11 April 2022.

112 Email from Clement Meynier, MAG, 14 March 2022.

113 Email from Mirjana Marić, Senior officer for analysis and reporting, BHMAL, 21 September 2022.

According to BHMAC's survey and clearance tables for 2021, technical survey and/or clearance of anti-personnel mines was conducted by the BiH Armed Forces, the Federal Administration of Civil Protection (FACP), the Civil Protection Administration of Republika Srpska (CPA RS), and other clearance organisations, comprising the NGOs (DEMIRA, MAG, Mine Detection Dog Centre (MDDC), Pro Vita, and Stop Mines) and commercial organisations (Detector, Heksogen d.o.o., In Demining N.H.O, N&N Ivsa, Udruga "Pazi mine", and UEM d.o.o.). International NGO, NPA, was not listed by BHMAC as having released mined area in BiH in 2021, most likely because BHMAC only reports land release data upon completion of tasks, but NPA did conduct survey and clearance of mined areas during the year.

Officially, only BHMAC can conduct non-technical survey and release mined area through cancellation. While MAG does not conduct its own non-technical survey in BiH, it does contribute to non-technical survey through its community liaison capacity in partnership with the BHMAC regional offices during technical survey and clearance operations, which includes identification and interviews with informants to collect additional evidence-based information.¹¹⁴ Similarly, NPA has one non-technical survey team, of two personnel, which conducts additional non-technical survey and reports information collated to BHMAC to feed into BHMAC's non-technical survey data.¹¹⁵

BHMAC began integrating drones into non-technical survey, following their use in the country assessment project. According to BHMAC, drone records help show confrontation line trenches, roads, areas in use, and other important elements for the development of demining projects. BHMAC uses targeted investigation during non-technical survey to identify risk areas.¹¹⁶

Clearance and technical survey operations in BiH include mechanical preparation of land, manual clearance, and the use of MDDs depending on the geographical conditions.¹¹⁷ Much of the remaining mined area is in hilly or mountainous terrain, which restricts the use of machinery.

The BiH Armed Forces' survey and clearance operations, which include use of machinery and explosive detection dogs, are fully engaged from March to November, and with reduced activity, predominantly in southern BiH, from December to February.¹¹⁸ Since 2010, NPA has increasingly focused on building the capacity of the Army's Demining Battalion. This involves direct operational support on clearance tasks of the Demining Battalion (including demining machines, MDDs, and detectors/locators. Through the close cooperation with national stakeholders, NPA BiH elaborated a

Capacity Development Plan for 2022–25, focused on capacity development of the BiH Demining Battalion as a key national resource, with a key role in the implementation of the BiH Mine Action Strategy. As per the plan, NPA's focus in 2022 is on the construction of the information management (IM) system of the BiH Armed Forces, including development of related SOPs, software solutions, and transfer of knowledge through training on the use and maintenance of the system. Implementation of the plan will depend on available funds.¹¹⁹

As at September 2022, the BiH Demining Battalion had 34 manual demining teams (which includes cluster munition remnant clearance), 4 MDDs, and 4 mechanical assets for ground preparation. Its humanitarian demining operations are financed through the budget of the MoD. In 2021, the Battalion also received a donation from the United States of 200 protective visors and 250 demining protective vests. The head of the BiH Demining Battalion said that as the Battalion had received new personal protective equipment (PPE) and demining equipment, it now had sufficient quantities of both for its current capacity.¹²⁰

The State operators, the BiH Armed Forces' Demining Battalion and the Civil Protection entities, are good partners and have effective capacities, but have suffered from logistical challenges and equipment deficits, which can prevent them from working at full capacity.¹²¹ Deminers in the BiH Armed Forces, however, are forced to stop demining at the age of 38 (this upper limit, until recently, had been 35). This results in experienced deminers being forced to retire at a very early age and results in a high turnover of personnel.¹²²

FACP teams are spatially distributed to cover the entire territory of the Federation of BiH and are located in Bihac, Busovaca, Gorazde, Livno, Mostar, Orasje, Sarajevo, Travnik, Tuzla, and Zepce.¹²³ FACP's capacity for clearance and technical survey in 2021 remained constant compared to the previous year, at 4 technical survey teams totalling 32 personnel, 11 demining teams totalling 73 personnel, 4 MDD handlers with 4 dogs, and 2 mechanical assets.¹²⁴

According to FACP, BiH has not updated the standards related to explosive ordnance disposal (EOD) since 2002. FACP therefore initiated a revision of the standard and forwarded a new proposed draft standard for EOD and demolition of landmines and UXO, harmonised to the IMAS and national legislation, to BHMAC in September 2021. FACP believes that the training system for EOD would benefit from being strengthened in BiH's national standards to bring it in line with the CWA 15464:2005 system (the 'Humanitarian Mine Action – EOD Competency Standards', under CEN (European Committee for Standardization)).¹²⁵

114 Emails from Clement Meynier, MAG, 11 March 2021 and 14 March 2022.

115 Emails from Jonas Zachrisson, NPA, 14 March 2021; Kristina Duric, NPA, 30 July 2021; and Charles Frisby, NPA, 11 April 2022.

116 Email from Ljiljana Ilić, BHMAC, 15 April 2022.

117 2018 Article 5 deadline Extension Request, p. 11.

118 Interview with Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.

119 Email from Charles Frisby, NPA, 11 April 2022.

120 Email from Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, 21 September 2022.

121 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 29; and interviews with Darvin Lisica, NPA, Sarajevo, 8 May 2017; Haris Lokvancic, Swiss Embassy, Sarajevo, 9 May 2017; and Tarik Serak, BHMAC, Sarajevo, 10 May 2017.

122 Interview with Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.

123 Email from the Cabinet, Federal Administration of Civil Protection, 29 August 2019.

124 Email from Muamer Husilović, FACP, 18 March 2022.

125 Emails from the Cabinet, Federal Administration of Civil Protection, 16 July 2020; and Muamer Husilović, FACP, 18 March 2022.

The teams of the FACP are trained in fast response to remove injured persons (both civilians and deminers) from mined areas. The FACP believes that accident and incident investigation, which is currently only conducted by BHMACE staff, should be expanded to include representatives from the wider demining community, such as the entities civil protection authorities, the Armed Forces, and EUFOR, to help improve the safety and quality of operations. According to the FACP, there are no obstacles to including representatives from the wider demining community in mine/demining accident investigation.¹²⁶

The Civil Protection of Brčko District only conducts removal and destruction of ERW, not mine clearance.

The CPA RS conducts survey and clearance of mines, CMR, and other ERW. In 2021, it deployed six manual teams, totalling approximately thirty-six deminers (some deminers were not engaged during the entire demining season), and two MDDs and dog handlers. In addition, a demining machine was deployed for one technical survey task in 2021.¹²⁷

MAG received operational accreditation in April 2017 and began technical survey and mine clearance operations in mid-May 2017.¹²⁸ In 2021, MAG maintained the same capacity as the previous year and deployed seven clearance teams, totalling 49 deminers, and four MDDs and dog handlers.¹²⁹

NPA deployed eight manual clearance teams (which also conduct technical survey), totalling forty-eight deminers; five MDDs and dog handlers; and two machines. NPA uses MDD for clearance and technical survey tasks, including targeted technical survey.¹³⁰ As mentioned above, since 2010, NPA has also focused on building the capacity of the Armed Forces Demining Battalion.

With the exception of MAG and NPA, clearance operators in BiH typically compete for international tenders in order to secure their funding. The UNDP evaluation suggested that this resulted in considerable capacity being underused and recommended alternative contracting models more appropriate for land release (either by having longer term contracts or being contracted for the clearance of larger areas), which could be more attractive to the demining organisations in terms of security and could also make best use of capacity in the long run.¹³¹ National demining NGOs, such as Stop Mines or Pro Vita, which are registered in a similar way to companies, potentially have capacity to quickly mobilise additional resources and up-scale operations.¹³²

The Demining Commission is responsible for considering the periodic re-accreditation of field operators, following the recommendation from BHMACE. Any delay in the appointment of the Demining Commission can therefore impact the re-accreditation process and have a knock-on impact on survey and clearance operations.¹³³ This was the case for a six-month period from late October 2019, when the previous Demining Commission's term expired, until 30 April 2020, when the new Demining Commission was put in place and accreditations could again be renewed or approved. The delay in appointing the new Demining Commission negatively impacted operations, in some instances preventing the initiation of clearance at the start of the demining season.¹³⁴

QC and QA is conducted by BHMACE.¹³⁵

Demining organisations, under the supervision of BHMACE, conducted a short training of demining personnel before the demining season and several courses were held for newly recruited personnel. According to the CPA RS, the lack of demining personnel in BiH is becoming a problem.¹³⁶

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

According to data provided to Mine Action Review by BHMACE, a total of more than 24km² of mined area was released in 2021, of which more than 0.69km² was cleared (see Table 4); more than 9.02km² of mined area was reduced through technical survey (see Table 3); and almost 14.43km² was cancelled through non-technical means (see Table 2).¹³⁷

This is an increase on the 16km² of mined area was released in 2020, of which almost 0.53km² was cleared; 2.57km² was reduced through technical survey; and almost 13.04km² was cancelled through non-technical means.¹³⁸

BHMACE said that the reason for the better land release results achieved in 2021, compared to 2020, was because in 2020 there had been delays caused by the COVID-19 pandemic, partly due to compliance with epidemiological measures and partly due to the involvement of government organisations to prevent further spread of the infection.¹³⁹

126 Emails from the Cabinet, Federal Administration of Civil Protection, 29 August 2019; and Muamer Husilović, FACP, 18 March 2022.

127 Emails from Milisav Pantic, CPA RS, 12 and 23 September 2022.

128 Interview with Josephine Dresner, MAG, Sarajevo, 9 May 2017; and email from Kathy Keary, MAG, 5 April 2018.

129 Email from Clement Meynier, MAG, 4 March 2022.

130 Email from Charles Frisby, NPA, 7 September 2022.

131 UNDP, Draft Mine Action Governance and Management Assessment for BiH, p. 35.

132 Email from Fotini Antonopoulou, EU, 18 September 2017.

133 Email from GICHD, 13 May 2020.

134 2020 Article 4 deadline Extension Request, September 2020, p. 5.

135 2020 Revised Article 5 deadline Extension Request, August 2020, p. 8.

136 Email from Milisav Pantic, CPA RS, 23 September 2022.

137 Email from Ljiljana Ilić, BHMACE, 15 April 2022.

138 Email from Ljiljana Ilić, BHMACE, 2 July 2021; and BiH draft Mine Action Report for 2020, undated draft.

139 Email from Ljiljana Ilić, BHMACE, 15 April 2022.

According to BHMAC's Annual Mine Action Report for 2021, the number of mines discovered and destroyed during the year was 1,717 anti-personnel mines and 229 anti-vehicle mines.¹⁴⁰

As at September 2022, BHMAC had yet to submit its Article 7 transparency report covering the previous calendar year.

BHMAC only records survey and clearance data upon completion of tasks,¹⁴¹ which likely accounts for the differences between BHMAC land release data and operator land release data, as the latter is reported on an ongoing basis.

SURVEY IN 2021

In 2021, over 9.02km² was reported to have been reduced through technical survey (excluding 32,024m² cleared during technical survey, which is included in Table 4 on clearance), according to BHMAC data disaggregated by reduction in separate technical survey tasks and reduction in completed MSA tasks (see Table 3); and almost 14.43km² was cancelled through non-technical survey (see Table 2). Survey output in 2021 was a small increase on the 2.57km² reduced and 13.05km² cancelled in 2020.¹⁴²

BHMAC is directly responsible for reporting all cancellation of mined areas in BiH and does so only upon completion of whole MSAs. The operators, therefore, do not report cancellation data to Mine Action Review. Furthermore, BHMAC only records reduction upon completion of tasks,¹⁴³ whereas operators report reduction on an ongoing basis. This accounts for the differences between BHMAC data and operator data for technical survey.

Table 2: Cancellation in 2021 by canton¹⁴⁴

Canton	Operator	Area cancelled (m ²)
Bosnian-Podrinje	MAG	2,387,299
Canton 10	Udruga "Pazi mine"	3,501,293
Canton 10	Udruga "Pazi mine"	288,160
Posavina	Federal Administration of Civil Protection	1,001,178
Sarajevo	Mine Detection Dog Centre (MDDC)	282,535
Sarajevo	MDDC	867,701
Sarajevo	MDDC	1,499,853
Tuzla	MDDC	268,863
Tuzla	MAG	596,581
Tuzla	MAG	1,326,925
Zenica-Doboj	MDDC	308,395
Total BiH Federation		12,328,783
Total Republika Srpska	MDDC	2,098,408
Grand totals		14,427,191

¹⁴⁰ BiH draft Mine Action Report for 2021, undated, p. 35.

¹⁴¹ Email from Mirjana Marić, BHMAC, 21 September 2022.

¹⁴² Email from Ljiljana Ilić, BHMAC, 2 July 2021; and Article 7 Report (covering 2020), Form C.

¹⁴³ Email from Mirjana Marić, BHMAC, 21 September 2022.

¹⁴⁴ Emails from Ljiljana Ilić, BHMAC, 15 April 2022 and Mirjana Marić, BHMAC, 21 September 2022. MAG did not report the amount cancelled through non-technical survey in 2021, as BHMAC is responsible for reporting cancellation and does so only upon completion of whole MSAs (email from Clement Meynier, MAG, 14 March 2022). NPA reported that it cancelled a total of 8,923,286m² through non-technical survey in of Central Bosnia and Una-Sana cantons and in Republika Srpska (email from Charles Frisby, NPA, 11 April 2022).

Table 3: Technical survey in 2021 (reduction in technical survey tasks and in MSAs)¹⁴⁵

Technical survey in 2021 in separate technical survey tasks that are not part of MSAs		
Canton	Operator	Area reduced* (m ²)
Bosnian-Podrinje	Federal Administration of Civil Protection	95,360
Canton 10	Federal Administration of Civil Protection and Armed Forces of BiH	185,261
Herzegovina-Neretva	Detektor, Federal Administration of Civil Protection, and Armed Forces of BiH	378,795
Sarajevo	Federal Administration of Civil Protection and Armed Forces of BiH	264,636
Central Bosnia	"In Demining" N.H.O. and N&N Ivša	59,922
Zenica-Doboj	"In Demining" N.H.O. and Federal Administration of Civil Protection	121,097
Tuzla	Armed Forces of BiH	66,246
Una-Sana	Armed Forces of BiH	147,947
Total BiH Federation		1,319,264
Total Republika Srpska	Armed Forces of BiH, Civil Protection Administration of Republika Srpska, and Stop mines	645,758
Total Brcko District	Detektor, N&N Ivša, Armed Forces of BiH, Civil Protection Administration of Republika Srpska, UEM d.o.o., and DEMIRA	1,229,074
Subtotals		3,194,096
Technical survey in 2021 in completed MSAs tasks		
MSA Name		Area reduced (m ²)
Orahovica Jug		417,076
Donji Svilaj - Novi Grad		97,381
Orahovica		747,524
Lendici		383,943
Zuc		126,291
Oras Planje		207,552
Nebocaj		358,694
Donji Malovan		1,021,101
Gora-Kamenica		558,868
Istocni Stari Grad		226,519
Mlinista - Paripovac		1,094,064
Nekopi		590,596
Subtotals		5,829,609
Grand totals		9,023,705

*Excludes 32,024m² cleared during technical survey, which is included in Table 4.

145 Emails from Ljiljana Ilić, BHMIC, 15 April 2022; and Mirjana Marić, BHMIC, 6 October 2022. BHMIC only records technical survey data upon completion of tasks, which likely accounts for the differences between BHMIC and operator reduction data, as the latter is reported on an ongoing basis. FACP reported that it reduced 724,868m² in 2021 across the cantons of Central Bosnia, Herzegovina-Neretva, Posavina, Sarajevo, Zenica-Doboj, and Una-Sana (email from Muamer Husilović, FACP, 18 March 2022). MAG reported that it reduced 1,481,079m² across the cantons of Herzegovina-Neretva and Zenica-Doboj, and in Republika Srpska (email from Clement Meynier, MAG, 28 July 2021/4 March 2022). NPA reported that it reduced 1,587,346m² across the cantons of Central Bosnia and Una-Sana, and in Republika Srpska (email from Charles Frisby, NPA, 11 April 2022).

FACP reported that it reduced 724,868m² in 2021 across the cantons of Central Bosnia, Herzegovina-Neretva, Posavina, Sarajevo, Zenica-Doboj, and Una-Sana.¹⁴⁶

MAG itself reported having reduced a total of 1,481,079m² across Herzegovina-Neretva, Zenica-Doboj, and Republika Srpska in 2021. MAG said that there was an increase in the size of area reduced compared to the previous year, due to area reduction for each investigation (polygon) occurring near the end of the land release process in BiH. A number of large investigations (polygons) were started in 2020 but only completed in 2021, allowing reduction then.¹⁴⁷

NPA reported that it reduced 1,587,346m² in 2021, across the cantons of Central Bosnia and Una-Sana, and in the Republika Srpska.¹⁴⁸

CLEARANCE IN 2021

According to data reported by BHMAC to Mine Action Review, a total of 694,856m² of mined area was cleared in 2021. This included 60,166m² during clearance in clearance tasks (i.e. separate clearance tasks that are not part of MSAs) in 2021, during which 83 anti-personnel mines were destroyed; 32,020m² cleared in technical survey tasks, during which 144 anti-personnel mines and 10 anti-vehicle mines were destroyed; and 602,670m² of clearance in MSAs, during which 2,869 anti-personnel mines and 31 anti-vehicle mines were destroyed (see Table 4).¹⁴⁹ (The 2,869 anti-personnel mines and 31 anti-vehicle mines destroyed during clearance of MSAs corresponds to MSAs completed and certified in 2021, and therefore the number of mines found does not only refer to those found in 2021.)¹⁵⁰ According to BHMAC's Annual Mine Action Report for 2021, the number of mines discovered and destroyed in the 2021 calendar year was 1,717 anti-personnel mines and 229 anti-vehicle mines.¹⁵¹

The 2021 total clearance output is an increase on the total of 529,455m² of mined area was cleared in 2020, during which 1,342 anti-personnel mines and 22 anti-vehicle mines were cleared.¹⁵²

Table 4: Mine clearance in 2021 ("clearance tasks", technical survey tasks, and MSAs) (BHMAC data)¹⁵³

Mine clearance in 2021 in separate clearance tasks that are not part of MSAs				
Canton	Operator	Area cleared in CHAs (m ²)	AP mines destroyed	AV mines destroyed
Bosnian-Podrinje	Federal Administration of Civil Protection	7,789	3	0
Sarajevo	Armed Forces of BiH	16,459	58	0
Tuzla	Heksogen d.o.o, Pro Vita, and Armed Forces of BiH	4,959	0	0
Zenica-Doboj	Federal Administration of Civil Protection and Detektor	21,540	18	0
Total BiH Federation		50,747	79	0
Total Republika Srpska	In Demining N.H.O and Civil Protection Administration of Republika Srpska	9,419	4	0
Subtotals		60,166	83	0

146 Email from Muamer Husilović, FACP, 18 March 2022.

147 Email from Ljiljana Ilić, BHMAC, 15 April 2022.

148 Email from Charles Frisby, NPA, 11 April 2022.

149 Email from Ljiljana Ilić, BHMAC, 15 April 2022.

150 BiH draft Mine Action Report for 2021, undated, p. 11.

151 Ibid., p. 35.

152 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

153 Email from Ljiljana Ilić, BHMAC, 15 April 2022; and BiH draft Mine Action Report for 2021, undated, pp. 14–16. BHMAC only records clearance data upon completion of tasks, which likely accounts for the differences between BHMAC and operator clearance data, as the latter is reported on an ongoing basis. FACP itself reported that it cleared 41,727m² across the cantons of Bosnian-Podrinje, Canton 10, Posavina, Sarajevo, Tuzla, Una-Sana, and Zenica-Doboj, with the destruction of 91 anti-personnel mines (email from Muamer Husilović, FUCZ, 18 March 2022). MAG reported that it cleared 591,641m² of mined area (including 300,861m² of lanes cleared during technical survey) in the cantons of Herzegovina-Neretva and Zenica-Doboj, and in Brcko District and Republika Srpska, with the destruction of 493 anti-personnel mines and 4 anti-vehicle mines (email from Clement Meynier, MAG, 14 March 2022). NPA reported that it cleared 78,441m² across the cantons of Central Bosnia and Una-Sana, and in Republika Srpska, with the destruction of 249 anti-personnel mines and 28 UXO (email from Charles Frisby, NPA, 11 April 2022).

Mine clearance in 2021 in technical survey tasks				
Canton	Operator	Area cleared in CHAs (m ²)	AP mines destroyed	AV mines destroyed
Bosnian-Podrinje	Federal Administration of Civil Protection	1,006	11	0
Herzegovina-Neretva	Armed Forces of BiH	9,336	23	0
Canton 10	Federal Administration of Civil Protection and Armed Forces of BiH	7,867	31	3
Sarajevo	Federal Administration of Civil Protection and Armed Forces of BiH	1,203	6	0
Central Bosnia	N&N Ivša	5,200	2	0
Una-Sana	Armed Forces of BiH	1,546	33	0
Zenica-Doboj	Federal Administration of Civil Protection	298	1	0
Total BiH Federation		26,456	107	3
Total Brcko district	N&N Ivša, Armed Forces of BiH, Federal Administration of Civil Protection, UEM d.o.o., and UG Demira	4,365	31	6
Total Republika Srpska	Armed Forces of BiH, Federal Administration of Civil Protection, and Stop mines	1,199	6	1
Subtotals		32,020	144	10

Mine clearance in 2021 in completed MSA tasks				
Canton	Operator	Area cleared in CHAs (m ²)	AP mines destroyed	AV mines destroyed
Canton 10	Pazi mine	138,143	637	13
Canton 10	Pazi mine	272,504	1,049	4
Bosnian-Podrinje	MAG	34,511	158	0
Posavina	Federal Administration of Civil Protection	397	1	0
Sarajevo	MDDC	1,100	8	0
Sarajevo	MDDC	5,970	35	0
Sarajevo	MDDC	22,462	174	8
Tuzla	MDDC	1,704	20	0
Tuzla	MAG	23,797	89	2
Tuzla	MAG	58,565	467	0
Zenica-Doboj	MDDC	7,016	45	1
Total BiH Federation		566,169	*2,683	*28
Total Republika Srpska	MDDC	36,501	186	3
Subtotals		602,670	2,869	31
Grand totals		694,856	3,096	41

AP mine = anti-personnel mine AV mine = anti-vehicle mine

*Corresponds to MSAs completed and certified in 2021, and therefore the number of mines found does not only refer to those found in 2021.¹⁵⁴

According to BHMAC, the total cleared area in 2021 in which no mines were found was 11,531m².¹⁵⁵

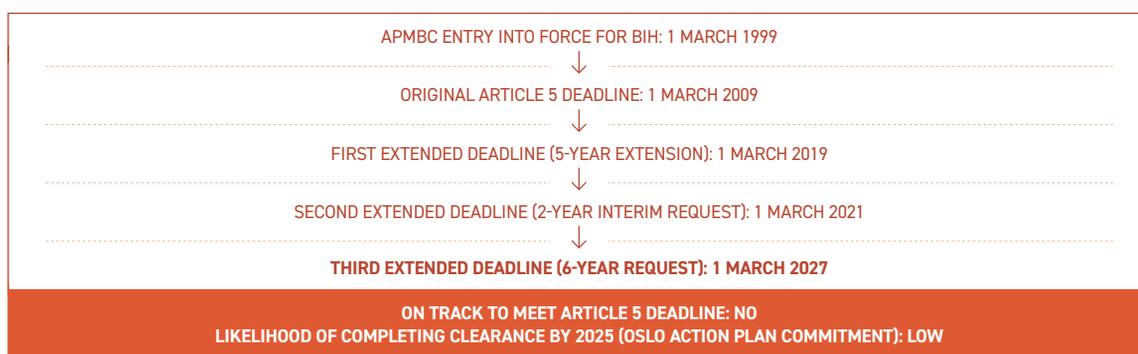
As previously mentioned, the clearance data for 2021 reported to Mine Action Review by operators is on an ongoing basis for tasks in progress, rather than upon completion of tasks (as is reported by BHMAC).

The FACP itself reported that it cleared 34,206m² in 2021, across the cantons of Bosnian-Podrinje, Canton 10, Posavina, Sarajevo, Tuzla, Una-Sana, and Zenica-Doboj, with the destruction of 91 anti-personnel mines.¹⁵⁶

MAG reported that it cleared 591,641m² of mined area (including 300,861m² of lanes cleared during technical survey) in the cantons of Herzegovina-Neretva and Zenica-Doboj, and in Brcko District and Republika Srpska, with the destruction of 493 anti-personnel mines and 4 anti-vehicle mines.¹⁵⁷

NPA reported that it cleared 78,441m² across the cantons of Central Bosnia and Una-Sana, and in Republika Srpska, with the destruction of 249 anti-personnel mines and 28 UXO. All of the areas in which NPA conducted clearance in 2021 contained mines.¹⁵⁸

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC and in line with the third extension (for six years) of its clearance deadline, BiH is required to destroy all anti-personnel mines under its jurisdiction or control as soon as possible, but not later than 1 March 2027. BHMAC said that based on the existing capacities, it expected to complete clearance by its deadline.¹⁵⁹

The 2020 extension request, granted by the Eighteenth Meeting of States Parties, was for the purpose of non-technical and technical survey "to better define the precise perimeter of mined areas in Bosnia and Herzegovina".¹⁶⁰ It is, however, assumed that there was an accidental omission of land release through clearance, and that BiH intends to complete both survey and clearance of remaining mined areas by the requested deadline. Prior to this, BiH had been granted a second extension request in 2018, for an interim two-year extension to 1 March 2021, during which it conducted a "country assessment", to better understand the remaining anti-personnel mine contamination and plan more effectively for its release.¹⁶¹

Over the last five years, BiH has released less than 4km² thorough clearance (see Table 5). Since the ten-year extension to its initial Article 5 deadline, granted in 2008, BiH has continuously fallen far short of its annual land release targets. The painfully slow pace of survey and clearance has resulted in lack of confidence in the national mine action programme from donors but also from people living in mine-affected communities, who felt disillusioned that the mines have not been cleared.¹⁶²

According to BiH's 2020 Article 5 extension request, BiH planned to release 91.3km² in 2021 (75.1km² through cancellation; 15.4km² through reduction, and 0.9km² through clearance, although this sums to 91.4km², and not 91.3km² as reported in the extension request).¹⁶³ BiH's actual land release output in 2021 fell significantly short of this and only totalled 18km² (with more than 0.69km² cleared, almost 3.23km² reduced, and 14.43km² cancelled).¹⁶⁴

155 Email from Ljiljana Ilić, BHMAC, 15 April 2022.

156 Email from Muamer Husilović, FACP, 20 September 2022.

157 Email from Clement Meynier, MAG, 14 March 2022.

158 Ibid.

159 Email from Ljiljana Ilić, BHMAC, 15 April 2022.

160 2020 Revised Article 5 deadline Extension Request estimate, August 2020, p. 17.

161 2018 Article 5 deadline Extension Request, p. 19; and "BiH Statement on Interim Request for Extension to the Deadline for Fulfilling Obligations as per Article 5", 7 June 2018, Geneva.

162 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 14.

163 2020 Revised Article 5 deadline Extension Request estimate, August 2020.

164 From Ljiljana Ilić, BHMAC, 15 April 2022.

Table 5: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	*0.69
2020	*0.53
2019	0.54
2018	0.92
2017	0.69
Total	3.37

* Combined technical survey and clearance output for MSAs

BHMAC said that in 2021, there were no significant delays caused by COVID-19.¹⁶⁵ FACP also reported that COVID-19 did not significantly affect its operations in 2021.¹⁶⁶ MAG said that it continued to maintain health protocols throughout the year and the impact of COVID-19 was limited on MAG's operations in 2021, aside from a five-day stand-down of one team in February after deminers tested positive for COVID.¹⁶⁷ NPA said COVID-19 did not affect anti-personnel mine survey or clearance operations in 2021. NPA BiH continuously adhered to national public health measures to prevent the spread of COVID-19 and maintained an internal contingency plan to protect health and wellbeing of all NPA personnel and people living in the area of operations.¹⁶⁸

In order to ensure that completion of mine clearance by BiH's Article deadline of 2027 becomes an achievable goal, key challenges must be addressed. While harmonising the NMAS with IMAS will certainly be beneficial in enhancing survey and clearance operations, the current NMAS do already allow for efficient, evidence-based land release. However, BHMAC (both headquarters and its regional offices) must ensure stronger coordination and a more consistent and efficient approach to land release operations by all stakeholders across the country, including more sustained and efficient mobilisation of strategic national demining resources such as the Demining Battalion and Civil Protection entities, and an enabling operating environment. This will, however, require political will and strong oversight and commitment from BHMAC, the Demining Commission, and their superiors in the government, which is lacking at present.

It is disappointing that no Country Coalition meeting took place in 2021. BiH should fully embrace and use the Country Coalition formed with Germany, as a useful platform to help strengthen coordination and actively address and overcome the ongoing challenges in Article 5 implementation. In order to achieve completion, BiH must sustain national and international funding to its Mine Action Programme, and mechanisms such as the Country Coalition and Board of Donor meetings are an essential element in achieving this.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

The National Mine Action Strategy for 2018–2025 requires the development of a strategy for the management of residual contamination by 2022. As at April 2022, the strategy had still to be developed.¹⁶⁹

¹⁶⁵ Email from Ljiljana Ilić, BHMAC, 15 April 2022.

¹⁶⁶ Email from Muamer Husitović, FACP, 18 March 2022.

¹⁶⁷ Email from Clement Meynier, MAG, 14 March 2022.

¹⁶⁸ Email from Charles Frisby, NPA, 11 April 2022.

¹⁶⁹ Email from Ljiljana Ilić, BHMAC, 22 March 2022.

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

NATIONAL AUTHORITY ESTIMATE

716 km²

AP MINE CLEARANCE IN 2021

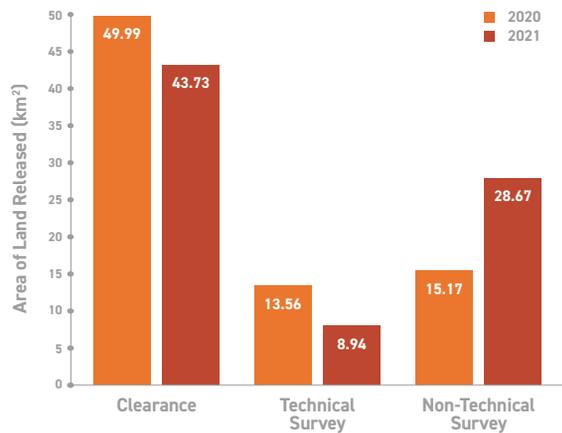
43.73 km²

AP MINES DESTROYED IN 2021

18,770

(INCLUDING 12,683 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Cambodia's estimate of anti-personnel mine contamination fell sharply from 801km² at the end of 2020 to 716km² at the end of 2021. The amount of land released through survey in 2021 was a 30% increase on the previous year, while the clearance output in 2021 fell compared to 2020. A ground data verification initiative resurveyed 73km² and found more than one third of the area could be cancelled through non-technical survey. A land reclamation non-technical survey conducted by Norwegian People's Aid (NPA) in three western provinces resulted in cancellation of 11.4km². Cambodia declared the south-eastern province of Kep to be mine free in February 2022, the first of 16 provinces it aimed to declare mine free by the end of 2023. A ban on operations by international demining organisations within seven kilometres of its international borders remained in place in Cambodia. Thailand and Cambodia resumed contacts on cooperation over survey and clearance of mined areas on their border but did not reach agreement on new survey or clearance projects.

RECOMMENDATIONS FOR ACTION

- Cambodia should expedite clearance of mined areas close to its international borders, recognising the need to accelerate clearance of dense contamination on the border with Thailand.
- Cambodia should reach agreement with Thailand on locations for survey and clearance in un-demarcated areas of their common border.
- The Cambodian Mine Action and Victim Assistance Authority (CMAA) should prioritise funding for quality assurance (QA) capacity in order to increase the number of QA teams and train them to monitor survey activities of all operators, ensuring that all survey is evidence-based; that cancellation and/or reclassification of mined area is applied wherever appropriate; and that new, previously unrecorded mined areas are verified before entry onto the national database.
- The CMAA should continue its efforts, through projects such as the data verification project, to attempt to identify non-evidence-based and inaccurate survey data included in the Information Management System for Mine Action (IMSMA) database and should discuss the possibility of cancelling them via desk analysis.

- Cambodia should continue to improve its information management systems by eliminating discrepancies with operator data and ensuring timely synchronisation of reporting.
- The CMAA should review the Cambodian Mine Action Standards (CMAS) to determine whether the criteria for cancellation and reclamation of mined areas can be strengthened.
- Cambodia should either commit to a clear timeframe for equipping, training, and deploying the proposed 2,000 additional deminers from the Cambodian Armed Forces or pursue other approaches to increasing capacity, including through other national entities, such as Cambodian Mine Action Centre (CMAC).
- Cambodia should commence the next clearance task as part of the pilot border clearance project with Thailand, and should seek to conclude a bilateral cooperation mechanism that would enable both nations to survey and clear all mined areas along the shared border.
- Cambodia should finalise the new Gender Mainstreaming in Mine Action Plan (GMAP) for 2021–25, which will replace the existing GMAP 2018–22, and provide regular progress updates on implementation of the plan.
- The CMAA should ensure that Mine Action Planning Units (MAPUs) work closely with the local communities, to help ensure that elaboration of annual work plans is well informed, focusing on contaminated areas requiring clearance and identifying those mined areas that can be cancelled through non-technical survey rather than released through clearance.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	An 11% drop in Cambodia's estimate of its remaining mine contamination attested to the progress of land release and the fact that little contamination was added to the database in 2021. Non-technical survey and a land reclamation non-technical survey project cancelled significant amounts of land from polygons awaiting clearance but Cambodia still lacks access to determine the extent of minefields in un-demarcated areas of the border with Thailand believed to be densely mined. Cambodia still does not disaggregate confirmed hazardous areas (CHAs) and suspected hazardous areas (SHAs) in line with international best practice.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	There is strong national ownership of mine action in Cambodia and an enabling environment for mine action, with good oversight from the CMAA. There is a Technical Working Group on Mine Action (TWG-MA), which brings all stakeholders together, as well as a Mine Action Coordination Committee (MACC) and eight Technical Reference Groups (TRGs), including one on survey and clearance. The Cambodian government contributes to mine action but seeks additional international assistance to help fund deployment of additional deminers from the Royal Cambodian Army.
GENDER AND DIVERSITY (10% of overall score)	8	8	The CMAA has an action plan for gender mainstreaming which has undergone three updates, the latest being adopted in November 2021. The CMAA's quality management teams and the mine action planning units (MAPUs) have all received training on implementing gender mainstreaming. The percentage of female staff employed by operators varies from around 18% in CMAC to 38% in HALO Trust but more women appear to be holding senior positions. The CMAA also has a Gender Mainstreaming Team (GMT) that was established to coordinate with the technical reference group on gender (TRG-G), one of eight TRGs helping to coordinate the sector.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	7	Strengthening information management is one of the goals of Cambodia's national mine action strategy and the CMAA has continued to make improvements in recent years. The IMSMA database is still being upgraded from New Generation to Core with support from the Geneva International Centre for Humanitarian Demining (GICHD) but the backlog in uploading operator reports was largely cleared in 2020. The CMAA has since requested monthly reports from operators to try to synchronise reporting and eliminate discrepancies, although these continue to afflict land release data in particular. Cambodia submits Article 7 reports annually.

Criterion	Score (2021)	Score (2020)	Performance Commentary
PLANNING AND TASKING (10% of overall score)	7	7	Cambodia has a comprehensive National Mine Action Strategy 2018–25, a detailed three-year implementation plan 2021–23, and land release targets set out in its 2019 Article 5 deadline extension request. Implementation, however, is proving challenging. The targets were calculated based on almost doubling capacity by deploying an additional 2,000 military deminers, but this faces major challenges in training and equipping and has not yet proved possible. As a result, the gap between land release targets and results has widened.
LAND RELEASE SYSTEM (20% of overall score)	7	6	Cambodia has national mine action standards (CMAS) that are broadly compliant with International Mine Action Standards. The CMAA is proactively reviewing and developing standards in consultation with operators. The CMAA has also taken steps to accelerate land release through non-technical survey and initiatives such as a ground data verification project that resurveys existing polygons but it also needs to strengthen quality management to ensure evidence-based survey that does not result in areas without mines being added to the database.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	7	Cambodia released a greater amount of mined area through survey in 2021, compared to the previous year, but its clearance output was a decrease on 2020. Land release outputs remain well below targets and the level needed to meet its Article 5 deadline. A ban on international demining organisations working within 7km of Cambodia's borders has halted clearance of areas with the country's densest mine contamination and talks with Thailand have yet to open up access to disputed areas of their common border.
Average Score	7.0	7.0	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Cambodian Mine Action and Victim Assistance Authority

NATIONAL OPERATORS

- Cambodian Mine Action Centre (CMAC)
- Cambodian Self-help Demining (CSDH)
- National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC)

INTERNATIONAL OPERATORS

- APOPO
- The HALO Trust
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- United Nations Development Programme (UNDP)
- Geneva International Centre for Humanitarian Demining (GICHD)
- ASEAN Regional Mine Action Centre (ARMAC)

UNDERSTANDING OF AP MINE CONTAMINATION

Cambodia estimated anti-personnel mine contamination affected 716km² at the end of 2021 (see Table 1), down from 801km² a year earlier, a drop of close to 11%. The CMAA recorded contamination in 8,287 suspected hazardous areas, 636 less than at the end of 2020.¹ This represented a much bigger drop in the level of contamination than the previous year, reflecting two main factors: Cambodia released a significant amount of land through clearance and survey; and unlike the previous year, Cambodia added only small amounts of previously unrecorded contamination to the database in 2021.² This is a significant step forward from 2020 when it added 75km².³

1 Article 7 Report (covering 2021), Form 4; and email from Ros Sophal, Database Unit Manager, CMAA, on behalf of Prum Sophakmonkol, Secretary General, CMAA, 26 July 2022.

2 The CMAA reported no previously unrecorded mined areas were added to the database in 2021. However, HALO Trust reported finding hazardous areas amounting to 4.3km² and MAG located 43 areas amounting to 2.8km². Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 26 July 2022; Lasha Lomidze, Programme Manager, HALO Trust, 25 March 2022; and Alexey Kruk, Programme Manager, MAG, 13 May 2022.

3 Article 7 Report (covering 2020), Form 4.

Table 1: Anti-personnel mined area (at end 2021)⁴

Province	SHAs	Area (m ²)
Banteay Meanchey	1,841	116,442,689
Battambang	1,241	106,094,920
Kampong Cham	11	979,586
Kampong Chhnang	42	3,277,627
Kampong Speu	407	46,227,152
Kampong Thom	531	48,457,217
Kampot	134	12,386,126
Kandal	2	63,203
Koh Kong	363	23,986,221
Kratie	104	17,117,345
Mondulkiri	62	8,399,249
Oddar Meanchey	964	90,271,930
Pailin	388	21,942,426
Phnom Penh	13	1,122,444
Preah Sihanouk	22	1,681,425
Preah Vihear	651	82,665,894
Prey Veng	1	5,900
Pursat	639	57,270,228
Ratanak Kiri	20	2,690,487
Siem Reap	695	60,992,311
Svay Rieng	93	9,382,708
Takeo	55	3,626,856
Tbung Khmum	8	817,955
Totals	8,287	715,901,899

Cambodia continues to grapple with the challenge of precisely defining the extent of its contamination. A Baseline Survey (BLS) conducted between 2009 and 2012 across 124 districts resulted in inflated polygons and missed many hazardous areas. A 2018 Cambodian Mine Action and Victim Assistance Authority (CMAA) analysis of land release data found that, on average, nearly one third of the areas the

survey had classified as dense contamination (A1) and half the area classified as scattered contamination (A4) had already been reclaimed for use by the population.⁵

The CMAA launched a land reclamation and non-technical survey in 2015 to verify contamination data and avoid planning for, or deploying, survey/clearance assets on land that had no mines or was already back in use. It had planned to complete this exercise in 2020 but later extended the target completion date to 2023.⁶ To compensate for the weakness of contamination data, operators such as The HALO Trust and Mines Advisory Group (MAG) conduct pre-clearance survey⁷ but the significant drop in the end-2021 estimates attests to progress in defining Cambodia's remaining challenge. CMAA data for some of the worst-affected provinces shows that mined areas remaining in Banteay Meanchey province dropped from 138km² at the end of 2020 to 116km² at the end of 2021 and in Battambang from 154km² to 106km² over the same period.⁸

Progress in survey and clearance allowed Cambodia to declare the south-western province of Kep as mine free in February 2022,⁹ the first of nine provinces that Cambodia plans to declare mine free by the end of 2022.¹⁰ The other eight provinces (Kampong Cham, Kandal, Kampong Chhnang, Phnom Penh, Preah Sihanouk, Prey Veng, Takeo, and Tbung Khmum)¹¹ were estimated at the end of 2021 to have mined areas affecting a total of 11.52km².¹² The CMAA has also named another eight provinces it aims to declare as mine-free in 2023, which combined have mined area totalling almost 195km².¹³

However, Cambodia still does not know and faces a significant challenge in determining the full extent of the mined areas on its border with Thailand where the contamination is densest but where many areas are inaccessible due to decades-old disputes over the demarcation of the border. In 2021, the government suspended demining within 7km of the border with Thailand, an area which accounts for close to half Cambodia's known anti-personnel mine contamination.¹⁴ Other mined areas located in un-demarcated areas of the border with Thailand have yet to be accessed and surveyed to determine their extent. Two of the provinces initially earmarked for declaration as mine free in 2022 (Kampot and Ratanak Kiri) and three provinces targeted for 2023 (Kratie, Svay Rieng, and Kampong Thom) have mined areas in the border belt where operations are suspended.¹⁵

4 Article 7 Report (covering 2021), Form 4.

5 CMAA, National Mine Action Strategy 2018–2025, p. 8.

6 Statement of Cambodia on Article 5 implementation, APMB 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

7 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and from Alexey Kruk, MAG, 13 May 2022.

8 Article 7 Reports (covering 2020 and 2021), Form 4.

9 "Kep is declared as the first mine-free province in Cambodia," EAC News, 28 February 2022, at: <https://bit.ly/3KRvmoK>.

10 Statement of Cambodia, APMB Intersessional Meetings, Geneva, 20 June 2022.

11 The list of provinces to be declared mine free presented to the 2022 Intersessionals Meeting was later amended to omit Kampot and Ratanak Kiri and include Kampong Chhnang and Tbung Khmum. Email from Prum Sophakmonkol, CMAA, 14 September 2022.

12 Article 7 Report (covering 2021), Form 4.

13 Statement of Cambodia, APMB Intersessional Meetings, Geneva, 20 June 2022. The eight provinces are Kampong Chhnang, Kampong Speu, Kampong Thom, Kratie, Mondulkiri, Siem Reap, Svay Rieng and Tbung Khmum.

14 Interview with Prum Sophakmonkol, CMAA, in Geneva, 21 June 2022. In a presentation to the APMB intersessional meetings in June 2022, Cambodia identified 3,961 mined areas in 12 provinces and amounting to 305.8km² located less than 7km from the border and 4,326 areas amounting to 410km² outside that border zone.

15 Statement of Cambodia, APMB Intersessional Meetings, Geneva, 20 June 2022.

Cambodia's mine hazards are a legacy of 30 years of conflict that ended in the 1990s concentrated in, but not limited to, 21 north-western districts along the border with Thailand, which have accounted for the large majority of mine casualties. The K5 mine belt, which was installed along the border with Thailand in the mid-1980s in an effort to block infiltration by armed opposition groups, ranks among the densest mine contamination in the world. The conflict also left significant contamination from other explosive remnants of war, including extensive areas affected by unexploded US submunitions (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Cambodia for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The CMAA was established by royal decree in 2000 with the mandate to regulate, monitor, and coordinate the mine action sector in Cambodia. The CMAA has Prime Minister Hun Sen as its President and government Senior Minister, Ly Thuch, as first vice president. Its Secretary General, Prum Sophakmonkol, manages CMAA's planning and operations.¹⁶ The CMAA has noticeably strengthened in recent years, and its roles and responsibilities have become more clearly defined.¹⁷ CMAC, which was established in 1992, had previously been responsible for regulating and coordinating the sector in addition to undertaking clearance. Since 2000, CMAC's activities have been limited to conducting demining, risk education, and training.¹⁸ CMAC, which conducts both humanitarian and commercial survey and clearance, is Cambodia's largest mine action operator.¹⁹

Since 2004, Cambodia has had Provincial Mine Action Committees (PMACs) and Mine Action Planning Units (MAPUs) in mine- and CMR-affected areas tasked with establishing clearance priorities in consultation with affected communities to ensure that clearance addresses their housing, agricultural, and infrastructure needs.²⁰ MAPUs meet regularly with all mine action operators to plan annual mine action activities.²¹

The Cambodian government established a Technical Working Group on Mine Action (TWG-MA) as a consultative mechanism between the government and implementing partners.²² It meets on a bi-annual basis and is attended by the CMAA, relevant ministries, operators, and donors.²³ TWG meetings were suspended in 2020 due to the COVID-19 pandemic²⁴ but resumed online in 2021 and were scheduled to be held

in-person in 2022.²⁵ The Mine Action Coordination Committee (MACC) and eight Technical Reference Groups (TRGs)²⁶ have been established by the CMAA to facilitate coordination and feedback at a strategic and technical level in areas such as survey and clearance, explosive ordnance risk education, victim assistance, information management, gender, cluster munitions, performance monitoring, and capacity development.²⁷

The operating environment for mine action in Cambodia is permissive, with the government open to the presence of international operators and supportive in administrative actions such as the granting of visas, approval of Memoranda of Understanding (MoUs), tax exemptions on demining equipment, and facilitating the importation of equipment.²⁸ The CMAA is open to the trialling and use of innovative survey and clearance methods and tools to improve efficiency.²⁹

The mine action sector receives technical support from a range of international organisations. UNDP's Clearing for Results programme has supported Cambodian mine action since 2006, aiming to promote efficiency and ensure clearance supports development priorities. The programme, which is now in its fourth phase (1 April 2020 to 31 December 2025), is focusing on releasing mined areas in the most affected provinces through Land Reclamation Non-Technical Survey (LR-NTS) and clearance, supporting victim assistance, mine risk education, gender mainstreaming, and strengthening the capacity of the CMAA to lead the sector and support the development of national sustainable capacity to address residual threats.³⁰

16 CMAA, "Legal framework and mandate", at: <http://bit.ly/2W7r3dJ>.

17 Interviews with Su Yeon Yang, Project Coordination Officer, and Tong Try, UNDP, 23 April 2019; and Rebecca Letven, Programme Manager, MAG, Phnom Penh, 25 April 2019.

18 CMAC, "20 Years' Achievement in Mine Action 1998-2018 and Path Ahead", 2018.

19 Interview with Heng Rattana, Director General, CMAC, Phnom Penh, 25 April 2019.

20 Geneva International Centre for Humanitarian Demining (GICHD), "Landmines and Land Rights in Cambodia", December 2010, pp. 9 and 13.

21 Email from Zlatko Vezilic, Programme Manager, NPA, 5 May 2020.

22 CMAA, National Mine Action Strategy 2018-2025, p. 24; and email from Tong Try, National Mine Action Adviser, UNDP, 18 June 2019.

23 Emails from Prum Sophakmonkol, CMAA, 1 July 2020; Oum Phumro, CMAC, 9 June 2021; Rebecca Letven, MAG, 7 April 2020; and Zlatko Vezilic, NPA, 5 May 2020.

24 Email from Matthew Hovell, Head of Region SE Asia, HALO, 9 April 2021.

25 Email from HALO Trust, 25 March 2022; and telephone interview with Portia Stratton, NPA, 13 May 2022.

26 The eight TRGs address Survey and clearance; Mine Risk Education; Victim Assistance; Information Management; Capacity Building; Gender; Cluster Munitions Survey; and the Performance Monitoring System.

27 CMAA, National Mine Action Strategy 2018-2025, p. 24; and emails from Tong Try, UNDP, 18 June 2019 and 27 July 2021.

28 Emails from Prum Sophakmonkol, CMAA, 11 September 2019; Rebecca Letven, MAG, 7 April 2020; and Lasha Lomidze, Programme Manager, HALO Trust, 15 May 2020.

29 Emails from Zlatko Vezilic, NPA, 4 April 2019; Rebecca Letven, MAG, 9 May and 28 June 2019; and Damian O'Brien, HALO Trust, 10 April 2019.

30 Emails from Tong Try, UNDP, 28 July 2021; and Naomi Konza, Project Coordination Specialist, UNDP, 18 April 2022.

The Geneva International Centre for Humanitarian Demining (GICHD) supported the upgrading of the CMAA's information management system as well as gender mainstreaming and the development of Cambodian national mine action standards.³¹ NPA, as part of a United Kingdom-funded partnership that includes MAG and The HALO Trust, conducts capacity development activities in support of the CMAA on gender equity and mainstreaming, information management, knowledge management, planning and prioritisation, quality management (QM), and strategic planning.³²

The Cambodian government contributes funding for clearance and management of the sector.³³ This support includes covering the expenses of the CMAA and providing funds to support planning and prioritisation, Quality assurance (QA)/quality control (QC), database management, the Cambodia mine/explosive remnants of war (ERW) victim information system (CMVIS), and risk education.³⁴ The cost of the database unit is, however, shared by NPA and the United Nations Development Programme (UNDP).³⁵

The Cambodian government also provides a 10% in-kind contribution to any new donor funding.³⁶ The Cambodian government has reported contributing just under 30% of the total funding to the mine action sector (US\$99.49 million of US\$340.2 million) in 2010–18.³⁷ Cambodia funds mine and ERW survey and clearance by CMAC and the National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC).³⁸ Local authorities coordinate and provide security support to survey and clearance operations on the ground.³⁹ Cambodia has estimated it would need almost \$119 million for CMR clearance in 2020–25.⁴⁰

ENVIRONMENTAL POLICIES AND ACTION

In 2021, Cambodia introduced a national mine action standard on environmental management (CMAS 20), and discussions continue on further amendments or additions to the standards. As of June 2022, the CMAS was being translated from English into Khmer. In the meantime, most operators reported following internal environmental policies and standing operating procedures (SOPs). APOPO updated its in-house environment policy in 2020, which has three main chapters on “Know”, “Protect”, and “Act”, with recommendations carried over into an SOP on environment.⁴¹ MAG said it followed international mine action standards (IMAS) on environmental management and protection and had its own SOPs to minimise environmental damage.⁴²

The HALO Trust said its deminers only cut small vegetation and do not cut trees or any vegetation with stems thicker than 3cm. Bamboo stems are cut sufficiently to accommodate detector heads only. Latrines in minefields and remote demining camps are established away from water sources and waste is carefully managed in pits. Camps are established closest to worksites to avoid long travel. HALO teams travel in groups to minimise vehicle usage, although COVID-19 measures temporarily limited the numbers of passengers per vehicle, and it was planning in 2022 to purchase electric motorbikes for mobile teams' activities.⁴³ MAG reported its operations follow IMAS (07.13) and the national strategy which take account of the need for vegetation and ground preparation, biodiversity conservation, measures to avoid soil erosion and pollution and managing deminer worksites to ensure proper disposal of waste including human waste, plastic, rubbish and waste water.⁴⁴

GENDER AND DIVERSITY

The CMAA has developed a Gender Mainstreaming in Mine Action Plan (GMAP) in line with the objectives of the National Mine Action Strategy 2018–2025. Two earlier GMAPs covered 2013–15 and 2018–22. The latest version, approved at the end of 2021 and covering the period 2021–25, sets out three strategies, building on the earlier plans. These are: developing implementation of GMAP guidelines through monitoring and evaluation of the performance of MAPUs and operators; building capacity of CMAA gender teams, MAPUs, and operators, and collecting data on the mine action needs of women; and promoting inclusive participation in mine action, including through collecting sex-, age- and disability-disaggregated data (SADDD), developing a CMAS on gender mainstreaming, and advocating for more women in decision-making positions.⁴⁵

31 Email from GICHD, 1 July 2020.

32 Email from Portia Stratton, NPA, 21 April 2021.

33 2019 Article 5 deadline Extension Request, p. 12.

34 Email from Prum Sophakmonkol, CMAA, 1 July 2020.

35 Emails from Rune Dale-Andresen, Country Director, NPA, 26 September 2020; and Portia Stratton, NPA, 21 June 2021.

36 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 6 September 2020.

37 2019 Article 5 deadline Extension Request, p. 6.

38 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

39 Ibid.

40 2019 Article 5 deadline Extension Request, p. 55.

41 Email from Michael Heiman, Regional Manager, APOPO, 1 April 2022.

42 Email from Alexey Kruk, MAG, 6 May 2022.

43 Email from Lasha Lomidze, HALO Trust, 25 March 2022.

44 Email from Alexey Kruk, MAG, 6 May 2022.

45 Gender Mainstreaming in Mine Action Plan 2021–25, December 2021, pp. 6–7.

The latest National Mine Action Strategy three-year Implementation Plan (2021–23) sets out activities in support of these goals.⁴⁶ NPA, as part of its capacity development, is supporting the CMAA with training on gender mainstreaming in mine action, on implementation of the GMAP and the development of associated guidelines, and on how to use gender- and age-disaggregated data in planning and prioritisation.⁴⁷ GMAP guidelines require 26 forms to collect data that are fully "SADDD".⁴⁸

A CMAA Gender Mainstreaming Team (GMT) was established to coordinate with the Technical Reference Group on Gender (TRG-G), one of eight TRGs ensuring coordination of the sector. The TRG-G is composed of representatives from UNDP, the Ministry of Women's Affairs (MoWA), the Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY), MAPU, operators, and international and national organisations working in risk education and victim assistance.⁴⁹ Of the CMAA's 216 employees in 2021, (20%) were female, with women in 12 of 49 (24%) managerial level positions and 28 of the 104 (27%) office staff, but only four of 63 field positions (6%).⁵⁰

As at April 2021, women made up 30% of Cambodian Self-help Demining (CSHD)'s workforce, with women in 5% of managerial/supervisory roles and 33% of operational positions.⁵¹ APOPO finished the year with a similar proportion of women employees who accounted for 23 of its 72 staff, but they also made up more than one third of the total staff holding managerial positions and nearly half of its operations posts.⁵²

CMAC said it is working to promote gender in mine action by providing equal employment opportunities for women, encouraging recruitment of women to management positions, nurturing a gender-friendly working environment, and promoting gender mainstreaming in all CMAC's activities. CMAC also said its strategy considers social norms and promotes gender mainstreaming in a culturally

sensitive fashion. CMAC ensures its mine action teams are gender-balanced, and an increasing number of women have been employed as deminers and in operational support positions in the field. As at June 2021, CMAC employed 178 female staff representing 13% of its workforce. Of these, 23 women were in managerial/supervisory positions and 86 were in operations posts.⁵³

The HALO Trust reported women continued to make up 38% of its employees in Cambodia, including 43% of operational staff (50% of HALO deminers are women). The proportion in managerial and supervisory positions drops to 30%, a significant increase on the 18% in 2020 and 9% the year before. Women made up about 40% of operations staff, a slight dip from the previous year, but it aims to keep a 50-50 split between males and females when hiring staff. HALO deploys gender-balanced survey and clearance teams to help ensure it consults all groups of the local community.⁵⁴

MAG started developing an action plan to promote gender and inclusion to follow up the findings of an assessment conducted in 2021. It operates mixed gender community liaison teams gathering information on the location of CMR and doing pre-clearance assessment of their impact. Women made up 37% of MAG's 525-strong team in Cambodia at the end of 2021, including 40% of its deminers and a majority (61%) of its medics. Women held 25 of the 93 staff in managerial or supervisor positions, including the heads of finance, human resources, and procurement.⁵⁵

Women were less than half (45%) of NPA's total employees in Cambodia in 2021, but close to two thirds (64%) of its operations personnel, including its operations supervisor and an operations officer. It said it recruited local staff from different ethnic communities to ensure teams could communicate effectively with minorities. Its main office staff included female managers for its support service department and finance.⁵⁶

INFORMATION MANAGEMENT AND REPORTING

The CMAA's database unit (DBU) is responsible for collecting, storing, analysing, and disseminating data in support of planning and prioritisation.⁵⁷ The DBU has taken a range of actions in the past two years to increase the accuracy of data and the efficiency of information management, working closely with international partners. The CMAA has used the Information Management System for Mine Action New Generation (IMSMA-NG) since 2014 and in 2020 started the process of upgrading the system to IMSMA Core, working with the GICHD. IMSMA Core was not fully operational in 2021 as the CMAA was still in the process of migrating data to the new system.⁵⁸

46 CMAA, Three-Year Implementation Plan 2018–2020, Phnom Penh, undated, but 2018, p. 14.

47 DFID Capacity Development Report, Activity Detail Extract, 18 September 2018.

48 Emails from Portia Stratton, NPA, 21 April 2021; and Tong Try, UNDP, 27 July 2021.

49 CMAA, National Mine Action Strategy 2018–2025, p. 22; and email from Tong Try, UNDP, 27 July 2021.

50 WhatsApp message from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 1 June 2022.

51 Email from Chhun Bora, Training and Monitor Officer, CSHD, 19 April 2021.

52 Email from Michael Heiman, APOPO, 1 April 2022.

53 Email from Oum Phumro, CMAC, 9 June 2021.

54 Email from Lashe Lomidze, HALO Trust, 25 March 2022.

55 Emails from Alexey Kruk, MAG, 29 March and 28 May 2021 and 6 May 2022.

56 Email from Portia Stratton, NPA, 19 April 2022.

57 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 10 May 2022.

58 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 13 May 2022.

Operators reported continued improvements in the CMAA's information management. They said a substantial backlog in uploading operator reports which delayed availability of data has been largely cleared and most survey and clearance reports had been submitted to IMSMA. The CMAA DBU has also requested monthly progress reports from all operators to verify and quality manage the data they submit against the data in IMSMA. The reports are intended to help eliminate discrepancies which operators said are rare,⁵⁹ although still apparent in available data on land release.

A Virtual Private Network set up by the DBU in 2018 enables operators to submit daily operating data directly to the IMSMA database.⁶⁰ The CMAA has also worked closely with the GICHD on the development of an application for daily data collection, a web application for QA/QC, and a dashboard

to view the output summary in order to assist planning and decision making, to allow for mobile data collection in the field and to allow MAPUs and quality management teams (QMTs) to enter data online, and to verify the data submitted by operators.⁶¹

The CMAA continued to hold regular meetings of its Technical Reference Group on information management discussing issues and solutions for data reporting and sharing. These were conducted online in 2021 in line with COVID-19 regulations but were able to resume in-person in 2022. The CMAA database unit said it also had regular meetings with operators once or twice a month to sort out any data issues.⁶² Despite the increased contacts between CMAA and operators on data, operating results continued to show significant discrepancies.

PLANNING AND TASKING

Cambodia currently pursues a National Mine Action Strategy for 2018–2025 which was officially launched in May 2018 with eight goals for clearance of mines, cluster munitions remnants, and other ERW. The first goal is to release all known mined areas by 2025 through planned land release of 110km² a year from 2020. The CMAA has also issued Three-Year Implementation Plans setting out activities and indicators to implement the strategy.⁶³

Cambodia submitted an Article 5 deadline extension request in 2019 with revised land release targets for 2019–25, with annual land release targets that were initially set to increase from 110km² a year in 2020–21 to 146km² for the remainder of the extension period as additional deminers are projected to come on board and become operational.⁶⁴ The targets assume that significant additional international funding will be secured allowing for deployment of 2,000 additional Royal Cambodian Army deminers. That has not yet happened and the annual

release targets for 2022 to 2025 have now risen to nearly 179km².⁶⁵ The annual land release targets also assumed that no new contamination would be added to the database, but more than 74.8km² of previously unrecorded mined area was added to the database in 2020 while the 78km² that Cambodia reported it released in 2020 and 81km² in 2021 fell well short of the annual extension request targets.⁶⁶

As of April 2021, CMAA reported that 818km² of mined area remained, equating to annual land release targets of 163.6km². As previously indicated, current capacity and land release output indicates there will continue to be a significant gap between predicted and actual land release output for 2021. The COVID-19 pandemic also risks impacting operations. In addition, many of the remaining mined areas are harder to reach minefields or mined areas that were not fully released previously.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Mine action is conducted according to Cambodian Mine Action Standards (CMAS), which are broadly consistent with IMAS,⁶⁷ though the National Mine Action Strategy (NMAS) 2018–2025 emphasised the need for efficient use of resources and the CMAA has worked on developing CMAS with support from NPA funded by the United Kingdom Foreign, Commonwealth and Development Office (FCDO) and in consultation with other mine clearance operators.⁶⁸

59 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; Michael Heiman, APOPO, 1 April 2022; and Alexey Kruk, MAG, 13 May 2022.

60 Email from Rebecca Letven, MAG, 9 May 2019; and interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.

61 Emails from Prum Sophakmonkol, CMAA, 1 July 2020; and Ros Sophal, CMAA, 16 August 2021; and interview with Ros Sophal, CMAA, 30 June 2021.

62 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 10 May 2022.

63 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

64 Statement of Cambodia, Fourth Review Conference, Oslo, 27 November 2019.

65 Statement of Cambodia, APMBIC Intersessional Meetings, Geneva, 20 June 2022.

66 Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 17 September 2021 and 26 July 2022.

67 Emails from Rebecca Letven, MAG, 7 April 2020; and Zlatko Vezilic, NPA, 19 March 2020.

68 Emails from Prum Sophakmonkol, CMAA, 11 September 2019; and Zlatko Vezilic, NPA, 4 April 2019.

Cambodia reported in June 2022 that it had approved 17 standards for implementation.⁶⁹ CMAA data in August 2022⁷⁰ showed 18 standards to have been approved and in use, although seven of these were listed as due to be updated.⁷¹ Newly approved standards included a CMAS chapter on explosive ordnance risk education and a standard for the protection of the environment. A new standard for mechanical demining was ready in final draft but awaiting comments from CMAC. Drafts of standards for Gender and Victim Assistance required further discussion and standards for Management of Training and Underwater Clearance required development.⁷²

In December 2020, the CMAA launched a “ground data verification” project that revisited mined areas which had already been surveyed to confirm whether they required clearance, included land that had been reclaimed or areas that could be cancelled through non-technical survey. The pilot project visited mined areas totalling 55km² in three of the most mine-affected provinces, Banteay Meanchey, Battambang, and Pailin, and confirmed that only 34km², less than two thirds of the total, was mined. It concluded that

21km² (38%) of the mined area could be released through non-technical survey.⁷³ By the end of 2021, the project had verified 72.7km² and identified 25.6km² that could be cancelled through non-technical survey.⁷⁴

The CMAA and demining organisations continue to explore measures to increase land release efficiency and avoid the persistent problem of clearance assets deploying to land that has no mines. The CMAA reported that operators cleared 53 mined areas covering almost 2.32km² that were found to have no mines in 2021, more than double the 23 minefields totalling over 1.12km² that were cleared despite the absence of mines in 2020.⁷⁵ However, HALO Trust and MAG alone reported clearing a total of 2,692,148m² that had no mines. HALO Trust said it cleared 43 sites covering 2,388,748m², most of it land classified as A2-2 (scattered and mixed AP/AV mines) but also 58,057m² of supposedly dense anti-personnel mine contamination and 0.8km² of area classified as having scattered anti-personnel mines. MAG reported clearing 8 sites covering 303,400m² that had no mines.⁷⁶ No data were received from CMAC.

OPERATORS AND OPERATIONAL TOOLS

Demining in 2021 was conducted mainly by the national operator, CMAC, and two international non-governmental organisations (NGOs), HALO Trust and MAG. International operator APOPO works in partnership with CMAC. CSHD also continued to support the programme.

APOPO worked in partnership with CMAC in Siem Reap and Preah Vihear provinces and in partnership with MAG in Battambang, conducting technical survey and clearance of mined areas with mine detection rats (MDR) and so-called “SMART dogs”. The dogs wear a harness fitted with the Swiss Mine Action Reduction Tool (SMART), an electronic track-and-trace system which allows remote monitoring of the dogs as they work at distances of up to 100 metres from their handlers and generates IMSMA-compatible data.⁷⁷ The SMART dogs also used for survey and clearance of cluster munitions (see *Clearing Cluster Munitions Remnants* report on Cambodia). APOPO's mine survey and clearance productivity dropped in 2021 as it shifted some of its capacity to work on CMR clearance and in 2022 it expected to add

capacity working with CMAC in Preah Vihear province, consisting of an MDR team, a technical survey dog team, a mechanical asset, and a manual clearance team.⁷⁸

CMAC operates with five Demining Units comprising survey teams, manual clearance, mechanical, and EOD teams. A sixth Demining Unit collaborates with APOPO operating animal detection systems.⁷⁹ In 2021, CMAC had 76 demining teams with 640 deminers; 14 non-technical survey teams, totalling 70 survey personnel; and 4 technical survey teams totalling 20 personnel. From March 2021, CMAC re-formed its technical survey and clearance teams from five-person to seven-person teams.⁸⁰ APOPO provides CMAC with MDRs and MAG reported contracting three mine detection dog (MDD) teams to CMAC. NPA provided funding for two CMAC manual teams to conduct technical survey in Kep province as part of the drive to declare parts of southern Cambodia mine-free as well as to conduct technical survey in Banteay Meanchey province close to the border with Thailand.⁸¹

69 Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

70 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 5 September 2022.

71 Seven standards due for updating included Reporting for investigation of demining incidents; Safety and occupational health (two standards); Personal protective equipment; Baseline survey; Land release; and Cluster munition remnant survey (CMRS).

72 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 5 September 2022.

73 Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021; and Portia Stratton, NPA, 17 August 2021.

74 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 26 July 2022.

75 Ibid.

76 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 6 May 2022.

77 GICHD, “Field Trials of the SMART System and Technical Survey Dogs in Cambodia, Final Report”, December 2021, pp. 6–10, 12 and 15.

78 Email from Michael Heiman, APOPO, 1 April 2022.

79 CMAC Operational Achievement Report, March 2021.

80 Email from Oum Phumro, CMAC, 9 June 2021.

81 “Signing ceremony on partnership cooperation agreement between CMAC and NPA”, CMAC Press Release, 9 March 2022; and email from Sron Samrithea, Deputy Programme Manager, NPA, 5 July 2022.

HALO Trust worked with 85 manual clearance teams and 765 deminers in 2021, a small increase on the 82 teams/738 deminers deployed in the previous year. It also deployed 11 non-technical survey teams with 33 personnel, an increase of two teams from the previous year. HALO said it expanded its use of HSTAMID dual sensor detectors, which it estimates saves the programme millions of dollars in time, labour, and materials, by sharply reducing the need for manual investigation of detector signals generated by metal waste.⁸²

MAG maintained its non-technical survey capacity with eight two-person community liaison (CL) teams and a total of 19 CL personnel in 2021. Its clearance capacity also remained unchanged from the previous year. Its 17 mine action teams conducted technical survey as well as clearance. MAG reintroduced use of drones to support non-technical survey (NTS), clearance and post-clearance impact assessments by collecting data on terrain and land use.⁸³

NPA's operational focus in Cambodia remains on survey and clearance of areas affected by cluster munitions (see *Clearing Cluster Munitions Remnants* report on Cambodia) but from April 2021 it also deployed four teams to conduct Land reclamation NTS + Baseline Survey (LRNTS + BLS) in Battambang, Banteay Meanchey, and Pailin, funded through the UNDP Clearance for Results programme.⁸⁴

Table 2: Operational clearance capacities deployed in 2021

Operator	Manual teams	Total deminers	Animal Detection and handlers	Machines	Comments
APOPO	3	18	3 MDR teams 38 rats/24 handlers 1 TSD team 4 dogs/4handlers	2	28 rats and 16 handlers, 4 SMART dogs and 4 technical survey handlers worked in partnership with CMAC. 10 rats with 8 handlers worked with MAG.
CMAC	76	640	7 MDD teams (40 dogs and 40 handlers)	11	
CSHD	1	12	0	0	
HALO Trust	85	765	0	3	Also 11 NTS teams with 33 personnel
MAG	17	136	2 MDD teams, 8 dogs, 8 handlers 1MDD team, 2 dogs, 2 handlers	4	In partnership with CMAC In partnership with NPA
Totals	182	1,571	38 rats/24 handlers 54 dogs/54 handlers	20	

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Cambodia released a total of 81.34km² in 2021, marginally more than the 78.72km² it reported the previous year. Official data shows it achieved this mainly through clearance (of 43.73km²) while 28.67km² was cancelled through non-technical survey and almost 8.94km² was reduced through technical survey.⁸⁵ Operators reportedly destroyed 18,770 anti-personnel mines in 2021, a small increase (of 5%) on the 17,957 destroyed the previous year.

SURVEY IN 2021

The CMAA reported that Cambodia increased the amount of land released by survey by 30% in 2021 to 37.61km² mainly through a jump in the amount of land cancelled from 15km² in 2020 to nearly 28.7km² in 2021 (see Table 3). HALO Trust reported cancelling 11.4km² in nine provinces in 2021, most of it in Banteay Meanchey, Kampong Thom, and Oddar Meanchey.⁸⁶

⁸² Email from Lasha Lomidze, HALO Trust, 25 March 2022.

⁸³ Emails from Alexey Kruk, MAG, 6 May 2022; and Tony Fernandes, MAG, 16 September 2022.

⁸⁴ Emails from Sron Samrithea, NPA, 5 July 2022; and Naomi Konza, Project Coordination Specialist, UNDP, 18 April 2022.

⁸⁵ Article 7 Report (covering 2021), Form 4; email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 26 July 2022. The Article 7 Report miscalculates the sum total of land released through non-technical survey, technical survey, and clearance as 78,360,293m².

⁸⁶ Email from Lasha Lomidze, HALO Trust, 25 March 2022.

LRNTS conducted by NPA under the UNDP's Clearing for Results programme accounted for another 11.14km², representing 15% of the 74.49km² of mined area surveyed under the LRNTS project.⁸⁷ In addition, MAG reported it cancelled 7.27km² in Battambang province,⁸⁸ which, combined with the other operators' results, would raise the total cancelled area to nearly 30km².

Table 3: Cancellation through non-technical survey in 2021⁸⁹

Province	Area cancelled (m ²)
Banteay Meanchey	10,041,918
Battambang	9,066,686
Kampong Speu	935,164
Kampong Thom	2,354,691
Kratie	821,268
Oddar Meanchey	2,501,048
Pailin	1,538,085
Preah Vihear	172,550
Pursat	289,862
Siem Reap	951,119
Total	28,672,391

Table 4: Reduction through technical survey in 2021⁹⁰

Province	Area reduced (m ²)
Banteay Meanchey	2,878,142
Battambang	4,627,545
Kampong Thom	114,350
Oddar Meanchey	48,586
Preah Vihear	55,296
Pursat	554,710
Siem Reap	656,892
Total	8,935,521

CMAA data showed less area reduction occurred in 2021, amounting to 8.94km², down from 13.56km² in 2020.⁹¹ HALO Trust said it reduced 0.45km², mostly in Pursat province⁹², and MAG 1.99km² in Battambang.⁹³ CMAA data showed that CMAC reduced 14.62km² through technical survey in 2021, almost one third more than in the previous year.⁹⁴

CLEARANCE IN 2021

Cambodia's anti-personnel mine clearance was lower in 2021 than in the previous two years. CMAA data recorded clearance of 43.73km² in 2021 (see Tables 5 and 6), a drop of about 13% from the 49.99km² it reported in 2020 and also less than in 2019 (see Table 8).⁹⁵ The total number of anti-personnel mines destroyed, at 18,770 in 2021, showed a modest increase on 2020, although official figures suggest the numbers destroyed in clearance and EOD reversed. The 6,087 anti-personnel mines destroyed in the course of clearance in 2021 represented a little under half the level of the previous year, but the CMAA reported another 12,683 anti-personnel mines were destroyed in EOD tasks, roughly double the number in 2020.⁹⁶

A decision by Cambodian authorities in July 2020 to halt clearance work by international operators on the K5 mine belt along the border with Thailand, later extended to a 7km-wide zone along all international borders, appears to have contributed to the drop in area released and mines

destroyed through clearance in 2021. HALO Trust and MAG both had to relocate assets working close to the border, where the densest contamination is located, and shift to lower priority tasks. HALO also noted that an increasingly limited number of tasks are suitable for much faster clearance using large-loop detectors.⁹⁷ CMAC also recorded 14% less area cleared in 2021 than in 2020 and the number of anti-personnel mines it cleared dropped by almost half.⁹⁸

COVID-19 prevention measures also caused operators to lose some weeks of operations in 2021 as they followed mandatory 14-day isolation of deminers before deployment to the field or after infection. APOPO said it did not lose any working days due to the pandemic in 2021⁹⁹ but HALO Trust had 205 cases of COVID infection among its deminers in 2021 and MAG also reported infections that resulted in lost working days and necessitated transfer of some deminers to hospital.¹⁰⁰

87 Email from Naomi Konza, UNDP, 18 April 2022; and UNDP, Clearing for Results IV, Annual Project Progress Report 2021, p. 4.

88 Email from Alexey Kruk, MAG, 6 May 2022.

89 Email from Prum Sophakmonkol, CMAA, 14 September 2022.

90 Emails from Ros Sophal, CMAA, 17 September 2021 and 26 July 2022.

91 Email from Lasha Lomidze, HALO Trust, 25 March 2022.

92 Email from Alexey Kruk, MAG, 6 May 2022.

93 Email from Ros Sophal, CMAA, 6 September 2022.

94 Email from Ros Sophal, CMAA, 26 July 2022.

95 Emails from Ros Sophal, CMAA, 17 September 2021 and 26 July 2022.

96 Operators reported to Mine Action Review that they cleared a total of 51.54km² in 2020.

97 Emails from Ros Sophal, CMAA, 26 July 2022.

98 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 6 May 2022.

99 Emails from Ros Sophal, CMAA, 17 September 2021 and 6 September 2022. The CMAA reported that CMAC destroyed 8,539 anti-personnel mines in the course of clearance in 2020, however, CMAC reported destroying 5,229 anti-personnel mines in 2020 (email from Oum Phumro, CMAC, 9 June 2021).

100 Email from Michael Heiman, APOPO, 1 April 2022.

Table 5: Mine clearance in 2021¹⁰¹

Province	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed during mine clearance
Banteay Meanchey	3,838,898	496	3	544
Battambang	20,377,998	3,143	32	2,568
Kampong Chhnang	985,026	205	0	170
Kampong Thom	97,487	2	0	32
Kep	64,412	0	0	23
Oddar Meanchey	1,522,682	241	8	993
Pailin	5,054,668	545	4	564
Preah Vihear	5,094,962	458	15	638
Prey Veng	422,415	0	0	167
Pursat	2,802,612	740	46	1,281
Siem Reap	2,986,589	257	1	286
Svay Rieng	477,924	0	0	291
Total	43,725,673	6,087	109	7,557

Table 6: Anti-personnel mine clearance in 2021 by operator¹⁰²

Operator	Area cleared	AP mines destroyed	AV mines destroyed	Other UXO destroyed
APOPO	1,100,956	260	4	307
CMAC	34,783,655	4,532	84	7,034
CSHD	351,485	63	1	27
HALO Trust	4,844,818	647	20	122
MAG	2,644,759	585	0	67
Totals	43,725,623	6,087	109	7,557

UNDP has supported Cambodian mine action through a clearance for results (CfR) programme since 2006 and in 2020 at the start of Phase IV of the programme it awarded three contracts (two to CMAC and one to HALO Trust) resulting in release of 11.42km²: 4.67km² through technical survey and 6.75km² through clearance, destroying in the process 951 anti-personnel mines.¹⁰³ In 2021, it awarded three contracts to CMAC which resulted in more than double the area cleared to 14.86km² and a sharp increase in the number of anti-personnel mines reportedly destroyed.¹⁰⁴

Table 7: Clearing for Results 2021¹⁰⁵

Operator	Provinces	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
CMAC	Battambang, Banteay Meanchey, Pailin	14,857,667	1,723	13	1,690

101 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 6 May 2022.

102 Emails from Ros Sophal, CMAA, 6 September 2022; Michael Heiman, APOPO, 1 April 2022; Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 6 May 2022.

103 Email from Tong Try, UNDP, 28 July 2021.

104 Email from Naomi Konza, UNDP, 18 April 2022.

105 Ibid.

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the second extension, of 5 years and 11 months, granted by States Parties in 2019), Cambodia is required to destroy all anti-personnel mines in areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. At the current pace of land release, Cambodia will not meet this deadline.

Cambodia's 2019 extension request and subsequent updates set out steadily rising land release targets but rates of clearance have remained under 50km² and the gap between results and targets has widened (see Table 7). At the start of the Article 5 extension period in 2019, the plan called for clearance of 110km² a year in 2020 and 2021 rising to 146km² a year from 2022 to the end of the extension period in order to release contamination estimated at that time to total 890km².¹⁰⁶ Since then, as a result of survey and clearance, the total needing to be released has fallen to an end-2021 estimate of 715km² but in its latest update for APMBC States Parties, Cambodia said the total amount of land released each year needed to rise to 179km² a year from 2022 to 2025, well over double its achievement in the last two years.¹⁰⁷

The deficit has highlighted financial and capacity constraints and the need to make Cambodia's land release process more efficient. The CMAA calculated in 2020 that with the existing capacity of the mine action sector it would need until 2031 to complete clearance.¹⁰⁸ The extension request's 2025 completion target relied on receiving additional funding, nearly doubling Cambodia's clearance capacity by adding 2,000 deminers from the Royal Cambodian Armed Forces (RCAF) and no additional mined areas being added to the national database. Although Cambodia added a hefty 75km² to the database in 2020 it appears to have largely met the last condition in 2021, but it has made no headway on the others. No military deminers have become active in the mine

action sector since 2019 or have yet undergone training to humanitarian mine action standards. The CMAA says that the cost of equipping 2,000 army deminers poses a major obstacle.¹⁰⁹

The CMAA has launched a number of initiatives to inject momentum into the land release process: it has set a timeline for declaring provinces mine free; launched a ground data verification project to confirm the real extent of mined areas in survey polygons and has reportedly started more desk analysis of surveyed areas to prevent uncontaminated areas being added to the database.¹¹⁰ However, plans to strengthen the CMAA's quality management capacity and processes to ensure more accurate, evidence-based non-technical survey have also been held back reportedly by budgetary pressures resulting from the COVID-19 pandemic.¹¹¹

Access to minefields on the Cambodian-Thailand border also assumes growing importance as the 2025 clearance deadline approaches and the ban on operations by international demining organisations in a 7km-wide border zone only adds to uncertainty about how this key dimension of the remaining mine challenge will be addressed. CMAA data shows minefields within the 7km border zone represent 43% of mined area¹¹² and operators have no shortage of tasks outside the border zone, but border contamination also includes Cambodia's most densely mined areas and the ban is therefore holding back progress on minefields where the level of contamination and tricky terrain will slow the pace of land release.

Cambodia and Thailand have yet to determine the extent of contamination in un-demarcated areas of the border or a timeline for survey and clearance. Each side says the other has intervened to stop deminers from working on tasks in border areas.¹¹³ The CMAA reports that CMAC is in constant

¹⁰⁶ 2019 Article 5 Deadline Extension Request, p. 43.

¹⁰⁷ Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

¹⁰⁸ Interview with Prum Sophakmonkol, CMAA, in Geneva, 11 February 2020.

¹⁰⁹ Interview with Prum Sophakmonkol, CMAA, in Geneva, 21 June 2022.

¹¹⁰ Email from Matthew Hovell, HALO Trust, 9 April 2021.

¹¹¹ Email from Portia Stratton, NPA, 20 April 2021.

¹¹² Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

¹¹³ See, e.g., Thailand's report that as of March 2022 Cambodia had requested it to stop work in 34 operational areas covering 14,31km² in six provinces. Thailand Article 5 deadline Extension Request, March 2022, p. 4.

communication with RCAF on the issue.¹¹⁴ CMAC is in contact with Thailand's Mine Action Centre (TMAC) on resuming cooperation on the border but progress has been slow. They have carried out one project in March–April 2020 that resulted in release of 95,000m² by Thailand and destruction of two items of UXO but no mines. The COVID-19 pandemic halted any immediate follow-up but the two sides have yet to identify the location for further demining.

Table 8: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	43.73
2020	49.99
2019	*45.62
2018	41.00
2017	27.68
Total	208.02

*May include significant AV mine clearance

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Goal seven of Cambodia's National Mine Action Strategy 2018–2025 is to establish a sustainable national capacity to address residual threats after 2025. Cambodia's 2019 Article 5 deadline extension request, said it is likely that the Royal Cambodian Army will be tasked with addressing explosive threats after 2025.¹¹⁵ The Strategy called for a review of the legal, institutional, and operational framework of mine action and the strategy and capacity needed to address the residual threats.¹¹⁶ The review had not taken place by the end of 2021 but was planned for 2022 under the current Strategy's three-year implementation plan 2021–2023.¹¹⁷ In February 2021, however, the CMAA and the GICHD began interviewing national and international operators and other relevant stakeholders to discuss the topic of institutional and operational frameworks and the capacity needed for addressing any residual threat.

¹¹⁴ Interview with Prum Sophakmonkol, CMAA, in Geneva, 21 June 2022.

¹¹⁵ 2019 Article 5 deadline Extension Request, Additional Information (August 2019), p. 5.

¹¹⁶ CMAA, National Mine Action Strategy 2018–2025, p. 14.

¹¹⁷ Email from Tong Try, UNDP, 27 July 2021.

CAMEROON



CLEARING THE MINES 2022

ARTICLE 5 DEADLINE: 1 MARCH 2013

NEW EXTENDED DEADLINE NEEDED TO RETURN TO COMPLIANCE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION: LOW
EXTENT UNKNOWN

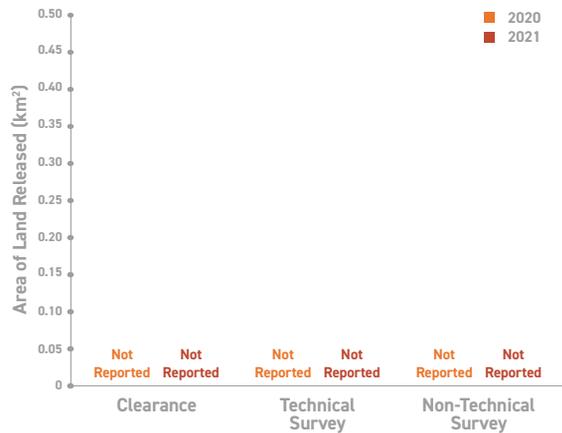
AP MINE
CLEARANCE IN 2021

0M²

AP MINES
DESTROYED IN 2021

NOT
REPORTED

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Non-state armed groups increased use of explosive devices, including mines of an improvised nature, particularly in Cameroon's northern districts along the border with Nigeria amid escalating military activity by Boko Haram but also in other regions such as the south west, also affected by anglophone insurgency.

RECOMMENDATIONS FOR ACTION

- Cameroon should inform states parties to the Anti-Personnel Mine Ban Convention (APMBC) of the discovery of any anti-personnel mine contamination, including mines of an improvised nature.
- Cameroon should submit an Article 7 transparency report detailing all suspected or confirmed mined areas under its jurisdiction or control and should report systematically on explosive device incidents detailing the number, location, and device type.
- Cameroon should request a new APMBC Article 5 deadline from the other States Parties.
- Cameroon should put in place a sustainable national capacity to respond to the contamination, seeking international assistance to achieve this, as required

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority or national mine action centre

NATIONAL OPERATORS

- Army Engineer Corps

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Cameroon faces an escalating threat from explosive devices, including mines of an improvised nature, resulting from conflict in three regions. They include a widening Boko Haram insurgency spilling over from Nigeria into the Lake Chad region and an increasingly violent separatist insurgency in the Anglophone North West and South West regions. The extent of the area affected by explosive devices is unknown. In all three regions, the main threat appears to stem from explosive devices, including victim-activated and remotely detonated devices, placed on an ad hoc basis on roads and sites frequented by civilians, not from minefields.¹

The United Nations reported that more than 10 improvised explosive device (IED) incidents occurred every month during 2021. It said attacks targeting civilians increased in the south-west during the last quarter of 2021 and reported 35 incidents in the north-west region in October 2021.² The UN reported 13 IED incidents in July 2022, seven in the north-west and six in the south-west.³ Casualties inflicted by explosive devices linked to the five-year old Anglophone insurgency escalated sharply in 2020 and 2021.⁴

Five police officers and three gendarmes were reportedly killed in the north west region in November 2021 when their vehicle detonated an improvised device.⁵ A roadside explosive device struck a military convoy near the North Western town of Mbengwi in January 2021 killing four

soldiers and a government official.⁶ The attack occurred a month after Cameroon's military reported that it had cleared six devices placed along a major road in the south-west that was regularly used by troops.⁷ Cameroon's Defence Minister Joseph Beti Assomo said in May 2021 that IEDs in western Cameroon had killed 24 people in the preceding two weeks and that the military was seizing or destroying them on an almost daily basis.⁸

In August 2020, customs authorities in northern Cameroon intercepted 207 improvised devices weighing more than two tons being transported across the border from Nigeria. In the second half of 2020, customs officers also seized large quantities of hydrogen peroxide and other chemicals used in producing IEDs.⁹

A senior army officer commented in 2017 that some roads in areas bordering Nigeria were "riddled with mines."¹⁰ A Cameroonian analyst commented that insurgents were using "homemade mines" with increasing frequency on roads and in houses.¹¹ The effect has been to reduce access for humanitarian organisations working in the area. International Organization for Migration (IOM) personnel who visited the Far North region in September 2018 were denied permission to visit a number of towns in Mayo-Tsanaga,¹² a department bordering Nigeria, because of the presence of mines and reports of kidnappings.¹³

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Cameroon does not have a functioning mine action programme. Mine clearance and explosive ordnance disposal (EOD) are mainly the responsibility of the Cameroon Military Engineer Corps. Cameroon's gendarmes and police officers have also attended training courses for tackling IEDs.¹⁴

1 UNICEF, "Cameroon Humanitarian Situation Report No. 2", February 2021, accessed at: <https://uni.cf/33TBRCs>.

2 United Nations Office for the Coordination of Humanitarian Affairs (OCHA), Cameroon Humanitarian Bulletin, Issue No. 29, January 2022, p. 3.

3 UN Office for the Coordination of Humanitarian Affairs, Cameroon Situation Report, 13 July 2022, p. 3.

4 "Cameroon: Violence spirals in Anglophone region", Ake Intel Department, 3 March 2021.

5 B. Etahoben, "Landmine explosion kills eight security officers in north west Cameroon", HumAngle, 15 November 2021.

6 J. Kouam, "Roadside bomb kills five in Cameroon's restive North West region", Reuters, 6 January 2021.

7 "Cameroonian forces dismantle explosive devices in restive Anglophone region", Xinhua, 14 December 2020.

8 M. E. Kindzeka, "Military says rebels turn to IEDs as numbers fall", Voice of America, 11 May 2021.

9 "La douane camerounaise intercepte 2000 litres d'un produit entrant dans la fabrication des Engins explosifs improvisés", Agence ecofin, 21 December 2020; P. N. Ngouern, "Cameroun: saisie record par la douane de plus de deux tonnes d'engins explosifs improvisés", Le360afrique.com, 31 August 2020.

10 P. Kum, "Landmine explosion kills two Cameroon soldiers", Anadolu Agency, 28 September 2017, at: <https://bit.ly/2LxKjQ0>.

11 "Boko Haram landmines inflict heavy toll on Cameroon", Latin American Herald Tribune, 30 May 2019.

12 The towns were Talla-Katchi, Assighassia, Zéméné and Cherif Moussari.

13 IOM, "Cameroon, Far North Region, Displacement Report, Round 15, 3-15 September 2018", p. 8.

14 "Cameroun: formation de 1 000 policiers et gendarmes à la lutte contre les engins explosifs improvisés" Xinhua, 20 June 2019.

Cameroon informed the United Nations in 2019 that casualties from mines and improvised devices had increased 43% in the previous year requiring a change of approach by the government. It appealed for international assistance but provided no information about any action to address the issue.¹⁵ However, Cameroon has not reported systematically on incidents involving improvised explosive devices or identified incidents involving victim-activated devices that constitute mines of an improvised nature.

In the past five years, the Army has received military training in demining and counter-IED measures, mainly from the France and the United States.¹⁶ A twitter feed by the US mission in Yaoundé in May 2021 reported provision of equipment for countering IEDs and training.¹⁷

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Cameroon in order to minimise potential harm from clearance.

INFORMATION MANAGEMENT AND REPORTING

As at September 2022, Cameroon had yet to submit an Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report covering the previous calendar year or for previous years, since its last Article 7 report which was submitted in 2009.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Cameroon did not report results of clearance and EOD conducted by its Army engineers.

ARTICLE 5 DEADLINE AND COMPLIANCE



Cameroon's Article 5 deadline to destroy all anti-personnel mines in mined areas under its jurisdiction or control expired on 1 March 2013. It has not sought to extend the deadline and is therefore in violation of the Convention.

Cameroon has not submitted an Article 7 report since August 2009 when it reported there were no areas of mine contamination under its jurisdiction or control. In view of the casualties reported by Cameroon from mines and/or victim-activated mines of an improvised nature, Cameroon needs to revise its position.

Under the APMBC's agreed framework, Cameroon should immediately inform all states parties of any newly discovered anti-personnel mines following the expiry of its Article 5 deadline in 2013 and ensure their destruction as soon as possible. It should also submit a request for a new Article 5 deadline, which should be as short as possible. Cameroon must continue to fulfil its reporting obligations under the convention, including on the location of any suspected or confirmed mined areas under its jurisdiction or control and on the status of programmes for the destruction of all anti-personnel mines within them.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Cameroon does not have plans in place to address residual contamination once its Article 5 obligations have been fulfilled.

15 Cameroon statement to the United Nations General Assembly, New York, 23 October 2019.

16 "Military Cooperation: mine clearing training (Sept. 19-30th 2016)", French embassy in Yaoundé webpage at: <http://bit.ly/2Z3ShnY>; and M. E. Kindzeka, "Cameroon Vigilantes Hunt for Boko Haram Landmines", Voice of America News, 4 March 2016, at: <http://bit.ly/2XZGxGM>.

17 US Embassy Yaoundé, @USEmbYaounde, 8 May 2021.

ARTICLE 5 DEADLINE: 1 JANUARY 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

**ANTI-PERSONNEL (AP)
MINE CONTAMINATION: MEDIUM**

NATIONAL AUTHORITY ESTIMATE

77.6KM²

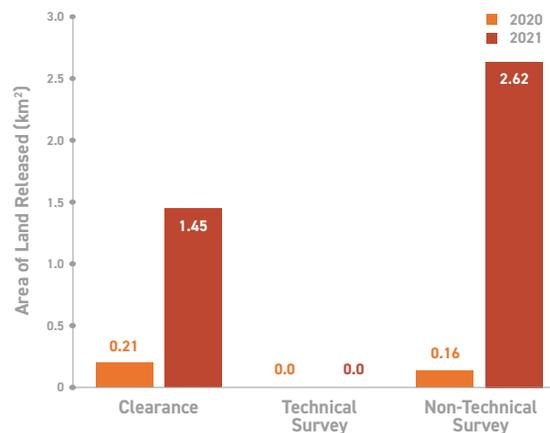
AP MINE
CLEARANCE IN 2021

1.45KM²

AP MINES
DESTROYED IN 2021

19

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

The European Union PRODECO programme which had funded mine action operations since 2017 officially ended in April 2022, although demining operations concluded already in October 2021. Operations have been at a standstill ever since as Chad seeks to reach a new agreement with an international donor for financial support. At the Anti-Personnel Mine Ban Convention (APMBC) Intersessional meetings in June 2022, Chad presented a three-year work plan which made clear it did not expect to complete mine clearance within its extended Article 5 deadline.

RECOMMENDATIONS FOR ACTION

- Chad's government should provide funding for continuing non-technical survey pending conclusion of a new agreement with an international donor to fund operations.
- The National High Commission for Demining (HCND) should ensure that demining assets are deployed to clear areas with known mine contamination.
- Chad should intensify and report on resource mobilisation to secure and diversify funding and attract international technical and operational support.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	Chad provided estimates of contamination broken down into confirmed hazardous areas (CHAs) and suspected hazardous areas (SHAs) for the first time in 2021. After a series of sharp fluctuations in earlier annual contamination estimates, Chad assessed its contamination in 2020 and 2021 at around 77km ² .
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	4	Chad's national mine action authority coordinates the sector and carried out further restructuring in 2019 to increase efficiency. The government pays salaries of national staff in the mine action sector but operations remain totally dependent on international funding.
GENDER AND DIVERSITY (10% of overall score)	3	4	Chad's last Article 5 deadline extension request did not address gender and diversity and at a point when the mine action has experienced major cuts in human resources they remain low on Chad's list of mine action priorities. The HCND employed nine women among more than 200 employees in 2019, and implementing partners who employ their staff on secondment from the HCND similarly have low numbers of women staff, with very few in operations.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	A clean-up of Chad's database by the Swiss Foundation for Mine Action (FSD) continued in 2020 and into 2021 and verification of survey results led to cancellation of more than 155,000m ² , but in 2021, only a year after Chad announced sharply reduced estimates of its mine challenge, down to 42km ² , it assessed mine contamination at almost double that amount.
PLANNING AND TASKING (10% of overall score)	4	4	Chad lacks a detailed mine action strategy but submitted an Article 5 deadline extension request in August 2019 setting out only general goals for survey and clearance that need to be enhanced by detailed annual work plans. Its ability to achieve its goals are dependent on attracting international donor support.
LAND RELEASE SYSTEM (20% of overall score)	6	5	Chad has national standards in place, which were updated by Humanity and Inclusion (HI) in 2017. These are said to comply with the International Mine Action Standards (IMAS). FSD completed the revision of 17 national standards in 2021.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	3	3	The progress of Chad's survey and clearance is unclear as official data bears little relation to available operator data. Chad reported releasing 2.3km ² through non-technical survey and 1.5km ² through clearance but it was unclear how much related to activity conducted in 2021 or if the totals included data relating to results of activities conducted in the previous year but only uploaded to the database in 2021.
Average Score	4.4	4.3	Overall Programme Performance: POOR

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- National High Commission for Demining (HCND)

NATIONAL OPERATORS

- HCND

INTERNATIONAL OPERATORS

- Humanity and Inclusion (HI)
- Mines Advisory Group (MAG)

OTHER ACTORS

- Swiss Foundation for Mine Action (FSD)
- Secours Catholique et Développement (SECADEV) (Victim Assistance)

UNDERSTANDING OF AP MINE CONTAMINATION

After years of fluctuating mine contamination estimates, Chad's assessment of its mine contamination in 2021–22 has settled on an estimate of 77km².¹ This marks a significant reduction from estimates in the Article 5 deadline extension request Chad submitted in August 2019 which said it had 137 mined areas affecting 111km².²

1 Presentation of Chad, Individualised Approach side-event, Intersessional Meetings, Geneva, 20 June 2022.

2 Revised Article 5 deadline Extension Request, August 2019, p. 9.

Chad reported in 2022 that it had anti-personnel mined area covering 77.6km² (see Table 1),³ a small drop from the 78.7km² reported a year earlier.⁴ The latest estimate comprises 72 confirmed hazardous areas (CHAs), the same number as at the end of 2020, covering a fractionally lower area of 56km², and 48 suspected hazardous areas (SHAs) covering 21.7km², a reduction of two SHAs and 1km². Maps accompanying the Article 5 deadline extension request identify most mines in Tibesti as being around Aouzou, Bardai, south-west of Goubonne, Wour, and Zouzou; in Borkou, particularly around Faya and Yarda; in Ennedi West, close to Fada; and one mined area each in the southern province of Moyen Chari and western Chari Baguirmi.⁵ Chad reports that Ennedi West's Wadi Doum minefield alone covers 16.4km².⁶

Table 1: Anti-personnel mine contamination (at end 2021)⁷

Province	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Borkou	9	13,491,891	8	2,266,963	15,758,854
Ennedi	12	18,220,782	2	361,798	18,582,580
Tibesti	51	24,224,623	38	19,049,801	43,276,424
Totals	72	55,937,296	48	21,678,562	77,615,858

However, Chad's latest Article 7 transparency report, submitted in June 2021, noted that a clean-up of its database was continuing and that its estimate of contamination would undergo further changes.⁸ Data relating to Tibesti in particular, which accounts for more than half the current estimated total mined area, may require revision. The province has not been surveyed for a decade and then only partially.⁹

Chad reports a significant challenge from explosive remnants of war (ERW). It asserts that it has eliminated the problem of cluster munitions in all areas except Tibesti. It reported in June 2022 that it has 28 hazardous areas containing explosive ordnance contamination and covering 255,663,167m² in nine provinces: Borkou, Ennedi, Kanem, Lac, Ouaddaï, Salamat, Sila, Tibesti, and Wadi Fira.¹⁰

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Chad's mine action programme is coordinated by the National High Commission for Demining (Haut Commissariat National de Déminage, HCND) which comes under the Ministry of Economy and Development Planning.¹¹ The National Demining Centre (Centre National de Déminage, CND), which earlier conducted clearance operations, appears to have been dissolved. The headquarters is supported by four regional centres and two sub-centres.¹²

The HCND is responsible for preparing a national demining strategy and annual work plans, and proposing a budget to support their implementation.¹³ Chad's 2019 Article 5 deadline extension request observed that its mine action programme had lacked a strategic vision, operational planning, and effective coordination, weakening its credibility nationally and internationally.¹⁴

A government decree in July 2017 ordered the HCND to restructure and it reduced the number of personnel by more than half from 744 to 329. By the time Chad submitted its revised Article 5 extension request in August 2019, the HCND reported having 320 staff, a number that was unchanged at the end of the year.¹⁵ A June 2019 decree provided for re-organisation, resulting in four main divisions covering: Operations and Logistics, Planning, Administrative and Financial Affairs, and Human Resources.¹⁶ Operators say constant changes in coordination staff have hampered efficiency.¹⁷

3 Presentation of Chad, Individualised Approach side-event, Intersessional Meetings, Geneva, 20 June 2022.

4 Article 7 Report (covering 2020), p. 5.

5 Revised Article 5 deadline Extension Request, August 2019, Annexes 5–9.

6 Presentation of Chad, Individualised Approach side-event, Intersessional Meetings, Geneva, 20 June 2022.

7 Ibid.

8 Article 7 Report (covering 2020), p. 4.

9 Convention on Cluster Munitions (CCM) Article 4 deadline Extension Request, 30 May 2022, p. 3.

10 Presentation of Chad, Individualised Approach side-event, Intersessional Meetings, Geneva, 20 June 2022.

11 Article 5 deadline Extension Request, April 2019, p. 9.

12 Ibid., p. 12. The four centres are Abéché (Ouaddaï), Bardai (Tibesti), Fada (West Ennedi), and Faya-Largeau (Borkou region); the two sub-centres are at Am-timan (Salamat) and Zouar (Tibesti).

13 Article 5 deadline Extension Request, April 2019, p. 10.

14 Ibid., p. 26.

15 Ibid., p. 11; and emails from Sultani Moussa, HCND, 14 May 2019 and 27 April 2020.

16 Article 5 deadline Extension Request, April 2019, p. 10.

17 Email from Seydou Gaye, HI, 3 June 2020.

Government funding for mine action is limited to payment of salaries for national staff. The HCND reported payment of up to approximately US\$1.5 million in 2019¹⁸ and has committed to paying \$3.4 million for three years over 2022–24.¹⁹ However, the government's persistent non-payment of salaries in previous years negatively affected sector performance. A long-running strike by deminers in 2017 gave rise to threats by former deminers that prevented operations in areas of Tibesti earmarked for survey and clearance.²⁰

ENVIRONMENTAL POLICIES AND ACTION

It is not known whether Chad has a national mine action standard on environmental management and/or a policy on environmental management. It is also not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of anti-personnel mines in order to minimise potential harm from clearance. Mines Advisory Group (MAG) reported its teams operated in accordance with relevant IMAS on protection of the environment.²¹

GENDER AND DIVERSITY

Gender and diversity are not priority issues for the HCND. Chad's 2019 Article 5 deadline extension request did not address the issue. The HCND reported employing nine women among its 207 staff in 2019, the last year for which it provided information. They were employed in a range of management, administrative, and field roles and included the HCND's assistant director, the administration and finance assistant director, and the head of risk education.²²

The low level of female employment in the HCND carried over to international demining organisations, which take staff on secondment from the national authority. In 2020, the last year before operators started winding down activities under the PRODECO programme, MAG said it employed six women among its ninety-one staff in 2020, reporting female staff made up 21% of its 23 country office staff but had only one woman among 68 staff working in field operations. MAG's female deminer, who was also the first woman in Chad to attain an explosive ordnance disposal (EOD) Level 3 certification, was employed as a team leader.²³ Humanity and Inclusion (HI)'s humanitarian mine action programme in Chad employed only one woman among its 76 personnel. The female staff member worked as a community liaison officer.²⁴

INFORMATION MANAGEMENT AND REPORTING

The HCND has an Information Management System for Mine Action (IMSMA) database which, under the European Union-funded PRODECO project, operated with the support of the Swiss Foundation for Mine Action (FSD). Poor maintenance and shortages of trained information technology (IT) staff meant data available had become unreliable because of lost reports and duplication. FSD started a clean-up of the database in 2017, which resulted in cancellation of large numbers of duplicate entries.²⁵ The clean-up cancelled a total of 35 areas from the database over the course of the PRODECO programme totalling 2.5km², including eight areas deleted in 2021 alone.²⁶

To improve the quality of reporting and data, the HCND, with FSD support, introduced a system of comprehensive weekly and monthly reporting for the operators. FSD conducted two missions to Borkou province in 2020 to confirm non-technical survey results as well as a series of quality assurance (QA) and quality control (QC) missions to Borkou and Ennedi provinces. By the end of 2020, FSD gave the quality of data an informal mark of "6 out of 10".²⁷ It also supported the HCND by drafting Chad's Article 7 reports and by building a website for the HCND. The website had not been brought online as of mid 2022 because of lack of management interest.²⁸

18 Emails from Souttani Moussa, HCND, 14 May 2019 and 27 April 2020.

19 Presentation of Chad, Individualised Approach side event, Intersessional Meetings, Geneva, 20 June 2022.

20 Email from Romain Coupe, MAG, 4 March 2019; "Tchad: grève des démineurs restés 10 mois sans salaire", ("Chad: deminers strike after 10 months without pay"), Agence de Presse Africaine, 10 May 2017, at: <http://bit.ly/30Cz25g>; and email from Julien Kempeneers, HI, 26 September 2017.

21 Email from Gérard Kerrien, Country Director, MAG, 4 April 2022.

22 Emails from Souttani Moussa, HCND, 14 May 2019 and 29 May 2020.

23 Email from Gerard Kerrien, MAG, 20 May 2021.

24 Email from Marie-Cécile Tournier, Programme Director, HI, 2 June 2021.

25 Email from Moussa Soltani, HCND, 27 April 2020.

26 Email from Eugenio Batsini, Programme Manager, FSD, 28 April 2022.

27 Email from Olivier Shu, Senior Technical Adviser, FSD, 18 May 2021.

28 Email from Eugenio Batsini, FSD, 28 April 2022.

PLANNING AND TASKING

Chad acknowledged in the Article 5 deadline extension request submitted in August 2019 that its mine action programme had lacked a strategic vision, operational planning, and effective coordination.²⁹ The request set out some very general goals and approximate timelines for survey and clearance, with a particular emphasis on Tibesti province (see Table 2) but did not set out an annual work plan or guide operations. From 2017 to 2021, Chad's mine action consisted of the PRODECO programme, which never operated in Tibesti due to security considerations. A Plan of Action for 2020–24 stated it was not possible to set detailed plans in the absence of clear data about the location and extent of contamination.³⁰

Table 2 Planning for the Extension Period 2020–25³¹

Region	Activities	Areas to be addressed	Timeline
Borkou	NTS, TS, clearance	39	January 2020–September 2021
Chagri	NTS, TS, clearance	1	January 2020–September 2021
Ennedi	NTS, TS, clearance	7	July 2020–December 2024
Moyen-Chari	NTS, TS, clearance	1	January 2020–September 2021
Tibesti	NTS, TS, clearance	89	January 2020–December 2024

NTS = Non-technical survey TS = Technical survey

The HCND prioritises tasks according to requests from local authorities. Under the PRODECO programme, it issued task orders to operators usually after receiving their input on technical and resource requirements of the task. Operators were usually able to physically review tasks with the HCND and local authorities prior to deploying staff.³² HI said it prioritised tasks according to local community development priorities.³³

Chad unveiled a three-year work plan for 2022–24 at the Intersessional meetings in June 2022, but acknowledged at the time that it had no funding to implement it. The plan proposed to deploy nine "units", three to each of the Borkou, Ennedi and Tibesti regions, to survey and clear priority minefields. The work plan set out detailed annual targets for tackling a total of 33 CHAs and all 48 SHAs, including 22.6km² in 2022, 25.8km² in 2023, and 24.8km² in 2024 for a total of 73km². It also identified a number of priorities: in West Ennedi it planned that teams would install permanent marking of the Wadi Doum minefield and clear all other mined areas; in Tibesti, operations would focus on the Zouarké area covering important communications routes for the towns of Aouzou and Bardai, the main population centres in the extreme north. The plan projected total costs of €15.6 million, of which €3.4 million would be provided by Chad's government for salaries and administrative costs and €12.2 million would be required from international donors to fund operating costs.³⁴

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Chad's national mine action standards are believed to be consistent with the International Mine Action Standards (IMAS). HI started a review of Chad's standards in 2016 and reported in September 2017 that 11 national mine action standards had been updated and issued, following HCND approval.³⁵ FSD also conducted a review of standards,³⁶ which it completed in November 2021 and in the course of which it revised 17 standards.³⁷ As at time of writing, the timeframe for the rollout of the revised standards was unclear. The HCND said it planned to update national standards for land release, supervision of organisations, and quality assurance, but gave no details.³⁸

²⁹ Article 5 deadline Extension Request, April 2019, p. 30.

³⁰ HCND, Provisional Plan of Action 2020–2024, July 2018, p. 24.

³¹ 2019 Article 5 deadline Extension Request, pp. 33–34.

³² Email from Daniel Davies, MAG, 27 April 2020.

³³ Email from Seydou Gaye, HI, 3 June 2020.

³⁴ Presentation of Chad, Individualised Approach side event, Intersessional Meetings, Geneva, 20 June 2022.

³⁵ Email from Julien Kempeneers, HI, 5 September 2017.

³⁶ Email from Gérard Kerrien, MAG, 4 April 2022.

³⁷ Email from Eugenio Balsini, Programme Manager, FSD, 28 April 2022.

³⁸ Email from Moussa Soltani, HCND, 27 April 2020.

OPERATORS AND OPERATIONAL TOOLS

Mine action operations between 2017 and 2021 were conducted under the auspices of the EU-funded PRODECO project. The conclusion of that project without agreement on a successor or alternative source of donor funding appeared to leave Chad without any active survey and clearance capacity by the start of 2022.

The HCND can draw on a pool of trained demining personnel. In 2020, the last year it provided data to Mine Action Review, the HCND reported having four manual teams with 72 deminers, two EOD teams, two non-technical survey teams, and two mechanical demining units.³⁹ Chad's 2022–24 work plan said it could deploy three clearance teams if the government decided to fund operations.⁴⁰ FSD conducted a clean-up of the HCND's technical equipment storage facilities in the capital and Faya Regional Centre, checking all metal detectors and other equipment and separating out the equipment that was no longer in working order. FSD said the operation left the HCND with sufficient equipment for two demining teams.⁴¹

FSD started 2021 with a total of 12 people (four international staff, four national programme staff, and four support

personnel)⁴² but by the end of the year had reduced to an expatriate programme manager, two national administrative assistants, and an IT specialist. Its activities in 2021 focused on continued clean-up of the database and providing IT training for the HCND.⁴³

HI's mine action programme in Chad also cut back operations in 2021. It had employed three multi-task teams (MTTs) with 35 deminers and a five-person non-technical survey team and a mechanical team in 2020. HI worked on mine and battle area tasks, mainly in Ennedi West province, and particularly in the Fada and Wadi Doum areas.⁴⁴

MAG started 2021 with around 40 staff, including 13 internationals, continuing to work in the Fada and Kalait areas of West Ennedi. It deployed three manual teams with 36 staff, a community liaison team and a mechanical demining team operating an Armtrac model 100-350 N/H 12 demining machine between January and August 2021. This was the last clearance work conducted by MAG under the PRODECO project and MAG wound down its operations closing the year with a total of 11 staff, including five internationals.⁴⁵

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Chad reported that it released a total of 3.71km² in 2021, far exceeding the 0.37km² released in COVID-affected 2020. The total reportedly included 2.26km² cancelled through non-technical survey and 1.45km² through clearance. In the course of those operations, Chad reported it destroyed 15 anti-personnel mines, one anti-vehicle mine, and 103 items of UXO.⁴⁶ Those results, however, were inconsistent with the available operator data. MAG, one of the two international operators working in 2021, said it released a total of 0.6km² through survey and clearance in 2021.⁴⁷

SURVEY IN 2021

Chad said it cancelled eight areas totalling 2.62km² by non-technical survey in 2021, of which seven were released by HCND with technical support from FSD. The eighth area, covering 78,025m² was reportedly cancelled by MAG.⁴⁸

MAG said that it conducted some non-technical survey in 2021, assessing an area in Torboul in West Ennedi, which was suspected as contaminated but not listed as SHA in the database. However, MAG said the survey did not find any items and it did not cancel any areas in 2021. It reported conducting technical survey with an Armtrac machine in the Fada district of West Ennedi and reducing 480,172m².⁴⁹

CLEARANCE IN 2021

Chad reported clearing a total of 1.45km² in 2021, attributing 0.76km² to clearance by HI in Ennedi and Borkou and the remaining 0.69km² to clearance by MAG conducted entirely in Ennedi.⁵⁰

39 Ibid.

40 Presentation of Chad, Individualised Approach side event, Intersessional Meetings, Geneva, 20 June 2022.

41 Email from Eugenio Balsini, FSD, 28 April 2022.

42 Email from Olivier Shu, FSD, 18 May 2021.

43 Ibid.

44 Email from Marie-Cécile Tournier, HI, 2 June 2021.

45 Email from Gérard Kerrien, MAG, 4 April 2022.

46 Article 7 Report (covering 2021), Form 5.

47 Email from Gérard Kerrien, MAG, 4 April 2022.

48 Article 7 Report (covering 2021), Form 5.

49 Email from Gérard Kerrien, MAG, 4 April 2022.

50 Article 7 Report (covering 2021), Form 5.

MAG reported that it cleared a total of just under 0.1km² 2021, destroying 19 anti-personnel mines (see Table 3) before closing down its demining operations as the PRODECO programme came to an end. MAG had cleared 90,889m² of Fada's Haridjalla 1 minefield in 2020 and clearance in 2021 allowed release of a total area of 132,542m².⁵¹ HI expected to work in 2021 on tasks in Delbo and Wadi Ewou in addition to reinforcing the marking around Wadi Doum but it did not report on the results of its 2021 activities.⁵²

Table 3: Mine clearance in 2021 (operator data)⁵³

Operator	Province/district/MF	Areas released	Area released (m ²)	Anti-personnel mines destroyed
MAG	Ennedi/Fada/Haridjalla 1	1	*41,653	14
	Ennedi/Fada/Haridjalla 2	1	1,478	0
	Ennedi/Fada/Chekinoura	1	54,296	5
Totals		3	97,427	19

* MAG released a total of 132,542m² in Haridjalla 1 in October 2021 but this included 90,889m² cleared in 2020.

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC and in line with the fourth extension (for five years) of its clearance deadline, Chad is required to destroy all anti-personnel mines under its jurisdiction or control as soon as possible, but not later than 1 January 2025.

On its present trajectory, Chad's prospects for meeting its revised Article 5 deadline or the Oslo Action Plan commitment are slim. Mine action in Chad was at a standstill in 2022 after the closure of the EU-funded PRODECO programme and the absence of any renewal or replacement of international donor support. The HCND prepared a three-year work plan for 2022–24⁵⁴ setting annual benchmarks for the number of CHAs and SHAs to be tackled and detailing projected costs but it also makes clear Chad did not expect to complete clearance within its fourth extension which expires on 1 January 2025. The plan provided for tackling all Chad's identified SHAs by the end of 2024 but only

33 of its 72 CHAs. Moreover, the document was academic at the time of release because of a lack of international funding to implement it. The government only provides funding to cover HCND salaries and as of the end of July 2022 no new agreement had been concluded international funding for operations.

Lack of data prevents a precise determination of what Chad was able to release in 2021 but a provisional tally of results since 2017, when Chad embarked on the €23 million PRODECO programme, shows it has cleared a total of 0.3km² of anti-personnel mined area (see Table 4) and destroyed 58 anti-personnel mines. Operators additionally cleared modest amounts of anti-vehicle mines, cluster munition remnants, and other unexploded ordnance. One of the main benefits of the programme may have been the clean-up of Chad's IMSMA database, providing a clearer understanding of its outstanding mine challenge.

51 Email from Gérard Kerrien, MAG, 4 April 2022.

52 Email from Marie-Cécile Tournier, HI, 2 June 2021.

53 Email from Gérard Kerrien, MAG, 4 April 2022.

54 Presentation of Chad, Individualised Approach side-event, Intersessional Meetings, Geneva, 20 June 2022.

Table 4: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km²)
2021	1.45
2020	0.2
2019	*0.0
2018	0.0
2017	0.0
Total	1.65

* A total of 423,934m² cleared in 2019 was anti-vehicle mined area only.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Chad has not begun planning for the management of residual contamination.

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

10 km²

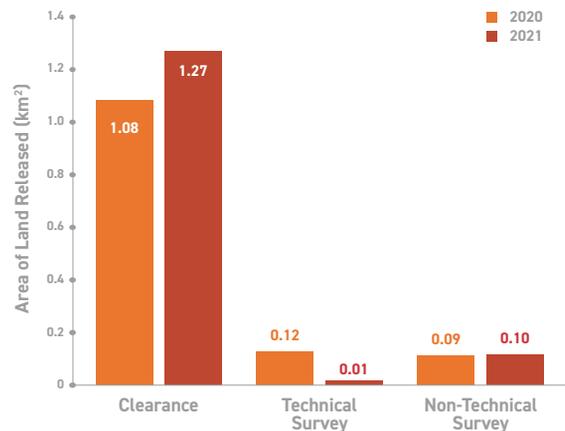
AP MINE CLEARANCE IN 2021

1.27 km²

AP MINES DESTROYED IN 2021

270

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

In 2021, Colombia requested and was granted a second extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline through to the end of 2025, although Colombia made it clear in the request that it will not complete mine clearance by that time. Clearance output increased in 2021 compared to the previous year despite restrictions imposed by civil unrest and protests all over the country in the first semester of 2021, as well as intermittent closures due to the COVID-19 pandemic. Improvements were also made to the mine action programme throughout the year with the Office of the High Commissioner for Peace (OACP – AICMA Group) issuing 17 new national mine action standards (NMAS). The new NMAS allow for more evidence-based survey and clearance. However, numerous challenges to efficient and effective land release persist, and it remains to be seen how the mine action programme will adapt.

RECOMMENDATIONS FOR ACTION

- Colombia should further endeavour to conduct a baseline survey to elaborate a more meaningful and evidence-based understanding of contamination while continuing to clean the data on “events” in the Information Management System for Mine Action (IMSMA) database.
- Colombia should establish a National Mine Action Platform (NMAP) for regular dialogue among all stakeholders, including donors, as recommended by the APMBC’s Committee on the Enhancement of Cooperation and Assistance, to collectively discuss progress, challenges, and support for Article 5 implementation in Colombia.
- The national programme should seek to further develop technical support to operators on land release in accordance with the new NMAS.
- Quality management of operations should be streamlined and targeted towards making operations more efficient rather than imposing unnecessary delays on operators. A specific space should be created as a matter of urgency for operators, the mine action authorities, and the Organization of American States (OAS) to discuss issues that arise in the monitoring process. As a priority the matrices that are used to evaluate demining operations should be reviewed.

- Colombia should proceed with the study on the effect of ageing on improvised anti-personnel mines in the country given the large proportion of non-functional mines being found during demining, and in order to provide data to inform decision making. Based on a risk analysis and clarity on the definition of “all reasonable effort”, a level of acceptability should be defined for residual contamination once Colombia has fulfilled its Article 5 obligations.
- Colombia should provide more detailed information on how it will mainstream gender and diversity considerations in its mine action programme, including with targets and timeframes.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	4	The precise extent of anti-personnel mine contamination remains unknown. While a nationwide baseline survey has yet to be conducted, non-technical survey is taking place in accessible areas and Colombia has developed guidance on establishing a baseline. Colombia is now presenting a more evidence-based estimate of remaining contamination that is at least partially based on survey. Of the areas surveyed Colombia estimated anti-personnel mine contamination as at end 2021 at 3.04km ² . Insecurity remains an obstacle to access of suspected mined areas and mines are still being emplaced in some areas by non-State armed groups (NSAGs).
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	7	6	There is strong national ownership in Colombia with overall responsibility for the mine action programme sitting with the OACP, and decision-making on demining the responsibility of a body within the Ministry of Defence. Roles and responsibilities at a national level are generally clear. Operators were actively consulted in the review of national standards, although Colombia would benefit from improved coordination mechanisms that are inclusive of all stakeholders in demining, including donors. In 2021, Colombia elaborated a resource mobilisation strategy and increased national funding for mine action.
GENDER AND DIVERSITY (10% of overall score)	7	7	Colombia has Gender Guidelines for Mine Action in place and gender is included within the framework of the new Strategic Plan for 2020–25. The needs of different groups must be considered during community liaison with gender-balanced teams according to the technical norm on risk education, and gender and diversity provisions are reflected in the land release technical norm. A woman heads the national authority and women make up 66% of the staff dedicated to mine action in the OACP – AICMA Group. However, among deminers overall this figure drops to only 3%. This proportion varies widely between operators, however, with only the military demining brigades not having any female deminers.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	Improvements have been made to information management in Colombia following a review of the IMSMA database. However, Colombia continues to rely on “events” where more recent survey data is unavailable as the main indicator of contamination even though these are beset with errors and are often cancelled or discarded once investigated. Discrepancies between operator data and figures from the national authority are also frequent, due to delays in information processing and quality control. Article 7 reports are submitted on a timely basis and the latest report also included information in relation to the implementation of the Oslo Action Plan.
PLANNING AND TASKING (10% of overall score)	6	5	Colombia has a five-year strategic plan through to 2025 and an operational plan for demining which includes land release targets although it is unclear how much will be released through survey and how much by clearance. Colombia has allocated all the tasks to operators that can be performed, but 129 municipalities remain inaccessible due to insecurity or contain areas where mine laying may reoccur. In such situations, risk education is being delivered. The updated annual targets in 2022–25 in Colombia’s latest Article 7 report only project to clear 3.15km ² of mined area. Prioritisation and task allocation continue to be an issue within the mine action programme, with operators often locked into inaccessible tasks or being deployed into new areas without prior consideration of their capacity. A new criterion for assigning tasks has been included in the new technical norms and will be aligned with performance indicators that will measure operators efficiency. It remains to be seen whether this will improve the situation once the technical norms have been implemented.

Criterion	Score (2021)	Score (2020)	Performance Commentary
LAND RELEASE SYSTEM (20% of overall score)	7	6	In 2020, Colombia developed a new set of 17 NMAS, which were developed in consultation with operators and other mine action stakeholders and are an important step in improving land release processes in Colombia. These include new technical norms on land release, survey, and information management. The NMAS were formally issued in 2021.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	5	Overall land release output rose in 2021, including for clearance of mined area. Colombia remains unlikely to meet its extended Article 5 deadline of 31 December 2025 based on progress to date and the extent of the remaining challenge.
Average Score	6.1	5.3	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Office of the High Commissioner for Peace (OACP – AICMA Group)

NATIONAL OPERATORS

- Humanitarian Demining Brigade (Brigada de Desminado Humanitario (BRDEH))
- Batallón de Desminado e Ingenieros Anfíbios (BDIAN) previously known as Marine Corps Explosives and Demining Group (Agrupación de Explosivos y Desminado de Infantería de Marina (AEDIM))¹
- Campaña Colombiana Contra Minas (CCCM)
- Humanicemos Desminado Humanitario (DH)

INTERNATIONAL OPERATORS

- Danish Refugee Council's Humanitarian Disarmament and Peacebuilding Sector, (DRC) previously known as Danish Demining Group (DDG)²
- The HALO Trust (HALO)
- Humanity and Inclusion (HI)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- Organization of American States (OAS) Comprehensive Mine Action Program (AICMA Program – OAS)
- Swiss Foundation for Mine Action (FSD)
- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

The precise extent of anti-personnel mine contamination in Colombia remains unknown. The OACP – AICMA Group reported that at the end of 2021 there was an estimated total of 3.04km² of anti-personnel mined area, of which 1.49km² was in confirmed hazardous areas (CHAs) and 1.55km² in suspected hazardous areas (SHAs). The contamination was spread across 12 departments and 64 municipalities.³ In 14 other departments, 187 municipalities are reported to have some anti-personnel mine contamination, but which has not been confirmed or cancelled. In total, as of end 2021, 26 of 32 departments and 251 of 1,122 municipalities in Colombia have some form of confirmed, suspected, or reported mined area (See Table 1 below). In sum, at the end of 2021, 21% of municipalities had anti-personnel mine contamination and 79% of municipalities were considered mine-free.⁴

While a nationwide baseline survey has yet to be conducted in Colombia, discussions on the possibility restarted in 2022.⁵ Nonetheless, the OACP, the OAS – AICMA Program, and the Swiss Foundation for Mine Action (FSD) consider that the dynamics of the Colombian conflict and the size of the country⁶ combine to preclude a nationwide baseline survey.⁷ For the OACP, the previous experience of the pilot project on the study of Socio-Economic Impact from APM and UXO EISEC (LIS), which was conducted between 2008 and 2010, led to improvements to the information management system, increased cartographic

1 The name AEDIM is still used in the Article 7 report (covering 2021) and in other official documents and websites.

2 The name DDG is still used in the Article 7 report (covering 2021) and in other official documents and websites.

3 Table 1 in emails from Diana Marisol Peñalosa, Advisor, OACP – AICMA Group, 23 and 26 August 2022. The figures do not match those in the latest Article 7 report (for 2021), which total 2.95km². Article 7 Report (covering 2021), Form D, pp. 41–43.

4 Email from Mariany Monroy Torres, Coordinator, and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022. For the OACP this is important as it reflects the advances of the Peace Agreement with the FARC–EP.

5 Email from Arturo Bureo, Operations Manager, HI, 30 June 2022.

6 1,141,748 square kilometres.

7 Any baseline survey conducted in Colombia is considered to be a waste of scarce resources and would be out of date very quickly as a consequence of the evolution of the conflict and the NSAGs continuing to lay mines. Emails from Yessika Morales, Coordinator, OACP – AICMA Group, 20 July 2022; Mariany Monroy Torres, and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022; Tammy Hall, General Coordinator, OAS Mine Action Program, Department of Public Security, 20 September 2022; and Angela de Santis, Country Director, FSD Colombia, 13 September 2022.

information, and harmonisation on victim accidents data. In addition, the new NMAS on land release, the increase in operator capacity to carry out non-technical survey, and the improved security conditions in mine-affected municipalities as a result of the Final Peace Agreement with the FARC-EP in 2016 make it possible to more accurately determine the contamination based on evidence from the primary source: the communities themselves.⁸ Thus the primary source of information for tasking of demining operators continues to be Information Management System for Mine Action (IMSMA) "events". However, these have proven to be a generally unreliable source for contamination and are frequently not directly related to a hazardous area.⁹

Table 1: Anti-personnel mined area by department (at end 2021)¹⁰

Department	Affected municipalities	CHA (m ²)	SHA (m ²)	Total area (m ²)	Affected municipalities without data on size
Antioquia	43	128,456	261,407	389,863	33
Arauca	7	0	0	0	7
Bolívar	16	16,599	34,088	50,687	15
Boyacá	6	0	0	0	6
Caldas	4	52,536	141,736	194,272	0
Caquetá	11	53,981	179,627	233,608	4
Casanare	4	0	0	0	4
Cauca	20	81,066	16,236	97,302	12
Cesar	9	0	0	0	9
Choco	27	0	0	0	27
Cordoba	4	0	0	0	4
Guainía	1	0	0	0	1
Guaviare	4	0	0	0	4
Huila	3	280,349	241,547	521,896	0
Guajira	7	0	0	0	7
Meta	12	591,734	172,206	763,940	3
Nariño	22	2,301	5,030	7,331	20
Norte de Santander	17	0	0	0	17
Putumayo	7	55,413	120,447	175,860	0
Risaralda	2	0	0	0	2
Santander	8	55,922	113,856	169,778	2
Sucre	1	0	0	0	1
Tolima	5	109,857	198,429	308,286	1
Valle del Cauca	8	62,741	68,833	131,574	5
Vaupés	1	0	0	0	1
Vichada	2	0	0	0	2
Totals	251	1,490,955	1,553,442	3,044,397	187

8 Emails from Yessika Morales, OACP – AICMA Group, 20 July 2022; Diana Marisol Peñalosa, OACP – AICMA Group, 23 and 26 August 2022; and Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022.

9 Emails from Tom Griffiths, HALO Trust Regional Director for Latin America, 20 June 2022; and Arturo Bureo, HI, 7 May 2021 and 30 June 2022.

10 The original total figures given by the OACP for Table 1 do not correspond to the raw data. The total figures were 1,770,494m² for CHAs and 1,400,162m² for SHAs for a grand total of 3,170,666m². Emails from Yessika Morales, OACP – AICMA Group, 20 July 2022; Diana Marisol Peñalosa, OACP – AICMA Group, 16, 23, and 26 August 2022.

A baseline of contamination is being constructed slowly and sporadically by demining operators in the municipalities in which they have been assigned. In 2020, the OACP – AICMA Group, with technical assistance from FSD, developed a study to update the national estimate of contamination for the purpose of the Article 5 deadline extension request, and in 2021 a monitoring and evaluation methodology with indicators, reference values, and analysis to compare the baseline of each indicator.¹¹ The OACP – AICMA Group has reported that in 2022 Colombia would continue to improve the “micro focalisation” methodology that allows work on “safe areas” in municipalities where the conflict is ongoing.¹²

For the AICMA Program – OAS, the first step on clarifying the contamination should be a desktop evaluation of existing areas in the database. Newly recorded areas identified by operators while conducting non-technical survey are more accurate and can be included as mined areas. But significant cancellation of areas recorded earlier, especially unconfirmed “events”, is likely.¹³ During 2021, new mined areas were recorded by the Colombian Campaign to Ban Landmines (CCCM), Danish Refugee Council (DRC), The HALO Trust, Humanity and Inclusion (HI), and Humanicemos DH.¹⁴

All the mines remaining in Colombia are said to have been laid by non-state armed groups (NSAGs) and all are of an improvised nature. According to The HALO Trust, mined areas in Colombia are low-density, nuisance minefields.¹⁵ Mines were planted in isolated rural areas to protect strategic positions; often coca cultivations and illegal gold mining sites. In other cases, they were laid by the side of communal paths,

which were used also by the military, as well as around hamlets, schools, on hills, and in riverbanks. The depth in which the mines were laid can vary between 10 and 13 centimetres.¹⁶ Humanicemos DH has reported in their area of operations the mined areas coincided with NSAGs' camps,¹⁷ while the CCCM has found that the patterns of minelaying corresponds to illicit cultivations areas as well as areas where the military stop and rest.¹⁸ The intended victims were the military or paramilitaries, local communities were often informed that certain areas were mined, though no specifics were typically given. This has led to a widespread belief that mines are everywhere and local people are afraid to use vast areas of land for fear of mines, despite scant firm evidence of their presence.¹⁹

As part of the Final Peace Agreement with the Fuerzas Armadas Revolucionarias de Colombia – Ejército del Pueblo (FARC-EP (2016), a tripartite mechanism (OACP/FARC-EP/United Nations Verification Mission (UNVMC), with technical support from the United Nations Mine Action Service – UNMAS) was established with a view to collecting all available information on areas that may have been contaminated by explosive ordnance (EO) in Colombia by former FARC combatants. The data, which is provided by ex-combatants, started to be collected in 2021.²⁰ A technical note on the information collection methodology was jointly developed by the OACP, the FARC (represented by the COMUNES party/Centro de Pensamiento y Diálogo Político, CEPDIPO), and the UNVMC.²¹ UNMAS acted as technical support to the UNVMC.²²

NEW CONTAMINATION

New minelaying by NSAGs continues to occur in Colombia. UNMAS in Colombia has stated that this included use amid the intensification of armed violence along the border with Venezuela and in the Pacific coast region.²³ In 2021, the most affected departments were Antioquia, Arauca, Cauca, Choco, and Norte de Santander.²⁴

Contamination may also have been laid across the border into Venezuela. The Venezuelan Minister of Defense has reported eight civilian deaths in early 2022 from improvised landmines said to have been produced in Colombia. The Minister also informed on the “deactivation” in 2021 of 100 improvised mines laid by FARC-EP dissidents, now called by the Venezuelan authorities as Terrorista Armado Narcotraficante Colombiano (TANCOL).²⁵

In April 2021, the Venezuelan government requested technical on-the-ground assistance from the United Nations to deactivate an undisclosed number of anti-personnel mines that had been discovered in the state of Apure, on the border with Arauca department in Colombia. It reported that two soldiers had died from anti-personnel mine blasts and that other nine were injured.²⁶ Venezuela declared itself free of anti-personnel mines in 2013, in compliance with Article 5 of the APMB.

11 Email from Angela de Santis, FSD Colombia, 13 September 2022.

12 Email from Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022.

13 Email from Tammy Hall, OAS Mine Action Program, Department of Public Security, 20 September 2022.

14 Emails from Francisco Moreno, Projects and Monitoring Director, CCCM, 15 June 2022; Caterina Weller, Programme Coordinator, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; Maria Sanz, Resource Mobilisation Manager, Humanicemos DH, 19 July 2022.

15 Email from Tom Griffiths, HALO Trust Latin America, 20 June 2022.

16 Article 7 Report (covering 2021), Form E.

17 Email from Maria Sanz, Humanicemos DH, 19 July 2022.

18 Email from Francisco Moreno, CCCM, 15 June 2022.

19 Email from Oliver Ford, Deputy Program Manager Colombia, HALO Trust, 6 August 2020; and Article 7 Report (covering 2019), Form D.

20 Email from Yessika Morales, OACP – AICMA Group, 20 July 2022.

21 Email from Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022.

22 UNMAS Colombia Newsletter, March 2021.

23 UNMAS Colombia Newsletter, January 2022.

24 ICRC, “Humanitarian Challenges 2022 Colombia”, p. 3, at: <https://bit.ly/3eeltVD>; and UNMAS Colombia Newsletter, February 2022.

25 “Venezuela informa de ocho muertes por minas antipersona en la frontera con Colombia”, *El País*, 11 February 2022, at: <https://bit.ly/3q608yl>.

26 Insight Crime, “Guerrillas colombianas exportan tácticas de minas terrestres a Venezuela”, 22 April 2021, at: <https://bit.ly/3AJ4lbc>; “La tensión armada crece en la frontera entre Colombia y Venezuela, con muertos y miles de desplazados”, *El País*, 26 April 2021, at: <https://bit.ly/3q9TPvH>.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In February 2019, in a restructuring of the Presidential Office, Descontamina Colombia,²⁷ through Presidential Decree 179,²⁸ was reallocated to the Office of the High Commissioner for Peace (OACP) and became Grupo AICMA, one of three working groups of the OACP.²⁹ A new Director, the High Commissioner for Peace, was appointed at the same time.³⁰ Presidential Decrees 179 and 1784,³¹ both issued in 2019, placed mine action as part of the strategy for formulating and developing the Peace Policy led by the OACP. With both decrees the OACP has all the functions of a National Mine Action Authority both at national and local levels.

In 2011, Decree 3750 created the Instancia Interinstitucional de Desminado Humanitario (IIDH an Inter Collegiate Body for Humanitarian Demining), which is composed of a representative from the Ministry of National Defence, another from the General Inspectorate of the Military Forces, and a third from the OACP – AICMA Group. It is responsible for recommending or suspending the certification of humanitarian demining organisations to the Ministry of National Defence as well as for prioritisation at national level of zones and municipalities to be progressively demined, as well as assigning demining tasks. The responsibility for drafting and adopting national mine action standards, their dissemination, implementation, and compliance was reassigned to the OACP in 2019 via Presidential Decree 1784 of 2019.³²

Operators report a largely enabling environment for mine action in Colombia, although the approval and decision-making process can be slow and would benefit from increased transparency between operators.³³

In 2021, the Geneva International Centre for Humanitarian Demining (GICHD), with support from the OACP – AICMA Group, issued a case study on the impact of mine action on

sustainable development in Colombia.³⁴ A second case study on mine action and the UN Sustainable Development Goals (SDGs) was started in 2021 but had not yet been completed as of writing. In July 2021, the GICHD conducted an assessment mission to evaluate the skills and capacities of the AICMA Program – OAS External Monitoring Component (CEM), and the quality of monitors and inspectors conducting external monitoring of demining operations on behalf of the Colombian Government. The results of this assessment have not been made public. In addition, DRC contracted the GICHD to conduct a gender and diversity assessment of its humanitarian mine action projects and activities in Colombia.³⁵

A proposed study on the effect of ageing on improvised anti-personnel mines, which is particularly pertinent to the Colombian context due to the large proportion of non-functional mines found, was shelved in 2021 as the process stalled due to a lack of political will.³⁶

The Organisation of American States (OAS) has been present in Colombia since 2003 providing technical and capacity support to the OACP – AICMA Group for mine action through its AICMA Program – OAS, in particular for humanitarian demining. On behalf of the OACP – AICMA Group and the Ministry of National Defence, it is responsible for external monitoring of demining in Colombia by almost all military and civilian operators.³⁷ The exception is with respect to Humanicemos DH, whose work is monitored by UNMAS.³⁸ The OAS cannot monitor Humanicemos DH due to donor restrictions (from the US Department of State, even though since November 2021 the FARC have been taken off the US list of foreign terrorist organisations).³⁹ The OAS, through the Group of Interamerican Monitors (GMI) of the Interamerican Defense Board,⁴⁰ evaluates demining personnel for accreditation. In addition, the AICMA Program – OAS monitors compliance with the NMAS and IMAS as well as

27 In April 2017, following the adoption of Presidential Decree 672 of 2017, the Dirección para la Acción Integral contra Minas Antipersonal – Descontamina Colombia was created replacing the Directorate for Comprehensive Mine Action (Dirección para la Acción Integral contra minas Antipersonal, DAICMA). Descontamina Colombia was ostensibly made Colombia's national mine action authority, with responsibility for formulating the strategic direction of mine action, coordinating and monitoring mine action at national and local level, applying technical guidance, regulating State and non-State operators, and elaborating and implementing national standards. In practice, it also served as the national mine action centre. The Name Descontamina is still used in some official documents.

28 Presidential Decree 179, 8 February 2019.

29 Presidential Decree 1784 of 4 October 2019 restructured for a second time in 2019 the Presidential Office. The other two working groups of the OACP are: Thematic Topics, and Legality and Coexistence. OACP, "Estructura Interna", undated, but last accessed 13 August 2022.

30 Emails from Arturo Bureo, HI, 18 July 2019; and Rupert Leighton, NPA, 15 July 2019; and Statement of Colombia, Committee on Article 5 Implementation, Geneva, 22 May 2019.

31 Presidential Decree 1784, 4 October 2019.

32 OACP – AICMA Group "Instancia Interinstitucional de Desminado Humanitario – IIDH," undated, last accessed 19 July 2022; Presidential Decree 1784, 4 October 2019; Ministry of National Defence, Decree 3750 of 2011.

33 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Oliver Ford, HALO Trust, 15 September 2022.

34 Emails from Angela Hoyos Ibarra, Advisor External Relations and Policy, GICHD, 16 June 2022; and Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022. The case study presents evidence of the transformative role of mine action in the country, identifying direct contributions to 16 SDGs and 83 of their associated targets. It approached thematic areas unique to the Colombian context, including the role of mine action in the Colombian peace process, the dynamic between mine action and the presence of illicit coca cultivation, and questions of land ownership and land-use rights. In contrast to previous studies, which only illustrated gender aspects, the Colombian study also addresses ethnic minority issues.

35 Email from Angela Hoyos Ibarra, GICHD, 16 June 2022.

36 Telephone interview with Pablo Parra, Chief of Mine Action Programme, and Gina Bernal, UNMAS, 14 July 2021.

37 Article 7 Report (covering 2021), Form H, p. 96.

38 Email from Tammy Hall, OAS Mine Action Program, Department of Public Security, 21 July 2022.

39 Email from Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022.

40 "Evaluación de nuevos operadores en el manejo, identificación y destrucción de artefactos explosivos (EOD)", at: <https://bit.ly/3dzdzFIP>.

operators' SOPs; and inspects released land before handover to local authorities and communities.⁴¹

FSD has been present in Colombia since 2016 and has provided advice through technical experts to the national mine action authority (NMAA) in areas such as explosive ordnance disposal (EOD), use of mine detection dogs (MDDs), mechanical demining, information management, environmental protection, operational efficiency, and hazard cartography. During 2021, FSD concentrated its support to the OACP – AICMA Group, on integrating the operational framework, information analysis and demining capacity into a broader strategy for an effective land release process.⁴² Support included the development of a monitoring and evaluation system and the new NMAS.⁴³ FSD provides ongoing operational support in the field and participates in accident and incident investigation committees.⁴⁴

UNMAS provides technical assistance to the national authority as well as training and capacity building with a focus on national operators.⁴⁵ In 2021, UNMAS provided technical assistance on information management to follow up the progress of humanitarian demining and provided training to the national authority on demining techniques and quality monitoring. Starting in 2021, UNMAS led the provision of an EOD IMAS Level 2 training, which led to the certification of 25 EOD operators, of whom seven were women and one was a former FARC-EP fighter.⁴⁶

UNMAS has worked closely with Humanicemos DH to support capacity development to enable it to become a fully self-sufficient operator. During 2021, UNMAS developed a standardised methodology for post-clearance impact assessments that can be used by all operators. The methodology was tested by the CCCM, HUMANICEMOS DH, and the Humanitarian Demining Brigade (BRDEH) in the municipalities of Algeciras, La Montañita, Puerto Asís, and Zambrano. The results showed illicit crop planting had reduced; roads were improved; requests for land restitution by farming families grew; and the pace of reforestation increased.⁴⁷ However, the methodology has not been formally submitted to the OACP, and the GICHD, The HALO Trust, and the CCCM are also developing similar methodologies. Once these are all complete, the OACP will agree with all stakeholders a unified methodology to be used by the sector.⁴⁸

In 2021, and since 2018, UNMAS as the leader of the Mine Action Area of Responsibility of the Protection Cluster, continued with the implementation of the regional coordination project in coordination with the OACP to improve humanitarian coordination, deploying nine people to the most mine-affected departments to facilitate the coordination of mine action. As a result, the nine departments included 164 mine-action related actions in their development plans, whose implementation benefited 23,000 people.⁴⁹

In addition, UNMAS in support of the UNVMC supported the national government, municipalities and community representatives in the development of a technical note to gather information on contamination and supported the elaboration of more than 80 reports on explosive ordnance contamination (including the number of devices, the type of explosive, the container used, and initiation and activation methods). These were based on the information provided by 22 former FARC-EP ex-combatants using field-based gathering of information based on the Format of Localization and Positioning of Events (FULE, which has been used by national authorities since 2004).⁵⁰ As mentioned previously, the methodology for the technical note and process was built jointly by the three parts of a Tripartite mechanism: the national government represented by OACP, the FARC delegates represented by the COMUNES party/CEPDIPO, and the UNVMC. UNMAS acted as technical support for UNVMC.⁵¹ The reports were given to the OACP – AICMA Group to inform national demining plans.⁵² UNMAS also supported the revision of the NMAS and drafted four technical notes on key issues, including treatment of human and archaeological remains found in contaminated areas and procedures for technical survey,⁵³ and FSD was also involved in the process.⁵⁴

Colombia has estimated the total cost of the mine action programme in 2020–25 will be almost US\$250 million, of which the government will fund 30%. Colombia plans to seek funding from the international community to cover the remainder.⁵⁵ Of this, the projected cost of demining activities is estimated at \$183 million, of which the government will fund \$55 million.⁵⁶ For demining, Colombia is seeking almost \$128 million from the international community to build the quality management capacity within the national authority, to fund civilian operators, and for equipment servicing and replacement for the military.⁵⁷

41 "Programa de Acción Integral contra Minas Antipersonal de la OEA (AICMA – OEA)", at: <https://bit.ly/3RDT3TD>; and email from Tammy Hall, OAS Mine Action Program, Department of Public Security, 20 September 2022.

42 FSD Annual Report 2021, Geneva, 2022, p. 19.

43 Article 7 Report (covering 2021), Form H, p. 96.

44 Email from Angela de Santis, FSD, 13 September 2022.

45 Article 7 Report (covering 2021), Form H, p. 96; and UNMAS Colombia Newsletter, February 2022.

46 UNMAS Annual Report 2021, pp. 47–48; and email from Pablo Parra, UNMAS Colombia, 19 September 2022.

47 UNMAS Annual Report 2021, pp. 47–48.

48 Email from Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022.

49 Email from Pablo Parra, UNMAS Colombia, 19 September 2022.

50 Email from Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022.

51 Ibid.

52 UNMAS Annual Report 2021, p. 48; see also: "Pilot project with ex-combatants will collect information on the location of anti-personnel mines in Colombia", UNMAS, 16 March 2022, at: <https://bit.ly/3AJt2eB>.

53 UNMAS Annual Report 2021, p. 48.

54 Email from Angela de Santis, FSD, 13 September 2022.

55 2020 Article 5 deadline Extension Request, pp. 86–87.

56 Ibid., p. 96.

57 Ibid., Annex 10 (exchange rate of US\$1 = COP3,430); and Article 7 Report (covering 2021), Form H, pp. 94–95.

In 2021, the OACP – AICMA Group received US\$1.3 million in national funding, a slight decrease from the \$1.4 million allocated in 2020. Of this funding, 82% was allocated to risk education and victim assistance. The BRDEH received US\$41 million in national funding and the Batallón de Desminado e Ingenieros Anfobios (BDIAN) received US\$1.15 million. As part of the national strategy for resource mobilisation, the OACP – AICMA Group helped raise US\$23.3 million in 2021, which covered 14 projects by 10 operators for demining, risk education, victim assistance, and technical assistance for the monitoring of demining operations. The resources were directly given to the operators by the donors.

In addition, during 2021, the OACP and the Presidential Counsellor's Office for Stabilisation renegotiated with the UN Multi Donor Fund for Peace Sustainability the inclusion of Mine Action within the framework of the Fund, which assigned US\$11.715 million for humanitarian demining, territorial management, and reintegration of FARC ex-combatants through Humanicemos DH.⁵⁸

Colombia does not have a platform in place which brings all stakeholders together to discuss the strengths and challenges of Article 5 implementation and coordination between national government entities is reported to be poor. The Swiss Embassy in Colombia has promoted a forum to bring together the OACP – AICMA Group, operators, and other partners from the mine action sector with the aim of eventually bringing in other donors and national entities.⁵⁹ Humanicemos DH reported starting to participate in the Swiss forum since July 2021, where demining stakeholders funded by the Swiss Government are encouraged to interact.⁶⁰ According to the CCCM and HI, only national operators receiving funding from the Swiss Government are part of this forum. According to the OACP, this is due to the Swiss international aid policy, which focuses on strengthening national capacities.⁶¹ The HALO Trust was not aware of the existence of the forum. HALO continues to advocate the establishment of a more effective strategic-level dialogue between the OACP – AICMA Group and its partners.⁶²

ENVIRONMENTAL POLICIES AND ACTIONS

Colombia has not produced a specific NMAS for environmental management in line with IMAS although Presidential Decree 1195 of 2017 outlines mitigation and correction measures that must be applied by operators when demining in national parks and other areas of ecological value. Operators are, in theory, expected to reforest in protected areas after clearance to mitigate environmental impact, but since the timeframe for reforestation is longer than for demining this may not be practicable.⁶³ According to the OACP – AICMA Group there have been inconsistencies in the application of Decree 1195 at regional and local levels. In response, the Group with support from FSD created a set of tools that clarify the obligations of demining operators and the process they must follow. The roles and responsibilities at local, regional, and national levels of environmental authorities are also clarified.⁶⁴

Several operators (CCCM, HI, Humanicemos DH, The HALO Trust, and DRC) have reported developing standing operating procedures (SOPs) in line with Decree 1195 of 2017, which they apply especially when working in environmentally protected areas.⁶⁵ DRC reported that, for several years now, it has been researching ways to mitigate the impact of demining in local communities. Today, deminers' camps all function with 100% energy generated from solar panels, and DRC has pledged to continue their use in new operations. In addition their environmental management SOP reflects internal humanitarian demining best practices for environmental management in land release operations, including the possible effects on soil, water, air, and flora and fauna.⁶⁶

GENDER AND DIVERSITY

Colombia, with the support of the GICHD, developed the Gender Guidelines for Mine Action in 2019 and reports that gender is mainstreamed within the framework of the new Strategic Plan 2020–25.⁶⁷ Data are disaggregated by gender, age, and ethnicity. The CCCM, DRC, The HALO Trust, HI, and Humanicemos DH all reported consulting women and children as well as men during non-technical survey and community liaison and employing women in their non-technical survey teams and or demining teams.⁶⁸

58 Email from Yessika Morales, OACP – AICMA Group, 20 July 2022; and Article 7 Report (covering 2021), Form A, p. 18 and Form H, pp. 91–93; and email from Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022. See also Annual Report Multi Donor Fund (2021) at: <https://bit.ly/3Mal0Qo>.

59 Email from Pablo Parra, UNMAS, 13 September 2021.

60 Email from Maria Sanz, Humanicemos DH, 19 July 2022.

61 Email from Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022.

62 Email from Tom Griffiths, HALO Trust Latin America, 20 June 2022.

63 Presidential Decree 1195, 11 July 2017; and emails from Angela de Santis, FSD, 11 July and 13 September 2022. According to FSD "the reforestation timeframe is at least 1 to 5 years of maintenance to be successful and the added value of demining is already enough."

64 Email from Yessika Morales, OACP – AICMA Group, 20 July 2022.

65 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

66 Email from Paula Ximena Cadena, Programme Officer, DRC Colombia, 23 September 2022.

67 2020 Article 5 deadline Extension Request, p. 77; Article 7 Report (covering 2021), Form A, p. 20.

68 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

HI highlighted that the new NMAS on Land release (NTC 6469) recognizes that different groups of populations call for different attention and protection needs. Those include responses related to gender, ethnic, age, disability condition, socio-economic condition and cultural identities, in order to ensure that mine action interventions promote equal opportunities and respect for their differences.⁶⁹ The new NMAS on Territorial Management (NTC 6480) contains an Annex which identifies affirmative actions to mainstream gender and diversity in demining, information management, territorial management, risk education, and victim assistance.⁷⁰

Colombia has a significant indigenous and ethnic minority group population (13.7% of the total population), which are afforded their own constitutional protections and therefore require a specific approach during demining tasks. Indigenous communities are said to have been disproportionately affected by anti-personnel mines. According to UNMAS Colombia, almost three (28.5%) of every 10 victims registered in 2021 were indigenous or Afro-descendants.⁷¹ While there was no information or associated actions on how the needs of ethnic and minority groups are being considered during community liaison, survey, and clearance activities in Colombia's 2020 Article 5 extension request, further developments concerning humanitarian demining and diversity were implemented in 2021. The OACP and the humanitarian demining operators (HDOs) developed annexes to the NMAS on non-technical survey and territorial management, in order to facilitate processes of negotiation with ethnic communities on demining interventions.⁷² The technical note for non-technical survey, has a specific methodology for interacting and negotiating with ethnic communities, so as to guarantee direct participation throughout the land release cycle.⁷³ In addition, a Manual, a Guide, and a format for registering agreements pertaining to information gathering, the participation process, and the agreements reached with ethnic groups were also designed and are currently being used. They were produced by the OACP and finalised in consultation with demining organisations. The documents were designed to help HDOs in the processes of working with ethnic communities. The OACP reported that, between 2019 and 2022, 32% of the funds for mine action have been destined to risk education and victim assistance in ethnic communities (indigenous and Afro-descendants).⁷⁴

Operators reported that in 2021 they continued, as reported in 2020, with the same approach towards indigenous groups that is requesting special permissions in order to gain access to indigenous reserves, and that they continue to work closely with communities to build trust by employing community liaison officers, deminers, and non-technical survey personnel directly from those communities. Operators involve local ethnic minority communities in the liaison process ahead of any field operations, working with them to map contamination and prioritise tasks.⁷⁵ The involvement of local indigenous communities during the community liaison process also gives operators an understanding of the necessary preparations that must take place before survey or clearance can be conducted on sacred land.⁷⁶ The CCCM reported that they also actively hire indigenous and Afro-Colombian people for non-technical survey and clearance teams in order to be more inclusive and improve their access to territories with indigenous populations.⁷⁷

The HALO Trust reported that while conducting surveys their teams ensure that women and young people are interviewed to guarantee the maximum level of input from communities as to the whereabouts of EO contamination. Furthermore, if there are gender-based considerations in terms of the level of impact of clearance of particular areas (access for women's groups, female farming initiatives, and so forth), these are incorporated into HALO's strategic plan for clearance. This type of information is often not volunteered freely and information through third-party organisations is frequently the best source of information.⁷⁸

DRC reported that their activities in the field when relating to communities are carried out taking into account flexible schedules and the use of pedagogical methodologies that allow the participation of women, children, and people with disabilities. During the meetings, gender stereotypes are eliminated, promoting equity between men and women. In addition, the indicators for DRC projects have special sections on the gender approach (number of women participating in the activities and women who are part of the work teams) and that DRC also encourages the deployment of mixed work teams in the field.⁷⁹ DRC's camps also take into account the needs of women and men.⁸⁰

69 Email from Arturo Bureo, HI, 30 June 2022.

70 Article 7 Report (covering 2021), Form A; and NTC 6480 Territorial Management, Annex C Guidelines for Mainstreaming the Gender Approach, pp. 138–53.

71 UNMAS Colombia Newsletter, February 2022.

72 Email from Yessika Morales, OACP – AICMA Group, 20 July 2022.

73 Ibid.

74 Email from Mariany Monroy Torres and Diana Marisol Peñalosa, OACP – AICMA Group, 30 September 2022.

75 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

76 Email from Alejandro Perez, CCCM, 18 July 2020.

77 Email from Francisco Moreno, CCCM, 15 June 2022.

78 Email from Tom Griffiths, HALO Trust Latin America, 20 June 2022.

79 Email from Caterina Weller, DRC, 9 June 2022.

80 Email from Paula Ximena Cadena, DRC Colombia, 23 September 2022.

Humanicemos DH informed Mine Action Review that both in their formats for collecting data for demining and RE the diversity of the beneficiaries and their needs are taken into account, which generates a direct impact on the prioritisation and planning of their operations. This was said to have been the case in La Montañita where they worked within an Emberá Chamí indigenous reserve. Contact from the very beginning is mandatory, as the ethnic authorities are the ones to authorise demining and risk education. As well, once in the field community liaison applies different socialisation strategies. In addition, their Gender and Inclusion internal Policy guarantees the access to equal employment within the organisation, non-technical survey and demining teams are composed of persons of diverse ethnic origin, which helps as the staff provide their knowledge of the areas being intervened.⁸¹

HI reported developing a prioritisation assessment tool before initiating mine action operations in a given municipality. This was in a pilot phase as of the time of writing. It takes into account specific needs, socio-economic vulnerability factors, and relative impacts, including in terms of disability and ethnicity. This tool will allow HI to identify what areas of a task have more vulnerable populations and to identify what other mine action components to deploy, supporting a more comprehensive mine action programming.⁸²

Colombia has a female head of its national mine action authority, one of the few women who hold this position in the world. Between 2002 and 2022, the NMAA has been led by five women and four men.⁸³ In the OACP – AICMA Group, of the 30 officials dedicated to mine action, 20 are women and 10 are men. A total of 70% of managerial positions are held by women; for the middle ranks, the figure is 65%.⁸⁴ However, from the 3,633 accredited deminers in Colombia, only 125 (3%) are female deminers.⁸⁵ As reported by the NMAA, the BRDEH, the largest operator in Colombia, had no female deminers operational in 2021 and nor did BDIAN, the smaller military operator.⁸⁶

As at August 2022, no information had been provided to Mine Action Review by the OACP – AICMA Group with regard to whether there is equal access to employment within the BRDEH or AEDIM for qualified women and men, or whether any measures have been put in place to achieve this. Remarkably, one woman is reported to be part of the non-technical survey teams of the BRDEH (see Table 2 on demining capacities during 2021 provided by the OACP – AICMA Group).⁸⁷

The HALO Trust has an organisational gender and diversity policy. Open recruitment for jobs such as deminers specifically encourages women to apply because manual labour is often seen as not appropriate for women in some rural regions of Colombia.⁸⁸ In 2021, 38% of HALO Colombia's staff were women. In operations positions, 28% were filled by women, while in managerial/supervisory staff positions 42% were women.⁸⁹

HI has an organisational disability, gender, and age policy which is being implemented in Colombia. HI actively recruits women and offers gender-appropriate working conditions, such as separate living quarters in the field. In 2021, 34% of staff in operational roles were women, with 39% of women in managerial/supervisory level positions. HI's community liaison personnel are recruited locally and selected by the local community. HI's demining staff are usually also recruited locally with the exception of some positions which require more experienced personnel as per the national standards. This also applies when HI works within indigenous communities.⁹⁰

In 2021, DRC reported that 31% of the total number of its employees in Colombia are women with 43% of managerial/supervisory positions held by women and 22% in operational positions.⁹¹

The CCCM has a gender and diversity policy and implementation plan. In 2020, the CCCM updated its gender and diversity policy and developed new procedures to promote efforts to achieve gender parity within the organisation and build a work environment that is free of all types of discrimination and gender-based violence. This work was extended to include the families of their staff with the aim of achieving safe spaces both at home and at work.⁹²

Gender focal points have been appointed within community liaison, survey, and clearance teams to ensure that gender is being mainstreamed throughout the CCCM. The organisation has reviewed its hiring processes to make roles more accessible to women both at the operational and managerial level, but despite these efforts the inclusion of women remains a challenge. In 2021, 45% of total staff were women: in operations, 42% were women while 44% of managerial and supervisory positions were held by women.⁹³

Humanicemos DH reported having in place a gender and inclusion policy, which guarantees equal access to employment for all levels. In 2021, 33% of the total staff were women, with 50% in managerial positions and 19.5% in operations.

81 Email from Maria Sanz, Humanicemos DH, 19 July 2022.

82 Email from Arturo Bureo, HI, 30 June 2022.

83 Article 7 Report (covering 2021), Form A, p. 20.

84 Email from Yessika Morales, OACP – AICMA Group, 20 July 2022.

85 Ibid.

86 Ibid.

87 Ibid.

88 Emails from Oliver Ford, HALO Trust, 9 and 21 August 2019; and Tom Griffiths, HALO Trust Latin America, 20 June 2022.

89 Email from Tom Griffiths, HALO Trust Latin America, 20 June 2022.

90 Email from Arturo Bureo, HI, 30 June 2022.

91 Email from Caterina Weller, DRC, 9 June 2022.

92 Email from Alejandro Perez, CCCM, 18 August 2021.

93 Email from Francisco Moreno, CCCM, 15 June 2022.

The AICMA Program – OAS reported that, for 2021, 47% of its total staff were women: in operations in Colombia, 42% were women, while 66% of managerial and supervisory positions at headquarters and in Colombia were held by women.⁹⁴

In 2021, UNMAS reported that 65% of its personnel were women, including the Chief of Operations, the head of Programme, and the acting head of Support Services. UNMAS Chief of Operations responsible for delivering training and technical assistance to the sector is a certified EOD IMAS Level 3 operator.⁹⁵

FSD reported that 50% of its staff are women, including its Country Director.⁹⁶

INFORMATION MANAGEMENT AND REPORTING

The OACP via Presidential Decree 1784 of 2019, was assigned as the source of official information for decision making, according to information collected through the prevention, marking, mapping, mine clearance and victim assistance programmes.⁹⁷ The OACP – AICMA Group uses the IMSMA NG V6 database⁹⁸ and its own “Periferico” database.

Poor information management has been a feature of the mine action programme since its inception. In 2018, an evaluation of information management was conducted and as a result the national authority, in partnership with FSD, elaborated an Improvement Plan 2018–19. According to the national authority, this has led to a review of the IMSMA database, increased data sharing with external parties, increased information management capacity, and improved reporting procedures and data management.⁹⁹

According to FSD, which has been advising the OACP – AICMA Group, some of the improvements seen during 2021 relate to the development of an interest by the Group in information quality. FSD has advised the NMAA to focus on the appropriate use of information, including for strategic purposes.¹⁰⁰

The GICHD have also noted improvements since 2017 in data sharing and data quality following a significant review and correction of IMSMA data.¹⁰¹ Access to data has improved, with IMSMA now available online and licences granted to the operators for access to the Periferico database. Training has also been provided for operators in the management of the online platforms that are required to submit demining outputs.¹⁰² DRC considers that the Periferico system’s biggest problem is the response time of the platform, be it for queries or uploads.¹⁰³

In addition, efforts from the national authority to improve the data in the database are ongoing. Since 2020, new data collection, analysis, and processing tools have been introduced and promoted by the NMAA, UNMAS, and the GICHD with the support of ESRI Colombia (Survey123, Collector, Dashboard, and Historical Maps, among others).¹⁰⁴ The HALO Trust reported that the use of Survey123 for weekly reporting on clearance activities worked well in 2021 and has not increased the workload for operators.¹⁰⁵ HI says that the OACP – AICMA Group are willing to listen and provide support in solving problems.¹⁰⁶ For Humanicemos DH, the new NMAS on information management has helped improve the process.¹⁰⁷ For DRC, the migration of weekly progress forms for non-technical survey and clearance has improved from the use of Excel files to the Survey123 application. In addition, the possibility for the general public to access IMSMA events and status of municipalities being addressed by demining via the geographic viewer is useful. However, there is still ample room for improvement in terms of stability and continuity of the services, as both the Survey123 and the geographic viewer portal applications often crash, affecting queries and the sending of forms.¹⁰⁸

As mentioned above, since 1990, “events” related to anti-personnel mines, unexploded ordnance (UXO), and improvised explosive devices (IEDs) have been collected in Colombia. IMSMA “events” are the main source of contamination information in areas that have not yet been surveyed and form the starting point for non-technical surveys carried out by operators.¹⁰⁹ Operators have found these IMSMA events are beset with errors, including duplications and inaccuracies. Despite some improvements

94 Email from Tammy Hall, OAS Mine Action Program, Department of Public Security, 21 July 2022.

95 Email from Pablo Parra, UNMAS Colombia, 19 September 2022.

96 Email from Angela de Santis, 13 September 2022.

97 Presidential Decree 1784, 4 October 2019, Article 28(25).

98 Email from Diana Marisol Peñalosa, OACP – AICMA Group, 16 August 2022.

99 Article 7 Report (covering 2019), Form H.

100 Email from Angela de Santis, FSD, 11 July 2022.

101 Email from Marc Bonnet, GICHD, 31 August 2019.

102 Emails from Arturo Bureo, HI, 13 May 2020; and Alejandro Perez, CCCM, 18 July 2020.

103 Email from Paula Ximena Cadena, DRC Colombia, 23 September 2022.

104 Emails from Arturo Bureo, HI, 13 May 2020 and 30 June 2022; and Yessika Morales, OACP – AICMA Group, 20 July 2022.

105 Email from Richard Scott, HALO Trust, 14 May 2021.

106 Email from Arturo Bureo, HI, 18 July 2019.

107 Email from Maria Sanz, Humanicemos DH, 19 July 2022.

108 Email from Paula Ximena Cadena, DRC Colombia, 23 September 2022.

109 Emails from Marc Bonnet, GICHD, 31 August 2019; and Arturo Bureo, HI, 13 May 2020.

to the registration of events and a clean-up of the database, when operators are assigned a task and investigate each event, they are still finding that most do not contain either mines or UXO, situation that continued throughout 2021.¹¹⁰ As a result, most of the investigated events are cancelled or discarded.

Frequent discrepancies between operators' data and the figures from the national authority continued in 2021. While the national authority provides a weekly update of all demining statistics, there is often a delay in information processing, which means that the publicly available figures are not always accurate or up to date.¹¹¹ Administrative delays between the National Authority, the external monitoring system (AICMA Program – OAS) and operators contribute to delays with approvals taking time between various parties.¹¹² Not only do data discrepancies continue but in addition, for the NMAA, only the data approved by the CEM and those incorporated in IMSMA are considered valid.¹¹³

According to the AICMA Program – OAS, the information is stored through the peripheral system. It is uploaded directly from the operation and is fully traceable from assignment to delivery. However, it does not have enough capacity to store big data, which causes delays for the operators and the CEM, as all information must be processed this way. In addition, it does not allow results analysis to be conducted.¹¹⁴

The HALO Trust suggests adopting an open-source data policy. While some data are publicly available, crucial key data is not available to implementing partners. As such, there is no formalised process that allows operators to access land release data submitted by other operators into the national database. This limits data analysis, thereby restricting the opportunity to improve evidence-based decision making.¹¹⁵ DRC has suggested that the OACP – AICMA Group publish the structure of tables arising from non-technical survey, SHAs, CHAs and risk education (RE) reports, so that the HDOs can capture the information in a structured system and allow HDOs to provide the OACP with a CSV or SQL back-up in compliance with its technical specifications.¹¹⁶

Article 7 reports are submitted on a timely basis, and Colombia's latest Article 7 report also includes comprehensive information in relation to the implementation of the Oslo Action Plan. There are large disparities in the clearance data recorded in the Article 7 reports when compared to the clearance data recorded on the humanitarian demining dashboard that is regularly updated by the OACP – AICMA Group. In 2022, inconsistencies in reporting continued, including with respect to the extent of contamination and land release in Colombia's Article 7 report covering 2021.

FSD is providing support to the OACP – AICMA Group to develop a methodology to measure the socio-economic impact of humanitarian demining in Colombia.¹¹⁷

PLANNING AND TASKING

In 2019, Colombia developed a new Strategic Plan 2020–25 "Towards a Colombia free of the suspicion of anti-personnel mines for all Colombians", which formed the basis of Colombia's 2020 extension request. But information from 2020 onwards is now outdated. In April 2023, Colombia will present to the APMBBC States Parties an updated intervention plan to comply with the terms of the extension request. Adjustments were made in 2021 to the completion calendar with updated estimated dates.¹¹⁸ The new NMAS do not include guidance on prioritisation at national level, which is left to the IIDH.¹¹⁹

For 2022, the plan is to release 21 contaminated areas covering 578,636m² in the departments of Antioquia, Bolívar, Caldas, Caquetá, Cauca, Huila, Meta, Nariño, Putumayo, Santander, Tolima, and Valle del Cauca.¹²⁰

110 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

111 Emails from Oliver Ford, HALO Trust, 23 April 2020; and Richard Scott, HALO Trust, 14 May 2021.

112 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

113 Email from Caterina Weller, DRC, 9 June 2022.

114 Email from Tammy Hall, OAS Mine Action Program, Department of Public Security, 21 July 2022.

115 Email from Tom Griffiths, HALO Trust Latin America, 20 June 2022.

116 Email from Paula Ximena Cadena, DRC Colombia, 23 September 2022.

117 Email from Angela de Santis, FSD, 11 July 2022.

118 Email from Yessika Morales, OACP – AICMA Group, 20 July 2022.

119 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

120 Article 7 Report (covering 2021), Form D, pp. 48–49.

Table 2: Annual land release projections (for 2022-25)¹²¹

Year	SHAs/CHAs	Area (m ²)
2022	21	578,636
2023	37	1,784,257
2024	15	596,017
2025	5	191,549
To be determined	25	387,502
Totals	103	3,537,961

The OACP – AICMA Group has now tasked all operators with all the accessible contaminated municipalities.¹²² The remaining municipalities not considered possible to intervene with demining are now receiving risk education from UNMAS and the AICMA Program – OAS through local implementing partners.¹²³

The municipalities with highest human casualties from anti-personnel mines tend to have the highest levels of anti-personnel mine contamination and the most security issues. In these areas, contaminated territories are often inaccessible to operators or operators are forced to suspend survey and clearance operations due to security concerns. These suspensions can last anywhere from a few days to an indefinite period depending on how severely the situation disrupts operations.¹²⁴ As a solution a micro-targeting methodology was developed in 2021 but was yet to be

operationalised as of writing.¹²⁵ It is seen as a way of being able to conduct demining in priority municipalities that have part of their territory considered as “safe” in terms of homogenous security conditions that can be verified objectively and contamination from landmines and UXO. For example, in 2021, 22 municipalities in 8 departments saw improvements in the security conditions in certain part of their territories through micro-targeting they became municipalities included in the prioritisation model.¹²⁶

Task allocation by the NMAA continues to be the subject of concern. The CCCM provided an example from May 2021 when several new municipalities were opened and tasks were allocated to operators that had no previous presence in the area rather than to operators already assigned to neighbouring municipalities.¹²⁷ A similar situation is reported by DRC, whereby adjacent municipalities are handed over to different HDOs, causing difficulties and generating operational inefficiencies. HI feels, however that there has been an improvement on clustering task assignments.¹²⁸

Operators do coincide in that there is no feedback from the NMAA regarding the score given to the operators by the IIDH on intervention plans when assigning municipalities.¹²⁹

DRC reported delays on the issuance of task orders by the NMAA. It is the operators themselves who must present to the local authorities and call for the prioritisation meetings, which can be a challenge given the full agendas local authorities have as well as security problems.¹³⁰

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In 2020, Colombia started developing a new set of 17 NMAS, which it renamed national technical norms (NTC) and are equated to NMAS, but with a higher level of obligation.¹³¹ A working group was established by the OACP to review the technical norms with representatives from the Ministry of Defence, the General Inspectorate of the Military Forces, the AICMA Program – OAS, and UNMAS, and FSD in its role as advisor,¹³² along with the national and international mine action operators.¹³³ The NTC were formally issued in 2021. According to operators they were consulted throughout the review process and the new technical norms were also subject to a public consultation process. Although the OACP did not adopt all the suggestions from stakeholders the new NMAS are viewed as an important step in improving land release processes in Colombia.¹³⁴

121 Article 7 Report (covering 2021), Form D, pp. 48–49.

122 Email from Yessika Morales, OACP – AICMA Group, 20 July 2022.

123 UNMAS Colombia Newsletter, February 2022; and email from Tammy Hall, OAS Mine Action Program, Department of Public Security, 21 July 2022.

124 Emails from Arturo Bureo, HI, 18 July 2019; Hector Hernandez Acevedo, CCCM, 5 August 2019; Oliver Ford, HALO Trust, 9 August 2019; and Yessika Morales, OACP – AICMA Group, 20 July 2022.

125 Article 7 Report (covering 2021), Form D, pp. 35–36.

126 Article 7 Report (covering 2021), Form D, p. 31; and email from Yessika Morales, OACP – AICMA Group, 20 July 2022.

127 Email from Alejandro Perez, CCCM, 18 August 2021.

128 Email from Caterina Weller, DRC, 9 June 2022; and Arturo Bureo, HI, 30 June 2022.

129 Email from Caterina Weller, DRC, 9 June 2022.

130 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; and Arturo Bureo, HI, 30 June 2022.

131 Email from Angela de Santis, FSD, 13 September 2022.

132 Email from Angela de Santis, FSD, 11 July 2022.

133 Article 7 Report (covering 2020), Form A; and emails from Caterina Weller, DRC, 5 May 2021; Arturo Bureo, HI, 7 May 2021; and Richard Scott, HALO Trust, 14 May 2021.

134 Email from Richard Scott, HALO Trust, 14 May 2021.

According to the OACP AICMA Group, key developments of the new NMAS with regard to land release can be summarised as follows: if a device is found, the whole area does not now need to become a hazardous area but can be treated as a spot task; through the new approach to technical survey, areas and polygons sizes can be reduced, which should help improve efficiency, instead of having to conduct full clearance as required previously. IMSMA events can now be cancelled through non-technical survey.¹³⁵

By the end of 2021, technical survey had not yet been implemented by civilian operators in Colombia. It is too early to assess if the new standards have led to operational demining efficiencies. Nonetheless, according to FSD the new technical norms present an improvement towards evidence-based survey and clearance compared to the previous NMAS. By the end of 2022, FSD will organise a lessons-learned workshop in order to collect the experiences of operators, the OACP, the AICMA Program – OAS, and UNMAS in their application and propose, if needed, adjustments.¹³⁶

For the CCCM, technical survey has not been implemented as there are no established patterns that could serve as the basis to reduce a given area. The CCCM has requested the OACP – AICMA Group to establish a technical committee to agree on the mentioned patterns.¹³⁷

For DRC there is a clear barrier in the possibility of applying technical survey in the Colombian context owing to the lack of clear guidelines from the NMAA on how to use this

method. Particularly, the lack of clear information on who is responsible for residual risk in hazardous areas reduced by survey is of great concern. Further, there is no established monitoring capacity in the AICMA Program – OAS to monitor the implementations of technical survey.¹³⁸

For HALO Trust, the lack of standardisation on how to implement the principles in the technical survey guidelines is the reason for operators not having yet started using this methodology. HALO considers further work is required by the sector to standardise and define practicalities across all operators for the successful implementation of technical survey.¹³⁹

HI had not developed an SOP on technical survey as of writing, nor does it plan yet to implement it, as it considers that due to the nature of mine contamination in Colombia, applying the new guidance would represent a duplication of efforts or delay land release in some cases.¹⁴⁰

FSD has reported to Mine Action Review that it has created a technical survey working group and that it will work with the OACP, CEM, and operators to clarify the “grey areas” in the technical survey NTC and operationalise it in the Colombian context. In addition, FSD’s Operational Efficiency Senior Technical Advisor will attend a GICHD training on technical survey in Bosnia and Herzegovina at the end of September 2022 and share the newly acquired knowledge with the sector.¹⁴¹

OPERATORS AND OPERATIONAL TOOLS

Colombia has a large operational clearance capacity at its disposal with a total of seven operators accredited to carry out demining operations: two national operators and five non-governmental organisations (NGOs). By far the largest clearance operator is the National Army’s Humanitarian Demining Brigade (BRDEH). BDIAN (previously known as the Marine Corps Explosives and Demining Association (AEDIM)), a smaller military operator, conducts clearance and destruction of anti-personnel mines and explosive remnants of war (ERW) in areas under the jurisdiction of the National Navy.¹⁴² Demining is also conducted by international mine action NGOs DRC, The HALO Trust, and HI, and national NGOs CCCM and Humanicemos DH.

Table 3: Survey capacities in 2021 (as reported by demining operators)¹⁴³

Operator	NTS teams	NTS personnel	TS teams	Comments
CCCM	41	101	0	
DRC	7	24	0	
HALO	13 (Average per month)	52 (4 per team)	0	TS is part of HALO’s Global manual clearance teams duties
HI	8	27	0	
Humanicemos DH	5	18	0	
Totals	74	222	0	

135 Email from Yessika Morales, OACP – AICMA Group, 20 July 2022.

136 Email from Angela de Santis, FSD, 11 July 2022.

137 Email from Francisco Moreno, CCCM, 13 September 2022.

138 Email from Caterina Weller, DRC, 9 June 2022.

139 Emails from Tom Griffiths, HALO Trust Latin America, 20 June 2022; and Oliver Ford, HALO Trust, 15 September 2022.

140 Email from Arturo Bureo, HI, 30 June 2022.

141 Email from Angela de Santis, 13 September 2022.

142 Descontamina Colombia, “Agrupación de Explosivos y Desminado de Infantería de Marina – AEDIM”, undated but accessed 3 September 2018, at: <http://bit.ly/2McfRw1>.

143 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

Table 4: Clearance capacities deployed in 2021¹⁴⁴

Operator	Manual teams	Total deminers	Machines	Comments
CCCM	10	35	0	
DRC	7	65	0	Increase from 2020
HALO	32 (Average per month)	160 (5x deminers per team)	0	Increase from 2020 in 2 teams and 10 deminers
HI	6	34	1	1 Mechanical team with 2 operators
Humanicemos DH	3	30	0	Increase from 2020
Totals	58	324	1	

The CCCM reported that their teams are multitask and conduct either non-technical survey or clearance as per requirements in the assigned municipalities. Overall, personnel for non-technical survey and clearance increased from 129 to 146 between 2020 and 2021.¹⁴⁵ The CCCM together with Tohoku University, Japan and the National University, has a research project on a new detector that combines metal detection and a penetration radar. The project was expected to finish in 2022.¹⁴⁶

The HALO Trust in 2021 deployed on average 13 non-technical survey teams per month totalling 52 personnel and on average 32 manual clearance teams with 160 deminers (5 per team). Due to additional funding from the United States, The HALO Trust increased its capacity of both clearance and survey teams in 2021 and expanded its area of operations. HALO's Colombia programme in 2021 saw an increase of overall operational staff of 19% as a result of the lifting of COVID-19 related restrictions.¹⁴⁷

In 2021, DRC began clearance activities for the first time; it also deployed two non-technical survey teams totalling six people. In 2021, DRC expanded to Curillo, Milan, and Solano municipalities in the department of Caquetá by adding one community liaison team, five non-technical survey teams, and four clearance teams to its existing capacity. In total, DRC deployed 65 clearance personnel in 2021. For 2022, the clearance teams will be in Caquetá department, and it will expand to Bolivar department with more non-technical survey teams. DRC is using drones to conduct marking during non-technical survey activities. In addition, DRC has developed information management software, which automates reporting, mapping, and risk analysis. The open-source software, which can be used online or offline, enables quality control of operations. DRC has also started

using a new protection material called Dyneema, which is more resistant and lighter than Kevlar and is not so easily affected by humidity.¹⁴⁸

HI during 2021 had no significant changes in the number of non-technical survey personnel, but did increase clearance staff as more hazardous areas were identified in Vista Hermosa in Meta department. HI also deployed a mechanical asset in support of manual clearance, a GCS-100 machine, using a tiller which has allowed clearance speed to triple and the cost per square metre to decrease considerably. HI expected to increase its teams in mid 2022, with an increase of demining teams dependent on the survey findings.¹⁴⁹

Humanicemos DH, the demining organisation comprised of ex-fighters from the FARC-EP, was accredited in August 2017.¹⁵⁰ In March 2020, the United Nations and the Government of Colombia, with the support of the European Union, signed a memorandum of understanding (MoU) facilitating the demining operations of Humanicemos DH. The MoU designated UNMAS as the responsible agency for external quality management and monitoring of Humanicemos DH.¹⁵¹ In November 2020, Humanicemos DH began survey and clearance operations in La Montañita, Caquetá and was tasked with demining a second municipality in Caquetá in 2021. In 2021, they deployed a total of around 100 personnel divided into four non-technical survey teams and two to three clearance teams. For 2022, Humanicemos DH expected to train non-technical survey teams to also do clearance.¹⁵²

The AICMA Program – OAS serves as the External Monitoring Component (CEM) body for accreditation and monitoring of humanitarian demining in Colombia, for all operators with the exception of Humanicemos DH. It has been criticised for being too focused on compliance rather than on supporting

¹⁴⁴ Ibid.

¹⁴⁵ Email from Francisco Moreno, CCCM, 13 September 2022.

¹⁴⁶ Email from Francisco Moreno, CCCM, 15 June 2022.

¹⁴⁷ Emails from Richard Scott, HALO Trust, 14 May 2021; and Tom Griffiths, HALO Trust, 19 June 2022.

¹⁴⁸ Email from Caterina Weller, DRC, 9 June 2022.

¹⁴⁹ Email from Arturo Bureo, HI, 30 June 2022.

¹⁵⁰ Email from Sergio Bueno Aguirre, Descontamina Colombia, 5 June 2018.

¹⁵¹ UNMAS Facebook post, 1 June 2020, at: <http://bit.ly/3f3U11Z>.

¹⁵² Telephone interview with Pablo Parra and Gina Bernal, UNMAS, 14 July 2021; and email from Maria Sanz, Humanicemos DH, 19 July 2022.

the operators to run effective demining operations. This has manifested itself in non-critical conformities being determined by rigid application and varied interpretation of national standards and/or SOPs, leading to delays in operations.¹⁵³ The differences in interpretation can depend on the region or individual OAS personnel with the HALO Trust reporting that processes are adapted dependent on the location or individual monitor or even in the same location when there is a change of personnel by OAS.¹⁵⁴

DRC considers that the delays imposed by the OAS due to their inefficiency to conduct proper monitoring has negatively affected DRC's work in the country.¹⁵⁵ There is a high turnover of leadership at the OAS with a new head of mission in post almost every year.¹⁵⁶ As of writing, the AICMA OAS General

Coordinator has assumed the role of head of programme, in order to ensure its stability while a new head of programme is being selected.¹⁵⁷

The AICMA Program – OAS reported that in 2021 it had identified recurrent (non-critical) non-compliance by some of the operators, and that it had held several technical roundtables with the operators and the OACP, for the HDOs to make their own adjustments and to encourage improvement in quality management processes.¹⁵⁸

The introduction of a new system of confidence levels was under discussion but it was decided in 2020 not to proceed as it became too difficult to implement.¹⁵⁹

DEMINER SAFETY

Mine action operations will only be undertaken with the local community's agreement, often in areas where mistrust of the State is high. In certain situations, the forced eradication of illicit crops by the security forces has affected civilian demining operations. Thus, during 2021 in Caquetá Humanicemos DH was forced to stop operations by request of one armed group.¹⁶⁰ Community members continued to be sceptical of the operator's intentions due to the initial perception that operators are linked to the military. Effective long-term community liaison and risk education have been key to change that initial perception.

Another factor is that civilian operators hire people from the affected communities and respect their ancestral traditions, as in the case of indigenous communities and Afro-Colombian communities.¹⁶¹ This is often exacerbated by the proximity of the demining brigade's operations to civilian operators' areas of intervention. This negatively affects the ability of humanitarian demining organisations to conduct survey and clearance and to determine an accurate estimate of contamination in these areas. HI reported that a car was burnt by a non-State armed group in December 2021 in Vista Hermosa, Meta department, with some equipment stolen, but no one was physically harmed.¹⁶²

During September 2021, in Meta department, HALO had a visit from FARC – EP dissidents, a vehicle was burnt in San Juan de Arama and though no staff were injured in the incidents HALO suspended operations in San Juan de Arama and Vista Hermosa municipalities.¹⁶³

The CCCM reported that in August 2021 a non-State armed group of about 100 armed men visited their camp and the community in the hamlet of Piñuña Negro, requested documentation from all civilians, the survey and clearance teams, as well as the representative from the CEM. The community and CCCM personnel were detained by the group for a day. Some people from the community were detained and taken away and days later were reported as assassinated. A Departmental Security Council was held, and the NMAA suspended operations in Puerto Leguizamo. The CCCM has the funds and the municipalities assigned, but cannot yet operate in all of the assigned municipalities as security conditions have worsened. By the end of 2021, five municipalities had operations suspended.¹⁶⁴ Neither the security forces nor the NMAA has authorised a start of demining operations.¹⁶⁵

153 Interviews with Pauline Boyer and Aderito Ismael, HI, Vista Hermosa, 8 August 2018; Esteban Rueda, and Sergio Mahecha, NPA, Vista Hermosa, 9 August 2018; Hein Bekker, and Emily Chrystie, San Juan de Arama, HALO Trust, 10 August 2018; and Alejandro Perez, CCCM, Bogota, 14 August 2018; and email from Rupert Leighton, NPA, 15 July 2019.

154 Email from Richard Scott, HALO Trust, 14 May 2021.

155 Email from Caterina Weller, DRC, 5 May 2021.

156 Telephone interview with Angela de Santis, FSD, 21 June 2021.

157 Email from Tammy Hall, OAS Mine Action Program, Department of Public Security, 20 September 2022.

158 Email from Tammy Hall, OAS Mine Action Program, Department of Public Security, 21 July 2022.

159 Telephone interview with Angela de Santis, FSD, 21 June 2021.

160 Email from Maria Sanz, Humanicemos DH, 19 July 2022.

161 Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

162 Email from Arturo Bureo, HI, 30 June 2022.

163 Email from Tom Griffiths, HALO Trust Latin America, 20 June 2022.

164 Email from Francisco Moreno, CCCM, 13 September 2022.

165 Email from Francisco Moreno, CCCM, 15 June 2022.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Colombia's Article 7 report (covering 2021) reports in Form D a total for the year of almost 1.27km² of mine clearance along with cancellation of almost 0.1km² of mined area (and reduction of less than 0.01km²). This resulted in the release of 22 mined areas.¹⁶⁶ But an Annex has a significantly higher figure for mine clearance. The data in the Article 7 report are not internally consistent nor do they match reports of release by the individual operators. Mine Action Review has taken the lower figure for clearance provided in the Article 7 report.

In 2020, a total of just over 1.28km² of mined area was released, of which 1.08km² was cleared, 0.12km² was reduced through technical survey, and 0.09km² was cancelled through non-technical survey.

SURVEY IN 2021

In 2021, 71,895m² was reportedly cancelled through non-technical survey (see Table 5), a slight decrease from 2020 when 86,891m² was cancelled through non-technical survey. Operators' figures are much larger than those reported by the national authorities (see Table 6).

Table 6: Cancellation through non-technical survey in 2021 (operator data)¹⁶⁷

Department	Operator	Area cancelled (m ²)
Antioquia	CCCM	0
Putumayo	CCCM	3,786
Caquetá	DRC	11,255
Valle del Cauca	HALO	4,948
Cauca	HI	62,445
Meta	HI	25,952
	Humanicemos DH	0
Total		108,386

CLEARANCE IN 2021

In 2021, Colombia reports in its Article 7 report variously a total of 1.26km² and 1.69km² as having been cleared in 2021, along with the destruction of either 204 or 178 anti-personnel mines. In August 2022, OACP – AICMA Group reported different figures again to Mine Action Review, as set out in Table 7. The NMAA has been unable to reconcile the difference between the different figures. NGO operators have reported clearing almost 0.42km² of mined area in 2021, destroying in the process 236 anti-personnel mines.

Table 5: Cancellation through non-technical survey in 2021 (Article 7 report, Annex III)¹⁶⁸

Departments	Operator	Area cancelled (m ²)
Bolívar	AEDIM	0
Sucre	AEDIM	0
Subtotal 2	AEDIM	0
Antioquia	BRDEH	1,241
Caldas	BRDEH	15,101
Caquetá	BRDEH	0
Huila	BRDEH	0
Meta	BRDEH	17,481
Nariño	BRDEH	0
Putumayo	BRDEH	831
Santander	BRDEH	1,356
Tolima	BRDEH	26,971
Valle Del Cauca	BRDEH	0
Subtotal 10	BRDEH	62,981
Cauca	CCCM	2,875
Putumayo	CCCM	0
Subtotal 2	CCCM	2,875
Caquetá	DDG	0
Subtotal 1	DDG	0
Antioquia	HALO	0
Meta	HALO	0
Nariño	HALO	757
Putumayo	HALO	0
Tolima	HALO	0
Valle Del Cauca	HALO	220
Subtotal 6	HALO	977
Caquetá	Humanicemos DH	0
Subtotal 1	Humanicemos DH	0
Cauca	HI	0
Meta	HI	5,062
Subtotal 2	HI	5,062
Totals 24		71,895

¹⁶⁶ Article 7 Report (covering 2021), Form D, pp. 43–46.

¹⁶⁷ Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022. There is a potential difference in methodology between operators with respect to "cancelling" mined area after investigating IMSMA events versus only cancelling mined area previously identified through non-technical survey and which is already recorded in the information management system.

¹⁶⁸ Article 7 Report (covering 2021), Form D, Annex III Released areas 2021, pp. 104–07.

Table 7: Reported destruction of explosive ordnance in 2021 (new data from OACP – AICMA Group)¹⁶⁹

Operator	AP mines destroyed	UXO destroyed	IEDs destroyed
AEDIM	17	12	0
BRDEH	100	33	11
CCCM	38	4	0
DRC	1	0	0
HALO	109	13	9
HI	5	12	8
HUMANICEMOS DH	0	1	0
Totals	270	75	28

Table 8: Mine clearance in 2021 (operator data)¹⁷⁰

Department	Operator	Area cleared (m ²)	AP mines destroyed	UXO destroyed	IEDs destroyed
Antioquia	CCCM	2,262	1	3	0
Putumayo	CCCM	60,227	57	4	7
Subtotals	CCCM	62,489	58	7	7
Caquetá	DRC	11,879	5	1	0
Subtotals	DRC	11,879	5	1	0
Antioquia	HALO	86,979	82	2	0
Boyacá	HALO	0	0	1	0
Casanare	HALO	103	0	1	0
Cauca	HALO	0	9	0	0
Meta	HALO	38,685	39	10	0
Nariño	HALO	27,490	6	5	0
Putumayo	HALO	15,689	10	1	0
Tolima	HALO	2,530	1	0	0
Valle del Cauca	HALO	44,977	9	0	0
Subtotals	HALO	216,453	156	20	0
Cauca	HI	18,546	0	0	0
Meta	HI	100,356	11	2	0
Subtotals	HI	118,902	11	2	0
Caquetá	Humanicemos DH	6,794	6	0	0
Subtotals	Humanicemos DH	6,794	6	0	0
Grand totals		416,517	236	30	7

In 2021, 39 minefields measuring a total of 106,305m² cleared by HALO Trust proved to contain no anti-personnel mines. Due to the easing of restrictive COVID-19 measures during 2021 HALO was able to deploy clearance teams uninterrupted throughout the year. As a result of higher deployment, there was an increase of 30% in metres it cleared compared to 2020.¹⁷¹ During spot tasks it destroyed seven anti-personnel mines, which are included in Table 8.

¹⁶⁹ Email from Diana Marisol Peñalosa, Advisor, OACP – AICMA Group, 26 August 2022.

¹⁷⁰ Emails from Francisco Moreno, CCCM, 15 June 2022; Caterina Weller, DRC, 9 June 2022; Tom Griffiths, HALO Trust Latin America, 20 June 2022; Arturo Bureo, HI, 30 June 2022; and Maria Sanz, Humanicemos DH, 19 July 2022.

¹⁷¹ Email from Tom Griffiths, HALO Trust Latin America, 20 June 2022.

HI reported 12 new CHAs and 3 SHAs with a total size of 89,063m² in Inza, Cauca and Vista Hermosa, Meta, all are legacy contamination. In addition, it cleared 17 areas measuring 94,503m² where no mines were to be found. In spot tasks it destroyed 11 anti-personnel mines not included in Table 8.¹⁷² Humanicemos DH reported clearance of four areas measuring 4,483m² which contained no anti-personnel mines. In addition, during spot tasks it destroyed two anti-personnel mines and one item of UXO not included in Table 8.¹⁷³ DRC reported clearing 3,900m² where no anti-personnel mines were found. In addition, one item of UXO was destroyed during a spot task, which is included in Table 8.¹⁷⁴ The CCCM reported clearing a total of 24 areas measuring 30,572m² without any anti-personnel mines being found. During spot tasks, it destroyed 9 anti-personnel mines, 11 items of UXO, and 10 IEDs, which are not included in Table 8.¹⁷⁵

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC, and in accordance with the four-year nine-month extension granted by States Parties in 2020, Colombia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. It is unlikely that Colombia will be able to meet this deadline given the numerous challenges it faces.

It remains to be seen whether implementation of the new technical norms will improve the efficiency of land release processes in Colombia. A high percentage of mined areas are still being cleared without any mines found and, the perception from The HALO Trust is that a large proportion of the aged, legacy mines that are found are non-functional.¹⁷⁶ The challenging terrain and climatic conditions along with an over-reliance on full clearance means that demining in Colombia is very expensive and, in this context, it is

especially important that demining is conducted in the most effective and efficient way possible which includes ensure that operators are tasked and deployed effectively.

Table 9: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	1.27
2020	1.08
2019	0.79
2018	0.96
2017	0.38
Total	4.48

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Colombia does not yet have a plan in place to manage residual contamination after clearance is completed in accordance with Article 5. The OACP – AICMA Group is aware of the importance for the management of residual contamination, although an official plan has not been drafted yet.

The Land Release Technical Note NTC6469, Annex A, is dedicated to residual risk, but this should not be confused with the management of residual contamination once clearance is completed as per Article 5 of the APMBC.

The Annex A to NTC6469 refers specifically to the methodology for managing residual risk within the framework of the land release process and once land release has been completed by HDOs. It addresses the responsibilities of the HDOs for the six months following the handover of released land, as well as the methodology for residual risk management once the responsibility period of the clearance operator has come to an end.¹⁷⁷

¹⁷² Email from Arturo Bureo, HI, 30 June 2022.

¹⁷³ Email from Maria Sanz, Humanicemos DH, 19 July 2022.

¹⁷⁴ Email from Caterina Weller, DRC, 9 June 2022.

¹⁷⁵ Email from Francisco Moreno, CCCM, 15 June 2022.

¹⁷⁶ Email from Oliver Ford, HALO Trust, 15 September 2022.

¹⁷⁷ See: ANEXO A_NTC6469_Metodología Atención Riesgo Residual, available at: <https://bit.ly/3ShAXHe>.

ARTICLE 5 DEADLINE: 1 MARCH 2026
UNCLEAR WHETHER ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: HEAVY

MINE ACTION REVIEW ESTIMATE

30km²

AP MINE CLEARANCE IN 2021

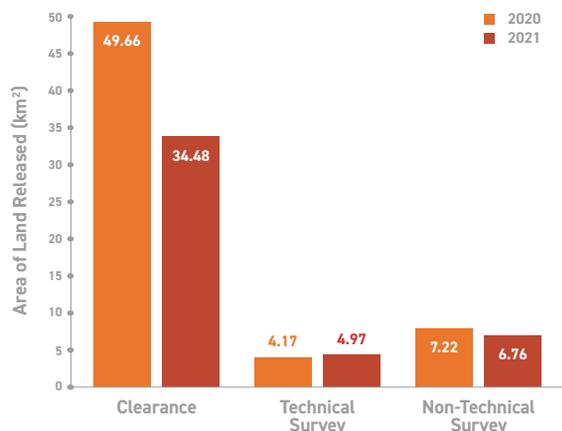
34.48km²

AP MINES DESTROYED IN 2021

1,462

(INCLUDING 230 DESTROYED AS PART OF THE "LESS ARMS, FEWER TRAGEDIES" PROGRAMME)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

In 2021, Croatia cleared 34km² of mined area (excluding military areas), falling short of its target for the year and a decrease of more than 30% on output in 2020. The national authorities blamed adverse weather in December 2021 for the missed target on the grounds that it delayed publication of land release certificates for some clearance projects. Release through technical survey in 2021 was an increase on the previous year but did not meet the target from its revised 2020–26 work plan published in 2020. Cancellation through non-technical survey was a decrease on the previous year but met the target in the 2020–2026 work plan. Release by the Ministry of Defence (MoD) was more than 4.7km² below its annual release target for 2021.

In April 2022, Croatia published a revised work plan for 2022–26, seeking to make up for the land release shortfalls in 2020 and 2021.¹ Given existing clearance capacity and output, however, Croatia will face a significant challenge in meeting its March 2026 Article 5 clearance deadline under the Anti-Personnel Mine Ban Convention (APMBC).

RECOMMENDATIONS FOR ACTION

- Civil Protection Directorate – Croatia Mine Action Center (CROMAC) should increase its survey and clearance capacity in order to meet the targets outlined in its revised work plan 2022–2026.
- In addition to survey of suspected hazardous areas (SHAs), CROMAC should also review the basis on which confirmed hazardous areas (CHAs) are established. In particular, it should conduct survey to confirm evidence of mine contamination before embarking on full clearance.
- The MoD should significantly increase clearance to release mined areas on military land, in line with Croatia's revised work plan 2022–26. The MoD should also report disaggregated figures for release through technical and non-technical survey.
- CROMAC should fulfil the pledge in Croatia's 2018 extension request to explore the potential for mine detection dogs (MDDs) to enhance the efficiency of technical survey. The 2015 demining law, which only allows MDDs to be used in clearance and not for survey, should be amended.

¹ Republic of Croatia, Revised Work Plan 2022–2026, April 2022, p. 10.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	6	Croatia considers its current national baseline of anti-personnel mine contamination to be reasonably accurate, evidence-based, and complete. One third of remaining mined area is suspected hazardous area (SHA), indicating the need for high-quality survey prior to clearance. Almost 99% of remaining mined area is in forest or on mountains, which can pose challenges for demining operations.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	There is strong national ownership of mine action in Croatia, with political will to implement Article 5. In January 2019, CROMAC and the Government Office for Mine Action (GOMA) were integrated within the Ministry of Interior (MoI). In 2021, in order to address the slow progress in releasing mined areas under military control, CROMAC and the Ministry of Defence (MoD) discussed conducting joint non-technical and technical survey to identify and release confirmed hazardous areas (CHAs) and SHAs within the MoD's responsibility.
GENDER AND DIVERSITY (10% of overall score)	4	4	Gender policies and their implementation in mine action in Croatia are addressed under the national Gender Equality Act, which includes guidelines on gender equality and regulates against gender-based discrimination. CROMAC does not compile or disclose data regarding commercial demining companies. However, the proportion of women employed at CROMAC is low, following its incorporation into the MoI in 2019, during which a significant portion of woman (including in managerial positions) were transferred or promoted into other sectors.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	8	8	Croatia has an information management system that is compliant with the International Mine Action Standards (IMAS) and which allows disaggregation by type of contamination and method of land release. Croatia provided regular, accurate, and consistent updates on its progress in Article 5 implementation at APMB meetings and in its Article 7 reports.
PLANNING AND TASKING (10% of overall score)	7	7	A "Mine Action Revised work plan 2020–26" was adopted by the Deputy Prime Minister and Minister of the Interior, and a revised work plan for 2022–26 was adopted in April 2022. A new National Mine Action Strategy 2020–2026 had been expected to secure Parliamentary approval in 2021 but it was revised and was expected to be approved by the end of 2022. In addition, Croatia had annual operational work plans for mine survey and clearance, as well as annual targets in its revised Article 5 work plan.
LAND RELEASE SYSTEM (20% of overall score)	5	5	The 2015 law on mine action encompasses national mine action standards. However, there is a continued need for survey prior to any clearance, to avoid clearance of CHAs where no contamination was found. In 2021, hazardous areas which did not contain anti-personnel mines accounted for 20.8% of all cleared areas, although CROMAC said that clearance where no explosive ordnance was found accounted for only 3.13% of all demined land.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	8	Clearance output in 2021 was a decrease of more than 30% on the previous year. While release through technical survey increased compared to 2020, that from non-technical survey decreased. The annual land release total fell short of the targets both in Croatia's revised work plan for 2020–26 and its annual work plan for 2021, reportedly due to adverse weather that prevented the finalisation of projects in December 2021. The deviation from the 2020–2026 work plan was most significant with respect to mined area under military control, with the MoD clearing only 12% of the 2021 annual work plan target.
Average Score	6.5	6.5	Overall Programme Performance: AVERAGE

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- Ministry of the Interior (MoI), in which CROMAC and the Government Office for Mine Action (GOMA) are integrated within the Civil Protection Directorate.

NATIONAL OPERATORS

- Forty-two commercial demining companies are accredited for mine and CMR clearance operations.
- Pioneer Company of the Engineering Regiment, Croatian Armed Forces

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

Croatia is affected by mines and, to a much lesser extent, explosive remnants of war (ERW), a legacy of four years of armed conflict associated with the break-up of the former Yugoslavia in the early 1990s. On 1 August 2020, Croatia declared compliance with Article 4 of the Convention on Cluster Munitions, having completed clearance of cluster munition-contaminated areas² (see Mine Action Review's *Clearing Cluster Munition Remnants 2021* report on Croatia for further information on cluster munition remnants).

At the end of 2021, Croatia reported a total of more than 204km² of mined area remaining,³ excluding military areas. Of this 136.79km² is in confirmed hazardous area (CHA), while mines were suspected to cover a further 67.6km² of SHA (see Table 1).⁴ This represents an 18% decrease in estimated contamination excluding military areas compared to 249km² of mined area at the end of 2020.⁵ Croatia believes that

hazardous areas, excluding the military zones, contain 13,856 anti-personnel mines and 921 anti-vehicle mines.⁶

A further 29.5km² of confirmed mined area existed in areas under military control as at the end of 2021⁷ compared to 30.14km² as at the end of 2020.⁸ This mined area, which is also contaminated with unexploded ordnance (UXO), is across military barracks, training sites, radar stations, and storage sites. The areas contain an estimated total of 25,276 anti-personnel mines.⁹ The Ministry of Defence (MoD) Pioneer Company of the Engineering Regiment is responsible for clearing all military facilities.¹⁰

Survey in 2021 by the Civil Protection Directorate sector of CROMAC added 0.77km² of previously unrecorded mined areas to Croatia's information management database.¹¹

Table 1: Anti-personnel mined area (in civilian areas) (at end 2021)¹²

County	Municipal areas with hazardous areas	CHA (m ²)	SHA (m ²)	Total mined area (m ²)
Karlovac	6	21,774,899	16,364,025	38,138,924
Lika-Senj	9	63,203,329	23,510,685	86,714,014
Osijek-Baranja	6	9,667,885	1,435,418	11,103,303
Požega-Slavonija	1	4,432,452	1,856,396	6,288,848
Split-Dalmacija	2	14,740,294	3,348,229	18,088,523
Sisak-Moslavina	10	16,397,046	18,409,560	34,806,606
Šibenik-Knin	3	6,569,599	2,675,845	9,245,444
Totals	37	136,785,504	67,600,158	204,385,662

A further 29.5km² of mined area exists in areas under military control.

Seven of Croatia's twenty-one counties are still mine-affected, one fewer than in 2020. At the end of 2021, 98.7% of mine contamination was on forested land, 1.11% was on agricultural land, and 0.19% was on other areas (e.g. marshland).¹³ Much of the remaining mined area is mountainous and has not been accessed for 20 years, so the terrain and conditions will pose challenges to demining.¹⁴

According to Croatia's Civil Protection Directorate, the baseline of anti-personnel mine contamination has been established through inclusive consultation with women, girls, boys, and men, including, where relevant, with minority groups. Croatia considers its current baseline of contamination to be evidence-based and reasonably accurate, following the completion of a baseline survey.¹⁵ However, the high ratio of suspected hazardous areas (SHAs) to CHAs, and the fact that mined areas continue to be cleared without anti-personnel mine contamination being encountered, calls this into question.

2 Statement of Croatia on Clearance, CCM Second Review Conference, 25–27 November 2020.

3 Email from Slavenka Ivšić, Head of Unit, Civil Protection Directorate, Ministry of Interior, 23 May 2022.

4 Ibid.

5 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

6 Article 7 Report (covering 2021), Form C.

7 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

8 Email from Ivana Odač, Civil Protection Directorate, 16 August 2021.

9 Article 7 Report (covering 2021), Form C.

10 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022; and 2018 Article 5 deadline Extension Request, p. 25.

11 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

12 Ibid.; and Revised work plan 2022–2026, April 2022, pp. 8 and 9.

13 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022; and Revised Work Plan 2022–2026, April 2022, p. 9.

14 Interview with Nataša Mateković, CROMAC, Sisak, 18 May 2017.

15 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In August 2018, the Croatian government decided that 54 government agencies, including CROMAC and the Government Office for Mine Action (GOMA), were to be integrated within existing State administration bodies. This was formally concluded through legislation which entered into force on 1 January 2019.¹⁶ As a consequence, CROMAC and GOMA ceased to exist as separate government entities and CROMAC became an "operational sector" within the Civil Protection Directorate, under the Ministry of the Interior (MoI).¹⁷ The main rationale for this was said to be "the establishment of a more relevant and operationally wider national institution (Civil Protection Directorate) that could more efficiently and effectively tackle all of the aspects of civil protection in the Republic of Croatia, including mine action activities".¹⁸

Prior to 2019, both CROMAC (established in 1998 as the umbrella organisation for mine action coordination),¹⁹ and the GOMA (created in 2012 as a government focal point for mine action),²⁰ had operated as independent entities.

A new law on mine action was adopted by the Croatian parliament on 21 October 2015.²¹ While the Law marked an improvement in certain respects (for instance, by permitting land release through technical survey), there were concerns that it would impede efficient and effective mine action.²²

Regarding accreditation, the MoI provides three separate permits: approval for manual mine detection; approval for mechanical mine detection; and approval for operations by mine and explosive detection dogs (EDDs). This replaces the former unified accreditation licence.²³

The Civil Protection Directorate – CROMAC is not responsible for survey and clearance of military areas, which comes under the remit of the MoD. However, in order to address the slow progress in release of mined areas under military control, CROMAC and the MoD held joint meetings to outline further cooperation between the ministries. This included plans for joint non-technical and technical survey to identify CHA and SHA which fall within the MoD's responsibility.²⁴

In its 2018 Extension request, Croatia estimated that fulfilment of its APMBC Article 5 obligations would cost a further €459 million in total.²⁵ In its Revised Work Plan 2022–2026 Croatia estimated it would cost €219 million to clear the remaining hazardous area.²⁶ Funding for land release through to 2025, is expected to come from the Croatian government (51%) and from the European Union (EU) and other sources (49%).²⁷

In 2021, the overall annual mine action budget for survey and clearance in Croatia was €47.6 million. The State contribution was almost 70% of the total (approx. €33.2 million),²⁸ an increase on the €31.7 million in 2020, when it was more than 57% of the budget.²⁹ EU funding remained a significant contribution in 2021 but fell from 40% of the total budget in 2020 to some 30% (€14.4 million) of the 2021 budget.

Croatia does not have a resource mobilisation strategy for Article 5 implementation.³⁰ The Civil Protection Directorate reported in 2022 that an in-country platform for dialogue, consisting of representatives from the MoI and the association of private companies in demining, meets on a regular basis.³¹

ENVIRONMENTAL POLICIES AND ACTION

There are no specific standards for environmental management in Croatia, and several synchronised cross-ministry policies and laws regulate environmental protection.³² In accordance with the 2015 Act on Mine Action (as amended) mine action operations are to minimise adverse impact on the environment. Furthermore, planning for mine action operations must identify and assess relevant environmental issues and determine appropriate and effective mitigation measures. Croatia's annual mine action plans are coordinated through several ministries, including the Ministry of Economy and Sustainable Development, and with local and regional administrations. Specific nature protection measures are described in detail within conceptual demining plans and operators are obliged to take all reasonable measures to ensure that the environment is left in a state suitable for its intended use once mine action operations cease.

16 Act on Amendments to the Act on Mine Action (OG No. 118/2018); and Act on Amendment to the Act on the Government (OG No. 116/2018).

17 Emails from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019 and 8 April 2020; and Article 7 Report (covering 2018), Form J; and Article 7 Report (covering 2019), p. 1.

18 Article 7 Report (covering 2019), Form 4.1.

19 CROMAC, "National Mine Action Strategy of Croatia 2009–2019", Zagreb, June 2009, p. 2.

20 Interviews with Dijana Pleština, Director, GOMA, in Geneva, 23 May 2012 and 10 April 2014; and email from Miljenko Vahtarić, CROMAC, 4 July 2013.

21 OG No. 110/15; and Article 7 Report (covering 2017), Form A.

22 Interviews with Neven Karas, CROMAC; and Tomislav Ban, Assistant Director and Head of Sector for Operational Planning and Programming, CROMAC, Sisak, 18 May 2017.

23 Email from Miljenko Vahtarić, CROMAC, 24 August 2016.

24 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

25 2018 Article 5 deadline Extension Request, p. 44.

26 Revised Work Plan 2022–2026, April 2022, p. 13.

27 Ibid.

28 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022; and Article 7 Report (covering 2021), Form C.

29 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021; and Article 7 Report (covering 2020), Form C.

30 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020.

31 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

32 Ibid.

For EU and international projects targeting Natura 2000 Ecological Network areas or nature or national park areas, particularly recent projects financed by the EU Cohesion Fund, the environmental considerations are more complex. Every clearance project is subject to a comprehensive environmental study, which details specific measures that must be performed prior, during, and after clearance.³³

GENDER AND DIVERSITY

The Gender Equality Act,³⁴ which establishes national guidelines for gender equality, prohibits gender-based discrimination, and creates equal opportunities for men and women, including with regard to employment.³⁵

According to the national authorities, women, men, boys and girls are all effectively consulted during survey and community liaison activities.³⁶ CROMAC gathers all relevant data during non-technical survey.³⁷

The Civil Protection Directorate does not compile or disclose data regarding commercial demining companies, which are privately owned.³⁸ Within the Civil Protection Directorate of the MoI, CROMAC employs 89 people, of whom 10 (some 12%) are women. As at May 2022, no women were employed in managerial or supervisory level positions in CROMAC, and only 2.24% of CROMAC field operations positions were held by women, though others are employed as desk officers.³⁹ According to Croatia, the low proportion of women is due to the fact that when CROMAC ceased to exist as an independent centre and was downsized when it was integrated within the Civil Protection Directorate/MoI in 2019, a significant portion of woman (including in managerial positions) were transferred or promoted into other sectors and managerial positions in the MoI or in other State or local authority institutions.⁴⁰

INFORMATION MANAGEMENT AND REPORTING

For the purpose of mine action information management, CROMAC established a mine information system (MIS), which is said to be compliant with the International Mine Action Standards (IMAS) and customised to meet CROMAC's needs. The MIS uses databases and a geographic information system (GIS) to deliver a fully integrated information management system.⁴¹ Efforts are ongoing to improve the quality of mine-related data by CROMAC's survey personnel.⁴²

Croatia submits annual Article 7 transparency reports and reports on its progress in Article 5 implementation at the APMBC intersessional meetings and meetings of States Parties. In May 2022, Croatia submitted its revised Article 5 work plan for 2022–2026 to the Committee on Article 5 Implementation.

PLANNING AND TASKING

Croatia's national mine action strategy for 2009–19 was drafted by CROMAC with the agreement of concerned ministries, the GOMA, the National Protection and Rescue Directorate, and local administration and self-administration bodies whose responsibility covers regions with hazardous areas.⁴³ The strategy, which was adopted by Parliament, included among its main goals the completion of mine clearance by 2019. This was not achieved.⁴⁴ A new national mine action strategy 2020–2026 was set to be approved by Parliament in 2021.⁴⁵ As at May 2022, an updated revised draft of the National Mine Action Strategy 2020–2026 had been sent to decision-makers, including the relevant government ministries and to mine action stakeholders. Approval was expected by the end of 2022.⁴⁶

33 Ibid.

34 Official Gazette 82/08 and 69/17.

35 Article 7 Report (covering 2017), Form C; Statement of Croatia, APMBC Intersessional Meetings, Geneva, 7 June 2018; and email from Davor Laura, CROMAC, 6 April 2018.

36 Ibid.

37 Email from Ivana Odalj, Civil Protection Directorate, 16 August 2021.

38 Ibid.

39 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

40 Email from Ivana Odalj, Civil Protection Directorate, 16 August 2021.

41 CROMAC website, "CROMAC's Mine Information System", accessed 26 June 2018.

42 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

43 2018 Article 5 deadline Extension Request, p. 25.

44 Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (covering 2015), Form B.

45 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

46 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

In 2018, Croatia was granted a seven-year request to extend its APMBC Article 5 deadline from 1 March 2019 to 1 March 2026. In its extension request, Croatia stated it had prioritised the remaining mined areas according to those which affect safety; pose barriers to socio-economic development; and impact the environment in other ways. Priorities at the operative level are elaborated in annual demining action plans.⁴⁷

A "Mine Action Revised work plan 2020–26" was adopted by the Deputy Prime Minister and Minister of the Interior in 2019.⁴⁸ However, following Croatia's failure to meet work plan targets in 2020, annual clearance targets were increased and survey targets were decreased for 2021,⁴⁹ and a revised mine action work plan issued for 2022–2026.⁵⁰

Based on approved funding, CROMAC drafts annual work plans, which are submitted to the responsible ministries

and other State bodies for comment and approval.⁵¹ In its 2021 annual work plan, CROMAC planned to release 42.4km² through clearance, 5km² through technical survey, and 6.8km² through non-technical survey.⁵² It fell well short of the annual work plan target for clearance, but broadly met the annual targets for survey. The MoD submits its demining plan for military facilities to CROMAC annually.⁵³ In 2021, the MoD's land release target was 5.4km².⁵⁴

Land release targets for 2022 were revised upwards after 2021 clearance targets were not met.⁵⁵ In its 2022 annual work plan, CROMAC planned to release 38.1km² through clearance: 3.8km² of "clearance in combination with technical survey", 7.8km² through technical survey, and 10km² through non-technical survey. In addition, the MoD has a land release target of 7.4km² for 2022.⁵⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The 2015 law on mine action allowed use of technical survey to confirm the presence or absence of contamination.⁵⁷ The law introduced a new procedure for "supplementary general survey" (a form of non-technical survey) and enabled "exclusion" (i.e. reduction) of SHAs through technical survey, which was not possible under the previous law.⁵⁸ The law also eliminated the need for standing operating procedures (SOPs), as all aspects of mine action were defined in detail.⁵⁹ National mine action standards are also encompassed within it⁶⁰ and no changes were made in 2021.⁶¹

In recent years, a significant number of CHAs have been cleared in which no anti-personnel mines were found, although the Civil Protection Directorate said many of these areas did, however, contain anti-vehicle mines or UXO. Furthermore, other oversized CHAs were cleared with very few anti-personnel mines discovered. In 2021, hazardous areas which did not contain anti-personnel mines accounted for 20.8% of all cleared areas,⁶² although the Civil Protection Directorate said that only some 3.13km² of mined area was cleared without finding any explosive ordnance.⁶³

The high proportion of cleared land containing no anti-personnel mine contamination in recent years calls into question the efficiency of the demining and strongly suggests the need for better use of pre-clearance, evidence-based survey to confirm contamination before time- and cost-intensive full clearance is undertaken on mined areas recorded by CROMAC as "confirmed".

The Croatian Mine Action Centre's Centre for Testing, Development and Training (HCR-CTRO) provides two testing sites for various clearance methods on different soil types. HCR-CTRO is also the coordinator of the NATO SPS Project entitled "Biological Method (Bees) for Explosive Detection", working in collaboration with the universities of Zagreb, St. Andrews, and Banja Luka. "The project aims to develop innovative methods and technologies for detection of mines and minefields, using trained honeybee colonies through three different techniques: training honeybees for explosive detection, polymer films as an explosive sensor, and honeybees imaging over the landmines. Two main methods were used with the trained honeybee colonies: the passive and the active method that can be applied in suspected area reduction,

47 2018 Article 5 deadline Extension Request, pp. 8 and 11.

48 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

49 Statement of Croatia on Clearing Mined Areas, 19th Meeting of States Parties (virtual meeting), 15–19 November 2021; and email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

50 Revised Work Plan 2022–2026, p. 10.

51 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

52 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

53 2018 Article 5 deadline Extension Request, p. 25; and email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

54 Revised Work Plan 2020–2026, April 2022, p. 9.

55 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

56 Revised Work Plan 2022–2026, p. 10.

57 National Gazette No. 110/15; and CCM Article 7 Report (covering 2017), Form A.

58 CCM Article 7 Report (covering 2017), Form A; and emails from Miljenko Vahtarić, CROMAC, 13 and 18 May 2016.

59 Email from Miljenko Vahtarić, CROMAC, 13 May 2016; and Article 7 Report (covering 2015), Form A.

60 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.

61 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

62 Email from Dejan Rendulić, Senior Advisor for EU Funds and International Cooperation, Civil Protection Directorate, 3 August 2022.

63 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

or in internal and external quality control after completion of demining." The project, which started in 2017 and was extended due to the COVID-19 pandemic,⁶⁴ was completed in September 2021 and presented in Bratislava at the NATO EOD Demonstration and Trials in October 2021.⁶⁵ Further improvements to the methods used should lead to a new and complementary tool for landmine detection in the future.⁶⁶

Croatia organises an annual Mine Action Symposium, which discusses new detection and clearance technologies. Due to the COVID-19 pandemic, the 2020 symposium was postponed until June 2021, and was organised by the MoI and the Centre

for Testing, Development and Training, in cooperation with Organization for Security and Co-operation in Europe (OSCE Project Co-ordinator in Ukraine).⁶⁷

In August 2021, as part of a study conducted by the Geneva International Centre for Humanitarian Demining (GICHD) on difficult terrain in mine action, the GICHD visited three areas of "difficult terrain". The primary objective of the study is to support national authorities in their efforts to address explosive hazards and return land to safe and productive use. CROMAC shared statistical data for the analysis with the GICHD research team, which will be used in the study.⁶⁸

OPERATORS AND OPERATIONAL TOOLS

Non-technical survey and technical survey in Croatia are conducted by CROMAC. In 2021, it had 27 non-technical personnel and 39 personnel working on Quality Control (QC)/Quality Assurance (QA) tasks.⁶⁹ This is a slight decrease in non-technical personnel and an increase in technical personnel compared with the 30 non-technical and 26 technical survey staff members employed the previous year.⁷⁰ The Civil Protection Directorate did not expect any further changes to survey or clearance capacity in 2022.⁷¹

As a result of conditions for earlier World Bank funding, Croatia has an unusually commercialised mine action sector, with almost all civil clearance conducted by local companies competing for tenders. Much foreign donor funding is tendered by ITF Enhancing Human Security, while CROMAC manages tendering for the Croatian Government and EU money in accordance with the Law on Public Procurement.

The trust fund, "Croatia without Mines", raises money from private sources.⁷²

As at the end of 2021, 42 commercial companies were accredited to conduct mine and CMR clearance,⁷³ one fewer than in 2021.⁷⁴ Non-governmental organisations (NGOs) are barred from competing for commercial tenders as CROMAC views their subsidy by other funds as unfair.⁷⁵ The Pioneer Company of the Engineering Regiment is responsible for clearing all military facilities.⁷⁶

Clearance operations in Croatia are conducted manually as well as with mechanical assets and with the support of mine detection dogs (MDDs). In accordance with the 2015 Act on Mine Action and its prescribed demining methodologies, MDDs are used only for clearance and not technical survey.⁷⁷

Table 2: Clearance capacity (at end 2021)⁷⁸

Clearance capacity	No.	Comments
Deminers	397	Reduction from 424 in 2020
Mine detection dogs	104	Reduction from 163 in 2020 (the average number at any time is usually approx. 100 depending on the accreditation period of each MDD ⁷⁹)
Demining machines	43	Same as in 2020

COVID-19 did not significantly affect clearance and survey operations in Croatia in 2021.⁸⁰

64 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

65 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

66 Email from Dejan Rendulić, Civil Protection Directorate, 3 August 2022.

67 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

68 Email from GICHD, 22 September 2022.

69 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

70 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

71 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

72 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.

73 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

74 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

75 Interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014.

76 2018 Article 5 deadline Extension Request, p. 25; and email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

77 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

78 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

79 Email from Dejan Rendulić, Civil Protection Directorate, 3 August 2022.

80 Ibid.

With the adoption of the new law in 2015, which enables use of technical survey, CROMAC planned to target demining on CHAs and to conduct technical survey on the remaining SHAs.⁸¹ Croatia also reported previously that it planned to research and develop methods and techniques for the use of MDDs, especially for technical survey operations, as a potentially more effective tool to address mined areas in mountainous terrain.⁸² However, this would require amendment to the 2015 demining law, which does not currently permit use of MDDs for technical survey.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

In total, almost 46.5km² of mined area was released in 2021 (including military areas), of which more than 34km² was cleared by commercial demining companies, nearly 5km² was reduced by CROMAC through technical survey, and nearly 6.8km² was cancelled through non-technical survey.⁸³ A total of 0.67km² was released by the Croatian army on military sites, including 0.38km² that was cleared.⁸⁴

Land release outputs in 2021 were overall lower than in 2020 when a total of 61km² was released, of which 49.2km² was cleared by commercial demining companies, a further 0.4km² was cleared by the Croatian army, nearly 4.2km² was reduced by CROMAC through technical survey, and more than 7.2km² was cancelled through non-technical survey.⁸⁵

SURVEY IN 2021

CROMAC released a total of more than 11.73km² through survey in 2021, a slight increase on the 11.39km² released through survey in 2020.⁸⁶ Close to 6.76km² was cancelled through non-technical survey and more than 4.97km² was reduced through technical survey in 2021 (see Tables 3 and 4).⁸⁷ In addition, the MoD "searched" more than 0.64km² of military areas, of which nearly 0.38km² was cleared,⁸⁸ and the remaining almost 0.27km² of uncontaminated area was released.⁸⁹

Table 3: Cancellation through non-technical survey in 2021⁹⁰

County	Operator	Area cancelled (m ²)
Karlovac	CROMAC	518,175
Lika-Senj	CROMAC	910,765
Osijek-Baranja	CROMAC	1,634,406
Požega-Slavonija	CROMAC	14,886
Split-Dalmacija	CROMAC	114,988
Sisak-Moslavina	CROMAC	1,930,226
Šibenik-Knin	CROMAC	1,632,096
Zadar	CROMAC	2,868
Total		6,758,410

Table 4: Reduction through technical survey in 2021⁹¹

County	Operator	Area reduced (m ²)
Lika-Senj	CROMAC	97,072
Osijek-Baranja	CROMAC	490,679
Požega-Slavonija	CROMAC	1,436,426
Zadar County	CROMAC	2,949,468
Total		4,973,645

Non-technical survey in 2021 also resulted in the addition of 0.77km² of previously unrecorded mined area to Croatia's baseline of contamination in its national information management database.⁹²

81 Email from Miljenko Vahtarić, CROMAC, 21 October 2016.

82 2018 Article 5 deadline Extension Request, pp. 43, 44, and 45; and Additional information submitted 21 June 2018, p. 1.

83 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

84 Ibid.

85 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

86 Emails from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021 and 23 May 2022.

87 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021; and Article 7 Report (covering 2020), Form C.

88 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

89 Email from Dejan Rendulić, Civil Protection Directorate, 3 August 2022.

90 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

91 Ibid.

92 Ibid.

CLEARANCE IN 2021

In 2021, nearly 34.5km² of mined area was released through clearance (nearly 34.11km² by operators working under the direction of CROMAC (see Table 5) and a further 0.38km² by the Croatian army). During land release, a total of 1,462 anti-personnel mines were destroyed (1,214 by the Civil Protection Directorate – CROMAC; 18 by the MoD; and 230 by the MoI (as part of the “less arms, fewer tragedies” programme)); along with 79 anti-vehicle mines (48 by the Civil Protection Directorate – CROMAC and 31 by the MoI (as part of the “less arms, fewer tragedies” programme)).⁹³

The 34.48km² of total mined area cleared in 2021 is a decrease of more than 30% on 2020, when nearly 49.66km² of mined area was released through clearance (nearly 49.24km² by operators working under the direction of CROMAC and a further 0.42km² by the Croatian army).⁹⁴ CROMAC has indicated that it would have met its clearance target of 42.4km² in 2021 but for adverse weather conditions in December 2021 that delayed the geodetic measurement of cleared areas and the issuance of official certificates of land

release. Certificates for 11km² of cleared land on the Velika Kapela mountain (Karlovac project) were due to be issued in the first quarter of 2022.⁹⁵ Certificates were issued in the first quarter of 2022 for 10.5km².⁹⁶

The 375,961m² of military facilities cleared in 2021 by the Pioneer company of the Engineering Regiment of the Croatian army was a decrease from the 415,756m² of military facilities cleared in 2020.⁹⁷

The total of 1,462 anti-personnel mines destroyed in 2021 represents a sharp fall compared to 2020, when a total of 5,154 anti-personnel mines destroyed (4,883 by CROMAC; 70 by the MoD; and 201 by the MoI (as part of the “less arms, fewer tragedies” programme)).⁹⁸ The 79 anti-vehicle mines found and destroyed in 2021 represented a similar dramatic drop from 2020, when 527 were found and destroyed in 2020 (493 by CROMAC and 34 by the MoI (as part of the programme)).⁹⁹

Table 5: Mine clearance in 2021 (excluding military clearance)¹⁰⁰

County	Operator	Area cleared (m ²)*	AP mines destroyed*	AV mines destroyed*	UXO destroyed
Karlovac	Dok-ing/ COR/ Piper/ Capsula Interna	3,586,132	118	3	4
Lika-Senj	Titan/Istraživač/Dok-ing/ Piton/ Piper/Maper/Zeleni kvadrat/Rumital/Capsula Interna	6,229,149	201	20	128
Osijek-Baranja	Dok-ing/Istraživač/ Zeleni kvadrat/ Capsula Interna/Titan/Piper	4,371,502	37	18	203
Požega-Slavonija	Diz-Eko/Capsula Interna/ Titan/Zeleni kvadrat/ Istraživač/Dok-ing	4,865,810	38	5	23
Split-Dalmacija	Capsula Interna/Piton/Titan	921,413	7	0	0
Sisak-Moslavina	Maper/Manang/Istraživač/ Dok-ing/ Capsula Interna/Zeleni kvadrat/Titan/ Alfa razminiranje/ Rumital/Piper	6,179,442	622	2	291
Šibenik-Knin	Manang/Istraživač/Dok-ing/ Piper/ Capsula Interna	1,857,802	46	0	4
Zadar	Istraživač/Dok-ing/ Capsula Interna/ Zeleni kvadrat/Titan/ Piper/Diz-Eko	6,096,039	145	0	157
Totals		34,107,289	1,214	48	810

AP = Anti-personnel AV = Anti-vehicle

* An additional 375,961m² of mined area was cleared by the MoD on military areas and 18 AP mines destroyed.

93 Ibid.

94 Ibid.

95 Ibid.

96 Email from Dejan Rendulić, Civil Protection Directorate, 3 August 2022.

97 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

98 Ibid.

99 Ibid.

100 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

Clearance output equates to approximately one anti-personnel mine destroyed for every 28,000 square metres of cleared area (excluding the items of UXO and anti-vehicle mines destroyed). This is a huge decline on the 10,000 square metre average of the previous year, which already indicated either very low density of contamination or poor targeting of clearance (or both).

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMB (and in accordance with the second extension—for seven years—granted by States Parties in 2018), Croatia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2026. It is unclear whether Croatia will meet this deadline, with clearance of military facilities in particular seeming to fall considerably behind schedule.

In November 2021, having failed to reach the target output of 70.1km in 2020, Croatia indicated that the difference would be tackled over coming years with updated annual implementation and financial projections harmonised with the Oslo Action Plan. The goal is a mine-free Croatia by 2026.¹⁰¹ The changes would mostly be reflected in the scope of annual mine clearance by the MoD, with Croatia referencing the MoD's limited capacities.¹⁰²

Croatia failed to meet its land release targets in 2020 and 2021, missing by a total of 17%, releasing a total of 106.4km² across both years (including MoD areas) against a target

of 128.7km². The authorities have explained that COVID-19 reduced land release in 2020, when clearance and survey operations were closed for 55 days, and that in 2021, adverse weather in December delayed the issuance of land release certificates for nearly 11km² of clearance.¹⁰³ The limited land release capacity of the MoD between 2020 and 2022 is reported to have affected land release outputs.¹⁰⁴ Despite this, and a decline in the capacities of authorised commercial clearance companies since the end of 2019,¹⁰⁵ Croatia remains confident that survey and clearance operations will be completed by the end of 2025, leaving only administrative/paperwork issues to be settled at the beginning of 2026 before its Article 5 deadline of 1 March 2026.¹⁰⁶

Croatia's second updated work plan (2022–2026), published in Spring 2022, sets out how it proposes to release the remaining 234km² of mined area at the end of 2021 (204.4km² under the MoD/Civil Protection Directorate and 29.5km² under the MoD's jurisdiction), with higher land release targets to make up for previous shortfalls (see Table 6).

Table 6: Planned land release output in km² (2022–26)¹⁰⁷

	Total	2022	2023	2024	2025	2026
Clearance	136.8	34.3	34.6	33.1	34.8	0
Clearance in combination with Technical Survey	17.4	3.8	8.4	5.2	0	0
Technical Survey	19.8	7.8	5.0	5.0	2.0	0
Non-Technical Survey	30.4	10.0	12.6	7.8	0	0
Subtotals	204.4	55.9	60.6	51.1	36.8	0
Croatian Army (MoD area)	29.5	7.4	3.1	8.8	10.2	0

101 Statement of Croatia on Clearing Mined Areas, 19th Meeting of States Parties (virtual meeting), 15–19 November 2021.

102 Ibid.

103 Revised Work Plan 2022–2026, April 2022, p. 3.

104 Ibid.

105 Ibid., p. 12.

106 Ibid., p. 11.

107 Revised Work Plan 2022–2026, April 2022, p. 10.

Meeting demining targets for military areas remains a particular challenge. The annual release targets in Croatia's revised work plan for 2022–26 are substantially higher than the area the armed forces has cleared in recent years. Between 2018 and 2020 the MoD cleared less than 0.5km² per annum, rising slightly to 0.64km² in 2020.¹⁰⁸ In 2021, the MoD released a total of 0.64km² (of which 0.38km² was cleared) against its annual land release target of 5.4km² for the year. As previously mentioned, in 2021 CROMAC discussed with the MoD joint survey activities in military areas to address the lack of progress with land release on military sites.

Releasing land for which CROMAC is responsible will also be challenging and questions remain over whether Croatia has sufficient (and sufficiently capable) survey and clearance capacity to meet its annual targets. With an estimated 234km² of mined area still to be released at the end of 2021, the Article 5 deadline for clearance and release of land by March 2026 is very ambitious, at least without increased capacity or improved efficiency.

The situation is made more difficult as the remaining areas to be released are mainly forested (98.7%), therefore there will be a significant reduction in the use of demining machinery, especially medium and heavy machines.¹⁰⁹ Croatia foresees that more use will be made of small, mobile machines that can be efficiently transported and used in affected areas, and that the resulting increase in manual demining will reduce

productivity and increase the cost of clearance and technical survey. Use of mechanical assets is also further restricted in the "Natura 2000" protected area.¹¹⁰

A total of more than 200km² of mined area has been cleared over the last five years (see Table 7).

Table 7: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	34.48
2020	49.66
2019	39.16
2018	49.01
2017	30.38
Total	202.69

In order to ensure that Croatia meets its Article 5 obligation by 1 March 2026, CROMAC will need to significantly increase its capacity and implementation of survey to determine the size and location of contamination more accurately before starting clearance, and to cancel and reduce areas in which no evidence of contamination is found.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

The Civil Protection Directorate has continued research cooperation and discussions with the GICHD on the issue of national survey and clearance capacity to address explosive ordnance discovered after the release of contaminated areas or post completion (i.e. residual contamination). In August 2019, a joint study entitled "National capacities and residual contamination – Croatia" was published, documenting the progress made on this issue so far and highlighting the importance of a participatory and transparent long-term strategic planning progress.¹¹¹

The integration of CROMAC within the MoI, which took effect from January 2019, is reported to be one of the first steps to deal with residual risk and liability, and it is believed this will elevate the importance of the issue within the MoI.¹¹² The integration also means that the challenge of residual risk will be handled within the responsibilities of the MoI – Police Directorate EOD teams and CROMAC.¹¹³ Activities which must be conducted upon discovery of residual contamination are predefined by the Act on Mine Action.¹¹⁴

¹⁰⁸ Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2022.

¹⁰⁹ Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021; and 2018 Article 5 deadline Extension Request, p. 43.

¹¹⁰ 2018 Article 5 deadline Extension Request, p. 45; and email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

¹¹¹ GICHD, "National capacities and residual contamination – Croatia", August 2019, at: <http://bit.ly/2EwKcTt>.

¹¹² Emails from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019 and 8 April 2020.

¹¹³ Emails from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020 and 30 April 2021; Statement of Croatia on Clearance, CCM Second Review Conference (Part 1, virtual meeting), 25–27 November 2020; and Croatia, Article 4 Declaration of Compliance, 1 August 2020.

¹¹⁴ Statement of Croatia on Clearance, CCM Second Review Conference (Part 1, virtual meeting), 25–27 November 2020.

ARTICLE 5 DEADLINE: 1 JULY 2025

NOT ON TRACK TO MEET DEADLINE (LACK OF EFFECTIVE CONTROL)

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: LIGHT

MINE ACTION REVIEW ESTIMATE

1 KM²

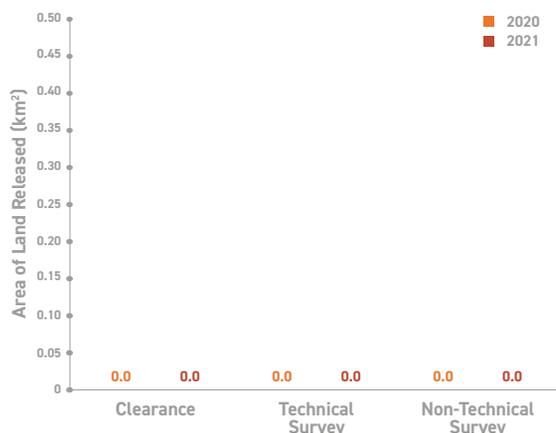
AP MINE
CLEARANCE IN 2021

0 M²

AP MINES
DESTROYED IN 2021

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Cyprus sought and was granted a further three-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline in 2021 on the basis that it still does not have effective control over areas in the north in which anti-personnel mines have been or are suspected to have been emplaced. There was no progress towards the Republic of Cyprus and the Turkish Cypriot authorities in northern Cyprus reaching an agreement on the way forward for mine clearance on the island and in 2021, for a second consecutive year, no mined area was released.

RECOMMENDATIONS FOR ACTION

- The Republic of Cyprus and the Turkish Cypriot authorities in northern Cyprus should comply with the UN Security Council's call for leaders of the two communities to agree and continue a plan of work to achieve a mine-free Cyprus, and make expeditious progress towards releasing the 29 remaining hazardous areas on the island.¹
- The Republic of Cyprus and the UN Peacekeeping Force in Cyprus (UNFICYP) should update, consolidate and align data on remaining mined areas.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority or mine action centre

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- None (Mines Advisory Group (MAG) and DOK-ING were last active in 2017)

OTHER ACTORS

- UN-supported mine action in Cyprus is coordinated by the UN Mine Action Service (UNMAS) on behalf of the UN Peacekeeping Force in Cyprus (UNFICYP)

1 UN Security Council Resolution 2646 (2022) operative para. 16.

UNDERSTANDING OF AP MINE CONTAMINATION

The precise extent of anti-personnel mine contamination in Cyprus is unclear. The Article 7 Report submitted by Cyprus in May 2022 stated that 21 anti-personnel minefields laid by Turkish forces remained: one in the buffer zone and the other twenty north of but “overwhelmingly situated adjacent to the buffer zone”. Cyprus said it did not know the size of these mined areas or if they contained mines other than anti-personnel mines.²

Contamination data in the United Nations Peacekeeping Force in Cyprus (UNFICYP)’s mine action database, cited by the UN Mine Action Service (UNMAS), differs significantly from that provided by Cyprus. It showed that across Cyprus

there were 29 mined areas covering a total of 1.5km² at the end of 2021, a level unchanged since the end of 2019,³ but that contamination consisted mostly of anti-vehicle mines (see Table 1). North of the buffer zone, mined areas include one confirmed hazardous area (CHA) and five suspected hazardous areas (SHAs) thought to contain a mixture of anti-personnel and anti-vehicle mines. Nineteen hazardous areas recorded south of the buffer zone contain only anti-vehicle mines (13 CHAs and 6 SHAs), as do three of four CHAs within the buffer zone (the mine type in the fourth was unknown).⁴

Table 1: Mined area (at December 2021)⁵

Location	CHAs	Contamination	Area (m ²)	SHAs	Contamination	Area (m ²)	Total SHA/CHA	Total area (m ²)
South of the buffer zone (territory controlled by Cyprus)	13	AV mines	418,543	6	AV mines	174,014	19	592,557
Buffer Zone	4	AV mines (3 areas) Unknown (1 area)	703,581	0	N/A	N/A	4	703,581
North of the buffer zone (territory controlled by Turkish Cypriot authorities)	1	Mixed (AV mines and AP mines)	170,493	5	Mixed	65,281	6	235,774
Totals	18		1,292,617	11		239,295	29	1,531,912

AV = Anti-vehicle AP = Anti-personnel

Cyprus has been divided geographically and politically since 1974 by a 180km-long buffer zone, following Turkish Forces’ operations in the north of the island. Minefields were laid by both the Greek Cypriot National Guard and the Turkish Armed Forces. Permission for UNFICYP to access areas within and outside the buffer zone remains limited.⁶

In February 2021, Cyprus renewed its request to extend its Article 5 deadline due to its continued inability to fulfil the mine clearance obligations in parts of the territory which are outside its effective control.⁷ The request was granted and the deadline extended until 1 July 2025.⁸

Cyprus confirmed that, in 2019, 18 SHAs (nine under the effective control of Cyprus and nine in the north of the island) were checked and declared mine-free.⁹ UNICYP had defined the 18 areas as potentially hazardous as a result of mines laid in the areas. The successful inspection of the 18 SHAs was achieved following a 2019 agreement between the President of the Republic of Cyprus and the leader of the Turkish Cypriot community in the context of confidence building measures.¹⁰

Despite repeated calls from the Security Council for the two sides to agree on “a plan of work to achieve a mine-free Cyprus” most recently in July 2022,¹¹ 2021 passed without

² Article 7 Report (covering 2021), Form C.

³ Emails from Mark Connelly, Chief of Operations, United Nations Mine Action Service (UNMAS), 8 April 2020, 26 June 2020, 28 May 2021, and 12 May 2022.

⁴ Emails from Mark Connelly, UNMAS, 28 May 2021 and 12 May 2022.

⁵ Ibid.

⁶ Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 26 September 2017.

⁷ Cyprus Article 5 deadline Extension Request, 9 February 2021.

⁸ Decision of the Nineteenth Meeting of States Parties, November 2021.

⁹ Cyprus Article 5 deadline Extension Request, Additional Information, 11 August 2021.

¹⁰ Ibid., and email from Aysan Mullahasan Atilgan, Director for Political Affairs, Ministry of Foreign Affairs of the Turkish Republic of Northern Cyprus (MoFA TRNC), 12 August 2022.

¹¹ UN Security Council 2646 (2022) operative para. 16.

progress and there was no change in the situation as of July 2022.¹² UNFICYP has followed up on the call by the Security Council, engaging with military representatives on both sides in order to make progress towards releasing the 29 remaining suspected hazardous areas on the island.¹³ While the Turkish Cypriot authorities have expressed potential interest if it involved reciprocity from the other side, the Greek Cypriot National Guard did not wish to discuss the matter.¹⁴ UNFICYP's Mine Action Service has indicated that it will continue to consider options for the next phase of clearance activities to be presented to the two sides, with a particular focus on the buffer zone.¹⁵

TERRITORY CONTROLLED BY THE REPUBLIC OF CYPRUS

Cyprus' latest Article 7 report stated that no anti-personnel mines remained in the minefields laid by the National Guard that are in territory under its effective control.¹⁶ In total, between becoming a State Party on 1 July 2003 and its original Article 5 deadline of 1 July 2013, Cyprus released all 20 mined areas under its effective control.¹⁷

BUFFER ZONE

Four mined areas remained in the Buffer Zone at the end of 2021, three of which belong to the Greek Cypriot National Guard and contain only anti-vehicle mines. The fourth belongs to Turkish Forces and the mine type is unknown.¹⁸ The Government of Cyprus considers the three minefields with only anti-vehicle mines to be under its control and not within the buffer zone.¹⁹

TURKISH-CONTROLLED TERRITORY IN NORTHERN CYPRUS

The extent of mine contamination in areas controlled by Turkish Forces is not known. Cyprus made its 2021 Article 5 extension deadline request, for the same reason as the previous three extension requests (in 2012, 2015, and 2018), on the grounds that certain parts of its territory outside its effective control contained mined areas "in which anti-personnel mines have been or are suspected to be emplaced."²⁰ Since the end of 2019, Cyprus has estimated that 20 Turkish-laid minefields remain north of and mostly adjacent to the buffer zone, plus one in the buffer zone near Deryneia village. The size of the minefields and whether they include mines other than anti-personnel mines, was reported as unknown.²¹

One minefield has been reported just north of the buffer zone in Mammari, where heavy rains led to mines being washed into the buffer zone in 2014 and 2015. UNFICYP has raised the issue of clearance of this minefield with the Turkish forces and has offered assistance in this regard.²² In 2017, a small area of the Mammari minefield was cleared by a Croatian commercial operator contracted by the Turkish Armed Forces.²³

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

UN-supported mine action operations in Cyprus are coordinated by UNMAS on behalf of UNFICYP.²⁴ UNMAS is a component of UNFICYP, providing expertise in mine action planning and coordination, quality assurance (QA) oversight, and management of mine action information.²⁵ UNMAS also provides assistance to the Committee on Missing Persons (CMP) to ensure safe access to areas where it conducts activities and to UNFICYP for explosive ordnance disposal (EOD) call-out tasks.²⁶

ENVIRONMENTAL POLICIES AND ACTION

There was no available information on environmental policies relevant to demining in Cyprus, but given that UN-supported mine action operations in Cyprus are said to be conducted in accordance with the International Mine Action Standards (IMAS),²⁷ it is assumed that this includes IMAS environmental standards.

12 Report of the Secretary-General on the United Nations operation in Cyprus, UN Doc S/2022/533, 5 July 2022, operative para. 18.

13 Ibid.

14 Ibid., and email from Aysan Mullahasan Atilgan, MoFA TRNC, 12 August 2022.

15 Report of the Secretary-General on the United Nations operation in Cyprus, UN Doc S/2022/533, 5 July 2022, operative para. 18.

16 Article 7 Report (covering 2021), Form C.

17 Committee on Article 5 Implementation, "Observations on implementation of Article 5 by Cyprus", 23 June 2015; and Article 7 Report (covering 2013), Form G.

18 Emails from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018; and Mark Connelly, UNMAS, 17 July 2019 and 12 May 2022. Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/676, 6 July 2018, para. 44.

19 Interview with Demetris Samuel, Deputy Permanent Representative, Cyprus Permanent Mission to the UN in Geneva, Geneva, 19 May 2016.

20 Cyprus Article 5 deadline Extension Request, 9 February 2021.

21 Article 7 Report (covering 2021), Form C.

22 Ibid.; and email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.

23 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.

24 Ibid.

25 UNMAS, "Cyprus" webpage, accessed 18 August 2022, at: <http://bit.ly/2GtXje>.

26 Report of the Secretary-General on the UN operation in Cyprus, UN doc. S/2018/25, 9 January 2018, para. 12.

27 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.

INFORMATION MANAGEMENT AND REPORTING

UNFICYP uses the Information Management System for Mine Action (IMSMA) database and in 2020 upgraded it from Version 6 to New Generation.²⁸

In 2017, a review and reconciliation of all minefield database information revealed that a number of SHAs had already been cleared and/or cancelled. However, due to capacity limitations between 2011 and 2016, the information had not been removed from the database. The review resulted in the removal of seven SHAs (totalling more than 950,000m²) from the database.²⁹

Cyprus has submitted annual Article 7 reports regularly since acceding to the APMBC in July 2003, most recently in 2022, for calendar year 2021. Cyprus has submitted four Article 5 deadline extension requests: in 2012, 2015, 2018, and most recently in 2021. Cyprus submitted most of the reports in a timely manner but provided only limited information due to it not having effective control over the remaining anti-personnel mined areas.

PLANNING AND TASKING

Neither Cyprus nor Turkish Cypriot-controlled northern Cyprus has disclosed plans to survey and clear the remaining mine contamination. The self-styled Turkish Republic of Northern Cyprus (TRNC) reported to Mine Action Review, however, that it made a recent proposal for a mine-free island on 8 July 2022 (see *Land Release Outputs and Article 5 Compliance* below for further detail) and that it had previously made comprehensive proposals for clearing mines from the island in 2014, 2015, and 2018.³⁰

As indicated above, non-technical survey conducted in 2019 was initiated as a confidence-building measure agreed in February 2019 by President of Cyprus, Nicos Anastasiades, and President of TRNC Mustafa Akıncı in the context of long-running discussions on a political settlement and "with a view to working towards a mine-free Cyprus".³¹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

All UN-supported mine action operations in Cyprus are said to be conducted in accordance with IMAS.³² In 2016, UNMAS updated the national technical standards and guidelines that are used in UNFICYP to reflect current best practice and to ensure the highest standards are applied for UNFICYP clearance operations.³³

OPERATORS AND OPERATIONAL TOOLS

UNMAS conducts non-technical and technical survey in cooperation with representatives of the National Guard and Turkish Cypriot Security Force.³⁴ No clearance has been conducted since 2017 when the Turkish Armed Forces contracted DOK-ING to conduct clearance, and Mines Advisory Group (MAG) to conduct QA of demining in the Mammari minefield.³⁵

The focus for UNFICYP is the four CHAs in the buffer zone (three anti-vehicle minefields belonging to Cyprus, and one mined area, where the mine type is unknown, which is the responsibility of Turkish forces). It does, though, have a mandate to support the removal of all mines in Cyprus.³⁶

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

No mine survey or clearance was reported in Cyprus in 2021 or 2020.³⁷

28 Email from Mark Connelly, UNMAS, 16 June 2021.

29 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/25, 9 January 2018, para. 12.

30 Email from Aysan Mullahasan Atılgan, MoFA TRNC, 12 August 2022.

31 Security Council Press Statement on Cyprus, 27 February 2019, UN doc. SC/13722, at: <http://bit.ly/2JKyYus>.

32 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.

33 Ibid.

34 Email from Mark Connelly, UNMAS, 26 July 2019.

35 Ibid.

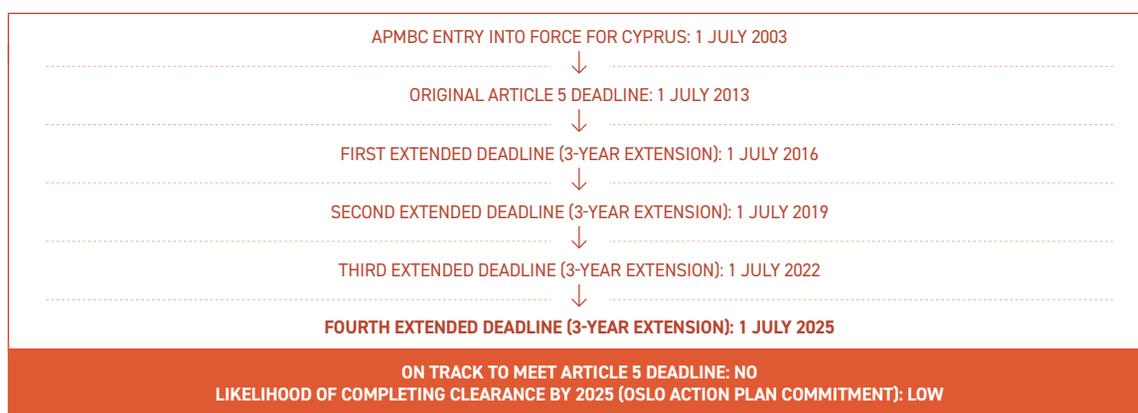
36 Email from Mark Connelly, 12 May 2022.

37 Article 7 Reports (covering 2020 and 2021), Forms C and F; emails from Mark Connelly, UNMAS, 28 May 2021 and 12 May 2022.

The last land release occurred in 2019 when UNFICYP announced release of 18 SHAs covering 210,882m² under confidence-building measures agreed in February 2019.³⁸ The SHAs included nine on each side of the island divide and were selected by UNMAS in cooperation with the National Guard and forces in the Turkish Cypriot-controlled north. The respective militaries conducted non-technical survey and UNMAS and UNFICYP then visited one site in the north and one site in the south to receive documentation certifying completion of the tasks. Some of the sites were located in military areas and respective military forces took the opportunity to conduct training resulting in some area reduction but no items were found.³⁹

UNMAS reported that in 2021, there had been no developments from the situation the preceding year. UNFICYP continues to raise the issue of demining in accordance with its mandate, but despite continued dialogue between UNFICYP senior managers and key leaders, there has been no agreement on options to continue demining yet.⁴⁰ In its recent proposal for a mine-free island dated 8 July 2022, reported to have been conveyed to the authorities of the Republic of Cyprus through the United Nations Secretary-General, the TRNC said that it proposed that: the ultimate goal shall be the clearance of the 29 remaining SHAs to free the Island from all landmines; demining activities shall be facilitated by UNFICYP in coordination with the two sides; demining activities shall commence in areas adjacent to the buffer zone (one minefield under the "jurisdiction" of the Turkish Cypriot authorities in Deryneia, the other three under Cypriot control); demining activities in each side shall be conducted proportionately and simultaneously; and that both sides shall convene to discuss, in detail, the modalities of the implementation of the demining operations.⁴¹

ARTICLE 5 DEADLINE AND COMPLIANCE



Cyprus is obligated to destroy or ensure the destruction of all anti-personnel mines in mined areas under its jurisdiction or control, as soon as possible but not later than 1 July 2025.

Cyprus reported clearing all anti-personnel mines in mined areas that it accepted were under its control within ten years of becoming a State Party, namely by 1 July 2013. In 2012, Cyprus submitted the first of four Article 5 deadline extension requests, on the grounds that Cyprus does not have effective control over remaining contaminated areas in the north under the control of Turkish forces.⁴² Cyprus has provided the same justification for all subsequent extension requests. The fourth request, submitted in February 2021, sought an extension of three years until 1 July 2025,⁴³ which was granted at the Nineteenth Meeting of States Parties.

Turkey (now renamed Türkiye) received a three-year, nine-month extension to its Article 5 clearance deadline until 31 December 2025 but did not request additional time for clearance of the areas it controls in northern Cyprus.⁴⁴

As indicated above, the UN Security Council continues to urge both sides in Cyprus to agree upon and implement a plan of work to achieve a mine-free Cyprus, most recently in July 2022.⁴⁵

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

It is not known whether plans are in place to address residual contamination once Cyprus' Article 5 obligations have been fulfilled.

38 UNFICYP, "18 Suspected Hazardous Areas declared mine free", Press release, 9 December 2019.

39 Emails from Mark Connelly, UNMAS, 26 June and 3 July 2020.

40 Email from Mark Connelly, UNMAS, 12 May 2022.

41 'Proposal of the TRNC for a Mine-Free Island', provided via an email from Aysan Mullahasan Atılğan, MoFA TRNC, 12 August 2022.

42 2021 Article 5 deadline Extension Request.

43 Ibid.

44 Turkey's Article 5 deadline Extension Request, 31 March 2021. On the issue of Turkish jurisdiction, see, e.g., European Court of Human Rights, *Güzyurtlu and others v. Cyprus and Turkey*, Judgment (Grand Chamber), 29 January 2019.

45 UN Security Council Resolution 2646 (2022), operative para. 16.

DEMOCRATIC REPUBLIC OF CONGO



CLEARING THE MINES 2022

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: LIGHT

MINE ACTION REVIEW ESTIMATE

0.4km²

AP MINE
CLEARANCE IN 2021

0.04km²

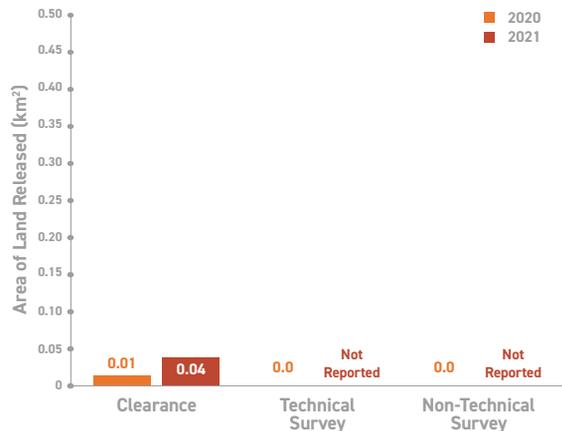
(PARTIAL REPORT BASED
ON OPERATOR DATA)

AP MINES
DESTROYED IN 2021

17

(BASED ON OPERATOR DATA)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

The Democratic Republic of Congo (DR Congo) submitted a request for a three-and-a-half-year extension to its Article 5 deadline in July 2021, which was granted at the Nineteenth Meeting of States Parties. Survey by the national non-governmental organisation (NGO) Afrique pour la Lutte Antimines (AFRILAM) in late 2021 located five previously unrecorded mined areas in Kasai province. An Article 7 transparency report submitted in May 2022 more than tripled the DR Congo's estimate of mined areas containing anti-personnel mines.

RECOMMENDATIONS FOR ACTION

- The DR Congo should update its latest Article 5 deadline extension request including a new work plan and new timelines that take account of the increased estimate of contamination.
- The Congolese Mine Action Centre (CCLAM) should specify what arrangements it is making for the long-delayed survey of Aru and Dungu territories.
- The DR Congo should submit annual, comprehensive Article 7 reports detailing results of survey and clearance for each previous calendar year, as the Anti-Personnel Mine Ban Convention (APMBC) requires.
- The DR Congo should report in detail on plans for and results of resource mobilisation activities.
- The DR Congo should detail its plans for sustainable capacity to tackle previously unidentified hazards.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	6	Two years after the DR Congo sharply reduced a previously inflated estimate of contamination, new survey has located previously unrecorded hazardous areas tripling the estimate of contamination. The DR Congo still needs to survey Aru and Dungu districts and the new finds add further uncertainty about the extent of the DR Congo's mine challenge.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	6	CCLAM coordinates mine action with financial support from the government but it relies on the United Nations Mine Action Service (UNMAS) and other international organisations for technical support and on the UN and international donors to fund operations.
GENDER AND DIVERSITY (10% of overall score)	6	6	The DR Congo's Article 5 extension request says it will encourage operators to employ up to 30% women in operations teams and at least half of the risk education teams. CCLAM recognised the significance of gender in mine action by including a section on it in the 2018–19 national mine action strategy. All activities, especially risk education and victim assistance, are required to take account of the needs of different age groups and genders, and women should participate in all essential stages of mine action planning.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	3	The DR Congo submitted an Article 7 report in May 2022 but it covered a 27-month period from 1 January 2019 to 31 March 2022 underscoring the lack of consistency in CCLAM's reporting. CCLAM continued to receive support from UNMAS and Norwegian People's Aid (NPA) for information management but operators say the quality of data from the database is poor and they are still being deployed for survey and clearance to tasks that have no mine contamination.
PLANNING AND TASKING (10% of overall score)	4	4	The July 2021 extension request included a calendar for operations with monthly targets for clearance and cost projections but these were overturned by release of new data tripling the estimate of contamination. Moreover, implementation is dependent on international donor funding. The request allowed a year for survey and clearance in Aru and Dungu but did not indicate when survey is expected to start.
LAND RELEASE SYSTEM (20% of overall score)	5	5	CCLAM has 24 chapters of National Technical Standards and Guidelines which it reportedly revised in 2018, making amendments to standards dealing with demining techniques and deminer safety. CCLAM still required support from UNMAS for quality assurance (QA) and quality control (QC).
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	3	3	The DR Congo has not reported details of land released in 2020 or 2021. It reported that DCA tackled three tasks covering 28,400m ² but gave no details of what work was undertaken or when it was conducted. DCA reported clearing 43,000m ² in 2021.
Average Score	4.6	4.7	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Centre Congolais de Lutte Antimines (CCLAM)

NATIONAL OPERATORS

- Afrique pour la Lutte Antimines (AFRILAM)
- National NGOs conduct non-technical survey and mine risk education

INTERNATIONAL OPERATORS

- DanChurchAid (DCA)
- G4S

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

The DR Congo is believed to have very limited anti-personnel mine contamination of less than 0.5km² but the precise extent is obscured by fluctuating and inconsistent official accounts and incomplete survey.

A new assessment of its contamination provided in an Article 7 transparency report in May 2022 said the DR Congo had 37 hazardous areas affecting 399,969m² (see Table 1),¹ more than triple the estimate of contamination it had submitted eight months earlier in its 2021 request for an extension of its APMBC Article 5 deadline.² The new estimate included five mined areas identified by the national NGO AFRILAM working under contract to the United Nations Mine Action Service (UNMAS).³ In June 2022, the DR Congo presented another estimate to the APMBC Intersessional Meetings, reporting that it had 36 hazardous areas covering 397,569m².⁴

The DR Congo informed the June 2022 Intersessional Meetings that several accidents had occurred between October and December 2021 in Kasai province in areas that were not previously suspected as hazardous. It said subsequent surveys had identified 328,726m² of additional contamination in Kasai and further surveys in Tanganyika province conducted during April 2022 had found 27,000m² of previously unreported mined area. It said the new discoveries raised the DR Congo's total contamination to 40 areas affecting 421,557m² though clearance of four areas in Tshopo province had removed 26,747m².⁵ The figures cited were not consistent with the data presented in either the Article 5 extension request⁶ or the Article 7 Report, which raised the estimate of contamination in Kasai from 700m² to 302,426m² and in Tanganyika province where it rose from 6,943m² to 36,343m².

The latest assessments also do not include any contamination in Aru district of Ituri province and Dungu in Haut-Uele province which it still plans to survey following up a preliminary assessment in 2013. The areas were not previously surveyed due to insecurity but since 2019 DR Congo has indicated that lack of financing was the factor holding back survey.⁷

Table 1: Anti-personnel mined area (at end-March 2022)⁸

Province	Mines areas	Area (m ²)
Ituri	4	6,100
Kasai	7	302,426
Maniema	2	4,752
North Kivu	9	12,760
South Kivu	2	851
North Ubangi	4	35,417
Tanganyika	8	36,343
Tshuapa	1	1,320
Totals	37	399,969

DR Congo has anti-personnel and anti-vehicle mine contamination left by decades of conflict with neighbouring states, rebel groups and militias since independence in 1960. At the end of 2016, UNMAS reported DR Congo still had 54 confirmed hazardous areas and suspected hazardous areas covering a total of 851,228m²,⁹ but subsequent re-survey found that a number of areas were contaminated by the DR Congo's more prevalent problem of unexploded ordnance (UXO) and contributed to a sharp fall in the estimate of contamination.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The mine action sector is overseen by the National Mine Action Committee (la Commission Nationale de Lutte Antimines, CNLAM), a multi-sectoral body which is supposed to meet twice a year and is composed of deputies from both parliamentary chambers, officials from four ministries, and representatives of five civil society organisations linked to mine action.¹⁰

Management of the sector is under the Centre Congolais de Lutte Antimines (CCLAM), which was established in 2012 with support from the UN Mine Action Coordination Centre (UNMACC) and UNMAS.¹¹ It is responsible for setting strategy, accrediting operators, information management, budgeting, and resource mobilisation. Law 11/007 of 9 July 2011 underpins

1 Article 7 Report (covering January 2019 to 31 March 2022), Form C.

2 Article 5 deadline Extension Request, 9 July 2021, p. 22. The request estimated AP mine contamination at 117,031m².

3 Email from Jean-Denis Larsen, Chief of Mine Action Programme, UNMAS, 31 May 2022.

4 Statement of DR Congo, Intersessional Meetings, Geneva, 20 June 2022.

5 Ibid.

6 The extension request recorded six hazardous areas in Tshopo province totalling 48,188m². The DR Congo's Intersessional statement refers to clearance of four HAs clearing 26,747m² but gives no indication of what action, if any, accounts for the contamination previously reported in Tshopo province.

7 Statement of DR Congo, Fourth APMBC Review Conference, 25–29 November 2019.

8 Article 7 Report (covering 1 January 2019 to 31 March 2022), Form C.

9 Email from Steven Harrop, Chief of Operations, UNMAS, 20 September 2017.

10 "Stratégie Nationale de Lutte Antimines en République Démocratique du Congo 2018–2019", CCLAM, November 2017, p. 11. The government ministries represented in CNLAM include defence, health, interior, and humanitarian affairs.

11 CCLAM, "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, p. 11; and Response to Cluster Munition Monitor questionnaire by Michelle Healy, UNMACC, 29 April 2013.

the national mine action programme.¹² CCLAM took over from UNMAS as the national focal point for demining in early 2016 overseeing accreditation, issuing task orders, conducting quality assurance (QA)/quality control (QC) and managing the national database but lack of capacity remained a concern for operators.¹³ The government has provided funding for CCLAM's operating expenses but has not funded operations. In 2018, that support amounted to US\$530,000¹⁴ but the Article 5 deadline extension request submitted in 2021 indicated this would fall to US\$272,271 and CCLAM indicated it would argue for government support for operations.¹⁵

UNMAS started working in DR Congo in 2002, when it established UNMACC as part of the UN Stabilisation Mission in the DR Congo (MONUSCO), coordinating mine action through offices in the capital, Kinshasa, and five other cities. In 2014, in accordance with Security Council Resolution 2147 (2014), humanitarian mine action was removed from MONUSCO's mandate although it has continued financial support and in 2020 and 2021 UNMAS was funded exclusively by MONUSCO.¹⁶

UNMAS supported mine action in DR Congo in 2021 operating with 25 staff (11 national and 14 international) working from offices in Beni, Bukavu, and Goma. It was also in the process of recruiting another eight national staff for a project funded by the South Korean government.¹⁷ UNMAS contracted an international operator, G4S, for disposal of improvised explosive devices (IEDs) and funded national operator AFRILAM to conduct explosive ordnance disposal (EOD) in five provinces. UNMAS provided technical advice to support national authorities preparing the APMB Article 5 deadline extension request submitted in September 2021 and participating in a meeting convened by the APMB Implementation Support Unit in November 2020 on what was needed for DR Congo to fulfil its Article 5 obligations.¹⁸

ENVIRONMENTAL POLICIES AND ACTIONS

The DR Congo does not appear to have national standards or policies covering the protection of the environment during mine action operations.

GENDER AND DIVERSITY

The national mine action strategy for 2018–19 stipulated that all mine action activities, particularly those related to risk education and victim assistance, must reflect the different needs of individuals according to age and gender, in a non-discriminatory manner. It also stated that the principles of non-discrimination against women as set out in the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and UN Security Council Resolution 1325 (2000) are to be respected, ensuring that women are involved in all essential stages of mine action (planning, implementation, monitoring, and evaluation), and that activities take into account the special needs of women and girls.¹⁹

CCLAM reported in 2019 that approximately 30% of operational staff in survey and clearance teams were female and only around 7% of managerial or supervisory positions were held by women, but that local customs about the employment roles appropriate for women were an obstacle to hiring female staff.²⁰ DR Congo's 2021 Article 5 deadline

extension request said CCLAM would work closely with operators to integrate women deminers into mine action so that women make up 30% of the staff in operations teams and at least half the members of risk education teams. It said risk education task orders would focus on increasing the participation of women in outreach sessions.²¹

CCLAM had previously reported that mine action survey teams were already gender balanced and that efforts were undertaken to ensure that all community groups, including women and children, are consulted. It also noted, however, the need to continue raising awareness on gender equality in certain communities as local customs can discriminate against women undertaking certain categories of work.²²

As of December 2021, UNMAS employed seven women among its staff of twenty-four, five of them international staff, including the programme manager, and two national staff working in office positions.²³

12 Email from Maître Sudi Alimasi Kimputu, Director, CCLAM, 3 June 2019.

13 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Bill Marsden, MAG, 11 May 2018; and Guillaume Zerr, Humanity and Inclusion, 24 May 2018.

14 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.

15 Article 5 deadline Extension Request, 6 July 2021, p. 11.

16 UN Security Council Resolution 2147, 28 March 2014; and email from Aurelie Fabry, UNMAS, 28 April 2021.

17 Email from Jean-Denis Larsen, UNMAS, 31 May 2022.

18 Email from Aurelie Fabry, Programme Officer, UNMAS, 28 April 2021.

19 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, pp. 15–16.

20 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.

21 2021 Article 5 deadline Extension Request, pp. 30–31.

22 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.

23 Email from Aurelie Fabry, UNMAS, 28 April 2021.

INFORMATION MANAGEMENT AND REPORTING

CCLAM took over responsibility for information management from UNMAS in 2016 but has lacked the capacity and resources to manage data and operate effectively the national Information Management System for Mine Action (IMSMA) database. As a result, data are not considered up to date or reliable. Operator access is also complicated by the fact that CCLAM decides which information it is prepared to share.

The 2018–19 national strategy acknowledged a need to build staff capacity, improve data collection, update the database on a regular basis, and provide data disaggregated by age and gender.²⁴ Persistent issues have included gaps in data; lack of maintenance; reporting on land release that did not comply with international terminology; misreporting items of UXO as mines; and a lack of verification of incoming reports.²⁵

Until 2020, CCLAM information management received support from UNMAS, which assisted monthly updates of data to improve operational coordination, collaborated on developing an information management work plan, and provided a range of computer and digital hardware.²⁶ Norwegian People's Aid (NPA) also previously provided refresher training for CCLAM staff in use of IMSMA and the associated Geographic Information System (GIS).²⁷ In 2020, CCLAM did not request IM support from UNMAS and a request for support from the Geneva International Centre for Humanitarian Demining (GICHD) was not met due to the Centre's lack of capacity and the onset of the COVID-19 pandemic.²⁸

UNMAS maintains an internal mine action database, which is said to be updated regularly.²⁹

PLANNING AND TASKING

An Article 5 deadline extension request submitted in July 2021 included a work plan with monthly clearance targets which would provide for tackling a total of 4,370m² in 2022, 59,644m² in 2023, 37,868m² in 2024, and 19,482m² in 2025. This made for a total of more than 120,000m², which exceeded the 117,030m² that the request has identified as remaining contamination. The request allowed a year for the survey of Aru and Dungu districts and said it plans to conduct non-technical and technical survey at the same time so as to facilitate manual clearance of areas identified as hazardous and had allowed a year for these operations but did not state when it expected to implement them.

In January 2022, DR Congo completed a "National Strategic Plan for the Fight Against Anti-Personnel Mines and Explosive Remnants of War", including cluster munitions, for 2023 to 2032. The plan sets out general objectives for the coming decade, including completing mine clearance by 2025 and cluster munition remnants by 2032. The strategy aims to ensure all mined areas are cleared, that survey of cluster munitions and other explosive remnants of war (ERW) is completed rapidly, and that a decentralised EOD capacity is established to tackle residual contamination.³⁰ The 76-page strategy sets out a detailed budget for the 10 years of the plan³¹ but provides no details or timeline for survey or clearance of hazardous areas.

The new strategy follows on from the National Mine Action Strategy 2018–19, prepared with support from UNMAS and the GICHD, which focused on seeking to fulfil the DR Congo's APMBC's Article 5 obligations by 2020, one year ahead of its extended 2021 deadline.³² The strategy also set out the objective of completing procedures for ratifying the Convention on Cluster Munitions by the end of 2018.³³ CCLAM has not reported any action to seek to implement this plan. The strategy identified three strategic pillars: effective and efficient management of the explosive threat; ensuring the national programme had the capacity to manage residual contamination in a sustainable manner; and that the legal framework of the mine action programme was strengthened through the adoption of national laws and other implementing measures and adherence to relevant treaties.³⁴ None of these goals was met.

Tasking continues to be challenged by the remote location of many hazardous areas and database weaknesses, including misidentification of ERW as mines and the addition of hazards to the database without robust evidence of the presence of explosive ordnance.

24 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, p. 14.

25 Skype interview with Jean-Denis Larsen, Programme Manager, NPA, 24 April 2019; and email, 24 May 2019.

26 Email from Aurelie Fabry, UNMAS, 13 April 2020.

27 Email from Jean-Denis Larsen, NPA, 24 May 2019.

28 Emails from Aurelie Fabry, UNMAS, 28 April and 7 June 2021.

29 Email from Jean-Denis Larsen, UNMAS, 31 May 2022.

30 "Plan Stratégique National de Lutte Contre les Mines Antipersonnel et les Restes Explosifs de Guerre en République Démocratique du Congo 2023–2032", January 2022, p. 11.

31 *Ibid.*, p. 63.

32 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, p. 4.

33 "Plan Stratégique National de Lutte Contre les Mines Antipersonnel et les Restes Explosifs de Guerre en République Démocratique du Congo 2023–2032", January 2022, p. 23.

34 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, p. 5.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The DR Congo has 24 national standards developed with support from the GICHD³⁵ and the national strategy for 2018–19 called for revision of the standards and awareness raising of their content through training.³⁶ CCLAM reported in June 2019 it had revised the National Technical Standards and Guidelines (NTSGs) during 2018, amending mainly the standards relating to demining techniques and safety of deminers.³⁷

OPERATORS AND OPERATIONAL TOOLS

International engagement with DR Congo's mine action programme has decreased following the closure of programmes by NPA in 2019 and TDI in February 2020. That left DanChurchAid (DCA) as the only international humanitarian organisation active in 2021, operating with a total staff of 65, including five internationals. Operational capacity included one manual clearance team of 16 deminers, an EOD team with nine people, and five mechanical assets. DCA worked in North and South Kivu tackling mine contamination in a project funded by the United States Department of State's Bureau of Political-Military Affairs (PM/WRA).³⁸

UNMAS deployed an IED disposal team consisting of two international staff based in North Kivu province. UNMAS also contracted five multi-task teams of national NGO AFRILAM in 2021. Three of these teams were engaged largely in a range of tasks supporting MONUSCO in North and South Kivu and Tanganyika provinces, while the other two were assigned to supporting DR Congo's mine action programme in Kasai Central, Kasai Oriental, and Kasai Occidental.³⁹

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Survey conducted by AFRILAM, working under contract to UNMAS, located five previously unrecorded minefields in Kasai province in 2021⁴⁰ but DR Congo's latest Article 7 report did not record any release of anti-personnel mined area through survey or clearance. It reported 12 anti-personnel mines were destroyed in 2021 compared with 21 destroyed the previous year, but gave no indication of whether this occurred in the context of area clearance or EOD.⁴¹

The DR Congo reported in June 2022 that four hazardous areas covering 26,747m² had been cleared in Tshopo province but provided no details of when the clearance occurred, who conducted it, or whether it resulted in any mines being destroyed.⁴² DCA reported that it cleared a total of 43,149m² in four provinces (Maniema, North and South Kivu, and Tshopo) resulting in destruction of 13 anti-personnel mines and 131 items of UXO.⁴³ AFRILAM also destroyed four anti-personnel mines and 3,808 items of UXO in the course of EOD operations in Kasai and Tanganyika provinces in 2021.⁴⁴

ARTICLE 5 DEADLINE AND COMPLIANCE



35 Statement of DR Congo, Intersessional Meetings, Geneva, 2 July 2020.

36 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, p. 34.

37 Skype interview with Jean-Denis Larsen, NPA, 24 April 2019; and email, 24 May 2019.

38 Email from Petri Siikanen, Country Director, DCA, 4 May 2022.

39 Email from Jean-Denis Larsen, UNMAS, 31 May 2022.

40 Ibid.

41 Article 7 Report (covering 1 January 2019 to 31 March 2022), Form G.

42 Statement of DR Congo, Intersessional Meetings, Geneva, 20 June 2022.

43 Email from Petri Siikanen, DCA, 4 May 2022.

44 Email from Jean-Denis Larsen, UNMAS, 31 May 2022.

Under Article 5 of the APMBC (and in accordance with the 42-month extension granted by States Parties in November 2021), the DR Congo is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. It is unlikely to meet this deadline based on progress to date.

The DR Congo's position on meeting its Article 5 obligations has fluctuated sharply in recent years. In November 2019, the DR Congo said it had 49 hazardous areas totalling 469,338m² but it would not need to extend its January 2021 Article 5 deadline.⁴⁵ In August 2020, after reviewing data, it said there were 128,842m² to release and it asked for its third extension of 18 months to complete the job.⁴⁶ Less than a year later, having released a little over 13,000m², and reporting it still had 33 hazardous areas covering around 117,000m², the DR Congo submitted its fourth extension request asking for 42 more months to complete clearance.⁴⁷ That request was overtaken 10 months later by new data that more than tripled the DR Congo's estimate of contamination, reporting 37 hazardous areas affecting 399,969m², undermining the DR Congo's proposed land release work plan and financial projections.⁴⁸

The DR Congo, in response to questions from the Article 5 committee, repeated the explanations for earlier extensions and said the request for 42 more months took account of the following issues:⁴⁹

- its financial situation and the need to establish mechanisms for researching and mobilising funding to implement the work plan
- logistical issues, linked to the condition of roads, bridges, and infrastructure
- insecurity and constraints on demining posed by military operations against armed groups; and
- environmental challenges posed by the climate and dense vegetation.

The decision by the Nineteenth Meeting of States Parties in 2021 that accepted the DR Congo's latest extension request asked the DR Congo to submit a detailed updated work plan by April 2023 with annual projections of which areas remained to be addressed and by which organisations.⁵⁰

Table 2: Five-year summary of anti-personnel mine clearance

Year	Area cleared (m ²)
2021	43,149
2020	10,562
2019 ⁵¹	146,761
2018	275,700
2017	226,025
Total	702,197

N/R = Not reported

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

DR Congo does not have plans in place to address residual contamination once its Article 5 obligations have been fulfilled.

45 Statement of DR Congo, Fourth APMBC Review Conference, Oslo, 26 November 2019.

46 Statement of DR Congo, Intersessional Meetings, Geneva, 2 July 2020.

47 Article 5 deadline Extension Request, July 2021, p. 8.

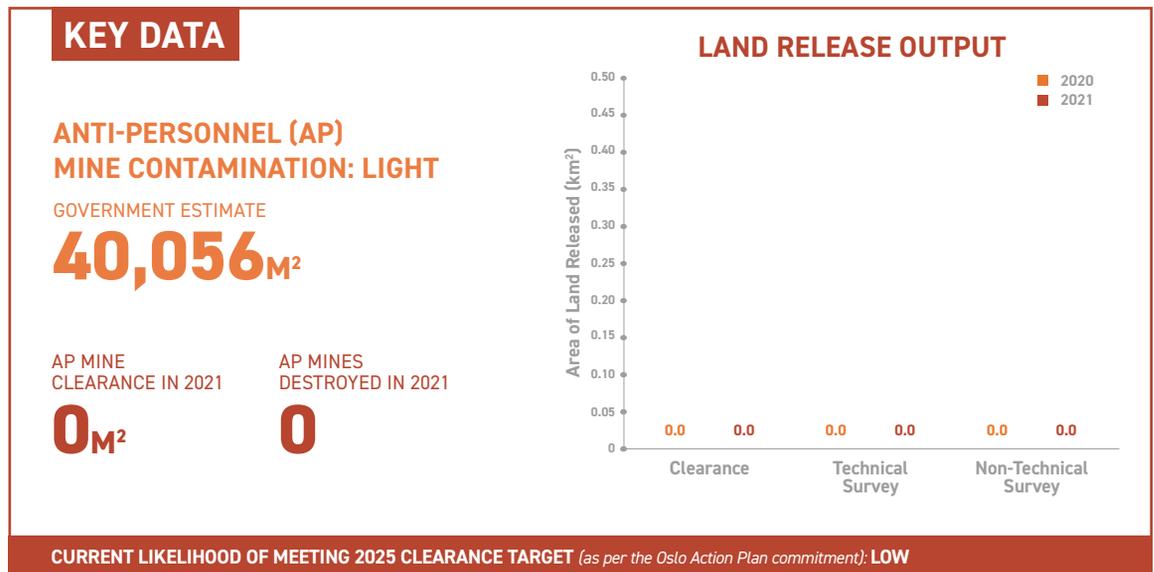
48 Article 7 Report (covering 1 January 2019 to 31 March 2022), Form C.

49 Response of CCLAM to questions from the Committee on Article 5 Implementation, 24 September 2021.

50 19th Meeting of States Parties, Decision on the DR Congo request for an extension of its Article deadline, 6 November 2021.

51 Article 7 Report (covering 2018), p. 7. Although ostensibly a report for 2018, it included results for the first three months of 2019.

ARTICLE 5 DEADLINE: 31 DECEMBER 2022
THREE-YEAR EXTENSION REQUESTED TO 31 DECEMBER 2025



KEY DEVELOPMENTS

Ecuador had no land release output in 2020 or 2021 due to a reallocation of resources following the COVID-19 pandemic. It submitted an Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request in March 2022 for an additional three years, claiming to have the resources and funding in place to complete clearance. Despite having become a State Party to the APMBC in 1999, Ecuador still does not have an accurate baseline of contamination and has made extremely slow overall progress in Article 5 implementation, raising compliance concerns with Article 5.

RECOMMENDATIONS FOR ACTION

- Ecuador should prioritise necessary non-technical survey to accurately determine its baseline of anti-personnel mine contamination and thereby inform its completion planning.
- Ecuador should further clarify why retrospective quality control is required, how much released area this relates to, what quality control will involve, and what the planned time scale is for conducting the quality control.
- Ecuador should develop National Mine Actions Standards (NMAS) in line with International Mine Action Standards (IMAS), in addition to, Standing Operating Procedures (SOPs) for the whole of the Humanitarian Demining intervention until completion and for residual contamination management.
- Ecuador should ensure it deploys its limited resources in the most efficient manner and clarify how its demining teams will use mine detection dogs (MDDs).
- Ecuador should elaborate a gender and diversity policy and mine action data should be systematically disaggregated by sex and age.
- Ecuador should develop a strategy for managing any residual contamination discovered after Article 5 completion.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	Ecuador's estimate of anti-personnel mine contamination is mostly unchanged from 2020 to 2021. Ecuador still has suspected hazardous areas (SHAs) that require non-technical survey and accordingly the size of contamination may be far smaller than reported. Ecuador has stated in its 2022 Article 5 deadline extension request and in the additional information it provided in August 2022 that it plans to conduct non-technical survey and technical survey of all hazardous areas in order to cancel or reduce as per international mine action standards (IMAS). A specific plan for this work has been included with yearly targets up to 2025.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	5	There is clarity of roles and responsibilities at a national level and Ecuador has necessary demining infrastructure in place. No national funding was provided to the mine action programme in 2020 or 2021 as resources were diverted towards COVID-19 response efforts. Ecuador has estimated that it requires almost US\$9.5 million to complete clearance by the end of 2025, all of which has now been allocated from the national budget. This budget does not include funds for quality control (QC) of the already cleared areas. The AICMA Program – OAS, through its AICMA-EC Mission, will provide technical assistance and cooperation, as well as implement the external QC. Ecuador needs to develop national standards and standard operating procedures (SOPs) in line with IMAS and updated land release methodologies.
GENDER AND DIVERSITY (10% of overall score)	3	3	Ecuador does not have a gender and diversity policy or plan. There are female deminers within the Army Battalion of Engineers "COTOPAXI", but no further details were provided on the proportion of women or on their position. Women, children, and ethnic minorities are said to be informed about planned demining operations.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	Ecuador uses the Information Management System for Mine Action (IMSMA) database and during 2021 data was verified and updated. Ecuador submitted its Article 5 deadline extension request in March 2022, providing some detail of its plan for survey and clearance to 2025. In August 2022, Ecuador submitted a revised extension request which included additional information requested by the Committee on Article 5 Implementation. Ecuador submitted its Article 7 report covering 2021 in May 2022.
PLANNING AND TASKING (10% of overall score)	6	6	Ecuador planned to restart demining activities in June 2022. Its revised annual land release targets in its latest extension request amount to around 10,000m ² per year to 2025. In addition, Ecuador plans to carry out QC of all areas released since 2000 but it has yet to provide details on the time and resources required.
LAND RELEASE SYSTEM (20% of overall score)	6	6	Ecuador claims to conduct survey and clearance according to the IMAS. It does not have national standards and SOPs, but operation manuals (one binational with Peru and one national). To date, all clearance has been conducted manually and supported by mechanical demining (a DOK-ING MV-4). The remaining clearance will be through manual demining, due to the terrain in the Cordillera del Condor, although mine detection dogs may also be applied in some manner.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	1	1	Ecuador did not release any anti-personnel mined area in 2020 or in 2021. It is not on track to meet its Article 5 deadline and submitted an Article 5 deadline extension request to 2025, its fourth request since 2016. It should be able to complete clearance by the new deadline, but this requires increased land release output and political will.
Average Score	4.4	4.3	Overall Programme Performance: POOR

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- National Centre for Humanitarian Demining (CENDESMI)
- Army Corps of Engineers (CEE)

NATIONAL OPERATORS

- CEE Battalion No. 68 "COTOPAXI"
- General Command for Demining and EOD (CGDEOD)
- Joint Ecuador-Peru Binational Humanitarian Demining Unit (Not operational in 2019)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- Mine Action Integral Program Ecuador– Organisation of American States (AICMA EC Mission – OAS)

UNDERSTANDING OF AP MINE CONTAMINATION

Ecuador reported that, as at end 2021, 40,056m² of anti-personnel mine contamination remained in the Zamora Chinchipe province containing an estimated 2,941 mines. The estimated 40,056m² is found in 28 confirmed hazardous areas (CHAs) and 25 suspected hazardous areas (SHAs) across four cantons in Zamora Chinchipe province (see Table 1).¹ There are some differences from the estimate provided as at end of 2020 with the number of CHAs increasing by one and SHAs decreasing by one as well as the location of the SHAs being reclassified from being in the district of El Panguí to now being "undefined". In its revised Article 5 deadline extension request submitted in August 2022 and containing additional information, Ecuador said of the 53 hazardous areas in Zamora Chinchipe province, 26 SHAs measuring 7,521m² are said to have no coordinates and thus require further survey for localization.²

Ecuador has stated that it plans to conduct non-technical survey and technical survey on all remaining hazardous areas with cancellation and reduction of areas expected.³ A detailed plan for survey of the SHAs was made in August 2022, with eight due to be surveyed in 2023 and the remainder in 2024.⁴

Table 1: Anti-personnel mined area by canton (at end 2021)⁵

Province	Canton	CHAs	Area (m ²)	SHAs	Area (m ²)	Total CHA/SHA	Total area (m ²)
Zamora Chinchipe	Chinchipe (Chito)	1	7,009	0	0	1	7,009
	Yanzatza	4	6,565	0	0	4	6,565
	Nangaritzza	14	4,577	0	0	14	4,577
	El Panguí	9	14,384	0	0	9	14,384
	Not defined	0	0	25	7,521	25	7,521
Totals		28	32,535	25	7,521	53	40,056

Ecuador's contamination results from its 1995 border conflict with Peru. The most heavily mined section of the border is the Condor mountain range (Cordillera del Condor) which was at the centre of the dispute.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The national mine action programme is managed by the National Centre for Humanitarian Demining (CENDESMI). The Ecuadorian government created CENDESMI by an Executive Decree in 1999.⁶ It is an interministerial body chaired by the Ministry of Foreign Affairs and Human Mobility and comprising the Ministry of National Defence, the Ministry of Public Health, and the Army Corps of Engineers (CEE) through the Engineers Battalion No. 68 "COTOPAXI" and the General Command for Demining and EOD (CGDEOD).⁷ CENDESMI is responsible for overseeing compliance with the APMBC, while the CEE is responsible for coordinating the planning of demining and COTOPAXI is tasked with conducting land release operations.⁸

Ecuador currently funds all its demining operations. It previously reported allocating almost US\$21 million for

demining personnel, materials, and equipment for 2014–22.⁹ This should have amounted to around \$2 million per year from 2019 to 2022.¹⁰ However, only \$821,953 was provided to the demining programme in 2019 and no national funding was allocated to the demining programme in 2020 or in 2021 due to the reallocation of the demining budget to the public health response following the COVID-19 outbreak.

Ecuador estimated in its latest Article 5 deadline extension request that it would require \$9,449,520 for demining operations from June 2022 to December 2025, all of which has been allocated from the national budget.¹¹ In February and March 2022, the Office of Security Cooperation and the United States (US) Southern Command donated demining equipment and supported the training and retraining of demining personnel and paramedics.¹²

1 Email from Lt.-Col. Juan Carlos Almeida, Engineers Battalion No. 68 "COTOPAXI", 11 March 2022; and 2022 Article 5 deadline Extension Request, pp. 5 and 27.

2 2022 Article 5 deadline Extension Request (revised), 17 August 2022, pp. 30–31.

3 2022 Article 5 deadline Extension Request, pp. 28 and 29; 2022 Article 5 deadline Extension Request (revised), 17 August 2022, pp. 7, 30–34.

4 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 6.

5 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 31; and Article 7 report (covering 2021), Form C.

6 Executive Decree No. 1297, issued on 22 September 1999.

7 2017 Article 5 deadline Extension Request, Annex I.

8 Ibid., pp. 39 and 40.

9 Ecuador Demining Action Plan 2019–2022, p. 20.

10 Ibid.; and Statement of Ecuador, Committee on Article 5 implementation, Geneva, 22 May 2019; and Statement of Ecuador, Fourth APMBC Review Conference, Oslo, 27 November 2019.

11 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 28.

12 Email from Lt.-Col. Juan Carlos Almeida, Engineers Battalion No. 68 "COTOPAXI", 11 March 2022.

In February 2021, the OAS, Ecuador and Peru, supported by the European Union (EU), organised a two-day virtual event with Ecuador and Peru both presenting the ongoing challenges they face in order to complete clearance by their respective deadlines.¹³

In March 2022, a Cooperation and Technical Assistance Agreement was signed by Ecuador and the General Secretariat of the Organisation of American States (OAS) through the AICMA Program.¹⁴ The Agreement foresees that the AICMA-EC Mission will support Ecuador to fulfill the obligations of the APMBC, and in particular Article 5. The activities will centre on the provision of technical assistance for capacity building; training and accreditation in quality assurance (QA); external monitoring; fundraising at international level; and provision of equipment and supplies.¹⁵

For the external Monitoring Component, the Interamerican Defense Board (Junta Interamericana de Defensa (JID)) will support AICMA-EC Mission of the OAS to coordinate the creation of teams of monitors and provide technical advisors. They will be responsible for developing a quality management system and ensure the certification of land released according to international mine action standards (IMAS).¹⁶

There is no specific in-country national platform for dialogue in Ecuador, but there are regular meetings to discuss progress, challenges, and support for the implementation of Article 5 with relevant personnel.¹⁷

ENVIRONMENTAL POLICIES AND ACTION

Ecuador is not believed to have any specific environmental policies in place for its mine action programme.

GENDER AND DIVERSITY

The Ministry of Foreign Affairs and Human Mobility, which chairs CENDESMI, has a gender and diversity policy but no similar policy exists that is specific to CENDESMI.¹⁸

Ecuador has stated that it considers all populations affected by mines, without discrimination, in the planning and execution of demining operations.¹⁹ Women, children, and ethnic minorities are targeted during risk education campaigns (though none were implemented during 2020 or 2021), which are conducted in Spanish as well as in native languages. Risk education teams are said to include indigenous people. During risk education activities, affected communities are also "informed" of planned demining operations, the prioritisation of operations, and the different land release activities being conducted.²⁰ Fourteen communities and five ethnic groups live in the eastern border sector near the contaminated areas.²¹

Mine action data are not disaggregated by sex or age.²²

Ecuador has trained women in demining and in the Information Management System for Mine Action (IMSMA) database.²³ Since 2014, Ecuador has employed three female

deminers, 3% of the total trained, however none is currently engaged in survey, clearance, managerial, or administrative positions.²⁴ Ecuador has said it will continue to include and train female personnel "according to their availability" ("de acuerdo a la disponibilidad de dicho personal").²⁵

Ecuador's March 2022 Article 5 deadline extension request makes limited reference to gender and diversity. Ecuador has stated that there are female deminers within the Army Battalion of Engineers "COTOPAXI".²⁶ In its August 2022 revised deadline extension request Ecuador indicated that the training of new female deminers depends on the assignment of women by the General Directorate of Human Resources of the Ecuadorian Army to COTOPAXI. However, it has provided no further information on the total number and proportion of women or on what steps it plans to mainstream gender and diversity within its mine action programme.²⁷ The additional information on Ecuador's extension request submitted in 2022 mentions the negative impact on indigenous communities and their livelihoods, with hunting and food gathering spaces reduced and communication lost between families on both sides of the Ecuador-Peru border.²⁸

13 Regional Dialogue on Humanitarian Demining, (virtual meeting), 10-11 February 2021, at: <https://bit.ly/2SvmcYd>.

14 "Programa de Acción Integral contra Minas Antipersonal de la OEA (AICMA - OEA)", at: <https://bit.ly/3RDT3TD>.

15 Email from Tammy Hall, General Coordinator, OAS Mine Action Program, Department of Public Security, 13 August 2022.

16 Cooperation and Technical Assistance Agreement between the Republic of Ecuador and the General Secretariat of the Organisation of American States in relation to the Integral Mine Action Program in Ecuador, 15 March 2022, Annex 1, p. 8.

17 Email from Lt.-Col. Juan Carlos Almeida, Engineers Battalion No. 68 "COTOPAXI", 11 March 2022.

18 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

19 Ecuador Demining Action Plan 2019-2022, p. 23.

20 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

21 Presentation by Commander of Ecuador's 68 "Cotopaxi" Engineers Battalion Staff Lieutenant Colonel Marcelo Torres Garzón for the Regional Dialogue on Humanitarian Demining, (virtual meeting), 11 February 2021.

22 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

23 Ecuador Demining Action Plan 2019-2022, p. 17.

24 2017 Article 5 deadline Extension Request, pp. 39 and 41; and email from Lt. Col Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

25 Ecuador Demining Action Plan 2019-2022, p. 20.

26 2022 Article 5 deadline Extension Request, 31 March 2022, p. 25.

27 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 27.

28 2022 Article 5 deadline Extension Request (revised), 17 August 2022, pp. 37-38.

INFORMATION MANAGEMENT AND REPORTING

Ecuador uses the IMSMA database.²⁹ During 2021, the database was verified and updated to improve the quality of information.³⁰

Ecuador has submitted its Article 7 report every year since 2000 with the exception of 2003 but they are often late and there have been issues with data accuracy in the past. In May 2022, Ecuador submitted its Article 7 report covering 2021 although the information provided is mostly unchanged since 2019.

In March 2022, Ecuador submitted its Article 5 deadline extension request to December 2025 which was relatively comprehensive and includes a work plan. More detailed information was provided in a revised deadline extension request submitted in August 2022, stating that only manual demining will be conducted³¹ from June to December each year until 2025 and that cantons and sectors with hazardous areas have been prioritised for intervention, leaving those in areas furthest away from population centres for release at the end.³² However, the use of mine detection dogs (MDDs) is mentioned later in the extension request as one of the techniques to be used as well as mechanical demining.³³

PLANNING AND TASKING

Ecuador presented a plan for mine clearance for 2022 to 2025 in its latest Article 5 deadline extension request. Ecuador planned to restart demining in June 2022 to release 10,056m² across 17 CHAs in Nangaritza and El Pangui by the end of the year, with about 10,000m² released each subsequent year to the end of 2025 (see Table 2).³⁴

Table 2: Planned land release in Zamora Chinchipe in 2022-25³⁵

Year	Mined areas	Area (m ²)
2022	17	10,056
2023	9	10,000
2024	8	10,004
2025	19	9,996
Totals	53	40,056

In addition, Ecuador has stated that it is necessary to carry out quality control of all the areas released since 2000, but not yet handed over to communities. These areas had no quality control due to the departure of the OAS from Ecuador in 2013, while the process of quality control had not been finalised by the OAS. There were discrepancies in the figures provided by Ecuador in the extension request, which alternatively stated the area concerned to amount to 551,742m²,³⁶ 262,711m²,³⁷ or

220,525m²,³⁸ in the provinces of Morona Santiago, Pastaza, and Zamora Chinchipe. In the additional information Ecuador provided on its extension request in August 2022, it clarified that full clearance has been conducted in 94 mined areas covering 220,524m² in the Morona Santiago Province, 8 areas covering 41,186m² in Zamora Chinchipe province and one area covering 1,000m² in Pastaza province, but yet require quality control.³⁹ In addition, there remain 103 mined areas covering 262,710m² where clearance has to be finalised and quality control conducted.⁴⁰

Ecuador also notes that demining operations were carried out in these areas more than 12 years ago and so it is expected that the vegetation and terrain that is typical to the Amazon rainforest in these areas will make this demining process difficult and considerably increase the time and resources that are needed.⁴¹ However, Ecuador has not included this in its work plan to 2025 and it should therefore clarify exactly what this quality control process will involve in terms of additional time and resources. The OAS considers it possible to conduct QA which otherwise would require full clearance.⁴² No resources have been allocated for the QA as at writing, nor was a plan included in the additional information provided by Ecuador to the Committee on Article 5 Implementation in August 2022. Nonetheless, Ecuador expects, with the support of the AICMA - EC Programme, to raise funds with the international community to finalise the quality management (QM) process.⁴³

29 2017 Article 5 deadline Extension Request, p. 25; and email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

30 Email from Lt.-Col. Juan Carlos Almeida, Engineers Battalion No. 68 "COTOPAXI", 11 March 2022.

31 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 4.

32 Ibid., p. 30.

33 Ibid., pp. 8 and 11.

34 Ibid., p.31.

35 Ibid., p. 31.

36 Ibid., p. 4.

37 Ibid., p. 5.

38 Ibid., p. 4.

39 Ibid., pp. 4 and 8.

40 Ibid., p. 7.

41 Ibid.

42 Telephone interview Tammy Hall, OAS Mine Action Program, Department of Public Security, 13 August 2022.

43 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 5.

Furthermore, cleared areas in the provinces of Loja and El Oro still need to be officially declared mine free by the Land Certification Unit. Ecuador has said it is working on the procedure needed for this purpose and expected the procedure to be finalised in the second half of 2022.⁴⁴

Ecuador prioritises contaminated areas for clearance according to their proximity of the local population and the impact on socio-economic development.⁴⁵

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The process of humanitarian demining in Ecuador is carried out in accordance with the Binational Manual for Humanitarian Demining (Manual Binacional de Desminado Humanitario), developed under the Binational Cooperation Programme with Peru, as well as the Manual of Humanitarian Demining Procedures of Ecuador. These are said to be based on the International Mine Action Standards (IMAS), but adapted to the Ecuadorian context.⁴⁶ Ecuador has not adopted national mine action standards (NMAS) for land release, non-technical survey, technical survey, clearance requirements, and explosive ordnance disposal (EOD), nor has it developed standard operating procedures for the work beyond the Binational Manual.⁴⁷

Ecuador stated in its 2022 Article 5 deadline extension request that it plans to conduct non-technical survey on all 'hazardous areas' with cancellation of areas listed in the planned activities. Once non-technical survey has been completed, Ecuador plans to conduct technical survey as and where necessary to further reduce areas before conducting clearance.⁴⁸ Ecuador also plans for QC of these areas as contaminated land is released, which will be conducted by the AICMA-EC Mission of the OAS.⁴⁹

Ecuador stated in its 2017 extension request that non-technical survey and technical survey would be carried out to determine the location, size, and other characteristics of the mined areas before operations begin using records of mined areas.⁵⁰ None was in fact conducted.

Ecuador reported that the Manual of Humanitarian Demining Procedures of Ecuador considers environmental management issues during humanitarian demining although it has not provided further details.⁵¹

OPERATORS AND OPERATIONAL TOOLS

Demining is conducted by Battalion No. 68 COTOPAXI although no personnel were deployed for survey or clearance during 2020 or 2021.⁵² As stated in its 2022 extension request, clearance will be conducted using manual demining techniques following the "one man per lane" methodology as set out in the Ecuador-Peru Binational Manual of Humanitarian Demining Procedures and will be supported by MDDs.⁵³ However, this contradicts the same document which states that, due to the altitude and type of terrain, vegetation, and weather conditions prevalent in the Cordillera del Condor, it will only use manual demining techniques.⁵⁴ Ecuador previously reported that MDDs are used only for QC following clearance and it is unclear exactly how they are planning to use MDDs.⁵⁵

The joint Ecuador-Peru Binational Humanitarian Demining Unit is deployed to areas that were at the centre of the conflict between the two nations but did not carry out any demining operations in 2019. In November 2019 in their "Tumbes Declaration" the presidents of Ecuador and Peru agreed to continue their binational cooperation and committed to assign the necessary resources to continue demining operations in both territories, but no further details were provided.⁵⁶

CENDESMI is responsible for observing and monitoring compliance of the demining, including QC and certification of clearance operations.⁵⁷ No quality control operations took place during 2021.⁵⁸

44 2022 Article 5 deadline Extension Request, 31 March 2022, p. 6; and 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 8

45 Demining Action Plan 2019–2022, p. 17; and 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 30.

46 Ibid., p. 5.

47 Ibid., p. 17; and 2022 Article 5 Extension Request (revised), 17 August 2022, pp. 11–24.

48 2022 Article 5 deadline Extension Request, 31 March 2022, p. 29; and 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 8.

49 2022 Article 5 deadline Extension Request, 31 March 2022, p. 6; and Cooperation and Technical Assistance Agreement between the Republic of Ecuador and the General Secretariat of the Organisation of American States in relation to the Integral Mine Action Program in Ecuador, 15 March 2022, Annex 1, p. 8.

50 2017 Article 5 deadline Extension Request, p. 15.

51 Email from Lt.-Col. Juan Carlos Almeida, Engineers Battalion No. 68 "COTOPAXI", 11 March 2022.

52 2022 Article 5 deadline Extension Request, 31 March 2022, p. 24; and 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 3.

53 2022 Article 5 deadline Extension Request (revised), 17 August 2022, p. 30.

54 Ibid., p. 4.

55 Ecuador Demining Action Plan 2019–2022, p. 18.

56 Statement of Peru, Fourth APMBR Review Conference, Oslo, 27 November 2019.

57 2017 Article 5 deadline Extension Request, p. 39.

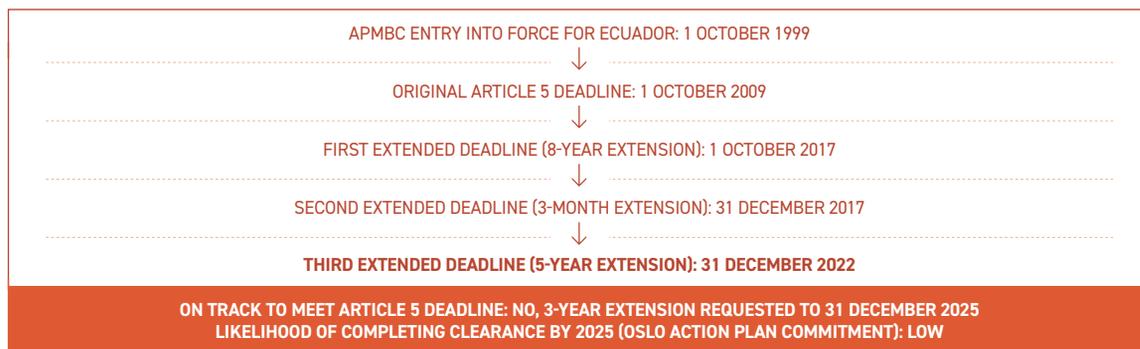
58 Email from Lt.-Col. Juan Carlos Almeida, Engineers Battalion No. 68 "COTOPAXI", 11 March 2022.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

No survey or clearance took place in 2020 or in 2021 due to lack of allocated funding.⁵⁹

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the five-year extension granted by States Parties in 2017, Ecuador is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2022. It will again fail to meet this deadline and is seeking a new deadline of the end of 2025.

Ecuador has now submitted four Article 5 deadline extension requests. Ecuador explained that the failure to meet its 1 October 2017 deadline was due to a serious earthquake on 16 April 2016, which required the diversion of the armed forces away from demining, as well as to the physical characteristics of the land and climate conditions in the areas requiring clearance.⁶⁰ In its Article 7 report covering 2016, Ecuador suddenly and without explanation determined that it would need a further five years to fulfil its Article 5 obligations. It submitted a further extension request in March 2017, for five additional years, and was granted the extension to 31 December 2022. Most recently, in March 2022, Ecuador submitted its fourth Article 5 deadline extension request seeking a new deadline of 31 December 2025.

There was no survey and clearance output in 2020 or 2021, with the mine action programme grounding to a halt due to

lack of funding. Ecuador has now set itself a land release target of approximately 10,000m² per year in order to complete clearance of remaining contamination in 53 hazardous areas in the Zamora Chinchipe province by its requested Article 5 deadline. Ecuador has reported in its latest Article 5 deadline extension request that it has secured the requisite funds and has sufficient operational capacity in place, and it should be able to easily complete mine clearance by the new deadline. However, as one of the slowest and least productive of the clearance operations this is by no means certain.

Table 5: Five-year summary of AP mine clearance

Year	Area cleared (m ²)
2021	0
2020	0
2019	2,899
2018	14,068
2017	15,476
Total	32,443

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Ecuador does not have a strategy in place for managing residual risk post completion but has stated that it will use its current capacity to address areas of residual contamination.⁶¹

The extension request makes no reference of what Ecuador has in place or plans for a sustainable national capacity to address previously unknown mined areas discovered following completion.

⁵⁹ Ibid.

⁶⁰ Letter from Efraim Baus Palacios, Director of Neighbourhood Relations and Sovereignty for the Ministry of Foreign Affairs and Human Mobility and President of the National Humanitarian Demining Center of Ecuador, to Amb. Patricia O'Brian, Permanent Representative of Ireland to the United Nations in Geneva, and Chair of the Article 5 Committee, Note No. 14839-DRVS/CENDESMI, Quito, 26 November 2016.

⁶¹ Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

ARTICLE 5 DEADLINE: 31 DECEMBER 2020
IN SERIOUS VIOLATION OF THE CONVENTION
(NEW EXTENDED DEADLINE AND RENEWED DEMINING NEEDED TO RETURN TO COMPLIANCE)

KEY DATA

**ANTI-PERSONNEL (AP)
 MINE CONTAMINATION: MEDIUM**

MINE ACTION REVIEW ESTIMATE

10_{KM²}

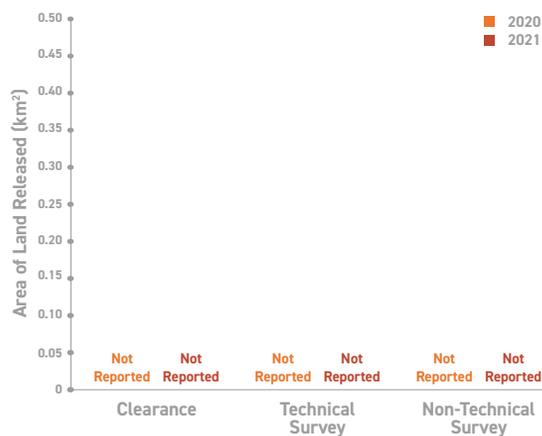
AP MINE
 CLEARANCE IN 2021

NOT REPORTED

AP MINES
 DESTROYED IN 2021

NOT REPORTED

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Eritrea's Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline expired on 31 December 2020 after it was granted an interim extension in November 2019. Eritrea was expected to submit a more detailed extension request by 31 March 2020 but, as at September 2022, had neither done so nor sought a further extension. It remains in serious violation of the Convention. Eritrea has also not submitted an Article 7 transparency report since 2014.

Eritrea is wilfully failing to comply with its obligation under Article 5 of the APMBC to complete clearance as soon as possible. There is no indication of any demining since the end of 2013, which, without exceptional justification, would itself amount to a serious violation of the Convention. At the Nineteenth Meeting of States Parties it was suggested, in accordance with Article 8(2) of the Convention, that States Parties should seek clarification on compliance by Eritrea through the good offices of the Secretary-General of the United Nations.

RECOMMENDATIONS FOR ACTION

- Eritrea needs immediately to take action with a view to returning to compliance with the APMBC. Failing this, the States Parties should initiate the procedure under Article 8 of the Convention to seek clarification through the United Nations Secretary-General and then, if none is forthcoming, mandate an obligatory fact-finding mission.
- The authorities in Asmara should ensure that release of mined areas confirmed or suspected to contain anti-personnel mines are undertaken as a matter of urgency.
- Eritrea should urgently submit an Article 5 deadline extension request with an up-to-date list of all confirmed or suspected mined areas and a detailed timeline of activities planned for the period sought.
- Eritrea must urgently submit its outstanding annual Article 7 reports, the latest of which was due by 30 April 2022.
- Eritrea should reconsider its policy of excluding international technical assistance in mine action, which would support efficient land release and re-open international funding paths.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	4	The last estimate of mine contamination in Eritrea dates back to the end of 2013, when Eritrea reported that 434 mined areas remained with a size of 33.4km ² . All area is reportedly suspected hazardous area (SHA). Mine Action Review is unaware of any indication of progress in land release or updated information on the extent of contamination since this time.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	3	3	Eritrea's mine action programme is entirely nationally managed. The Eritrean Demining Agency (EDA) is believed to be still responsible for mine clearance.
GENDER AND DIVERSITY (10% of overall score)	3	3	It is not known if Eritrea has policies in place relating to gender and mine action.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	0	1	Details on Eritrea's current information management system are not known. However, its lack of submissions of Article 7 reports over the past seven years is a violation of the Convention. It has failed to provide any updates on the status of its mine action obligations in recent years.
PLANNING AND TASKING (10% of overall score)	1	1	Recent details on Eritrea's planning and tasking system are not available.
LAND RELEASE SYSTEM (20% of overall score)	3	3	Eritrea is reported to have national mine action standards dating back to 2012. The EDA was responsible for the implementation of quality management activities.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	0	1	Eritrea seemingly made no progress in land release to meet its obligations under its second Article 5 extension period. In 2014, Eritrea reported it would need a third extension. Eritrea submitted an interim request for a third extension in November 2019 with the apparent intention of making a more detailed request by 31 March 2020. As at September 2022, no such request was forthcoming and Eritrea remains in violation of the Convention both for failing to work towards the completion of mine survey and clearance as soon as possible, and for not respecting the procedural provisions of the Article 5 of the Convention.
Average Score	2.1	2.4	Overall Programme Performance: VERY POOR

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Eritrea Demining Agency (EDA)

INTERNATIONAL OPERATORS

- None

NATIONAL OPERATORS

- Engineering units of the Eritrean Armed Forces

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Eritrea is affected by mines and explosive remnants of war (ERW) dating back to the Second World War, but largely as the result of the struggle for independence in 1962–91 and its armed conflict with Ethiopia in 1998–2000.

In May 2015, in response to Mine Action Review's request for updated information on the state of contamination and mine action activities in Eritrea, the Deputy General Manager of the Eritrea Demining Agency reported "no significant progress registered by the EDA currently". He claimed, though, that the EDA was being reorganised in an effort to make "better progress".¹ Since then, the EDA has not responded to repeated requests from Mine Action Review for further information, most recently in the first half of 2022.

1 Email from Habtom Seghid, Deputy General Manager, Eritrean Demining Agency (EDA), 6 May 2015.

The last estimate of mine contamination in Eritrea dates back to the end of 2013, when Eritrea reported 434 mined areas covering an estimated 33.4km².² This was a two-thirds reduction on the earlier estimate of 99km² of June 2011,³ and significantly lower than the 129km² identified by the 2004 landmine impact survey.⁴

Table 1: Mined area by region (at end 2013)⁵

Zoba (region)	SHAs	Estimated area (m ²)
Semienawi Keih Bahri	166	9,462,537
Anseba	144	10,230,940
Gash Barka	63	6,252,951
Debub	29	3,894,036
Maakel	24	2,423,325
Debubawi Keih Bahri	8	1,169,029
Totals	434	33,432,818

SHA = Suspected hazardous area

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Eritrea mine action programme is entirely nationally managed. The EDA, established in July 2002, is responsible for policy development, regulation of mine action, and the conduct of mine clearance operations. The EDA is believed to report directly to the Office of the President.

Eritrea projected that costs during its Article 5 extension period to 1 February 2020 would amount to more than US\$7 million, all to be raised nationally.⁶ In 2011–13, Eritrea had managed to raise only \$257,000 annually. Eritrea acknowledged at the time that its progress in clearing mines would be slow due to its lack of resources, but it has never been clear how Eritrea intended to secure the funding for its survey and clearance activities, particularly in light of its policy of not accepting international technical assistance.⁷

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Eritrea in order to minimise potential harm from clearance.

GENDER AND DIVERSITY

Eritrea did not respond to Mine Action Review's inquiries in 2022 about the national mine action programme's policies relating to gender and diversity.

INFORMATION MANAGEMENT AND REPORTING

Details on Eritrea's current information management system are not known. However, its failure to submit Article 7 reports over the past seven years is a violation of the Convention. As at September 2022, Eritrea had yet to submit its latest Article 7 report covering 2021. It has also failed to provide an updated Article 5 work plan or detailed extension request.

2 2014 Article 5 deadline Extension Request, p. 7. This was despite finding 49 previously unrecorded suspected hazardous areas (SHAs) in five regions across an estimated area of 9km² during non-technical survey in 2013. Analysis of Eritrea's Second Article 5 deadline Extension Request, submitted by the President of the 13th Meeting of the States Parties on behalf of the States Parties mandated to analyse requests for extensions, 20 June 2014, p. 2.

3 Eritrea's reply to questions from the Article 5 Analysing Group about its Article 5 deadline Extension Request, 7 June 2011, p. 2.

4 Survey Action Center (SAC), "Landmine Impact Survey, Eritrea, Final Report", May 2005, p. 7.

5 2014 Article 5 deadline Extension Request, p. 8.

6 2014 Article 5 deadline Extension Request, p. 11.

7 Statement of Eritrea, Thirteenth Meeting of States Parties, Geneva, 6 December 2013.

PLANNING AND TASKING

There is no recent information on how Eritrea plans its demining operations. Re-survey during the second extension period was planned to involve both technical and non-technical survey of all remaining mined areas across six regions, and to run concurrently with clearance in priority areas in the Anseba, Maakel, and Semienawi Keih Bahri regions.⁸

Eritrea submitted an interim Article 5 deadline extension request on 11 November 2019, which was granted at the Fourth Review Conference in November 2019. The request did not contain any updated information on the extent of remaining mined area or on Eritrea's plans to address it. Eritrea committed to submit a detailed follow-on extension request by 31 March 2020, but as at September 2022 had still to do so.⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Eritrea reportedly has national mine action standards (NMAS) that date back at least to 2012. It is not known if any updates to the standards have been made in the ten years since. It was reported that the EDA was responsible for the implementation of quality assurance (QA) and quality control (QC) activities.¹⁰

OPERATORS AND OPERATIONAL TOOLS

In the past, demining has been primarily conducted by the engineering units of the Eritrean defence forces under the supervision of the EDA.¹¹ According to its 2014 Article 5 deadline extension request, Eritrea planned to deploy "at least" five demining teams during its second extension period.¹²

Since the expulsion of international non-governmental organisations (NGOs) in 2005, the authorities have not allowed international operators to conduct survey or clearance in Eritrea.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Under its 2014 extension request, Eritrea projected that up to 15.4km² of mined area could be cleared within five years. It reported that 67.3km² of contaminated area had been cancelled through non-technical survey and that 5.7km² was cleared over 38 mined areas in 2011–13.¹³

Eritrea has not provided any updates to States Parties to the APMB, nor responded to Mine Action Review requests for information on any mine action activities (including survey) undertaken since 2014. In 2013, Eritrea had reported release of 157 SHAs totalling 33.5km², leaving 385 mined areas of close to 24.5km² to be surveyed.¹⁴ Forty-nine new mined areas with a total size of 9km² were discovered in five of the country's six regions during non-technical survey in 2013: Anseba, Debub, Gash Barka, Maakel, and Semienawi Keih Bahri.¹⁵

Likewise, Eritrea has not made public any information on any mine clearance undertaken in 2021 or earlier years. In 2013, Eritrea seemingly cleared approx. 2.26km² of mined area, almost twice the amount cleared in 2012 (1.2km²).¹⁶ The number of anti-personnel and anti-vehicle mines destroyed in 2013 was not reported.

LAND RELEASE OUTPUTS IN 2021

As stated, no land release output, whether through survey or clearance, was reported in 2021.

8 Statement of Eritrea, Standing Committee on Mine Clearance, Geneva, 9 April 2014.

9 Interim Article 5 deadline Extension Request, 11 November 2019, pp. 2–3.

10 Article 7 Report (covering 2012), Form F, p. 5.

11 Ibid.

12 Ibid., p. 10.

13 Analysis of Eritrea's Second Article 5 deadline Extension Request, 20 June 2014, p. 2.

14 Second Article 5 deadline Extension Request, 23 January 2014, p. 7.

15 Analysis of Eritrea's Second Article 5 deadline Extension Request, 20 June 2014, p. 2.

16 Article 7 Report (covering 2012), Form F, p. 10.

ARTICLE 5 DEADLINE AND COMPLIANCE

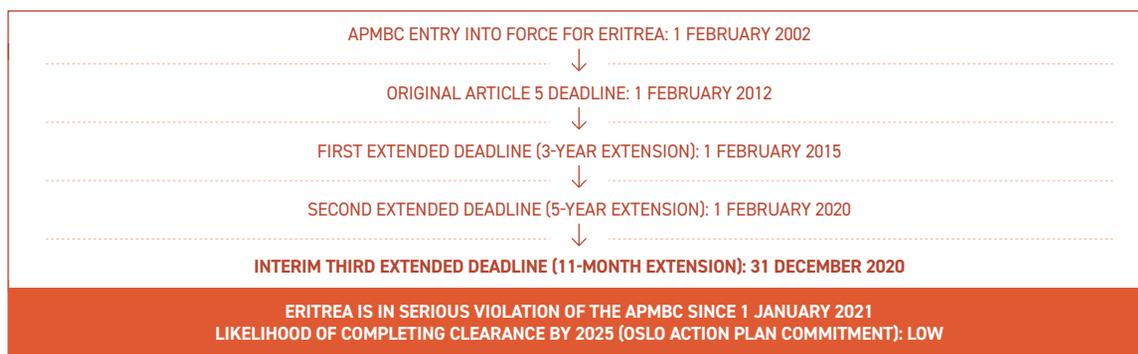


Table 2: Five-year summary of AP mine clearance

Year	Area cleared (m ²)
2021	N/R
2020	N/R
2019	N/R
2018	N/R
2017	N/R
Total	N/R

N/R = Not reported

Under Article 5 of the APMBC (and in accordance with the three-year extension granted by States Parties in 2011, a five-year extension granted in 2014, and an interim 11-month extension in 2019), Eritrea was required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2020. It did not do so and continues to be in serious violation of the Convention.

Eritrea submitted its last extension request in November 2019, just before the Fourth APMBC Review Conference. In January 2014, Eritrea had previously secured a second Article 5 deadline extension to continue clearance and to complete re-survey of SHAs. The States Parties granted Eritrea its extension request, but noted that five additional years beyond Eritrea's previous February 2015 deadline "appeared to be a long period of time to meet this objective".¹⁷

In the interim extension request submitted on 11 November 2019, just two weeks before the start of the Fourth APMBC Review Conference, Eritrea reported that it had not gained any clarity on the remaining anti-personnel mine contamination during the second extension period as Eritrea's demining capacity had been diverted to

other government development programmes, such as construction and agriculture, and that mine action had faced financial and resource shortfalls and required external assistance to continue operations. Eritrea believes that it has the necessary experience and expertise to address the challenges but will require international support.

As at November 2019, the EDA was said to be in the process of restructuring and an interim request was submitted as no information could be provided on outstanding contamination, survey or clearance. Eritrea claimed it was planning to submit a more detailed extension request by 31 March 2020 with information on remaining mine contamination, progress made and a detailed work plan for implementation.¹⁸ As at September 2022, however, no further extension request had been submitted.

At the Nineteenth Meeting of States Parties in November 2021, the States Parties collectively expressed grave concern that Eritrea has not engaged in a cooperative dialogue and remains in a situation of non-compliance. The Meeting noted that if a cooperative dialogue is not established and the current status of non-compliance resolved then States Parties should consider seeking clarification and resolving questions relating to compliance by Eritrea through the Secretary-General of the United Nations in accordance with Article 8.2 of the Convention.¹⁹

In their national statements on mine clearance at the Meeting, Germany had strongly urged Eritrea to reengage with the Convention while Austria, Canada, and Norway supported the idea to collectively consider invoking Article 8(2). Canada urged Eritrea to submit an extension request as soon as possible, which it said "would be good not only for the achievement of the Convention's objectives, but also for the recognition of the norm it establishes". Norway regretted that the "situation of non-compliance and lack of meaningful dialogue [from Eritrea] hurts the credibility of the Convention."

17 Decision on Eritrea's Second Article 5 deadline Extension Request, Third APMBC Review Conference, Maputo, 26 June 2014.

18 Interim Article 5 deadline Extension Request, 11 November 2019, pp. 2-3.

19 Draft Final Report of the Nineteenth Meeting of States Parties to the APMBC, 18 November 2021.

The Committee on Article 5 Implementation reports that, in April 2022, one of the Convention's Special Envoys, His Royal Highness Prince Mired Raad Zeid Al Hussein, met with Amanuel Giorgio, Chargé d'affaires of the Permanent Mission of Eritrea to the United Nations in New York to discuss the situation of non-compliance by Eritrea. During the meeting, the Special Envoy and the Implementation Support Unit recalled the decision of the Nineteenth Meeting of States Parties and highlighted the support available to Eritrea to overcome the current impasse.²⁰

Serious concern over Eritrea's continued non-compliance was voiced again by numerous states and civil society organisations at the APMBC Intersessional Meetings in Geneva in June 2022. States again urged Eritrea to re-engage and several put forward the suggestion to collectively consider invoking Article 8(2).

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

As at September 2022, Eritrea had not provided any information on whether it has made any provision for a sustainable capacity to address previously unknown mined areas following completion.

20 Preliminary Observations of the Committee on Article 5 Implementation, Intersessional Meetings, Geneva, 20-22 June 2022, p. 2.

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

20 km²

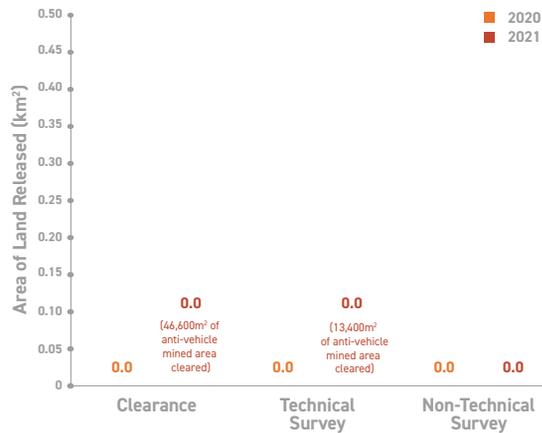
AP MINE CLEARANCE IN 2021

0 M²

AP MINES DESTROYED IN 2021

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Ethiopia did not undertake any survey or clearance in 2021 and, as of writing, had not yet submitted the updated work plan as requested by States Parties in accordance with the decision taken on Ethiopia's 2019 Article 5 deadline extension request. Ethiopia's already ambitious land release targets now seem wholly unrealistic, with obstacles including technical and logistical challenges, a lack of basic infrastructure, and a critical lack of funding and capacity, as well as ongoing conflict within the country.

RECOMMENDATIONS FOR ACTION

- As a priority, Ethiopia should conduct a desk assessment of remaining contamination in the database and conduct a complete re-survey of mined areas to establish an up-to-date and accurate baseline.
- Ethiopia should ensure the national mine action centre has sufficient resources to sustain an effective mine action programme and ensure the mobilisation of resources to complete clearance.
- Ethiopia should clarify its ability to meet the annual land release targets in its extension request and provide more information on the size of the demining capacity it requires to address the remaining challenge.
- Ethiopia should produce an updated work plan, with revised estimates of contamination, annual survey and clearance targets, and a detailed budget, in accordance with the terms of its latest extension.
- Ethiopia should cooperate with Eritrea, Sudan, and South Sudan on cross-border mine action activities by establishing regular regional coordination meetings to build trust between neighbouring countries and share information on mine action activities.
- Ethiopia should conduct a review of its existing information management capacity and finalise the transfer of its existing database to the Information Management System for Mine Action (IMSMA) database.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	4	Ethiopia has an inflated baseline of mine contamination, 99% of which are in suspected hazardous areas (SHAs) in the Somali region. Ethiopia estimates that only 2% of the total mined area actually contains mines. Ethiopia has requested international assistance for a baseline survey to revise contamination data from the 2001–04 landmine impact survey. No progress was made on establishing a baseline survey in 2020 or 2021.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	4	In 2019, it was announced that the national programme would report directly to the Ministry of Defence (MoD), with a view to raising the profile of mine action and improve the efficiency of operations and availability of national resources. As at September 2022, it was not known if this had taken place. Ethiopia reported that no funding was made available for survey or clearance from April to December 2020 and in 2021, reiterated the need for more resources to make progress.
GENDER AND DIVERSITY (10% of overall score)	3	3	Ethiopia claimed to have a gender policy in place for its mine action centre and reflected in its national mine action standards. It reported that, according to the policy, there is equal access for employment for qualified men and women in survey and clearance teams, including for managerial positions. As at September 2022, it was not known if any women were involved in survey or clearance in 2020 or 2021.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	4	Ethiopia's reporting in recent years have demonstrated improvements in accuracy although they lack detail. While Ethiopia submitted its Article 7 report covering 2021, no updated work plan, as requested by the decision taken by States Parties on Ethiopia's 2019 Article 5 deadline extension request, had been submitted.
PLANNING AND TASKING (10% of overall score)	3	4	Ethiopia's 2019 Article 5 deadline extension request contained annual targets for survey and clearance. According to the work plan, Ethiopia would have needed to more than double its clearance output from 2019 to 2020 to meet those targets. This seems unrealistic as no survey or anti-personnel mine clearance took place in 2021.
LAND RELEASE SYSTEM (20% of overall score)	6	6	An update to the National Mine Action Standards (NMAS) is long overdue and, as at September 2022, Ethiopia had not reported on whether this has happened. Urgent progress is still needed on non-technical survey at scale, given the high degree of uncertainty over the extent and location of contamination.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	3	4	Ethiopia massively increased its land release output in April 2019–April 2020 but, as of writing, has reported that only 60,000m ² of further land release has taken place since. Given this, it seems unlikely that Ethiopia will meet its 2025 deadline, as challenges remain around capacity, funding, and access due to insecurity.
Average Score	4.0	4.3	Overall Programme Performance: POOR

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- Head Office of the Ministry of Defence (MoD)
- Ethiopia Mine Action Office (EMAO)

NATIONAL OPERATORS

- National Demining Companies (Ethiopian Armed Forces)

INTERNATIONAL OPERATORS

- The HALO Trust (technical agreement with the Ethiopian Ministry of Defence signed in June 2022)

OTHER ACTORS

- International Committee of the Red Cross (ICRC)
- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

In September 2022, Ethiopia reported a total of 152 suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs) with a size of 726km² remaining (see Table 1).¹

This estimate was unchanged between its Article 7 report covering 2020 and its Article 7 Report covering 1 January 2021 to 31 March 2022. Ethiopia records mine contamination in six of its eleven states. Almost all of the anti-personnel mine contamination is in SHAs, with just under 99% of the total estimate located in the Somali region.² However, the United Nations Mine Action Service (UNMAS) points out that there are important caveats to this statement in that the 2019 Article 7 Report mentions that the unknown threat along the border with Eritrea, where it is believed there may be dense contamination, is not included in that report. Furthermore,

additional contamination is expected to result from the ongoing conflict.³

Ethiopia stated in its 2019 extension request that only 2% of the SHA are expected to contain mines.⁴ As such, as at the end of 2018, the request projected a total of 27.3km² (6.3km² of existing CHA and 21km² of the SHA reported) would require clearance, while 1,029km² would be cancelled or reduced.⁵ While high levels of cancellation are likely, The HALO Trust cautions that additional minefields could be found in the Somali region, which were not captured in the original Ethiopian Landmine Impact Survey (LIS) between 2001 and 2004.⁶

Table 1: Anti-personnel mined area by region (at end March 2022)⁷

Region	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHAs/CHAs	Total area (m ²)
Somali	18	1,027,500	82	718,769,532	100	719,797,032
Gambela	0	0	20	838,000	20	838,000
Afar	6	1,755,049	8	1,915,300	14	3,670,349
Tigray	3	691,989	0	0	3	691,989
Oromia	0	0	13	1,026,105	13	1,026,105
Benishangule Gumuze	2	45,000	0	0	2	45,000
Totals	29	3,519,538	123	722,548,937	152	726,068,475

As mentioned above, the estimate of mine contamination does not include the contaminated area along the border with Eritrea as this area has not been surveyed due to lack of access and delineation between the two countries.⁸ It is expected that survey of the buffer zone will be undertaken once demarcation of the border area is completed.⁹ Positively, the second extension request predicted negotiations through a joint border commission would allow mine action in previously inaccessible areas to begin. Specifically, new "military humanitarian demining" operations were expected to start in the Tigray border minefield.¹⁰

In November 2020, armed clashes began between the Ethiopian Defense Force (ENDF) and Tigray Regional Security Forces. Initial clashes took place along the regional border with Sudan and between Amhara Region and Western and North-Western Tigray, and quickly moved towards other parts of Tigray.¹¹ Humanitarian access to Tigray has been severely hampered by insecurity and the closure of road and air access to Tigray, Afar and Amhara Regions.¹² In March 2022, the Federal Government of Ethiopia declared an "indefinite humanitarian truce" to allow aid into Tigray, although unrest and armed clashes continue elsewhere in the country and the situation was deteriorating in Amhara and Oromia as of writing.¹³

The 2019 extension request also states that access to mined areas in Afar and Somali regions continued to present a challenge for operations due to insecurity and their remoteness, while technical and logistical challenges and a lack of infrastructure

1 Article 7 Report (covering 1 January 2021 to 31 March 2022), Form C.

2 Statement of Ethiopia, Anti-Personnel Mine Ban Convention (APMBC) Intersessional Meetings, Geneva, 20-22 June 2022.

3 Email from Abel Tesfai, Chief of Mine Action Programme Ethiopia, UNMAS, 26 August 2022.

4 2019 Article 5 deadline Extension Request, p. 35; and Article 7 Report (covering 2018), Form D.

5 2019 Article 5 deadline Extension Request, p. 48.

6 Emails from Ralph Legg, Ethiopia Programme Manager, HALO Trust, 13 July and 25 August 2022.

7 Article 7 Report (covering January 2021-March 2022), Form C.

8 2019 Article 5 deadline Extension Request, p. 9.

9 Ibid., p. 11.

10 Ibid., pp. 9 and 35. Ethiopia said it was difficult to determine which areas were under the responsibility of Ethiopia or Eritrea. The area was previously under the control of the United Nations Mission in Ethiopia and Eritrea (UNMEE). Ethiopia reported in 2015 it had conducted clearance behind its own defensive lines, but said it was not possible to enter the area between the two countries' defensive lines due to security concerns, and clearance would have to wait for demarcation to be completed.

11 UN Office for the Coordination of Humanitarian Affairs (OCHA), "Humanitarian Needs Overview Ethiopia 2021", p. 16.

12 Ibid., p. 17.

13 Crisis Watch Digest Ethiopia, International Crisis Group, April 2022, at: <https://bit.ly/39gxCY8>.

continued to hamper access to Gambela and Benishangule regions.¹⁴ There have reportedly been six explosive ordnance (EO) accidents in Somali region since May 2021 (including three anti-vehicle mine explosions).¹⁵

In 2001–04, a landmine impact survey identified mine and explosive remnants of war (ERW) contamination in 10 of Ethiopia's 11 regions, with 1,916 SHAs across more than 2,000km² impacting more than 1,492 communities.¹⁶ The Ethiopian Mine Action Office (EMAO) stated that the LIS overestimated the number of both SHAs and impacted communities, citing lack of military expertise among the survey teams as the major reason for the overestimate.¹⁷ EMAO, with support from donors and Norwegian People's Aid (NPA), subsequently carried out efforts to confirm the results of the LIS and conduct mine clearance throughout the country.¹⁸ In November 2019, Ethiopia requested international assistance to conduct a new baseline survey.¹⁹

Ethiopia's mine problem is a result of internal and international armed conflicts dating back to 1935, including the Italian occupation and subsequent East Africa campaigns (1935–41), a border war with Sudan (1980), the Ogaden war with Somalia (1977–78), internal conflict (1974–2000), and the Ethiopian-Eritrean war (1998–2000).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In 2001, following the end of the conflict with Eritrea, Ethiopia's Council of Ministers established EMAO as an autonomous civilian body responsible for mine clearance and mine risk education reporting to the Office of the Prime Minister.²⁰ EMAO developed its operational capacities with technical assistance from NPA, the United Nations Development Programme (UNDP), and the United Nations Children's Fund (UNICEF).²¹ In 2011, however, EMAO's governing board decided that the Ministry of Defence was better suited to clear the remaining mines. It was claimed that a civilian entity such as EMAO would struggle to access the unstable Somali region.²²

In response to the decision to close EMAO and transfer demining responsibility to the army's Combat Engineers Division, NPA ended its direct funding support and had completed the transfer of its remaining 49 mine detection dogs (MDDs) to EMAO and the federal police by the end of April 2012. The Combat Engineers Division took over management of the MDD Training Centre at Entoto in early 2012. The transition of EMAO to the MoD appeared to be in limbo until September 2015, when Ethiopia reported that oversight of national mine action activities had been re-established as "one Independent Mine Action Office" under the Combat Engineers Main Department.²³ In 2017, Ethiopia confirmed that this "autonomous legal entity" had been re-named EMAO, and was responsible for survey, clearance, and risk education.²⁴

In 2019, however, Ethiopia reported that the responsibility for the national mine action programme had been transferred back to the headquarters of the MoD. This was, it said, to enable the Ministry to directly manage resources and activities; to improve access to remaining CHAs; and to raise the profile of mine action at a time when resources are increasingly limited.²⁵

According to Ethiopia's second extension request (2019), just under US\$41 million is required to fulfil its Article 5 obligations by 2025, a decrease from the US\$46 million reported in its 2017–20 work plan, which it said was due to progress made in land release in 2016–18. The request includes a breakdown of the budget required: US\$28.7 million for demining, US\$6.1 million for coordination and administration, US\$4.1 million for training and equipment to manage "residual issues"; and US\$2 million for quality assurance and information management.²⁶ Of the total US\$41 million sought, the government pledged to cover 20% (US\$8.2 million).²⁷ In its Article 7 Report covering January 2021 to March 2022, Ethiopia did not provide details of government funding that was forthcoming or of the international donor funding required to fulfil its Article 5 obligations by 2025, simply stating that: "Ethiopia made realistic initiatives to improve the overall performance of the country's mine action sector in the period ending March 2022. This must be supplemented with adequate resources to allow the country to become landmine-free."²⁸

14 2019 Article 5 deadline Extension Request, p. 35.

15 Email from Ralph Legg, HALO Trust, 25 August 2022.

16 Norwegian People's Aid (NPA), "Landmine Impact Survey Report, Federal Democratic Republic of Ethiopia", May 2004.

17 In 2012, Ethiopia reported that subsequent technical survey and non-technical (re-)survey of SHAs identified during the LIS had confirmed mine contamination in only 136 areas. However, 60 previously unrecorded hazardous areas were also identified, which were confirmed as mined through technical survey, resulting in a total of 196 areas confirmed as mined. Also in 2012, Ethiopia reported that 358 SHAs across an area of 1,200km² from the LIS data needed to be re-surveyed.

18 2019 Article 5 deadline Extension Request, p. 8.

19 Statement on Article 5 deadline extension request, Fourth APMB Review Conference, Oslo, 27 November 2019.

20 Council of Ministers, Regulation No. 70/2001, 5 February 2001.

21 A. Borchgrevink et al., "End Review of the Norwegian People's Aid Mine Action Programme in Ethiopia 2005–2007: Final Evaluation", Norad Collected Reviews 36/2008, June 2008, p. 5.

22 Statements of Ethiopia, Committee on Article 5 Implementation, Geneva, 25 June 2015, April 2014, and 24 May 2012.

23 Statements of Ethiopia, Committee on Article 5 Implementation, Geneva, 9 April 2014 and 25 June 2015; "Response to Committee on Article 5 Implementation request for additional information on its Article 5 deadline Extension Request", submitted 26 September 2015; and Analysis of Ethiopia's Article 5 deadline Extension Request, 19 November 2015, p. 3.

24 Revised National Mine Action Plan for 2017–20, October 2017, pp. 2 and 32.

25 2019 Article 5 deadline Extension Request, p. 9.

26 *Ibid.*, p. 51.

27 *Ibid.*, p. 11.

28 Article 7 Report (covering January 2021–March 2022), Form J.

Ethiopia's 2019 Article 5 deadline extension request notes the availability of trained and highly experienced demining teams.²⁹ In 2018, the Ethiopian government was the sole funder of mine action operations.³⁰ EMAO had informed Mine Action Review that it expected to receive increased funding in 2019.³¹ In November 2020, Ethiopia reported that no funding was made available for humanitarian demining activities during the year from either the government or donors and that insecurity in border and remote areas was making access for demining personnel difficult.³² Ethiopia has also made numerous requests for international assistance, for vehicles, detectors, and personal protective equipment (PPE); assistance to conduct a baseline survey; and for Information Management System for Mine Action (IMSMA) training for staff.³³

In May 2021, the United Nations (UN) in collaboration with Ministry of Foreign Affairs (MFA) and EMAO convened a meeting with national stakeholders, including ministries, and international stakeholders to discuss how to address Ethiopia's Anti-Personnel Mine Ban Convention (APMBC) commitments. This opened up the humanitarian mine action space, increasing scope to appeal for financial and technical assistance for mine action, including mine clearance equipment.³⁴ As a result, Terms of Reference (ToR) for the formation of a mine action standing group were established and an ad hoc accreditation process was determined, providing international operators with access to register and resume operations in Ethiopia. In March and June 2021, UNMAS undertook assessment missions in the northern part of the country including Tigray. The mission report emphasised the urgency of establishing a Mine Action Area of Responsibility (MA AoR) in Ethiopia to ensure a predictable, accountable, and coordinated response, organised in line with international humanitarian law principles.

Following these assessment missions, the UN Ethiopia Humanitarian Country Team (UNHCT) endorsed the establishment of an MA AoR in Ethiopia, which falls under the UN Protection Cluster.³⁵ The MA AoR, coordinated by UNMAS, was formally activated in Ethiopia in August 2021.³⁶ In November 2021, in the context of extensive armed fighting throughout Tigray and some parts of the Afar and Amhara regions, with high numbers of EO casualties and ERWs spread across residential areas, internally displaced persons (IDP) sites, in communal areas and among ruined buildings, UNMAS shifted focus from providing a strategic advisory role to Ethiopia's UNHCT to an operational role. This included emergency Explosive Ordnance Risk Education (EORE), technical assessment and threat reduction in support

of humanitarian aid delivery. While the current context of conflict has necessitated this shift, UNMAS aspires to support the development of EMAO's long-term capacity in future if donor funding can be obtained.³⁷

UNMAS describes how the present MA AoR advocacy strategy has been produced in line with Ethiopia's UNHCT's Protection Strategy and responds to its Priority Objective, which is to enable the operationalisation of mine action, set for the first quarter of 2022. This MA AoR strategy was developed by MA AoR members in Ethiopia in order to facilitate advocacy for the rapid deployment of appropriate mine action capacities, when required, as part of emergency humanitarian operations as well as to support the safe transition and sustainable solutions for internally displaced people. The strategy aims at enabling the humanitarian mine action response in Ethiopia in 2022 through appropriate action, including EORE, victim assistance, survey, marking, and clearance. Since the MA AoR's establishment participation has grown with active members including UNMAS as the lead organisation, The HALO Trust, Humanity and Inclusion (HI), Danish Refugee Council (DRC), the International Committee of the Red Cross (ICRC), Ethio-Professional Security Solution (EPSS), Rehabilitation and Development Organization (RADO), Survivors Recovery and Rehabilitation Organization (SRaRO), and the National Association for Disability.³⁸

At the time of writing, UNMAS had received contributions from the Government of Japan and the United Nations Office for the Co-ordination of Humanitarian Affairs (OCHA), through the Ethiopia Humanitarian Fund, supporting the programme's activities in its mobilisation phase through to the middle of 2022. UNMAS Ethiopia is currently seeking US\$2.5 million to scale up its mine action intervention in northern Ethiopia, and provide necessary technical assistance and capacity development for EMAO.³⁹

In June 2022, The HALO Trust signed a Technical Agreement with the Mine Action Office at the Ethiopian MoD and in August 2022, began training its first demining sections.⁴⁰ HALO has acquired funding from international donors to recruit, train, and deploy eight Ethiopian manual mine clearance teams by April 2023 to clear high-priority minefields on the border with Somaliland. HALO will also begin a resurvey of 100 known CHAs and SHAs in the Somali region with the objective of producing a baseline assessment of mine contamination in the east of Ethiopia. The requirement for both clearance and survey is expected to be much greater than the operational deployment that secured funding will currently permit.⁴¹

29 2019 Article 5 deadline Extension Request, p. 10.

30 Ibid., p. 21.

31 Email from Col. Tadege Yohala, Head, EMAO, 5 August 2019.

32 Statement of Ethiopia, 18th Meeting of States Parties, 5 Nov 2020.

33 Statement on Article 5 deadline extension request, Fourth APMBC Review Conference, Oslo, 27 November 2019.

34 "Ethiopia appeals for International support to combat landmines", The Reporter, 22 May 2021, at: <https://bit.ly/3jKdoci>; and email from Abel Tesfai, UNMAS, 26 August 2022.

35 Emails from Abel Tesfai, then UNMAS Advisor to the UN Resident and Humanitarian Coordinator in Ethiopia, 18 and 26 August 2021.

36 Email from Abel Tesfai, Chief of Mine Action Programme Ethiopia, UNMAS, 19 July 2022.

37 Email from Abel Tesfai, UNMAS, 26 August 2022.

38 Email from Abel Tesfai, UNMAS, 19 July 2022.

39 Ibid.

40 Emails from Ralph Legg, HALO Trust, 13 July and 25 August 2022.

41 Email from Ralph Legg, HALO Trust, 13 July 2022.

The success of Ethiopia's mine action programme is partly dependent on cross-border co-operation, given that there are areas believed to be contaminated at the borders with Eritrea, Somalia, Somaliland, South Sudan, and Sudan. Recognising this, UNMAS organised a workshop in 2021 with the objective of bringing together all the affected states and key governmental institutions. In this workshop, participants were able to express their concerns and develop a collective response. Consequently, ToR for the establishment of the National Mine Action Authority was drafted. However, its momentum was halted due to the ongoing conflict in Ethiopia's Tigray region. In addition to the workshop, EMAO, supported by UNMAS, began engaging with the Intergovernmental Authority on Development (IGAD) to obtain some support, and, critically, strengthen regional cooperation. Although this engagement is at an early stage, UNMAS reports that it appears promising.⁴²

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Ethiopia in order to minimise potential harm from clearance. The HALO Trust has institutional guidance on environmental management during demining operations. HALO is also in the process of developing pre-clearance environmental assessments for mine-impacted communities and is actively building partnerships with regional-based national non-governmental organisations (NGOs) in Somali Region, with the aim of facilitating post-clearance land regeneration projects to support resilience building against climate shocks.⁴³

GENDER AND DIVERSITY

In August 2019, EMAO claimed to have a gender and diversity plan in place and to have mainstreamed gender in the national standards. It stated that all groups affected by anti-personnel mines are consulted during survey and community liaison through face-to-face interviews and using elders to disseminate information to local communities. It also noted, though, that no female deminers were employed in the demining companies. It claimed that, according to EMAO's policy, there is equal access for employment for qualified men and women in survey and clearance teams, including for managerial positions, but acknowledged that in practice no women had been engaged in survey or clearance in 2018.⁴⁴

As at September 2022, the Ethiopian authorities had not provided information on whether women were involved in survey or clearance activities in 2020 or 2021. However, the HALO Trust is actively pursuing a policy of equal employment for women and men in Ethiopia for both operations and support staff. Most recently this has included the prioritisation of recruitment of women as deminers for HALO's first operational deployment in Somali Region.⁴⁵

INFORMATION MANAGEMENT AND REPORTING

Although a version of the IMSMA database software was installed and customised by EMAO prior to 2015, in 2019, Ethiopia continued to report it was still using an "alternative data processing package" alongside the IMSMA database, due to a "gap" in the IMSMA system's installation. It reported that efforts to upgrade capacity and data processing had been ongoing under EMAO, and that it requested additional IMSMA training and assistance from the Geneva International Centre for Humanitarian Demining (GICHD) to finalise the transfer of the database.⁴⁶ The GICHD, however, has no record of a request for such assistance nor for any application by Ethiopia for its mine action personnel to attend any training courses.⁴⁷

In 2021, the British Embassy in Addis Ababa provided minor infrastructure support to facilitate the establishment of an information management database, including support for refurbishing existing computers and printers, and some infrastructure support, such as fixing cable lines.⁴⁸

Ethiopia's 2019 Article 5 extension request contained a number of discrepancies in reporting, possibly due in part to previous inconsistencies in reporting on area remaining in its 2017 updated work plan and first Article 5 extension request.⁴⁹ The figures in Ethiopia's Article 7 report, covering April 2019 to April 2020, are accurate but the report lacks detail on survey and clearance capacity and land release methodology, and reporting would benefit from an updated work plan and detailed budget. However, both documents are evidence of significant improvements in reporting compared to previous years.

42 Email from Abel Tesfai, UNMAS, 19 July 2022.

43 Email from Ralph Legg, HALO Trust, 25 August 2022.

44 Email from Col. Tadege Yohala, EMAO, 5 August 2019.

45 Email from Ralph Legg, HALO Trust, 25 August 2022.

46 2019 Article 5 deadline Extension Request, pp. 30–31.

47 Email from Dominic Wolsey, Advisor, Gender and Diversity, GICHD, 17 July 2020.

48 Email from Abel Tesfai, UNMAS, 19 July 2022.

49 Ethiopia's reporting on the number and size of areas suspected or confirmed to be mined has been plagued with inconsistencies, including the figures contained within its 2015 Article 5 extension request, its response to subsequent requests for clarification, statements at APMBC meetings, and its last Article 7 transparency report on the status of contamination as at 30 April 2017. Ethiopia has been asked by States Parties to the APMBC on numerous occasions to clarify its estimates of contamination and to present accurate information on the number and estimated size of CHAs and SHAs. "Response to Committee on Article 5 Implementation request for additional information on its Article 5 deadline Extension Request", submitted on 26 September 2015; and Analysis of Ethiopia's Article 5 deadline Extension Request, 19 November 2015, p. 3.

Both Ethiopia's Article 7 reports covering 2020 and 2021 were mostly unchanged from the Article 7 report it submitted covering 2019, albeit with a further 60,000m² of land release through anti-vehicle mine survey and clearance reported in the latest report. In the decision on Ethiopia's 2019 Article 5 deadline extension request, the States Parties requested that Ethiopia submit by 30 April 2021 an updated work plan for the period covered by the extension request. As at September 2022, Ethiopia had not done so.

In its Article 5 update to the APMBC Intersessional Meetings in Geneva in June 2022, Ethiopia stated its plans to conduct a desk assessment of remaining contamination in the database and conduct re-survey of mined areas to establish an accurate baseline, as well as strengthen technical capacity for emergency response while building towards nationwide survey and clearance.⁵⁰ However, no timeframe for these activities was given.

PLANNING AND TASKING

Ethiopia's second Article 5 extension request for the period 2020–25 aims to achieve the following:

- Address the remaining 1,065km² of mine contamination
- Complete survey of the buffer zone between Ethiopia and Eritrea once demarcation is completed
- Obtain the support of donors and international advisors
- Fully equip and train the demining companies, Rapid Response Teams (RRTs), and explosive ordnance disposal (EOD) teams
- Implement risk education in affected communities and mark SHAs; and
- Finish the building of the demining training centre.⁵¹

In 2019, Ethiopia planned a "rearrangement" of the RRTs and demining companies in the Somali region, and to release 171.5km² through survey and 1.9km² through clearance.⁵² Ethiopia far exceeded its survey target, releasing nearly

329km² from April 2019 to April 2020, but did not quite meet its clearance target of 1.9km², clearing only 1.76km².⁵³

In 2020 and 2021, Ethiopia planned to continue demining in the Somali region and expected to release 171.5km² through survey and to clear 4.3km² each year (see Table 2).⁵⁴ Ethiopia reported that while land release activities had been planned in the Somali region for the remainder of 2020 the COVID-19 pandemic meant that field activities were suspended both due to lockdowns affecting deployment of personnel and demining personnel being redeployed to support COVID-19 mitigation activities within the community.⁵⁵ In its Article 7 Report covering the period 1 January 2021 to 31 March 2022, Ethiopia reported again that the COVID-19 pandemic had "affected the Ethiopian mine action sector" but gave no further details. It is not clear exactly when the 60,000m² reported as taking place 'as at 2020' occurred or when the suspension of field activities was lifted.⁵⁶

Table 2: Planned land release in 2019–25

Year	Area to be reduced/cancelled (m ²)	Area to be cleared (m ²)	Totals (m ²)
2019	171,507,352	1,905,438	173,412,790
2020	171,507,352	4,300,000	175,807,352
2021	171,507,352	4,300,000	175,807,352
2022	171,507,353	4,300,000	175,807,353
2023	171,507,352	4,300,000	175,807,352
2024	171,507,352	4,300,000	175,807,352
2025	0	3,900,000	3,900,000
Totals	1,029,044,113	27,305,438	1,056,349,51

50 Statement of Ethiopia, APMBC Intersessional Meetings, Geneva, 20–22 June 2022.

51 2019 Article 5 deadline Extension Request, pp. 10–11.

52 Ibid., p. 47.

53 Article 7 Report (covering 31 April 2019–31 April 2020), Form D.

54 2019 Article 5 deadline Extension Request, Additional Information, p. 5; and Article 7 Report (covering January 2021–March 2022), Form C.

55 Article 7 Report (covering 2020), Form J.

56 Article 7 Report (covering January 2021–March 2022), Form C.

The work plan included in the 2019 extension request is neither realistic nor achievable and has already been surpassed by events. For example, Ethiopia did not detail how the significant jump in projections for clearance from 1.9km² in 2019 to 4.3km² in 2020 was to be realised. The request indicates that one additional "demining company" will be added during the extension period, but does not specify at what time this will occur or the number of deminers who will form the company. EMAO informed Mine Action Review that it was 90 deminers.⁵⁷ The request also foresees that one deminer will clear on average 40–50 square metres per day, 22 days a month, 10 months a year; projections which are improbably optimistic.⁵⁸

Ethiopia was due to submit to the States Parties, by 30 April 2021 and then a second time by 30 April 2023, updated work plans for the remaining period covered by the extension request. The decision at the Fourth Review Conference had further requested that these work plans contain an updated list of all areas known or suspected to contain anti-personnel mines, annual projections of which areas would be dealt with each year and by which organisations during the remaining period covered by the request, and a revised detailed budget.⁵⁹ As at September 2022, Ethiopia had not submitted the first of the requested updated work plans.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Ethiopia previously reported in 2017 that its National Mine Action Standards (NMAS) would be "developed and updated" and that standing operating procedures (SOPs) for mine clearance and other land release would be revised according to the International Mine Action Standards (IMAS). It had also reported that this would happen in 2015, according to its extension request targets.⁶⁰ As at September 2022, Ethiopia had not reported that the revisions had been completed.

Ethiopia's second Article 5 deadline extension request detailed the land release methodology it intended to employ in demining operations.⁶¹ The request claimed that manual demining is the most efficient and least costly method of clearance, and states that machines cannot be used due to the terrain of the remaining contaminated areas.⁶² Arguably, with such large projections for cancellation and reduction of SHA, Ethiopia should consider significantly increasing non-technical survey capacity before expending significant resources on technical survey.

OPERATORS AND OPERATIONAL TOOLS

All survey and clearance in Ethiopia are conducted by the national demining companies of the Ethiopian Armed Forces. Ethiopia's second extension request forecasted that following a "rearrangement" of its four demining companies and four RRTs, which included two technical survey/RRTs and two specialist EOD teams in 2019, these four demining companies and four RRTs would be deployed each year through to the end of its Article 5 deadline extension period in 2025.⁶³ According to EMAO, two companies were deployed for clearance in 2018, along with two technical survey teams, and one EOD team.⁶⁴ Ethiopia has not reported on the operational capacity that was deployed for survey and clearance from April 2019 to April 2020. From April to December 2020 no operational capacity was deployed and, as at August 2022, Ethiopia had not formally reported what operational capacity was deployed in 2021. However, UNMAS noted that EMAO trained 45 new deminers in 2021.⁶⁵

The extension request claims that the manual clearance, technical survey, and EOD teams have carried out extensive trainings and "are enough capable to implement the activities mentioned in the detailed work plan".⁶⁶ Ethiopia has reported that while it has six ground preparation machines, these were not in use as all remaining hazardous areas are located in remote areas, which it claims are only suitable for manual clearance.⁶⁷ The British Embassy in Addis Ababa is reported to have supported basic improvised explosive device (IED) and EOD training for Ethiopia in 2021.⁶⁸

57 Email from Col. Tadege Yohala, EMAO, 5 August 2019.

58 2019 Article 5 deadline Extension Request, p. 42.

59 Decision on 2019 Article 5 deadline Extension Request, 29 November 2019.

60 Revised National Mine Action Plan for 2017–20, October 2017, p. 12; and 2015 Article 5 deadline Extension Request, p. 11.

61 2019 Article 5 deadline Extension Request, pp. 24–25 and 27–29.

62 Ibid., p. 51.

63 Ibid., pp. 46–48.

64 Email from Col. Tadege Yohala, EMAO, 5 August 2019.

65 Email from Abel Tesfai, UNMAS, 26 August 2022.

66 2019 Article 5 deadline Extension Request, p. 50.

67 Ibid.

68 Emails from Abel Tesfai, UNMAS, 19 July and 26 August 2022.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Prior to 2021, the last reported land release of anti-personnel mined area in Ethiopia took place between end-April 2019 and end-April 2020, when a total of 330km² of mined area was released across 128 hazardous areas. Of this, 1.76km² was cleared, 10.3km² was reduced through technical survey, and 318.2km² was cancelled through non-technical survey. A total of 128 anti-personnel mines were found and destroyed.⁶⁹ Ethiopia reported that no further survey or clearance took place in 2020 due to the COVID-19 pandemic.

Ethiopia then stated that, as at 31 March 2022, it had been able to release 330,341,076m².⁷⁰ The additional 60,000m² of land release concerns anti-vehicle mined area in the Fik district of Erer zone in the Somali region. There is inconsistency in the Article 7 Report as to the means by which this land was released. The report variously states that 13,400m² was "cancelled using technical survey" and 46,600m² was cleared or that 13,400m² was "reduced through technical survey" and 46,600m² was cleared, albeit with no anti-personnel mines or items of UXO destroyed.⁷¹ A total of 46 TM-57 anti-vehicle mines (and no anti-personnel mines) were destroyed during this clearance/technical survey.⁷²

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 3: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021*	0
2020**	0
2019***	1.76
2018	1.10
2017	0.40
Total	3.26

* Reporting year was January 2021 to March 2022

** Reporting year was April–December 2020

*** Reporting year was 31 April 2019–31 April 2020

Under Article 5 of the APMBC, Ethiopia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025.⁷³ In its 2019 Article 5 deadline extension request, Ethiopia listed the following reasons for its inability to comply with its Article 5 obligations: insecurity in and around some mined areas; the lack of basic social services and infrastructure necessary for operations in rural areas; continuous redeployment of demining teams in scattered mined areas; lack of funding; the identification of additional hazardous areas; climate (such as a three-month rainy season); and a lack of precise information on the number and location of mined areas.⁷⁴ This again points to the need for extensive non-technical survey to clarify the extent of remaining mined areas and the total area of known contamination in the country.

69 Statement of Ethiopia, APMBC Intersessional Meetings, Geneva, 20–22 June 2022.

70 Article 7 Report (covering January 2021–March 2022), Form C.

71 Ibid. Table 2 on Form C in the same draft report specifies 13,400m² "reduced" and 46,600m² "cleared".

72 Article 7 Report (covering January 2021–March 2022), Form C.

73 Ethiopia's original Article 5 deadline expired on 1 June 2015. In March 2015, Ethiopia submitted a request for an extension of five years until 1 June 2020 to complete survey and clearance of all remaining mined areas. It failed, however, to submit an extension request with sufficient time to allow States Parties to consider extending the deadline prior to its expiry, thus placing Ethiopia in violation of the convention until the approval of the late request by the Fourteenth Meeting of States Parties on 4 December 2015.

74 2015 Article 5 deadline Extension Request, pp. 40–41; and 2019 Article 5 deadline Extension Request, pp. 14–15.

Ethiopia has been at best, overly ambitious, or at worst, seriously remiss in its projections and estimations for completion of survey and clearance in recent years. Its 2017–20 work plan, submitted in October 2017, stated that it was “realistic” that all 314 areas then remaining could be addressed using “all available demining assets in Ethiopia” within the extension time period, and that donor funding will enable it “successfully to complete the clearance of contaminated areas from land mines and fulfil the legal obligations of the Anti-Personnel Mine Ban Convention by 2020”.⁷⁵ This did not occur.

The second extension request clearly sets out primary assumptions and risk factors in implementing its targets: that donor funding will increase steadily; that old demining equipment is replaced by “licensed” demining equipment; that one deminer will clear on average as much as 50 square metres per day, 22 days a month, and 10 months a year; and that one additional demining company will be added, for a total of five deployed. This average clearance rate per deminer appears unrealistically high.⁷⁶

For the period April 2019 to April 2020, Ethiopia cleared 1.76km² and exceeded its land release through survey target by 91%. Ethiopia has not reported on its deployed operational capacity during this period, so it is unclear how these high levels of productivity were achieved. Ethiopia reported that for the remainder of 2020, no land release activities took place due to the impact of the COVID-19 pandemic in the country. Ethiopia’s Article 7 Report covering the period 1 January 2021 to 31 March 2022 indicated that only a further 60,000m² had been released to date. Ethiopia would benefit from providing an updated work plan with realistic and costed annual targets for land release.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

The scope of residual contamination remains unknown in Ethiopia. Ethiopia acknowledges that landmines may have been left because of lack of information during clearance operations, because of ground movements, or exposure to rain. It is also possible that more mines have been laid in recent armed conflicts.⁷⁷ As at September 2022, Ethiopia had not reported on whether it has a strategy for managing residual contamination after completion of large-scale clearance.

⁷⁵ For example, in just one year, 2018, the work plan stated that more than 518.5km² would be addressed through non-technical and technical survey by concluding survey of Afar, Benishangul, Gambela, and Oromia regions, along with ongoing survey in Somali region, and the clearance of just under 8km².

⁷⁶ 2019 Article 5 deadline Extension Request, p. 42.

⁷⁷ *Ibid.*, p. 16.

ARTICLE 5 DEADLINE: 31 DECEMBER 2022

TWO-YEAR INTERIM EXTENSION REQUESTED TO 31 DECEMBER 2024

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

(PARTIAL NATIONAL ESTIMATE, BUT LIKELY TO INCLUDE AREAS ONLY CONTAINING EXPLOSIVE REMNANTS OF WAR)

1.09 KM²

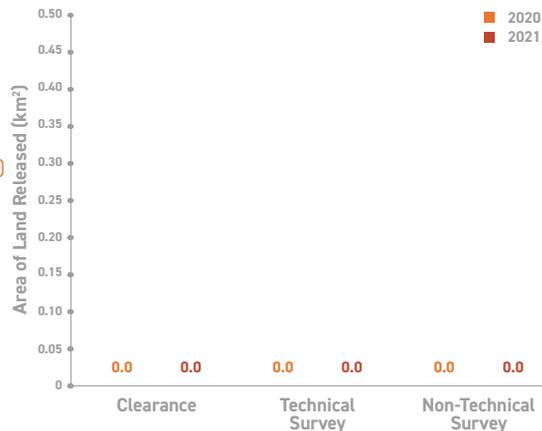
AP MINE CLEARANCE IN 2021

0 M²

AP MINES DESTROYED IN 2021

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): MEDIUM

KEY DEVELOPMENTS

Having previously declared fulfilment of its Article 5 obligations under the Anti-Personnel Mine Ban Convention (APMBC) in December 2012, Guinea-Bissau reported in June 2021 at the Intersessional Meetings of the APMBC the discovery of new anti-personnel mine and explosive-remnants of war (ERW) contamination. In the same month, Guinea-Bissau submitted a first interim Article 5 deadline extension request, through to 31 December 2022, which was granted in November 2021 by the 19th Meeting of States Parties (19MSP).

According to the Request, Guinea-Bissau would use the interim period to better understand the contamination, and submit a follow-up request by March 2022. Guinea-Bissau then reported to the APMBC Intersessional Meetings in June 2022 that the lack of resources and international support inhibited progress, and subsequently submitted a second interim Article 5 extension request seeking a new deadline of 31 December 2024, with the aim to submit a third and final extension request by 31 March 2024 for completion. Guinea-Bissau's second extension request, submitted in June 2022, featured a two-year work plan costed at almost US\$5.7 million, most of which will have to come from international assistance.

RECOMMENDATIONS FOR ACTION

- Guinea-Bissau should mobilise funds and operational support to survey of all hazardous areas, confirm or deny the presence of anti-personnel mines, and more accurately determine the location and extent of contamination.
- Guinea-Bissau should ensure that its national survey clearly disaggregates areas that contain anti-personnel mines from areas containing other explosive ordnance.
- Guinea-Bissau should adopt national mine action standards (NMAS) and ensure they are in accordance with the International Mine Action Standards (IMAS).
- Guinea-Bissau should establish a reliable Information Management System for Mine Action (IMSMA).
- Guinea-Bissau should establish a multi-year national mine action strategy.

- Guinea-Bissau should elaborate measurable gender and diversity targets for mine action.
- Guinea-Bissau should establish a sustainable national capacity to address a residual threat from anti-personnel mines following renewed fulfilment of its Article 5 obligations.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	Not scored	A survey conducted by the national operator (HUMAID) in 2014 revealed a little over 1.09km ² of hazardous area across 9 confirmed hazardous areas (CHAs) and 43 suspected hazardous areas (SHAs) whose size had not been determined. In addition to 402,304m ² of contamination across five battle areas. The survey, however, originally generated rough estimates as it was conducted using only non-technical methods and did not demarcate any of the SHAs. Moreover, Guinea-Bissau says that the majority of its contamination is resulting from unexploded ordnance (UXO), and did not specify how much of the contamination is of anti-personnel mines as opposed to other types of explosive ordnance.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	3	Not scored	Guinea-Bissau's National Mine Action Centre (CAAMI)'s activities have been limited since 2012 due to a lack of funding. CAAMI's workforce in 2021 consisted of 17 staff members, some of whom do not receive salaries. CAAMI continues to function at reduced capacity and restricts its activities to dialogue with stakeholders regarding mine action, in addition to quality control of sporadic spot tasks by HUMAID.
GENDER AND DIVERSITY (10% of overall score)	4	Not scored	The most recent Article 5 deadline extension request states that the proposed action plan follows best practice by promoting gender and diversity inclusivity at all stages of the mine action programme. It also promises that CAAMI will build its own gender and diversity policy and require operators to constitute their operational teams taking into consideration gender and diversity issues. The extension request and work plan do not, however, contain measurable gender and diversity targets.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	3	Not scored	Guinea-Bissau does not have a functioning information management system for mine action, but CAAMI has sought technical support to retrieve data and restore its information management system. Guinea-Bissau's work plan of 2022-24 considers the creation of an information management system as a prerequisite to resuming mine action activities, and has allocated US\$367,000 for that purpose. Guinea-Bissau expected it would take six months to develop a fully functional system. In June 2022, Guinea-Bissau submitted a comprehensive Article 7 report with the support of Mines Advisory Group (MAG) and The HALO Trust.
PLANNING AND TASKING (10% of overall score)	6	Not scored	In its extension request of June 2022, Guinea-Bissau submitted a two-year detailed work plan, costed at US\$5,688,000. The work plan aims to conduct a national technical and non-technical survey, and to submit a final extension request for completion of its Article 5 obligations by 31 March 2024.
LAND RELEASE SYSTEM (20% of overall score)	3	Not scored	Guinea-Bissau does not have national mine action standards (NMAS) in place, but in its latest Article 5 deadline extension request, it sought US\$112,000 for the development of national standards that are compliant with the International Mine Action Standards (IMAS).
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	Not scored	Guinea-Bissau was granted an interim extension request with a deadline of 31 December 2022, but did not achieve progress during the interim period due to the lack of resources. Guinea-Bissau then submitted a second interim deadline extension request seeking a new deadline of 31 December 2024. Guinea-Bissau has yet to secure funding to be able to advance in its proposed work plan, and aims to submit a final extension request for completion by March 2024.
Average Score	4	Not scored	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Commission for Humanitarian Demining (Comissão Nacional de Desminagem Humanitária, CNDH)
- The National Mine Action Coordination Centre – (Centro Nacional de Coordenação da Acção Anti-Minas, CAAMI)

NATIONAL OPERATORS

- Humanitarian Aid (HUMAID)
- We All Fight Against Mines (Lutamos Todos Contra As Minas, LUTCAM)- (inactive)

INTERNATIONAL OPERATORS

- The HALO Trust
- Mines Advisory Group (MAG)

OTHER ACTORS

- The United Nations Office for Project Services (UNOPS)

UNDERSTANDING OF AP MINE CONTAMINATION

Guinea-Bissau declared fulfilment of its Article 5 obligations on 5 December 2012 at the Twelfth Meeting of States Parties to the APMB, but reported the discovery of new contamination of anti-personnel mines and explosive remnants of war (ERW) under its jurisdiction and control at the APMB Intersessional Meetings in June 2021.² Since 2012, a survey conducted by the national non-governmental organization (NGO) Humanitarian Aid (HUMAID) revealed a little over 1.09km² of hazardous area across nine confirmed hazardous areas (CHAs) and 43 suspected hazardous areas (SHAs) whose size had not been determined.³ An additional 402,304m² of contamination was identified across five battle areas as well as three sites of spot tasks. The identified areas are suspected to be contaminated by different types of explosive ordnance, including anti-personnel mines, anti-vehicle mines, and ERW. The HUMAID survey was based on reports by the local populations and used only rough estimates of the extent of contamination and non-technical methods to determine its presence.⁴ It did not delimit the SHAs or disaggregate by type of hazard.

Contamination in Guinea-Bissau is spread mostly across the north, south, and east of the country.⁵ Accidents caused by explosive ordnance have also been reported in sectors where no hazardous areas were identified, which indicates that the contamination data is incomplete, and highlights the need to conduct a comprehensive and evidence-based national survey to confirm the extent and nature of contamination.⁶ It is unclear to what extent—and indeed whether—the hazardous areas contain anti-personnel mines as opposed to other types of explosive ordnance. But according to Guinea-Bissau, the contamination caused by unexploded ordnance (UXOs) is far more widespread than that caused by anti-personnel mines.⁷

In June 2021, Guinea-Bissau submitted an interim Article 5 deadline extension request through to 31 December 2022, which was granted by the 19MSP in November 2021. According to the request, the interim period would allow Guinea-Bissau the opportunity to mobilise national and international resources, investigate the suspected contamination, and better determine the nature and scale of the problem.⁸ Following this work, Guinea-Bissau would be in a position to submit a follow-up extension request by 31 March 2022 for consideration at the Twentieth Meeting of States Parties (20MSP).⁹

Given the lack of financial resources, however, Guinea-Bissau did not achieve the intended progress, but in June 2022, it submitted a second Article 5 extension request seeking a new interim deadline of 31 December 2024. During the period between the two extension requests (June 2021–June 2022), the National Mine Action Coordination Centre (Centro Nacional de Coordenação da Acção Anti-Minas, CAAMI) engaged in dialogue with national and international stakeholders, leading to the identification of five key elements: the widespread explosive ordnance contamination across Guinea-Bissau, which is only partially known and was never systematically assessed; the lack of capacity to demarcate, mark, and remove the threat posed by explosive ordnance, the lack of functional information management system to support mine action; the lack of national mine action standards (NMAS) to frame and improve the safety, quality, and efficiency of mine action; and the current exposure of population to the threat of explosive ordnance.¹⁰

1 Guinea-Bissau declaration of completion of implementation of Article 5 of the APMB at the 12th Meeting of States Parties (12MSP), Geneva, 3–7 December 2012.

2 Presentation of Guinea-Bissau, APMB Intersessional Meetings, 22–24 June 2021, slide 9; and Article 5 deadline Extension Request, 22 June 2021, pp. 9–12.

3 Ibid.

4 Guinea-Bissau Article 5 deadline Extension Request to the APMB, dated April 2022 but submitted in June 2022, p. 9.

5 Ibid., pp. 9–11.

6 Ibid., pp. 11 and 30–31.

7 Ibid., p. 15.

8 Article 5 deadline Extension Request, 22 June 2021, para. 11.

9 Presentation of Guinea-Bissau, APMB Intersessional Meetings, 22–24 June 2021, slides 10 and 11.

10 2022 Article 5 deadline Extension Request, p. 3.

According to its latest request, submitted in June 2022, Guinea-Bissau will accomplish the following goals during the new two-year extension period: completion of a national non-technical survey, preparation of resources for spot tasks, technical surveys and clearance, development of a national information management system and national standards in line with international mine action standards (IMAS), resumption of EORE, carrying out emergency spot tasks, preparation of a strategy to address residual risk, and fundraising. The extension request featured a two-year (2022–24) work plan with a planned budget of US\$5,688,000. The work plan aims for Guinea-Bissau to develop and submit a final extension request by 31 March 2024, including a detailed plan for completion of its Article 5 obligations.¹¹

Table 1: Confirmed mined areas (at end of 2021)¹²

Province	Region	Sector	Community	CHA	CHA area (m ²)
North	Cacheu	São Domingos	Djequemondo	1	15,000
North	Gabú	Pitche	Buruntuma	1	116,700
North	Oio	Bissorã	Encheia	1	600,000
North	Oio	Farim	Bricama	1	90,000
North	Oio	Farim	Cuntima	1	50,000
North	Oio	Farim	Demba Dabo	1	51,000
South	Quebo	Empada	Gubia	1	2,345
South	Tombali	Quebo	Imbai-Baila	1	60,000
South	Tombali	Quebo	Medjo	1	108,800
Totals				9	1,093,845

CHA = Confirmed hazardous area

The landmine contamination in Guinea-Bissau dates back to its independence war 1963–74, the 1998–99 civil war, and the four-decade-old Casamance conflict. Landmine and UXO contamination is primarily located in the north and the east of the country around the national borders with Senegal and Guinea. According to Guinea-Bissau, a faction of the Movement of Democratic Forces in Casamance (MDFC) laid both factory-made and improvised anti-personnel mines in 2006 in the northern regions bordering Senegal.¹³ The capital, Bissau, was declared free of landmines in March 2006, following which clearance was extended throughout the country in accordance with a national five-year clearance plan (2004–2009) developed by CAAMI.¹⁴

In its initial APMB Article 7 transparency report submitted in 2002, Guinea-Bissau reported that “an impact survey was to be initially carried out in and around Bissau to assess the anti-personnel mines contamination and respond adequately”.¹⁵ The first coordinated effort to assess landmine and ERW contamination on a national level, however, only took place in 2006–08. During this period, CAAMI conducted a preliminary opinion collection (POC), followed by a landmine impact survey (LIS) conducted by a British NGO, Landmine Action. The LIS covered all but seven of the 278 areas

covered by the POC and identified 12 mined areas in addition to a total impact area of nearly 2.24km².¹⁶

By June 2010, nine mined areas remained to be addressed, in the sectors of São Domingos, Cacheu, Bigene, Oio, Quinara, and Tombali, covering a total of 1.35km². In addition to these areas, there was a requirement to survey additional 29 areas and 16 communities that had not been visited but where contamination was reported by community members or NGOs. In December 2012, Guinea-Bissau declared that it had fulfilled its Article 5 obligations having cleared 50 mined areas containing anti-personnel mines and covering a total of 6.52km², destroying in the process 3,973 anti-personnel mines, 207 anti-vehicle mines, and 309,125 items of UXO.¹⁷ In the same document, Guinea-Bissau stated that “battle area clearance tasks remain, as well as an expected residual contamination, which will be addressed by the CAAMI”.¹⁸

Since its declaration of completion in 2012, Guinea-Bissau has registered a total of 13 accidents, which have claimed 73 victims. It is likely that other accidents occurred without having been recorded in the absence of a formal reporting mechanism and an information management system.¹⁹ In its Article 7 report covering 2021 however, Guinea-Bissau

11 Ibid., pp. 19 and 26.

12 Article 7 report (covering 2021); Form D. The total is reported as 1,093,840m² in the report.

13 Declaration of completion of implementation of Article 5, 12MSP, Geneva, 3–7 December 2012, p. 2.

14 Article 7 Report (covering 2010), Form C.

15 Article 7 Report (covering November 2001 to April 2002), Form C.

16 Declaration of completion of implementation of Article 5, 12MSP, Geneva, 3–7 December 2012, pp. 2–4.

17 Ibid.

18 Ibid., p. 5.

19 2022 Article 5 deadline Extension Request, pp. 7 and 12.

reports having recorded 1,500 incidents caused by explosive ordnance.²⁰ The continued casualties led CAAMI to task the local NGO, HUMAID, to conduct additional survey in 2014,²¹ the results of which are indicated above. The last reported incident involving EO occurred in January 2021 in Buruntuma, Gabú region, where two children were killed and another four injured as a result of the explosion of a hand grenade.²²

In its statement to the Fourth Review Conference of the APMBBC in November 2019, Guinea-Bissau reported that, as at the end of 2019, 0.56km² of ERW contamination remained to be cleared along with almost 1km² still needing to be surveyed in its northern, southern, and eastern regions.²³ In its Convention on Cluster Munitions (CCM) Article 7 report covering 2019, Guinea-Bissau stated that it had cleared all its cluster munition contamination before entry into force of the CCM.²⁴

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

CAAMI was established in March 2001 in accordance with the decree of Council of Ministers (Decree 4/2001-17). In addition, the National Commission for Humanitarian Demining (Comissão Nacional de Desminagem Humânitaria, CNDH) was created to serve as a steering committee appointed by the Government. Under the aegis of State Secretary of Veteran Affairs and the CNDH, CAAMI functions as the policy setting and coordination body. It plans, coordinates, and supervises all mine action activities, and mobilises resources necessary for the implementation of the national humanitarian mine action programme (PAAMI).²⁵ CAAMI's activities have been limited since 2012 due to a lack of funding.²⁶ CAAMI, however, reports that it maintains a good human resources capacity.²⁷ As at April 2022, CAAMI had 17 staff members: 12 men and 5 women, but some of its staff members were not receiving salaries.²⁸

Since 2000 and until the declaration of Article 5 completion in 2012, CAAMI received technical and financial support from many organisations, including the United Nations Development Programme (UNDP), the UN Children's Fund (UNICEF), and the Geneva Centre for Humanitarian Demining (GICHD).²⁹ In the course of 2021–22, Mines Advisory Group (MAG), HALO Trust, and Humanity and Inclusion (HI) also provided support, notably in the preparation of Guinea-Bissau's Article 5 deadline extension request.³⁰

Since 2012, the government of Guinea-Bissau has provided an annual contribution of approximately US\$40,000 to support the functioning of CAAMI by providing premises, running

costs, salaries of some staff members, and a few spot clearance tasks. No financial support has been provided for field operations. CAAMI has continued to undertake quality control activities on the punctual clearance and spot task operations by HUMAID and the cleaning of the accident and victim data without contributions from international donors or organisations. According to Guinea-Bissau's latest Article 5 deadline extension request, the lack of resources has affected CAAMI's capacity to carry out its mandate to conduct EORE, survey, and clearance. It also affected other key areas such as information management, representation, and fundraising. Over the last ten years, the United Nations Office for Project Services (UNOPS) funded some tasks carried out by the national NGO HUMAID.³¹

In the second half of 2022, MAG secured funding from Norway for capacity development in Guinea-Bissau, including conducting a capacity and needs assessment, review of the Information Management System for Mine Action (IMSMA) and training in information management, a review of the NMAS, support for the development of an accreditation process, as well as some support for non-technical survey and EORE.³²

The Implementation Support Unit (ISU) of the APMBBC has supported Guinea-Bissau with its resource mobilisation, as well as in organising a national dialogue on victims and persons with disability in January 2022.³³

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Guinea-Bissau in order to minimise potential harm from clearance.

20 Article 7 report to the APMBBC (covering 2021), Form H.

21 2022 Article 5 deadline Extension Request, p. 8.

22 Presentation of Guinea-Bissau, APMBBC Intersessional Meetings, 22–24 June 2021, slide 8.

23 Statement of Guinea-Bissau, Fourth APMBBC Review Conference, Oslo, 25–29 November 2019.

24 CCM Article 7 Report (covering 2019).

25 APMBBC Article 7 Report (covering 2010), Form A.

26 2022 Article 5 deadline Extension Request, p. 7.

27 Presentation of Guinea-Bissau, APMBBC Intersessional Meetings, 22–24 June 2021, slide 12.

28 2022 Article 5 deadline Extension Request, pp. 12–14.

29 Article 7 Report (covering 2010), Form A.

30 Presentation of CAAMI to the APMBBC Intersessional Meetings, Geneva, 20–22 June 2022.

31 2022 Article 5 deadline Extension Request, p. 7.

32 Email from Roxana Bobolicu, MAG, 29 September 2022.

33 2022 Article 5 deadline Extension Request pp. 8 and 23.

GENDER AND DIVERSITY

CAAMI's most recent Article 5 deadline extension request states that the proposed action plan follows best practices by promoting gender and diversity inclusion at all stages of its programme. It also mentions that "EORE activities and tools will also be tailored taking into account gender and diversity aspects, as well as the at-risk groups", and that CAAMI will seek to build its own gender and diversity policy, and "will require operators to constitute their operational teams taking into consideration matters related to gender and diversity."³⁴ Guinea-Bissau's Extension Request and work plan, however, do not contain any measurable gender and diversity targets. In 2021, 29% of CAAMI's staff members were women.³⁵

INFORMATION MANAGEMENT AND REPORTING

Guinea-Bissau considers that a functional information management system as a prerequisite to resuming its mine action activities.³⁶ In 2001–12, CAAMI used the IMSMA Version 5 with the support of GICHD, but since the declaration of completion in 2012, the physical server was no longer in use. During the first quarter of 2022, with the support of MAG, CAAMI sought qualified technicians to retrieve and back-up the data but could not find the needed qualification locally. According to Guinea-Bissau, owing to the sensitive nature of the national contamination, if the search of locally qualified technician does not yield, CAAMI will consider retrieval and filing of paper archives in the second quarter of 2022 in anticipation of further manual integration of historical data into the newly developed information management system.³⁷ As of writing, it is not known if this has indeed happened.

According to Guinea-Bissau's latest extension request, submitted in June 2022, the first step to establishing an information management system is to define the best option in terms of quality, efficiency, sustainability, and national ownership. CAAMI intends to develop a monitoring and evaluation plan for the information management system to respond to operational and strategic needs in terms of data and information.³⁸ Guinea-Bissau expected that the development of a fully functional system covering all components of the mine action programme could take an initial six months. Afterwards, additional components could be added and maintenance done.³⁹ In its planned 2022–24 budget, CAAMI has allocated US\$367,000 for the development of an information management system.⁴⁰

Since its declaration of completion in 2012, Guinea-Bissau submitted a comprehensive Article 7 report to the APMB in 2022, albeit two months past the April 2022 deadline.

PLANNING AND TASKING

In its extension request of June 2022, Guinea-Bissau submitted a detailed two-year action plan that comprises 11 objectives over the course of 2022–24 as follows.

In 2022: development of an information management system; development of IMAS-compliant national standards; preparation for non-technical survey; preparation for technical survey, marking, and clearance; resumption of EORE; and mobilisation of financial resources.

In 2023–24: implementation of a national non-technical survey; emergency spot task clearance and marking; continuation of EORE; capacity building of CAAMI and national operators; and definition of residual risk management strategy.⁴¹

The action plan is costed at US\$5,688,000, but funds to set this plan in motion are yet to be secured. Guinea-Bissau noted the importance of funding as a prerequisite for the preparatory activities, as well as the "qualitative and efficient" roll-out of its action plan.⁴² The HALO Trust noted that operators have supported CAAMI with their planning and extension, but also noted that organisations' support remains limited in the absence of international funding.⁴³ In addition to supporting the elaboration of Guinea-Bissau's extension request, MAG also supported Guinea-Bissau's attendance at the APMB intersessional meetings and the individualised approach meeting. As previously mentioned, MAG has secured funding from Norway for capacity development in Guinea-Bissau.⁴⁴

34 Ibid., pp. 16, 22, and 24.

35 Ibid., pp. 12–14.

36 Ibid., p. 9.

37 Ibid., p. 10.

38 Ibid., p. 20.

39 Ibid., p. 20.

40 Ibid., p. 26.

41 Ibid., p. 19.

42 Ibid., p. 26.

43 Statement of HALO Trust on Guinea-Bissau's presentation of its Article 5 deadline Extension Request, Intersessional meetings, Geneva, 20–22 June 2022.

44 Email from Roxana Bobolicu, MAG, 29 September 2022.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Guinea-Bissau does not have NMAS, but considers the establishment of IMAS-compliant national standards as a prerequisite to the resumption of mine action activities, ensuring safety, quality, and efficiency.⁴⁵ Guinea-Bissau sought US\$112,000 for the development of NMAS.⁴⁶

The 2022–24 work plan foresees the establishment of a working group to follow the development and review of NMAS by a panel of national and international actors, for which, CAAMI will seek the support of an experienced international consultant. The first task is to define the priority standards to develop, followed by the planning, writing, review, and finalisation of the national standard(s), for subsequent adoption by operators.⁴⁷

According to Guinea-Bissau's declaration of completion in 2012, all clearance work had been conducted in accordance with IMAS. Technical and non-technical surveys were only applied in 2010; prior to this, land was released solely through clearance.⁴⁸

OPERATORS AND OPERATIONAL TOOLS

CAAMI's activities have been largely restricted since 2012 due to a lack of funding.⁴⁹ CAAMI's capacity as at April 2022 was 17 staff members.⁵⁰

HALO Trust has been operating in Guinea-Bissau since November 2017. It is implementing a Weapons and Ammunition Safety Programme in support of the armed forces of Guinea-Bissau. HALO constructed a secure storage facility for serviceable ammunition and has been working alongside the Guinea-Bissau armed forces to carry out the cutting, burning, and demolition of obsolete weapons and ammunition. HALO has also been providing training in ammunition storekeeping, store management, and explosive ordnance disposal (EOD) in the north-east region of Gabú.⁵¹ At the request of CAAMI, The HALO Trust organised a visit in March 2022 to assess the state of contamination in some villages.⁵²

HUMAID is a national demining NGO that has been active since 2000. HUMAID receives reports of incidents and victims reported by communities and, when financially possible, makes field visits to verify the information. HUMAID has also conducted some demining and spot task operations with the support of UNOPS. HUMAID's capacity consists of more than 20 deminers formerly trained at different EOD levels and functions, that can be mobilised upon request. HUMAID has one vehicle, an ambulance, one global positioning system (GPS), 13 detectors, personal protective equipment, and destruction equipment. However, the equipment is old and

requires maintenance or replacement.⁵³ In 2014, HUMAID conducted the assessment survey of the newly discovered anti-personnel mine and ERW contamination.⁵⁴ The other national operator, Lutamos Todos Contra As Minas (LUTCAM), is no longer active in Guinea-Bissau, but CAAMI considers to either reactivate it or integrate former LUTCAM staff into HUMAID as means to increase national capacities.⁵⁵

HI has been working in Guinea-Bissau since 2000, but suspended its operations from 2008–14, due to the political unrest and security risks, then resumed working in 2015.⁵⁶ As present, HI is not directly engaged in mine action activities.

Since 2021, MAG has supported CAAMI in identifying challenges, opportunities, and resources needed for the resumption of mine action activities, as well as in a preliminary diagnostic in terms of information management. For this purpose, MAG has been coordinating with the GICHD, which has supported CAAMI in the use of IMSMA in 2001–12.⁵⁷

Norwegian People's Aid (NPA) was present in Guinea-Bissau until 2012 conducting survey and clearance.⁵⁸ NPA also conducted a national survey of mine and UXO contamination, working in partnership with LUTCAM, which was active at the time.⁵⁹ During the first quarter of 2012, NPA conducted mainly EOD spot tasks and, despite concerns of possible residual contamination, it eventually closed the programme in 2012 due to the lack of evidence of additional anti-personnel mine contamination.⁶⁰

45 2022 Article 5 deadline Extension Request, p. 10; and Article 7 Report (covering 2021), Form D.

46 2022 Article 5 deadline Extension Request, p. 26, and Article 7 Report (covering 2021), Form D.

47 2022 Article 5 deadline Extension Request, p. 20; and Article 7 Report to the APMBC (covering 2021), Form D.

48 Declaration of completion of implementation of Article 5, 12MSP, Geneva, 3–7 December 2012, p. 4.

49 2022 Article 5 deadline Extension Request, p. 7.

50 *Ibid.*, pp. 12–14.

51 Email from James Scott, HALO Trust, 9 August 2021.

52 2022 Article 5 deadline Extension Request, p. 8.

53 2022 Article 5 deadline Extension Request, p. 15.

54 Presentation of Guinea-Bissau to the APMBC Intersessional Meetings, online, 22–24 June 2021, slide 9; and 2022 Article 5 deadline Extension Request, p. 8.

55 2022 Article 5 deadline Extension Request, p. 16.

56 HI website, accessed on 7 August 2022, at: <https://bit.ly/3vLIJ3k>.

57 2022 Article 5 deadline Extension Request, p. 8.

58 Email from Hans Risser, NPA, 10 August 2021.

59 Declaration of completion of implementation of Article 5, Geneva, 3–7 December 2012, pp. 3–4.

60 Email from Hans Risser, NPA, 10 August 2021.

Prior to Guinea-Bissau's declaration of fulfilment of Article 5 obligations in 2012, all mine clearance had been conducted manually with deminers equipped with metal detectors and excavation tools.⁶¹ Several organisations conducted clearance in conjunction with the national operators HUMAID and LUTCAM, including, HI,⁶² Landmine Action,⁶³ NPA,⁶⁴ and a British NGO: Clear Ground Demining.⁶⁵

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

No mined area was reported to have been released in Guinea-Bissau in 2021. HALO Trust destroyed five unused PRB M409 anti-personnel mines from a military ammunition storage in February 2021.⁶⁶

SURVEY IN 2021

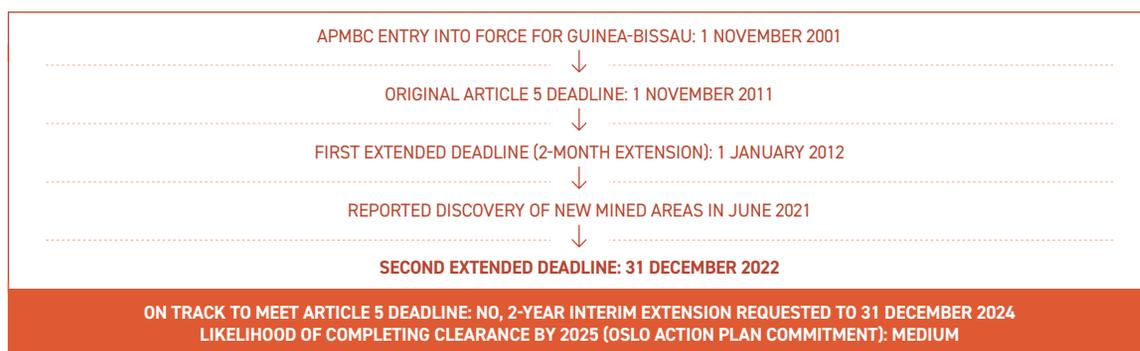
There were no reports of any survey of mined areas in Guinea-Bissau in 2021.

CLEARANCE IN 2021

There was no clearance of mined areas in Guinea-Bissau in 2021.

HALO Trust destroyed five PRB M409 anti-personnel mines from a military ammunition storage area and reports that other stockpiled mines were left at locations around Guinea-Bissau as of February 2021.⁶⁷ Guinea-Bissau's deadline for stockpile destruction expired on 1 November 2005.

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC, Guinea-Bissau is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2022. Guinea-Bissau will not meet this deadline and has sought a further two-year interim extension.

Guinea-Bissau's original Article 5 deadline of 1 November 2011 was previously extended for two months. Guinea-Bissau had declared fulfilment of its Article 5 obligations at the 12th MSP in December 2012, but in June 2021, reported at the APMBC Intersessional Meetings the discovery of 1.09km² of CHA and 43 SHAs of an unknown size containing anti-personnel mine and ERW contamination. Guinea-Bissau did not specify what proportion of contamination was believed to contain anti-personnel mines, as opposed to other types of explosive ordnance.

In June 2021, Guinea-Bissau submitted an interim extension request through to 31 December 2022, which was granted at the 19MSP in November 2021. Guinea-Bissau said it would use the interim period to further investigate the contamination and mobilise the necessary resources in order to be in a better position to submit a follow-up extension request by 31 March

⁶¹ Declaration of completion of implementation of Article 5, 12MSP, Geneva, 3–7 December 2012, p. 4.

⁶² 2022 Article 5 deadline Extension Request, p. 16.

⁶³ Email from James Scott, HALO Trust, 9 August 2021.

⁶⁴ Email from Hans Risser, NPA, 10 August 2021.

⁶⁵ Article 7 Report (covering November 2001 to April 2002), Form C.

⁶⁶ Ibid.

⁶⁷ Ibid.

2022.⁶⁸ Due to the lack of resources, however, little progress has been achieved during the interim period, and Guinea-Bissau submitted a second interim Article 5 deadline extension request in June 2022, through to 31 December 2024, for consideration at the 20MSP.

The latest interim extension request featured a detailed work plan that aims to complete a national non-technical survey to better understand the contamination, develop NMAS and information management system; resume EORE activities; prepare resources for spot tasks, technical survey, and the clearance; and lay out a strategy of management of residual risk, with a view of submitting a final extension request by 31 March 2024, with a detailed plan for completion of its Article 5 obligations.⁶⁹

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

In its declaration of completion of Article 5 obligations under the APMBC in 2012, Guinea-Bissau stated that “battle area clearance tasks remain, as well as an expected residual contamination, which will be addressed by the CAAMI”.⁷⁰ Guinea-Bissau also stated that, in the event of discovery of new previously unknown mined areas, it would report in accordance with its obligations under Article 7 of the Convention, ensure the effective exclusion of civilians, and destroy or ensure the destruction of all anti-personnel mines as a matter of urgent priority, making its need of assistance known to other States Parties as appropriate.⁷¹

In its extension request submitted in June 2022, Guinea-Bissau stated that it “will work on defining a national strategy for the residual risk management and on strengthening national capacities for its conduct”. Guinea-Bissau also said that “the results of the national survey and subsequent clearance will be critical to further ensure the establishment of an appropriate sustainable demining capacity to address any contamination identified following completion”.⁷² In its presentation to the Intersessional Meetings in June 2022, Guinea-Bissau identified the reinforcement of national capacities and the national strategy for the residual risk management as two main challenges.⁷³

MAG endorsed the importance for Guinea-Bissau to establish sustainable national capacities to address mined areas discovered after completion, and to manage remaining contamination from other explosive ordnance. In June 2022, MAG also stated in the Intersessional Meetings that it was working with Guinea-Bissau and national implementing partners to ensure a more sustainable approach to completion.⁷⁴

68 Article 5 deadline Extension Request, 22 June 2021, paras. 10–11.

69 2022 Article 5 deadline Extension Request, p. 19.

70 Declaration of completion of implementation of Article 5, 12MSP, Geneva, 3–7 December 2012, p. 5.

71 *Ibid.*, pp. 4–5.

72 2022 Article 5 deadline Extension Request, p. 25.

73 Presentation of Guinea-Bissau to the APMBC Intersessional Meetings, Geneva, 20–22 June 2022, slide 12.

74 Statement of MAG to the APMBC Intersessional Meetings, Geneva, 20–22 June 2022.

ARTICLE 5 DEADLINE: 1 FEBRUARY 2028
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE PRECISE EXTENT UNCLEAR

AP MINE CLEARANCE IN 2021

11.6km²

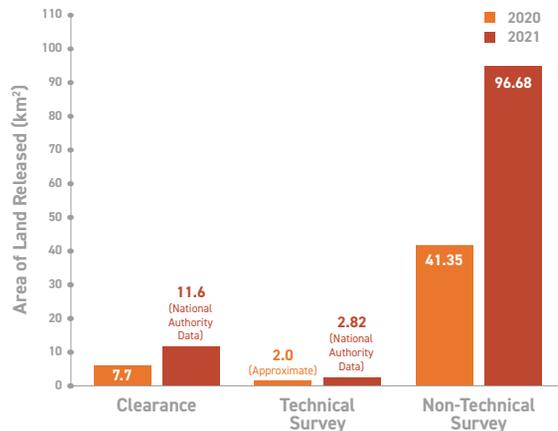
(NATIONAL AUTHORITY FIGURES: 10.97KM² IN FEDERAL IRAQ AND 0.63KM² IN THE KURDISTAN REGION OF IRAQ, KRI)

AP MINES DESTROYED IN 2021

13,255

(NATIONAL AUTHORITY FIGURES: 11,819 IN FEDERAL IRAQ AND 1,436 IN THE KRI)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Iraq's mine action sector saw significant improvements in productivity, particularly in cancellation of areas contaminated by improvised mines, and a sharp rise in the number of cleared mines. Despite the continuing focus on areas liberated from Islamic State, work started in August 2021 on clearing anti-personnel mines and other explosive ordnance from the valuable date palm forest in the Shatt al-Arab district funded by the European Union. The Directorate for Mine Action (DMA) and the United Nations Mine Action Service (UNMAS) reviewed and updated Iraq's national mine action standards. The DMA and the Iraqi Kurdistan Mine Action Agency (IKMAA) worked with the Geneva International Centre for Mine Action (GICHD) in drafting a new National Strategy for 2022–28 (released in April 2022), which commits them to closer cooperation in planning and resource mobilisation.

RECOMMENDATIONS FOR ACTION

- The Iraqi government should provide the DMA with the legal authority, funding, equipment, and training for staff to strengthen its effectiveness as the national mine action authority.
- The Iraqi government should increase its financial support for humanitarian mine action, including creating funding mechanisms to support national and international NGOs, to offset the diversion of international donor funds to other humanitarian emergencies.
- International donors and organisations supporting humanitarian mine action should address the severely limited capacity and resources in national mine action structures.
- Iraq should establish a National Mine Action Platform (NMAP) for regular dialogue among all stakeholders, including donors, to collectively discuss progress, challenges, and support for Article 5 implementation.

- Iraq should explicitly recognise mines of an improvised nature as part of its Anti-Personnel Mine Ban Convention (APMBC) treaty obligation and national mine action authorities in Federal Iraq and the Kurdistan Region of Iraq (KRI) should amend reporting forms to include improvised mines as a separate category distinct from improvised explosive devices.
- The DMA should provide comprehensive, disaggregated data on the results of survey and clearance, detailing the results achieved by every active organisation.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	6	Iraq has a broad understanding of the location of legacy mined areas although accelerating survey continued to add substantial previously unrecorded hazardous areas in Federal Iraq. KRI estimates of contamination have remained largely stable in recent years. Federal Iraq says that initial survey estimates greatly exaggerate the extent of contamination. It is confident that further non-technical survey will substantially lower the amount of legacy mined area requiring clearance. Nonetheless, priority continues to be given to surveying and clearing improvised mines in areas liberated from Islamic State where large areas are being cancelled and cleared but previously unrecorded hazardous areas continue to be added to the database.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	5	The DMA and IKMAA cooperated for the first time in preparation of a new national mine action strategy for 2022–28 which aims to increase national ownership by strengthening both authorities. Federal Iraq has not provided the DMA, a department of the Ministry of Environment, with the legal mandate and institutional authority to effectively manage or coordinate mine action activities by more politically powerful ministries such as defence, interior, and oil.
GENDER AND DIVERSITY (10% of overall score)	6	6	Iraq's mine action strategy for 2022–2028 acknowledges the importance of gender and diversity to the sector. Conservative social attitudes to women's employment hamper recruitment in what has been a male-dominated sector but demining organisations are slowly increasing the number of women they employ, including in supervisory positions and in survey, community liaison and clearance teams as well as in office roles. Opportunities to hire women for field work vary according to region and are particularly limited in the affected governorates in the south.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	The DMA is in the process of upgrading its Information Management System for Mine Action (IMSMA) database from New Generation to Core which, together with a planned data clean-up, should help to address challenges posed by cumbersome information management procedures and slow entry of operator survey and clearance results. Iraq has submitted regular annual and, in recent years much improved, Article 7 transparency reports but still falls short in reporting land release results disaggregated by operator.
PLANNING AND TASKING (10% of overall score)	6	5	Iraq released a National Strategy 2022–2028 in April 2022 setting out strategic objectives for the DMA and KRI. Operators report significant improvement in the issuance of task orders by the DMA in recent years although the process can still be slow and data accompanying the task orders was largely out of date.
LAND RELEASE SYSTEM (20% of overall score)	6	5	The DMA has reviewed standards with support from UNMAS and said in April 2022 that it had updated 20 standards although they had not yet been translated into English. International partners in the meantime continue to work from their own standing operating procedures (SOPs).
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	6	Federal Iraq and the KRI significantly increased land release in 2021, helped by progressive easing of Covid-19 related restrictions. Federal Iraq reported a sharp rise in the amount of improvised mine contamination cancelled by non-technical survey, most of it in one governorate, Ninewa. The KRI looked forward to receiving international donor funding that would enable it to acquire a large number of vehicles, facilitating field deployment of demining teams and accelerating clearance.
Average Score	6.2	5.5	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Federal Iraq:
 - Ministry of Health and Environment
 - Directorate for Mine Action (DMA)
- Kurdistan Region of Iraq (KRI):
 - Iraqi Kurdistan Mine Action Agency (IKMAA)

NATIONAL OPERATORS

- Ministry of Defence
- Ministry of Interior: Civil Defence, EOD Directorate
- IKMAA
- Ain Al Saker Demining Company
- Akad International Co. for Mines
- Baghdad for Clearance Organisation
- Al Basrah Demining Organisation
- Al Bayrac Demining Company
- Al Danube
- Al Fahad Co. for Demining
- Al Fayha
- Al Khebra Al Fania Demining Co.
- Al Safsafa
- Alsiraj Al mudhia for Mine Removal
- Arabian Gulf Mine Action Co.
- Al Waha
- Al Watania Company for Demining

- AZSC
- Eagle Eye
- Health and Social Care Organisation in Iraq (IHSCO)
- Iraq Tadamon Company for Mine Clearance
- Kanary Mine Action Company
- Nabaa Al-Hurya Company
- Ta'az Demining
- Wtorplast Demining

INTERNATIONAL OPERATORS

- Danish Church Aid (DCA)
- Danish Refugee Council Humanitarian and Disarmament and Peacebuilding Sector (DRC) (formerly Danish Demining Group, DDG)
- Global Clearance Solutions
- The HALO Trust
- Humanity & Inclusion (HI, formerly Handicap International)
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)
- Swiss Foundation for Mine Action (FSD)
- Tetra Tech
- G4S
- Optima

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

Iraq recorded total anti-personnel mine and improvised mine contamination of 1,733km² at the end of 2021, making it the world's most heavily mined country. This comprised 1,523km² in Federal Iraq and 210km² in the Kurdish Region of Iraq (KRI) (see Tables 1 and 4, respectively). This is some 3% less than the total figure at the end of 2020.¹ Most of the contamination is in confirmed hazardous areas (CHAs) rather than suspected hazardous areas (SHAs).

FEDERAL IRAQ

Federal Iraq reported nearly 1,000km² of "legacy" minefields at the end of 2021, almost 10% more than a year earlier. These minefields are heavily concentrated in southern governorates, which date back to the 1980–88 war with Iran, the 1991 Gulf War, and the 2003 invasion by the United States (US)-led coalition (see Tables 1 and 2). Basrah governorate, comprising the Shatt al-Arab and Fao districts, which were fiercely contested during the war with Iran, makes up 85% of the total.²

Table 1: Mined area in Federal Iraq (at end 2021)³

Contamination type	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Anti-personnel mines	317	981,388,638	43	17,290,546	998,679,184
Improvised devices*	1,187	381,662,714	335	142,601,786	524,264,500
Totals	1,504	1,363,051,352	378	159,892,332	1,522,943,684

* The area attributed to mines of an improvised nature.

1 Article 7 Report (covering 2021), pp. 15–19.

2 Ibid., pp. 15–16.

3 Ibid., pp. 14–15.

Table 2: Legacy anti-personnel mined area by governorate in Federal Iraq (at end 2021)⁴

Governorate	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Anbar	0	0	1	1,580	1,580
Basrah	58	841,786,243	1	962,731	842,748,974
Diyala	1	0	28	15,791,646	15,791,646
Kirkuk	1	5,584	0	0	5,584
Missan	216	55,420,682	3	400,183	55,820,865
Muthanna	4	38,978,577	0	0	38,978,577
Najaf	1	1,754,329	0	0	1,759,329
Ninewa	1	390,540	9	132,792	523,332
Salah al-Din	2	51,712	1	1,614	53,326
Wassit	33	43,000,971	0	0	43,000,971
Totals	317	981,388,638	43	17,290,546	998,684,184

In addition to legacy mines, Federal Iraq also contends with 524km² of improvised mine contamination which was left by Islamic State occupation of large swathes of central and northern governorates in 2014–17. This included long belts of improvised devices initiated by pressure plates sometimes stretching for tens of kilometres, and dense contamination of buildings such as hospitals and utilities, as well as private houses.

The end-2021 estimate of contamination was 69km² less than a year earlier reflecting the priority Iraq and its donors have given to tackling improvised mines in recent years so as to support resettlement of displaced populations and rehabilitate the economy.⁵ Most of the reduction occurred in Ninewa governorate, estimated to have improvised mine contamination amounting to 55km² at the end of 2021 compared with 126km² at the end of the previous year. In Diyala, the governorate with the biggest area affected by improvised mines, contamination estimates remained largely unchanged.⁶

Table 3: Improvised Explosive Device (IED)/Improvised mine contamination in Federal Iraq (at end 2021)⁷

Province	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Anbar	737	103,557,368	177	72,982,519	176,539,887
Diyala	7	206,540,876	12	47,617,199	254,158,075
Kirkuk	45	26,395,084	19	1,650,965	28,046,049
Ninewa	305	35,584,843	116	19,750,272	55,335,115
Salah al-Din	93	9,584,543	11	600,831	10,185,374
Totals	1,187	381,662,714	335	142,601,786	524,264,500

However, the accelerating pace of survey saw Federal Iraq continuing to add substantial areas of previously unrecorded hazardous areas to the database in 2021, notably in the western governorate of Anbar.⁸ The DMA has discussed, but not yet implemented, a major re-survey of Ninewa governorate and operators believe this would be likely to find more hazardous areas.⁹ Newly recorded contamination included 24.4km² of legacy mined areas, mainly in Wassit (17.2km²) and Missan governorates. Operators found a much larger area containing improvised mine contamination in areas liberated from Islamic State totalling 68.2km². This was almost entirely (98%) concentrated in two governorates, Anbar (56.4km²) and Ninewa (10.5km²), with smaller areas of Diyala, Kirkuk, and Salah al-Din.¹⁰

⁴ Ibid., pp. 15–16.

⁵ Article 7 Report (covering 2021), pp. 18–19.

⁶ Ibid., and Article 7 Report (covering 2020) p. 10.

⁷ Article 7 Report (covering 2021), pp. 18–19.

⁸ The DMA recorded improvised mine contamination affecting 176.5km² in Anbar governorate at the end of 2021 compared with 162.4km² at the end of 2020, an increase of 9%.

⁹ Email from Katie Shaw, MAG, 29 August 2022.

¹⁰ Article 7 Report (covering 2020), pp. 10 and 12–13.

KURDISTAN REGION OF IRAQ (KRI)

The KRI has a much smaller mined area than Federal Iraq but its contamination of 210km² (see Table 4) still ranks it among the world's most heavily mined areas.

In addition, IKMAA says an area of around 20km² still remains to be surveyed where access has been prevented by insecurity. This included about 10km² in Slemani province, mainly close to the border with Iran, and about 5km² in each of Erbil and Dohuk provinces.¹¹

Table 4: Legacy anti-personnel mined area by governorate in the KRI (at end 2021)¹²

Province	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Dohuk	399	20,200,801	0	0	20,200,801
Erbil	334	47,679,331	0	0	47,679,331
Halabja	258	12,331,899	5	1,265,000	13,596,899
Slemani	2,112	100,172,132	117	28,519,766	128,691,898
Totals	3,103	180,384,163	122	29,784,766	210,168,929

The KRI had only a small amount of improvised mine contamination which it reported totalled 2,534,842m², of which only 34,852m² was in CHAs.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The mine action programme in Iraq is managed along regional lines. The DMA has represented Iraq internationally and oversees mine action for humanitarian purposes in Federal Iraq, covering 15 of the country's 19 governorates. Mine action in the KRI's four governorates is overseen by IKMAA, which reports to the Council of Ministers and is led by a director general who has ministerial rank. The two organisations have functioned largely autonomously though contacts appear to have improved in 2021 after years in which relations were overshadowed by tensions over funding and territorial demarcation issues.

Iraq's National Mine Action Strategy 2022–2028, the first produced in consultation with the two authorities and developed with support from implementing partners, led by the GICHD, in March 2021 sets increasing national ownership as a key objective and says this will be achieved by strengthening both authorities and "ensuring these national entities are empowered, appropriately structured and sufficiently equipped and resourced to allow them to fulfil their responsibilities." The strategy also commits Iraq to preparing a national mine action law consistent with international best practice and to a review of the DMA's institutional status and mandate.¹³

The two authorities will also seek to increase both international and national funding. Iraq is to ensure its national survey and clearance capacities are strengthened,

including through increased national funding to develop and sustain national non-governmental organisations (NGOs), and through formalised capacity development partnerships between national and international partners. It sets as a strategic objective of the plan that "all relevant ministries, directorates, and governorates will dedicate specific funding for technical survey, clearance, and QM."¹⁴

To promote cooperation between the DMA and IKMAA and achieve a unified programme the new national strategy states that:¹⁵

- A Memorandum of Understanding (MoU) formalising the partnership between DMA and IKMAA should be developed and signed before the end of 2022.
- "Regular and structured coordination meetings between the two will be formalised."
- The DMA and IKMAA will jointly promote Iraqi mine action internationally.
- The DMA, working closely with IKMAA, will take the lead in organising bi-annual coordination meetings involving Iraqi ministries, international donors, and national and international operators to strengthen coordination and information sharing.
- The DMA and IKMAA will collaborate with the Ministry of Planning and advocate for inclusion of mine action in broader national programmes, including the National Development Plan and Poverty Reduction Strategy.

11 Email from Niyazi Khalid Qusaim, Deputy Head, IKMAA, 6 April 2022.

12 Article 7 Report (covering 2021), p. 16.

13 Iraq National Mine Action Strategy 2022–2028, pp. 36–38.

14 Ibid., pp. 18, 22, and 37.

15 Ibid., pp. 36–38.

FEDERAL IRAQ

The inter-ministerial Higher Council of Mine Action,¹⁶ which reports to the Prime Minister, oversees and approves mine action strategy, policies, and plans. The DMA “plans, coordinates, supervises, monitors and follows up all the activities of mine action”. It draws up the national strategy and is responsible for setting national standards, accrediting, and approving the standing operating procedures (SOPs) of demining organisations and certifying completion of clearance tasks.¹⁷

The DMA oversees three Regional Mine Action Centres (RMACs):

- North: covering the governorates of Anbar, Diyala, Kirkuk, Nineveh, and Salah ad-Din.
- Middle Euphrates (MEU): Babylon, Baghdad, Karbala, Najaf, Qadisiya, and Wassit.
- South: Basrah, Missan, Muthanna, and Thi-Qar.

RMAC South, located in Basra City, is the focal point for Federal Iraq’s response to cluster munition contamination and coordinates mine action in the four governorates most heavily contaminated by legacy mines. It maintains its own

database and is responsible for tasking operators in its area of operations. RMAC North and MEU were located in Baghdad but RMAC North also opened a satellite office in Mosul in August 2019.¹⁸

DMA coordination of mine action remains a challenge in a sector in which its formal status as a department of the Ministry of Environment has less authority than the powerful ministries of Defence, Interior, and Oil, which are also major actors in the sector. Rapid turnover of directors has also affected management and policy continuity. The present Director General, Dhafir Mahmood Khalaf, appointed on an acting basis in September 2020, confirmed in 2021 and well-regarded by operators, was at least the 12th director since 2003.

Iraq’s new national strategic plan for 2022–28 acknowledges the institutional issues, citing the “widespread belief” that the DMA should be strengthened to give it the authority commensurate with its mandate. The plan calls for an external assessment of the DMA’s mandate and position that will result in recommendations to the Higher Council for Mine Action but does not indicate any timeline for this review.¹⁹

KRI

IKMAA functions as both the regulator and an operator in the KRI. It reports directly to the Kurdish Regional Government’s Council of Ministers and coordinates four directorates in Dohuk, Erbil, Garmian, and Sulaymaniyah (Stemani). IKMAA had a total staff of 822, including 445 personnel in operations, but a budgetary crisis in the KRI in 2020 and 2021 imposed severe constraints on the mine action sector. IKMAA received no international donor support in 2021 but reported that ITF Enhancing Human Security (ITF) had expressed willingness to provide funding in 2022 and 2023.²⁰

OTHER ACTORS

UNMAS established a presence in Iraq in mid 2015 to assess the explosive ordnance hazard threat in liberated areas and set three priorities: explosive threat management to support stabilisation and recovery, including the return of people displaced by conflict; delivery of risk education, nationally and locally; and capacity development of government entities to manage, regulate, and coordinate Iraq’s response to explosive ordnance contamination. In 2021, UNMAS shifted its focus from explosive hazard management to providing technical support to national mine action authorities and implementing partners. The UNMAS mission in Iraq employed 100 people with 43 international staff in 2019 but the number dropped to 86 staff in 2021 and by 2022 numbered 62, of whom 12 were internationals.²¹

Donor funding channelled through UNMAS has declined from its high of US\$76.9 million in 2019 (some of it for activities in 2019–20) but was slightly higher in 2021 than the previous year. Funding for mine clearance in 2020 amounted to \$12.75 million but in 2021 picked up to \$16.24 million.²² This included a grant for anti-personnel mine and explosive ordnance clearance of once important date palm forests in the Shatt al-Arab which were heavily contested and contaminated during the Iran-Iraq war. UNMAS also extended grants to three national NGOs as part of continuing efforts to build sustainable national capacity for explosive hazard management and risk education given added emphasis in Iraq’s National Strategy 2022–2028 by the pressure on donor funding. Iraq remains a priority for some mine action donors and funding pledged for 2022 amounted to \$13.9 million as at April 2022 but some donors have indicated they will cease support to Iraq and competing international priorities exacerbated by the war in Ukraine looked likely to shrink donor support.²³

16 The Council, which is led by the Prime Minister, includes representatives of the ministries of defence, interior, oil, and environment, as well as the National Security Adviser and the head of IKMAA.

17 “Document of roles and responsibilities”, undated but 2019, received by email from the DMA, 13 May 2019.

18 Interview with Gus Guthrie, NPA, in Geneva, 12 February 2020.

19 Iraq National Mine Action Strategy 2022–2028, pp. 37–38.

20 Email from Niyazi Khalid Qusaim, Deputy Head, IKMAA, 22 April 2022.

21 Emails from Shinobu Mashima, Programme Officer, UNMAS, 4 May 2019 and 6 April 2020; and Hayder Ghanimi, Programme Officer, UNMAS, 28 April and 31 August 2022.

22 Emails from Shinobu Mashima, UNMAS, 4 May 2019 and 6 April 2020; and Hayder Ghanimi, UNMAS, 28 April 2022. Donors included Australia, Belgium, Canada, Czechia, Denmark, Estonia, the EU, France, Germany, Italy, Japan, the Netherlands, New Zealand, Sweden, Slovakia, and the United Kingdom.

23 Email from Hayder Ghanimi, UNMAS, 28 April 2022.

ENVIRONMENTAL POLICIES AND ACTION

Iraq does not have a policy on environmental management in mine action. Individual operators, such as Mines Advisory Group (MAG), Norwegian People's Aid (NPA), and HALO Trust, have institutional policies in place at headquarters level.

GENDER AND DIVERSITY

The Iraq National Strategic Mine Action Plan for 2017–2021 referred to gender equality and gender mainstreaming within mine action activities as objectives of an effective programmatic response.²⁴ The 2022–28 strategic plan says Iraq's mine action recognises the different impact of contamination shaped by gender, age, and ethnic or religious affiliations, and requires specific activities targeting those needs, for which disaggregated data is a prerequisite.²⁵

The DMA, which first created a gender unit in 2017, adopted its first Gender Unit Action Plan in early 2021 and the DMA's director, who has advocated for employment of more women in mine action,²⁶ approved the concept of a Gender Task Force in early 2021.²⁷ The DMA reported members of its gender unit participated in non-technical surveys conducted by international implementing partners, including the Swiss Foundation for Mine Action (FSD) and MAG.²⁸ Female staff members also joined quality assurance team monitoring to clearance conducted by Civil Defence Muthanna governorate, as well as conducting explosive ordnance risk education (EORE) and collecting victim data. It also requested support from international partners in organising seminars on gender issues in rural areas and suggested they help prepare a register of all women working in mine action.²⁹

IKMAA reported that it offered equal employment opportunities to women who accounted for about 30% of its more than 800 employees and it encouraged them to seek advancement in their careers. IKMAA had appointed a woman for the first time as director of one of its four provincial mine action centres in Duhok in 2021 and in 2022 had appointed a female as IKMAA's legal affairs director. IKMAA has had a female public affairs director for some years and women also held managerial positions in planning, information management and EORE departments. In 2022, IKMAA was seeking to create female explosive ordnance disposal (EOD) teams in all four provinces and appealed for international support to help achieve it.³⁰

Women's participation in mine action, a male-dominated sector, still faces some resistance from socially conservative attitudes, particularly in rural areas. Efforts to recruit women can encounter attitudes questioning the point of female employment when there are not enough jobs for men.³¹ It can be problematic to deploy women outside the areas they live and some candidates have dropped out of training that required overseas travel.³² Women make up well below 20% of the personnel in most international implementing partners (IPs). Some IPs report that non-technical survey and community liaison teams are gender mixed rather than gender balanced, but the number of female staff has risen across office and operational roles and most IPs said they intended to employ more women in the future.³³

Danish Refugee Council Humanitarian and Disarmament and Peacebuilding Sector (DRC) recruited six female deminers in Basrah in March 2022 who will work in mixed clearance teams. The same month it hired a female medic to address the needs of female staff and it has taken other steps to attract women staff, including offering 18 weeks of paid maternity leave and five days of paid leave to deal with child sickness in line with global DRC Minimum Standards for employment of national staff.³⁴ It set improving gender representation as one of its priorities in 2022 drawing on the findings of two gender assessments conducted in 2021. The first focused on identifying barriers to employment and retention in the mine action sector in Ninewa, and provided recommendations for recruitment, training, and sustainable deployment of female or mixed clearance teams. The second assessment, conducted by the GICHD, reviewed DRC's staff perception, knowledge, and practices in relation to gender equality and inclusion, and led to an action plan which DRC is now implementing.³⁵

FSD employed 21 female staff out of a total of 164 personnel, including 17 women in risk education and demining, of whom two were team leaders.³⁶ Women made up just under 15%

24 National Strategic Mine Action Plan, pp. 12, 18, 20, and 30.

25 Iraq National Mine Action Strategy 2022–2028, p. 15.

26 Email from Chris Tierney, Programme Manager, NPA, 17 April 2022.

27 Email from Hannane Boulmaoui, Head of Programme Section, UNMAS Iraq, 16 April 2021.

28 Email from Ahmad Aljasim, DMA, 15 April 2022.

29 Email from Tim Marsella, Programme Officer, HALO Trust, 17 March 2022.

30 Email from Niyazi Khalid Qusaim, IKMAA, 22 April 2022.

31 Email from Chris Tierney, NPA, 17 April 2022.

32 Email from Tim Marsella, HALO Trust, 17 March 2022.

33 Emails from Marie-Josée Hamel, DRC, 30 March 2022; Peter Smethers, Country Director, FSD, 22 February 2022; Tim Marsella, HALO Trust, 17 March 2022; Chris Tierney, NPA, 17 April 2022.

34 Emails from Marie-Josée Hamel, DRC, 30 March 2022; and Lasse Marinus Joergensen, Operations Manager, DRC, 21 April 2022.

35 Email from Marie-Josée Hamel, DRC, 30 March 2022.

36 Email from Peter Smethers, Country Director, FSD, 22 February 2022.

of HALO Trust's 204 staff and 10% of operations staff at the end of 2021, but women held three of eight managerial positions in the office (38%) and a quarter of the team leader positions in the field. Achieving gender balance remains challenging but HALO's survey and community liaison teams were all gender mixed and it said it offers equal opportunity for employment regardless of gender, ethnicity or religion. After consulting UNMAS it said it took a number of practical measures to improve recruitment and conditions for women from better design of women's uniforms and separate facilities for field ablutions to improve engagement with family members of female employees.³⁷

MAG employed 133 women out of a total staff of 811 at the end of 2021 with women working across the spectrum of jobs ranging from managerial and administrative office positions to field positions that included community liaison, manual clearance, a mechanical asset operator and improvised explosive device (IED) search dog handlers. MAG has traditionally found it easier to recruit women in Federal

Iraq, particularly in the Sinjar area where it has employed female deminers since 2016, but in 2021 it hired and trained women for manual clearance teams in Ninewa governorate (Mosul and Hamdaniya) and the KRI (Sleman). By mid 2021, four women had progressed to become deputy team leaders and three were team leaders. MAG Iraq's actions were part of the organisation's global focus on Gender Diversity and Inclusion (GDI) in mine action, and informed by a GDI Baseline Assessment in September 2021. MAG formed a GDI Working Group in 2022, which is tasked to review and enhance MAG Iraq's approach to gender equity in the sector.³⁸

NPA also plans to hire more women who made up a little over 17% of its total staff of 274 people, varying between more than a quarter of management personnel but close to 14% of its operations staff. NPA's survey and community liaison teams are mixed gender and it actively encourages women to apply but also encounters attitudes questioning the point of female employment when there are not enough jobs for men.³⁹

INFORMATION MANAGEMENT AND REPORTING

Iraq's National Mine Action Strategy 2022–2028 underscores the importance of comprehensive information management processes to effective planning, tasking, implementation, and reporting. It says Iraq will seek to increase understanding of its remaining landmine and CMR contamination through continuous updating of its baseline data by means of a database clean-up, desktop analysis, and contact with communities. It also states the DMA will strengthen information sharing and coordination with relevant ministries, including the Ministry of Planning, to strengthen connections between mine action and broader development goals.⁴⁰ Operators say considerable work is still required to achieve these objectives.

The DMA and IKMAA have operated databases using Information Management System for Mine Action New Generation (IMSMA NG) with technical support from iMMAP, a commercial service provider based in Erbil and working under contract to the US Department of State's Office of Weapons Removal and Abatement (WRA).

Federal Iraq's mine action database is located at the DMA's Baghdad headquarters. RMAC-S, the focal point for cluster munition remnants (CMR) survey and clearance, maintains a database in Basrah, which receives reports from demining organisations in its area of operations.⁴¹ The DMA started

upgrading its database from IMSMA NG to IMSMA Core in 2021 and was working with the GICHD on cleaning up and migrating data to the new server. The DMA believes the process could take two years to complete in view of the large volume of data to be transferred and citing the experience of Lebanon's database upgrade.⁴² The DMA also operates an Online Task Management System (OTMS) developed by iMMAP and an online dashboard providing operators with access to data on operational developments.

Information management continues to be plagued by cumbersome procedures requiring hard-copy reports and slow uploading of data. Operators say information available from the OTMS and dashboard is incomplete, not up to date on survey and clearance results, and insufficient for the purposes of planning and informed decision-making. The DMA is moving towards streamlining procedures, requiring operators to submit reports in digital as well as hard copy, which is expected to accelerate data processing and facilitate access to information. In the meantime, operators said it still required a wide range of documents in hard copy, including task order requests, non-technical survey reports, and hazardous area reports. The DMA issued updated IMSMA reporting forms and also conducted a workshop on IMSMA reporting in 2021. It also required operators to submit weekly plans for all teams to RMACs enabling unannounced site visits.⁴³

37 Email from Tim Marsella, HALO Trust, 17 March 2022.

38 Emails from Jack Morgan, MAG, 19 April 2021; and Katie Shaw, Programme Manager, MAG, 29 June 2021 and 29 August 2022.

39 Email from Chris Tierney, NPA, 17 April 2022.

40 Iraq National Mine Action Strategy 2022–2028, pp. 14 and 20–21.

41 Interview with Nibras Fakhir Matrood, RMAC-S, Basrah, 29 April 2019.

42 Emails from Ahmad Aljasim, DMA, 15 April and 7 August 2022.

43 Emails from Marie-Josée Hamel, DRC, 30 March 2022; Peter Smethers, FSD, 22 February 2022; Tim Marsella, HALO Trust, 17 March 2022; Katie Shaw, MAG, 29 August 2022; and Chris Tierney, NPA, 17 April 2022.

NPA quality control (QC) teams set up in Anbar in 2021 to monitor site set-up, progress, and completion by open area-clearance teams working with Leica GG04 differential global positioning system (DGPS) for completion reports with a probability of error of less than 10cm. NPA also updated Survey123 software on tablets and other smart devices so that GPS data is automatically logged on NPA forms to avoid possible manual data entry errors. NPA's external QC teams use the same model of Leica DGPS units to mark sampling boxes.⁴⁴

IKMAA is planning to replace its IMSMA database with one based on open-source technology and licencing. IKMAA said in April 2022 that work had started on design of the new system and it expected to complete the work by the end of the year.⁴⁵

PLANNING AND TASKING

Iraq's National Mine Action Strategy 2022–2028, released in April 2022, sets broad goals for both the DMA and IKMAA, the first time the two authorities have cooperated in drawing up a national plan.⁴⁶ These include as a strategic priority the development of "a prioritisation system based on clear and transparent criteria" to inform all planning and tasking decisions.

Tasking, previously a major source of friction between the DMA, operators, and UNMAS, is reported to have improved significantly since 2019. UNMAS reported improved liaison and coordination with the DMA in 2021⁴⁷ and the DMA cited its high level of cooperation with UNMAS among factors contributing to the sector's increased productivity.⁴⁸ The DMA issues tasks requested by operators after consultation with DMA operations and RMAC staff and taking account of requests from government, local authorities, development plans and prioritisation criteria that include a non-technical survey scoring system.⁴⁹ Operators say most task orders are issued in a timely manner but the process can be slow, particularly in the case of large hazardous areas which can be more effectively addressed by splitting into several smaller tasks.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Iraq has national mine action standards for mine and battle area clearance (BAC), non-technical survey, and technical survey, but they were written in 2004–05 and they exist in Arabic only. Operators have reported that even those versions have been hard to locate.

The DMA and UNMAS started conducting a review and update of Iraq's national mine action standards (NMAS) in 2019 to bring them into line with international standards.⁵⁰ In 2021, the DMA's NMAS review committee and UNMAS had three workshops to review and update 27 standards.⁵¹ The DMA said in April 2022 that it had updated 20 standards although they had yet to be translated into English.⁵²

The updated standards which have been officially released covered non-technical and technical survey, battle area clearance, manual mine clearance, mechanical demining,

post-clearance documentation, accreditation, EOD, IED disposal, land release, safety in the workplace, house clearance, monitoring, sampling procedures, personal protective equipment (PPE), quality management, and marking. A standard on environmental management in mine action was still under review in the Ministry of Environment as were draft standards for the following: Investigation and reporting of accidents and incidents, Risk management in mine action; Medical support; Testing and evaluation of mine action equipment; Guide for the application of NMAS; and Guide for establishment of a Mine Action programme. These are all pending review internally by DMA prior to official release.⁵³ The new mine action strategy for 2022–2028 called for standards on land release to be finalised and approved by mid 2022.⁵⁴

44 Email from Chris Tierney, NPA, 17 April 2022.

45 Email from Niyazi Khalid Qusaim, IKMAA, 22 April 2022.

46 Email from Ahmed Aljasim, DMA, 15 April 2022.

47 Email from Hayder Ghanimi, UNMAS, 28 April 2022.

48 Email from Ahmed Aljasim, DMA, 7 August 2022.

49 Emails from Marie-Josée Hamel, DRC, 30 March 2022; Peter Smethers, FSD, 22 February 2022; Tim Marsella, HALO Trust, 17 March 2022; and Chris Tierney, NPA, 17 April 2022.

50 Emails from Ahmed Aljasim, DMA, 15 April 2021; and Hannane Boulmaoui, UNMAS Iraq, 16 April 2021.

51 Email from Hayder Ghanimi, UNMAS, 28 April 2022.

52 Email from Ahmed Aljasim, DMA, 15 April 2022. The DMA said it had updated standards numbered 10-6, 07-11, 07-12, 07-30, 07-40, 08-10, 08-20, 08-30, 08-40, 09-10, 09-10-1, 09-11, 09-13, 09-20, 09-30, 09-31, 09-50, 10-12, 10-20, 10-30.

53 Email from Hayder Ghanimi, UNMAS, 28 April 2022.

54 Iraq National Mine Action Strategy 2022–2028, p. 24.

OPERATORS AND OPERATIONAL TOOLS

The DMA reported 40 organisations accredited for survey and clearance in 2021. They included eight international and four national NGOs which were active mainly in clearance of improvised mines in Ninewa and Anbar governorates. The DMA also listed 28 accredited commercial companies, of which it said 12 were active in 2021.⁵⁵

Iraq's Ministry of Defence and the Ministry of Interior's Civil Defence and Directorate for Combatting Explosives constitute the biggest organisations in Federal Iraq's mine action sector but provide few details about the extent of their capacity or activities. The Ministry of Defence reported in 2019 that it had twelve 600-strong engineer battalions conducting EOD and clearance of mines of an improvised nature in which approximately half the personnel (equating to several thousand men) were operators. Army engineers worked on tasks identified as priorities by local government authorities.⁵⁶ The Army remains the only organisation authorised to conduct demolitions.⁵⁷ The Ministry of Interior's Civil Defence units employed 494 personnel divided into teams deployed in every governorate tackling unexploded ordnance and other explosive remnants of war (ERW) but did not conduct area clearance of improvised mines.⁵⁸

In the KRI, IKMAA employed a total of more than 820 people in 2021 with 445 people in operations, including 36 manual demining teams, 8 non-technical survey teams, 4 EOD/BAC teams, 10 mechanical units, 9 EORE teams, and 18 QA/QC teams. In addition to the impact of COVID-19 on operations, IKMAA has faced severe financial constraints in recent years but it looked forward to receiving international donor support in 2022.⁵⁹

DCA's mine action engagement until 2022 focused on developing the capacity of a national partner, Health and Social Care Organization in Iraq (IHSCO). It worked in 2021 with three international staff (an operations manager and two technical advisers), supported by two national staff: a QA officer and an operations officer. Although based in Erbil, DCA provided training for IHSCO at its base in Hamdaniya district of Ninewa governorate. IHSCO received its accreditation for mine survey and clearance in April 2021. DCA planned to start its own operations in 2022 with one multi-task team comprising a team leader and deputy and five searchers. To support its clearance operations it also planned to open an office in Sherqat in Salah al-Din governorate.⁶⁰

FSD capacity rose from a total staff of 131 in 2020 to 160 in 2021, adding one manual team of female deminers deployed in Mosul district and a number of other deminers taking on the additional role of searchers. In 2020, FSD had acquired a

remote-controlled Bobcat machine to give it more flexibility for building clearance⁶¹ and in 2021 it reconfigured its mechanical assets to increase from one to two mechanical demining units.⁶² FSD also trained two EORE teams and four demining teams for a local NGO, Shareteah, which in 2021 became the first national NGO to be accredited for clearing improvised mines.⁶³

Global Clearance Solutions (GCS), headquartered in Freienbach, Switzerland, worked under a grant from UNMAS in Ninewa's Telkeif district focused mainly on clearance of farmland.⁶⁴

The HALO Trust continued a build-up of capacity, which saw its staff numbers more than double to 150 in 2020 and rise further to 205 at the end of 2021. It continued to operate mainly in Anbar governorate, with an office in Ramadi serving teams working in Ramadi and Fallujah, and also in Salah al-Din, with an office in Tikrit supporting teams in Tikrit and Baiji districts. It reconfigured its team structure, deploying one manual demining team instead of six the previous year, while boosting the number of survey teams from two to twelve. It also boosted its mechanical capacity adding two wheeled front-end loaders and increasing the number of people in its mechanical units from 38 in 2020 to 50.⁶⁵

MAG, the biggest of the international demining organisations in Iraq with a head office in Erbil employed a total of 811 staff at the end of 2021 and continued to be the only one operating in the KRI as well as in Federal Iraq. In the KRI, MAG operated through offices in Dohuk and Chamchamal which supported seven mine action teams with a total of seventy deminers and three multitask teams totalling fifteen deminers plus a mechanical team, a mechanical support team, two mine detection dog (MDD) teams, and an MDD support team. In Federal Iraq, MAG operated 34 mine action teams with 220 deminers, five mechanical teams and three IED search dog teams. These worked in Ninewa governorate's districts of Sinjar, Telafar, Telkeif, and Hamdaniya. In Diyala governorate, MAG partnered Work for Peace which operated six EORE teams. MAG opened a new operating base in Telkeif, north-east of Mosul, in March 2022, which substantially cut the travel time for teams operating in the north-east area of Ninewa and enabled it to deploy mechanical assets on rural and urban tasks in and around Mosul city. MAG also collaborated with a number of humanitarian organisations, including Nadia's Initiative, the International Committee of the Red Cross (ICRC), Solidarities, and the United Nations Human Settlements Programme (UNHABITAT), to facilitate restoration of shops, services, and housing projects in cleared areas.⁶⁶

55 Email from Ahmed Aljasim, DMA, 15 April 2022. The commercial operators identified as active in 2021 were Arabian Gulf Mine Action Company, Al Bayrac, Al Fahad, Al Fayhaa, Al Khebra al-Fania, Alsiraj Almudhia, Al Waha, AZSC, Eagle Eye, GCS, Ta'az Demining and Tetra Tech.

56 Interview with Brigadier-General Hassan, Ministry of Defence, Baghdad, 3 May 2019.

57 "Document of roles and responsibilities", undated but 2019, received by email from the DMA, 13 May 2019.

58 Interview with General Salah, Ministry of Interior, at the DMA, Baghdad, 3 May 2019.

59 Email from Niyazi Khalid Qusaim, IKMAA, 22 April 2022.

60 Email from Albert Schevey, Operations Manager, DCA, 21 April 2022.

61 Email from Peter Smethers, FSD, 11 April 2021.

62 Email from Peter Smethers, FSD, 22 February 2022.

63 FSD Annual Report 2021, p. 21.

64 Email from Hayder Ghanimi, UNMAS, 28 April 2022; "Unearthing hope in Tel Kaif", GCS website, 22 March 2022, accessed at: <https://bit.ly/3zI0uQj>.

65 Email from Tim Marsella, HALO Trust, 17 March 2022.

66 Email from Katie Shaw, MAG, 3 May 2022.

NPA reported adding nine clearance teams and three armoured vehicles in 2021, providing a significant boost to productivity of operations focused on Anbar governorate. It established two dedicated internal QC teams with DGPS to work in Anbar focused on site setup, progress and completion QC on all open area clearance teams using Leica GG04 DGPS for completion reports, to increase accuracy and avoid manual entry errors in survey and completion reports.⁶⁷

Tetra Tech, working under contract to the US Department of State, deployed 10 multi-function teams in 2021, a drop from 14 the previous year as a result of budget cuts which saw total staffing reduced to 107 from 220 the previous year. The number of international staff also halved to nine. The number of mechanical assets, however, remained unchanged. Tetra Tech also closed its forward operating base in Mosul and worked from a project office in Erbil. Tetra Tech worked with two multi-task teams with 24 personnel and eight search-and-clearance teams with 64 personnel supported by eight mechanical teams working in Anbar, Kirkuk and Ninewa governorates. Tetra Tech's operational focus remained on clearing critical infrastructure but widened from major towns to villages to facilitate the return of internally displaced people.⁶⁸

Table 5: Operational clearance capacities deployed in 2021

Operator	Manual teams	Total deminers	Dogs and handlers	Machines*	Comments
Army	12	est. 3,000			
IKMAA	36	360		10 teams/33 personnel	Clearance teams conduct technical survey (TS)
FSD	12	93		2 teams/17 personnel	
HALO	1	9		5 teams/50 personnel	
MAG (Federal Iraq)	34	220	3 teams/ 8 personnel/ 6 dogs	5 teams/25 personnel	Manual Teams include 13 mine action teams (169 personnel) and 21 multi-task and mech support teams (110 personnel). Mech teams vary but minimum of 4 armoured machines per team.
MAG (KRI)	11	89	2 teams/8 personnel 1 MDD support team/7 personnel	1 teams/5 personnel	Manual Teams include 7 mine action teams (91 personnel) and 3 multi-task and mech support teams (15 personnel).
NPA	25	100		9 teams/13 personnel	Added 9 clearance teams, which all conduct TS, and 3 armoured machines.
Tetra Tech	10	88		8 teams/10 personnel	Manual teams include 2 multi-task teams with 24 personnel and 8 search and clearance teams with 64 personnel.
Totals	141	est. 3,959	6 teams/ 23 personnel	40 teams/ 153 personnel	

* Excluding vegetation cutters and sifters

NPA introduced drones for reconnaissance of mine sites planned for clearance in 2021 and trained its non-technical survey teams in drone use. In 2022, it planned to go further and develop use of drones for high-resolution mapping of hazardous areas.⁶⁹ The HALO Trust had plans to introduce drones in 2021 that were held up by security issues but it drew on analysis of NPA's use of drones and received permission to proceed with adding this capacity to its programme in 2022.⁷⁰

DEMINER SAFETY

NPA suffered its first demining fatality in Iraq in September 2021 when a VS500 improvised mine detonated, killing a manual deminer in Ana district of Anbar governorate. NPA investigated the incident in conjunction with the DMA. Investigators concluded the actions of the deminer who was killed may have caused the device to function.⁷¹

⁶⁷ Email from Chris Tierney, NPA, 17 April 2022.

⁶⁸ Email from Jeff Caldwell, Iraq Senior Destruction Operations Manager, Tetra Tech, 13 July 2022.

⁶⁹ Email from Chris Tierney, NPA, 17 April 2022.

⁷⁰ Email from Tim Marsella, HALO Trust, 17 March 2022.

⁷¹ Email from Chris Tierney, NPA, 17 April 2022.

In February 2021, MAG reported an explosion in an explosive storage house which resulted in the death of a deminer and caused non-life-threatening injuries to a supervisor. MAG concluded the explosion was caused by the functioning of a cocked striker of a VS500 improvised mine. Another MAG deminer was injured in the course of legacy mine clearance in Slemani governorate. Investigation reports for both incidents were submitted to the DMA, IKMAA, and relevant stakeholders.⁷²

Turkish airstrikes targeting Kurdish YPS positions in Sinjar city in August 2021 resulted in fragmentation injuries sustained by three GCS personnel operating in the district who were caught in the crossfire and caused logistical damages. GCS clearance operations in the area were suspended for a week before resuming normally.⁷³ A vehicle transporting GCS men and women deminers to a work site in Telkeif district of Ninewa governorate was hit by an improvised device blast in July 2022, slightly injuring seven people. The UN called on Iraqi authorities to investigate the incident and provide security for deminers.⁷⁴

Several members of Iraqi security forces are understood to have died in a detonation of ordnance in August 2021 but Mine Action Review did not receive details of the incident.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Iraq's official data showed that Federal Iraq and the KRI released a total of more than 111km² in 2021 (96.68km² through non-technical survey, 2.82km² through technical survey, and 11.6km² through clearance), up by almost 25% on the results of the previous year, helped by the progressive lifting of COVID-19 measures that significantly affected productivity in 2020. Other factors cited by the DMA as contributing to increased output included the use of donor grants held up in the pandemic and the increased capacity of implementing partners.⁷⁵

Restrictions still in force at the start of the year posed a number of challenges: limits on the number of people who could travel in one vehicle necessitated hiring or acquiring additional vehicles; visa restrictions impeded international staff movements; and operators also reported meetings delayed and some staff absenteeism. A more permissive environment emerged as those restrictions eased and Iraq adopted other measures such as issuing visas on arrival. Operators continued to report delays and difficulties at security checkpoints and delays conducting demolitions of cleared items which can only be carried out by the military.⁷⁶

FEDERAL IRAQ

Federal Iraq saw a significant increase in land release across survey and clearance to 110.5km² in 2021 but it attributed 85% of that total to cancelling areas suspected to be affected by improvised mines (see Table 6). Iraq's huge areas of conventional anti-personnel mine contamination remained a low priority for international donors although attention may be beginning to widen. Persistent discrepancies between official data and results reported by demining organisations raise the possibility that Iraq released more land through technical survey and clearance than appears in official figures.

Table 6: Official Federal Iraq land release results for 2021⁷⁷

Device type	Area cancelled (m ²)	Area reduced (m ²)	Area cleared (m ²)	Total area released (m ²)
Legacy AP mines	2,945,191	2,819,962	1,212,718	6,977,871
Improvised mines	93,739,179	0	9,752,845	103,492,023
Totals	96,684,370	2,819,962	10,965,563	110,469,894

SURVEY IN 2021

Federal Iraq more than doubled the area of improvised mine contamination cancelled in 2021 to almost 94km² compared with 41km² the previous year. In both years, almost all the area cancelled was in one governorate, Ninewa. In 2020, the area cancelled was in Ninewa's Daquq and Kirkuk districts, in 2021 93% was in six districts but mostly Mosul, Sinjar and Telafar (see Table 7).⁷⁸ The DMA reported Army engineers alone cancelled 59.5km² of improvised mine contamination in Mosul.⁷⁹

72 Emails from Katie Shaw, MAG, 3 May 2022 and 29 August 2022.

73 Email from Hayder Ghanimi, UNMAS, 28 April 2022.

74 "Improvised explosive device struck demining team; UN calls for an investigation", *ReliefWeb*, 6 July 2022.

75 Email from Ahmed Aljasim, DMA, 7 August 2022.

76 Emails received from international operators, March to May 2022.

77 Article 7 Report (covering 2021), pp. 20, 22.

78 *Ibid.*, p. 20; and email from Ahmed Aljasim, DMA, 7 August 2022.

79 Emails from Ahmed Aljasim, DMA, 15 April and 7 August 2022.

Table 7: Area containing improvised mines cancelled by non-technical survey in 2021 (official data)⁸⁰

Operator	Governorate	District	Area cancelled (m ²)
DMA	Ninewa	Telafar	6,875,716
MoD	Ninewa	Al-Hamdaniya, Makhmur, Mosul, Telafar, Telkeif	65,401,256
Mol	Baghdad	Al-Mahmodiya	3,577,320
HI	Kirkuk	Daquq	2,013,379
MAG	Ninewa	Telafar, Sinjar	15,470,088
NPA	Anbar	Haditha, Ramadi	401,421
Total			93,739,180

Iraq reported cancelling 39km² of legacy mined areas in 2020 but had reclassified the area as battle area rather than an anti-personnel mine hazard. As a result, the nearly 3km² of legacy mined area cancelled in 2021, although a sharp drop on paper, actually represented an increase in real terms. However, results reported by international operators suggest the area reduced by technical survey may be substantially greater.

Federal Iraq's official data shows it reduced 2.8km² in 2021 in the Shatt al-Arab district of Basrah governorate (1.9km²) and the Amara district of Missan. The data omits 8.3km² which MAG reported it reduced in Ninewa⁸¹ and 4.9km² reduced by NPA in Anbar governorate⁸² and 0.1km² reduced by HALO Trust⁸³ (see Table 8). The 13.4km² reduced by these three operators compared with just under 2km² they reduced in 2020.⁸⁴

Table 8: Cancellation and reduction through survey reported by International NGOs (INGOS) in 2021⁸⁵

Operator	Governorate	Area cancelled (m ²)	Area reduced (m ²)
HALO Trust	Anbar, Salah al-Din	259,095	120,914
MAG	Ninewa	84,707	8,302,139
NPA	Anbar	971,591	4,892,688
Totals		1,315,393	13,315,741

CLEARANCE IN 2021

Mine clearance in Federal Iraq, freed of COVID-19 restrictions, accelerated sharply in 2021. Official data shows land released through clearance increased by 55% to almost 11km² (see Table 9), much of it in Ninewa governorate, up from 7km² the previous year. The number of mines cleared rose by close to 90%.⁸⁶

For the first time in several years, Iraq also conducted some clearance of legacy mines in 2021. An Iraqi commercial operator, Al Khebra Al Fania (AKAF), started training in June 2021 on a project to survey and clear almost 15km² of heavily contaminated date palm forest in Basrah governorate's Shatt al-Arab district. The \$2.1 million project, funded by the EU and managed by UNMAS in coordination with the DMA and RMAC-South, which began operations in July 2021, was due to run for a year.⁸⁷ By the end of the year AKAF had cleared 428,700m² and 449 anti-personnel mines, including 238 improvised mines, as well as 27 anti-vehicle mines and 3,380 other ERW items.⁸⁸ UNMAS planned to continue its operation in the south in 2022.⁸⁹

⁸⁰ Email from Ahmed Aljasim, DMA, 7 August 2022.

⁸¹ Email from Katie Shaw, MAG, 3 May 2022.

⁸² Email from Chris Tierney, NPA, 17 April 2022.

⁸³ Email from Tim Marsella, HALO Trust, 17 March 2022.

⁸⁴ Emails from Nicholas Torbet, HALO Trust, 12 April 2021; Jack Morgan, MAG, 19 April 2021; and Gus Guthrie, NPA, 23 March 2021.

⁸⁵ Emails from Tim Marsella, HALO Trust, 17 March 2022; Katie Shaw, MAG, 3 May 2022 and 29 August 2022; and Chris Tierney, NPA, 17 April 2022.

⁸⁶ Article 7 Report (covering 2021), p. 22.

⁸⁷ Email from Joel Yves Aboh, Associate Programme Officer, UNMAS, 15 July 2021.

⁸⁸ Email from Hayder Ghanimi, UNMAS, 28 April 2022.

⁸⁹ Email from Hayder Ghanimi, UNMAS, 31 August 2022.

Table 9: Mine clearance in Federal Iraq in 2021 (official data)⁹⁰

Governorate	Area cleared (m ²)	AP mines destroyed
Improvised mines		
Anbar	1,654,693	4,272
Kirkuk	133	1
Ninewa	8,007,304	4,480
Salah al-Din	90,715	904
Subtotals	9,752,845	9,657
Legacy minefields		
Basrah	940,300	805
Missan	272,418	1,357
Subtotals	1,212,718	2,162
Totals	10,965,563	11,819

As in previous years, it appears official data understates the actual amount of land released, possibly as a result of delays in uploading operating results to the database. Four international demining NGOs reported they cleared 17.82km² (see Table 10), almost triple the results of the previous year and similarly almost tripled the number of mines or improvised mines cleared during the year. FSD and MAG alone recorded clearance of nearly 14km² in Ninewa governorate while HALO Trust and NPA together reported clearance of almost 3km² in Anbar, significantly more than shown in official data.⁹¹

Table 10: Mine clearance in Federal Iraq in 2021 (INGO data)⁹²

Operator	Governorate	Area cleared (m ²)	AP mines, including improvised mines, destroyed
FSD	Ninewa	*8,281,499	3,088
HALO	Anbar, Salah al-Din	1,993,063	2,279
HI	N/R	N/R	N/R
MAG	Ninewa	5,651,239	1,427
NPA	Anbar	1,891,147	8,372
Totals		17,816,948	15,166

N/R = Not reported * This figure may contain significant release through technical survey.

KURDISTAN REGION OF IRAQ

The KRI also recorded a significant gain in the amount of land released in 2021, almost entirely through clearance. In 2020, when financial crisis and COVID-19 restrictions severely hampered mine action, the KRI reported clearance just under 100,000m².⁹³ In 2021, the KRI's clearance rose to 634,464m² (see Table 11). IKMAA and the Slemani Mine Action Centre reportedly⁹⁴ cancelled 65,378m² but the rest of the area released was accounted for by clearance, with Slemani governorate accounting for two thirds of the area and 85% of the 1,431 mines cleared. Operators also destroyed 135 anti-vehicle mines and 1,840 items of unexploded ordnance (UXO).⁹⁵

IKMAA has identified lack of vehicles as a major obstacle to deploying mine action teams in 2021.⁹⁶ With projected international donor support in 2022 it planned to buy 38 vehicles and hire another 30 vehicles, raising the prospect of a significant rise in productivity.⁹⁷ MAG expected to maintain operations in Dohuk focused on clearing high priority minefields in order to support socio-economic development. It also continued working with IKMAA on capacity building including EOD level 2 and EOD level 3 training for IKMAA staff.⁹⁸

90 Article 7 Report (covering 2021), p. 22.

91 Emails from Peter Smethers, FSD, 22 February 2022; Tim Marsella, HALO Trust, 17 March 2022; Katie Shaw, MAG, 3 May and 29 August 2022; and Chris Tierney, NPA, 17 April 2022.

92 Ibid.

93 Article 7 Report (covering 2020), Table 8, p. 22.

94 Email from Niyazi Khalid Qusaim, IKMAA, 22 April 2022.

95 Article 7 Report (covering 2021), p. 21; and email from Niyazi Khalid Qusaim, IKMAA, 22 April 2022.

96 Iraq National Mine Action Strategy 2022–2028, p. 11.

97 Email from Niyazi Khalid Qusaim, IKMAA, 22 April 2022.

98 Email from Katie Shaw, MAG, 3 May 2022.

Table 11: Mine clearance in KRI in 2021*⁹⁹

Operator	Governorate	Area cleared (m ²)	AP mines destroyed
Dohuk MAC	Dohuk	51,325	44
Erbil MAC	Erbil	93,658	141
Garmyan MAC	Garmyan	1,504	0
MAG	Dohuk, Garmyan, Halabja, Slemani	434,751	758
Slemani MAC	Slemani	53,226	493
Totals		634,464	1,436

* Includes area reduced through technical survey

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the ten-year extension granted by states parties in 2017), Iraq is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 February 2028. Iraq will not meet the deadline given the scale of remaining contamination.

The reported release of more than 110km² through cancellation and clearance in 2021 attests to post-pandemic recovery in the productivity in the mine action sector (see Table 12). Mine action continues to concentrate on tackling improvised mine contamination in areas liberated from the Islamic State 2014–17 occupation rather than the larger legacy mine contamination in southern and border governorates. That focus reflects the government's security and socio-economic imperative of facilitating the return of more than a million internally displaced people before tackling the more sparsely populated areas affected by legacy mines.¹⁰⁰

However, an accurate determination of the extent of Iraq's progress continues to be obscured by the lack of comprehensive, up-to-date data on results achieved by different actors in Federal Iraq, particularly key national actors and commercial companies, which should underpin

effective planning and prioritisation. The National Strategy for 2022–28 provides for a DMA database upgrade to IMSMA Core and data clean-up that is expected to ease information management challenges. The problems also underscore limitations on the authority and mandate of the DMA as a department within the Ministry of Environment in relation to more powerful actors such as the ministries of Defence, Interior and Oil.

Future progress is vulnerable to a number of risks, most notably a downturn in international donor support but Iraq's 2022–28 national strategy also identifies insecurity and political instability among the principal risks for the mine action sector.¹⁰¹ Islamic State cells continue to be active in Iraq conducting small-scale local attacks mainly targeting security forces and mainly in Diyala and Kirkuk governorates,¹⁰² but insecurity has not escalated significantly or interfered with mine action operations. Political instability following the October 2021 elections posed a more immediate challenge, holding up the formation of a new government for ten months as of August 2022, which in turn has undermined Iraq's ability to move forward implementing national strategy goals of strengthening the sector's institutional framework, national capacity, and national financing of the mine action sector.

⁹⁹ Email from Niyazi Khalid Qusaim, IKMAA, 22 April 2022.

¹⁰⁰ Iraq National Mine Action Strategy 2022–2028, p. 5.

¹⁰¹ Ibid., p. 18.

¹⁰² See, e.g., C. Bunzel, "Explainer: The Islamic State in 2021", Wilson Center, 10 December 2021; The Soufan Centre, "Intelbrief: The Islamic State is not finished in Iraq and Syria", 1 November 2021; Clingendael Institute, "A Stubborn threat: Islamic State in Iraq in early 2022", May 2022.

Table 12: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	11.6
2020	7.7
2019*	15.7
2018	8.4
2017	23.3
Total	66.7

* Mine Action Review estimate

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Iraq has not formulated any plan for coping with residual mine and explosive ordnance risks. Iraqi Security Forces and the Ministry of Interior's Civil Defence are well placed to provide a long-term demining and EOD capacity. Iraq's 2022–28 national strategy commits to developing a strategy for tackling residual risk by 2025.¹⁰³

103 Iraq National Mine Action Strategy 2022–2028, p. 26.

ARTICLE 5 DEADLINE: 1 MARCH 2009
IN VIOLATION: A NEW EXTENDED DEADLINE IS NEEDED

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: NOT REPORTED

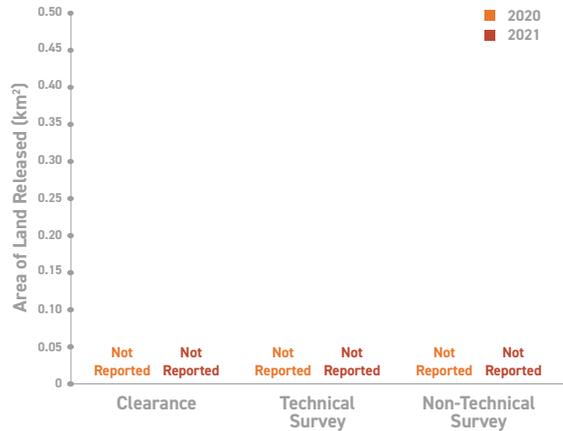
AP MINE CLEARANCE IN 2021

NOT REPORTED

AP MINES DESTROYED IN 2021

NOT REPORTED

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

RECOMMENDATIONS FOR ACTION

- Mali should seek a new Article 5 deadline in order to return to compliance with the Anti-Personnel Mine Ban Convention (APMBC).
- Mali should submit an Article 7 transparency report as a matter of urgency and provide other States Parties with an updated assessment of anti-personnel mine contamination (including anti-personnel mines of an improvised nature) and action to address it.
- Mali should set up a national mine action centre with United Nations (UN) support to coordinate a systematic humanitarian response to explosive hazards.
- Mali should develop capacity for mine clearance outside the context of military counter-improvised explosive device (IED) operations and should be responsive to humanitarian imperatives.
- Mali's mine action sector should apply International Mine Action Standards (IMAS) relating to survey and distinguish between non-technical survey and community visits.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority or mine action centre

NATIONAL OPERATORS

- Army, police

INTERNATIONAL OPERATORS

- United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA)
- Operation Barkhane

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)
- Mines Advisory Group (MAG)
- Association Malienne pour La Survie au Sahel (AMSS)
- TASSAGHT

UNDERSTANDING OF AP MINE CONTAMINATION

A decade of conflict between multiple armed actors and deepening political turmoil marked by a coup in May 2021 have left Mali facing a rising threat from explosive devices, including mines and mines of an improvised nature. The upsurge in conflict since 2012 resulted in use of anti-vehicle mines by armed groups and later in targeted use of improvised explosive devices (IEDs), including many that are victim activated and qualify as anti-personnel mines under the Anti-Personnel Mine Ban Convention (APMBC).

There is no estimate of the area affected by mines or improvised mines. Contamination is believed to be scattered and sparse, consisting of conventional and improvised mines placed on roads. Non-technical survey and community liaison activities, although limited in scale, have not identified any minefields.¹ The UN Mine Action Service (UNMAS) recorded a fivefold increase in mine and improvised mine incidents in the five years to 2021. In that year alone the number of incidents jumped by more than half (see Table 1). UN Multidimensional Integrated Stabilization Mission in Mali (MINUSMA) military engineers, who conduct clearance and technical assessment of explosive devices, have not disclosed details of device types.

Table 1: Incidents involving anti-personnel mine, including improvised mines (2017–21)²

Region	2017	2018	2019	2020	2021
Gao	8	12	7	15	35
Kidal	19	29	27	33	52
Timbuktu	4	3	6	7	17
Mopti	2	27	53	47	36
Segou	0	5	5	4	16
Koulikouro	0	0	0	1	11
Kayes	0	0	0	0	1
Totals	33	76	98	107	168

The explosive threat is concentrated in the central regions of Mopti and Kidal, which together accounted for more than half the improvised mine incidents recorded by UNMAS in 2021.³ In 2021, the UN recorded the first mine/improvised mine incident in the western Kayes region. Increased insecurity in 2021 cut off access to parts of Kidal, Gao, and Menaka, an area bordering Niger that was particularly affected by clashes between armed groups.⁴ The level of violence appears to have deepened in 2022. Two MINUSMA peacekeepers were killed in June 2022 when their vehicle struck an improvised device in the Mopti region in what the UN reported was the sixth attack on a MINUSMA convoy in two weeks.⁵ Two weeks later, another UN peacekeeper was killed when an improvised device detonated during a mine clearance operation in the Kidal region.⁵

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Mali in order to minimise potential harm from clearance.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Mali does not have a national mine action authority or programme. The government has agreed in principle to establish an authority within the Secrétariat permanent de la Lutte contre la prolifération des Armes Légères et Petits Calibres (ALPC). UNMAS has said “it is supporting this endeavour.”⁷ Successive coups d’état in August 2020 and March 2021 have delayed discussions on further action.⁸

1 Email from Benoit Poirier, Country Director, Mines Advisory Group (MAG), 30 July 2021.

2 UNMAS data, received by email from UNMAS Mali Programme, 27 April 2022.

3 Email from UNMAS Mali Programme, 27 April 2022. Data for incidents recorded in 2020 have been revised upwards from 103 reported last year to 107.

4 Email from Gérard Kerrien, Regional Programme Manager, MAG, 7 April 2022.

5 United Nations, “Mali: UN condemns second ‘cowardly’ attack in three days against peacekeepers”, 3 June 2022.

6 United Nations, “Mali: Latest attack against UN peacekeepers leaves Guinean ‘blue helmet’ dead”, 19 June 2022.

7 Email from UNMAS Mali Programme, 12 May 2021.

8 Email from UNMAS Mali Programme, 27 April 2022.

Mine action observers note that the government's agreement was verbal and have questioned whether the Permanent Secretariat has sufficient seniority within the government to provide an effective platform. They also note that the authority views its role in the context of the Economic Community of West African States (ECOWAS) Convention on Small Arms and Light Weapons, which does not address landmines, and that its suggested mandate would not include mine clearance.⁹

Mali has no programme of systematic mine survey and clearance. UNMAS has commented that "strategic planning will be linked to the establishment of a national authority".¹⁰

UNMAS first deployed to Mali in January 2013 to conduct an emergency assessment of explosive threats. Since April 2013, UNMAS has been referred to in UN Security Council resolutions that define the mandate for MINUSMA,¹¹ acting as the focal point for mine action pending the creation of a national authority. UNMAS said it had seven staff, including three internationals, engaged in mine action in 2021, coordinating the provision of humanitarian mine action services. These included non-technical surveys in suspected and confirmed hazardous areas, providing risk education, and assisting victims. It expected to add two additional staff in the course of 2022.¹²

Mines Advisory Group (MAG) operated with 20 staff in 2021. They included eight internationals, consisting of four working on management, finance, logistics, and project monitoring, and four on project implementation, including survey and weapons and ammunition destruction. MAG has offices in Bamako and Gao and a small office in Timbuktu to facilitate support to partner organisations. MAG mentored two Malian non-governmental organisations (NGOs), Gao-based TASSAGHT and the Timbuktu-based Association Malienne pour La Survie au Sahel (AMSS), which provided two seven-person survey teams.¹³

UNMAS co-chairs the Humanitarian Mine Action Working Group (Groupe de travail sur la lutte antimines humanitaire – GT-LAMH) with another organisation elected by members for a term of one year. Attendance included 17 members and 9 observers in 2021, among them a representative of the Permanent Secretariat. The International Committee of the Red Cross (ICRC) participates as an observer. UNMAS reported the group usually convenes once a month in Bamako. Sub-national working groups are also convened when needed, for instance in Mopti region, Timbuktu, or Gao involving actors working in the area.¹⁴ In 2021, the working group met 11 times at a national level and 3 times at regional level.¹⁵

INFORMATION MANAGEMENT AND REPORTING

UNMAS operates an Information Management System for Mine Action (IMSMA) database for Mali (IMSMA New Generation). In 2022, the system was reportedly being upgraded to IMSMA Core.¹⁶ Since July 2013, UNMAS has recorded all known explosions and verified mine or IED incidents, providing data for maps that detail the explosive hazard threat and facilitate planning in affected areas. UNMAS does not provide operators access to the database but said it shares technical data with all mine partners engaged in explosive threat mitigation.¹⁷ Other stakeholders say the range of information shared is extremely limited. The Mine Action Working Group agreed in early 2020 that it would classify and report victim-activated devices as landmines.¹⁸

As at September 2022, Mali had yet to submit an APMBC Article 7 transparency report covering the previous calendar year or for previous years. Its last Article 7 report was submitted in 2005. The failure to submit annual Article 7 reports is a violation of the Convention.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Malian and international security forces serving with MINUSMA and Operation Barkhane, led by French forces, are the only organisations clearing mines and IEDs.¹⁹ Clearance is limited to counter-IED operations and largely restricted to areas where they have security.²⁰ Operators do not employ any mechanical assets or mine detection dogs.²¹

9 Emails from UNMAS Mali Programme, 12 May 2021 and 27 April 2022.

10 Email from UNMAS Mali Programme, 12 May 2021.

11 UN Security Council Resolution 2100, 25 April 2013

12 Email from UNMAS Mali Programme, 27 April 2022.

13 Email from Gérard Kerrien, MAG, 7 April 2022.

14 Emails from UNMAS Mali Programme, 12 May 2021 and 27 April 2022.

15 Ibid.

16 Email from Gérard Kerrien, MAG, 7 April 2022.

17 Email from UNMAS Mali Programme, 12 May 2021.

18 Email from Benoit Poirier, MAG, 11 March 2020.

19 Email from UNMAS Mali Programme, 26 May 2020.

20 Skype interview with Sebastian Kasack, Senior Community Liaison Adviser, MAG, Bamako, 27 May 2020.

21 Email from UNMAS Mali Programme, 26 May 2020.

MAG conducts limited non-technical survey, sending out teams in response to information on possible threats provided by communities and marking the location of any explosive items.²² In 2021, MAG conducted 11 non-technical survey operations. These included six in the towns of Innegar and Ménaka (Ménaka region), two in Tessalit (Kidal), two in Dire (Timbuktu), and one in Bourem (Gao).²³

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR MALI: 1 MARCH 1999



ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

**IN VIOLATION: NEW ARTICLE 5 DEADLINE NEEDED
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW**

Under Article 5 of the APMBC, Mali was required to destroy all anti-personnel mines in mined areas under its jurisdiction or control not later than 1 March 2009. In its last Article 7 transparency report, submitted in June 2005, Mali said it had no mined areas containing anti-personnel mines.²⁴ Since the expiry of its Article 5 deadline Mali has encountered new anti-personnel mine contamination, in particular of an improvised nature, laid by non-State armed groups.

Under the Convention's agreed framework, in the event mined areas are discovered after the expiry of a State Party's Article 5 clearance deadline, it should immediately inform all other States Parties of this discovery and undertake to destroy or ensure the destruction of all anti-personnel mines as soon as possible. Mali has not submitted an Article 7 transparency report since 2005.

Mali should request a new extended Article 5 deadline, which should be no more than two years, affording it the opportunity to assess and, if necessary, survey. It must also fulfil its reporting obligations under the APMBC, including by reporting on the location of all suspected or confirmed mined areas under its jurisdiction or control and on the status of programmes for the destruction of all anti-personnel mines therein.²⁵

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Mali does not have plans in place to address residual contamination once its Article 5 obligations have been fulfilled.

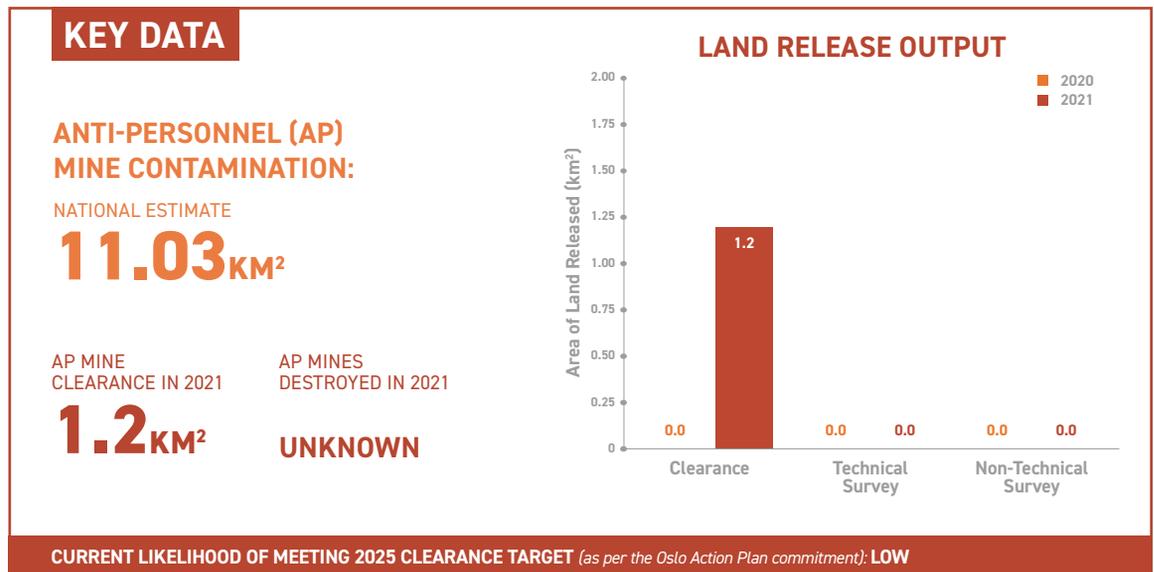
22 Email from Benoit Poirier, MAG, 3 June 2020.

23 Email from Gérard Kerrien, MAG, 7 April 2022.

24 Article 7 Report (covering 1 May 2004 to 1 May 2005), Form C.

25 Final Report of the APMBC 12th Meeting of States Parties, Geneva, 21 January 2013, p. 10.

ARTICLE 5 DEADLINE: 31 DECEMBER 2026
NOT ON TRACK TO MEET DEADLINE



KEY DEVELOPMENTS

In February 2021, at the request of Mauritania, Norwegian People's Aid (NPA) conducted an assessment of recently discovered mined areas in territory under its jurisdiction. The assessment identified a total of almost 15.5km² of mine contamination across ten suspected hazardous areas (SHAs), of which 10.9km² across eight SHAs contained only anti-personnel mines.¹ On 1 June 2021, Mauritania submitted a request to extend its Article 5 deadline by almost five years to the end of 2026, which was granted at the Nineteenth Meeting of the States Parties to the Anti-Personnel Mine Ban Convention (19MSP). Based on additional survey, Mauritania was now reporting that just over 11km² across 15 confirmed hazardous areas (CHAs) contained anti-personnel mines, with the size of a further area to be confirmed.²

In July 2022, Mines Advisory Group (MAG) said that it had secured Norwegian government funding to provide capacity development support to the national authority (the Programme National de Déminage Humanitaire pour le Développement, PNDHD), including for information management and revision of national mine action standards (NMAS). Contingent on signing the contract, which as at September 2022 was expected to be signed shortly, MAG will also conduct a contamination baseline assessment, non-technical survey, and explosive ordnance risk education (EORE). The planned capacity development project which spans from August 2022 to December 2025, will benefit the whole of Mauritania's mine action programme supporting the strengthening of systems, processes, and planning. MAG planned to prioritise compliance with Article 4 of the Convention on Cluster Munitions (CCM).

¹ NPA, Mauritania Assessment Report, 12 April 2021, p. 6; and email from Melissa Andersson, Country Director, NPA, 26 April 2021.

² Additional information submitted by Mauritania to the Committee on Article 5 Implementation, 10 September 2021, p. 1. There is a discrepancy in the contamination type reported in Mauritania's fourth Article 5 deadline extension request (submitted in June 2021) and the subsequent additional information provided by Mauritania in September of the same year. On page 5 of the extension request, Mauritania reports that CHA Rbeit l'char-1 contains APID51 and PT M-iK mines, the former being an anti-personnel mine. In the latter document, the same CHA is reported to contain only PT M-iK mines, which are anti-vehicle mines. The figures in the Article 5 deadline extension request are more likely to be correct as they are consistent with what was reported by NPA's assessment mission in March 2021.

RECOMMENDATIONS FOR ACTION

- Mauritania should conduct technical survey to establish a more accurate baseline of anti-personnel mine contamination and better determine the size of the identified CHAs.
- Mauritania should report on its anti-personnel mine contamination accurately, consistently, and in accordance with the International Mine Action Standards (IMAS), including through timely submission of Article 7 reports.
- Mauritania should continue its efforts to mobilise the necessary funds and operational support to enable survey and clearance of anti-personnel mine contamination.
- Mauritania should update its NMAS in accordance with the IMAS.
- Mauritania should elaborate a gender and diversity policy for mine action.
- Mauritania should establish a sustainable national capacity to address any residual anti-personnel mine contamination discovered following the fulfilment of Article 5 obligations.
- Mauritania should establish a multi-year national strategy to replace the one that expired in 2020.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	In 2021, NPA, in collaboration with the PNDHD, conducted the first baseline survey assessment to determine the extent of anti-personnel mine contamination since Mauritania's discovery of new contaminated areas in 2019. The PNDHD, albeit with limited resources, continued to survey and identify new hazardous areas throughout 2021. Further technical survey is required to accurately determine the size and extent of the actual contamination.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	5	The PNDHD is the national entity responsible for coordination of mine action. Mauritania contributes resources to support its mine action programme but the PNDHD needs greater operational, financial, and technical capacity to fulfil that role.
GENDER AND DIVERSITY (10% of overall score)	4	4	Mauritania does not appear to have a gender and diversity policy for mine action, and neither issue is referenced in the Article 5 deadline extension request submitted in June 2021 or in Mauritania's latest Article 7 report (covering 2020). Mauritania did, however, state in response to questions from the Committee on Article 5 Implementation that it intends to deploy diverse and gender-balanced teams to the extent possible, and that it includes consultation of women, girls, and boys in the planning of its mine action programme.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	4	Mauritania uses Version 6 of the Information Management System for Mine Action (IMSMA) software. Mauritania's reporting does not classify mined areas into SHAs and CHAs in a manner consistent with IMAS and international best practice. Mauritania's reporting on its implementation of the APMBC is frequently late and lacks accuracy, and data it provides often vary across reports. As at August 2022, Mauritania had yet to submit its Article 7 report covering 2021.
PLANNING AND TASKING (10% of overall score)	3	3	Mauritania's last mine action strategic plan and work plan expired in 2020. Part of the international cooperation and assistance sought by Mauritania is to support its efforts to draft a new mine action strategy. Mauritania estimates that anti-personnel mine clearance can be concluded in five years, accounting for the time required to mobilise resources, deploy teams to the field, and finalise reporting.
LAND RELEASE SYSTEM (20% of overall score)	6	6	Mauritania's NMAS were published in 2007, and were said to be in accordance with the IMAS at that time. The NMAS include standards on non-technical survey, technical survey, mine clearance, and quality control (QC). The PNDHD reported that the NMAS were reviewed and adapted to the "new ways of working". What is meant by this is unclear.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	5	In November 2021, Mauritania was granted an almost five-year extension to its Article 5 deadline to complete clearance. The PNDHD continued to survey and clear contamination within its limited resources, and has appealed for further support from the international community.
Average Score	5.2	5.2	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Humanitarian Demining Programme for Development (Programme National de Déminage Humanitaire pour le Développement, PNDHD)

NATIONAL OPERATORS

- Army Engineer Corps

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA) (programme closed in 2015; NPA conducted an ad-hoc assessment mission of contamination in Mauritania in 2021)

UNDERSTANDING OF AP MINE CONTAMINATION

There is no clear estimate of anti-personnel mined area under the jurisdiction or control of Mauritania as figures differ and reporting by Mauritania is incomplete and inconsistent. Mine Action Review has used one national estimate of just over 11km² as the national baseline but further survey is likely to reduce this figure significantly. In separate reporting to Mine Action Review this year, a single area in Dakhlet Nouadhibou was estimated to cover more than 9km².

On 23 June 2020, after having declared fulfilment of its Article 5 obligations on 29 November 2018 at the Seventeenth Meeting of States Parties to the Anti-Personnel Mine Ban Convention (17MSP), Mauritania reported the discovery of previously unknown mined areas.³ Three days later, it formally requested a thirteen-month extension to its Article 5 deadline, during which the PNDHD, in collaboration with NPA, planned to investigate the mined areas and “possibly discover other areas not currently known”.⁴ Since the declaration of completion in November 2018 and until 2021, a total of six mine incidents occurred,⁵ while others might have gone unreported.

In its Article 7 report covering 2019, Mauritania reported a total of more than 8km² of mined areas (4.7km² of CHA and nearly 3.4km² of SHA).⁶ However, it was not clear how the size and location of the 32 areas had been determined. Estimates of the size of mined areas were only provided for the region of Tiris Zemmour (north) and not the other three regions deemed affected.

In 2020, Mauritania requested NPA's support to survey the newly discovered contamination to better determine its scale. Due to the COVID-19 pandemic, the assessment, which took one month to complete, could only take place in February 2021.⁷ Based on direct evidence, NPA confirmed the presence of 15.47km² of landmine contamination across 10 SHAs in Nouadhibou (west) and Tiris Zemmour (north) regions. Of the total, 10.90km² across eight SHAs contained anti-personnel

mines. In addition, two SHAs covering 4.56km² were contaminated with anti-vehicle mines.⁸

According to NPA, further survey work was required to determine the size and extent of the hazardous areas more accurately, and estimated that, once done, the areas requiring full clearance will be further reduced. NPA also highlighted the high likelihood of discovering residual contamination after completion, since mines are in remote and sparsely populated areas.⁹ Indeed, Mauritania continued to discover and report on new contamination in the months that followed NPA's initial assessment. By the time of the submission of its extension request in June 2021, Mauritania had estimated a total mined area of 16.18km² across 20 CHAs (see Table 2). Mauritania did not specify the type of contamination, but the types of mines it reported indicate that of the 20 CHAs, 5 cover a total of 0.7km² and contain only anti-personnel mines, 11 covering 10.33km² contain a mix of anti-personnel and anti-vehicle mines, and 4 CHAs of at least 5.15km² contained only anti-vehicle mines. Of these latter four, one (at Gunive) had an area of unknown extent.¹⁰ In addition, as at June 2021, a PNDHD team was deployed in the area of Ouadane of Adrar region following a report from the local authorities that had indicated a mined area.¹¹

In March 2022, the PNDHD reported that it had continued to survey, discover, and clear new areas contaminated by anti-personnel mines. The most updated contamination figures provided by the PNDHD in March 2022 report a total anti-personnel mined area of 14.4km² across 17 CHAs in Dakhlet Nouadhibou and Tiris Zemmour regions (Table 1).¹² It is not clear whether the variance in contamination figures across the reports provided by Mauritania is a result of inaccurate data or due to continued land release during the period that followed the latest submission of Article 7 report in July 2021, but it is unlikely that Mauritania released a significant area of land in light of its limited national resources. Moreover, the latest PNDHD contamination data

3 Third Article 5 deadline Extension Request, June 2020, pp. 1 and 3. On pages 2 and 3 of Mauritania's 2020 extension request it said the requested deadline was 31 January 2022 while on page 10 it said 1 January 2022. In November 2020, Mauritania was granted a thirteen-month extension to 31 January 2022.

4 Third Article 5 deadline Extension Request, June 2020, pp. 1 and 3.

5 Fourth Article 5 deadline Extension Request, received June 2021, p. 8.

6 Third Article 5 deadline Extension Request, June 2020, p. 3; and Article 7 Report (covering 2019), p. 3.

7 NPA, Mauritania Assessment Report, 12 April 2021, p. 2.

8 Ibid., p. 6; and email from Melissa Andersson, NPA, 26 April 2021.

9 NPA, Mauritania Assessment Report, 12 April 2021, pp. 2–3.

10 Fourth Article 5 deadline Extension Request, June 2021, p. 5.

11 Ibid., p. 6.

12 Email from Lt-Colonel Moustaphaould Cheikhna, Chief of Operations, PNDHD, 15 March 2022.

lack sufficient detail and do not include the contamination previously reported in Adrar region, calling these figures into question.

Mauritania did not elaborate the methodology it used to identify its hazardous areas, but estimated that the size of areas requiring actual clearance will be reduced by an average 37% once further survey is conducted.¹³ This means the areas are more akin to SHAs than CHAs.

In Nouadhibou, at least 11.53km² of the contamination was known to Mauritania prior to its declaration of compliance in November 2018, but was considered politically inaccessible until 2019. A further 3.82km² has been newly discovered since 2018. In Tiris Zemmour, Mauritania had not been aware of the mined areas before their discovery in 2019.¹⁴ In Adrar, it is not clear if the discovered mined areas was known to Mauritania before its compliance declaration. In its latest Article 5 deadline extension request, Mauritania states that: "Mauritania submitted a request in June 2020 to extend its Article 5 deadline by one year having recently found two additional minefields in the Northern areas of Mauritania, and then redefining which mined areas are considered to be under its jurisdiction or control in the Nouadhibou peninsula".¹⁵

Mauritania reported that all identified contamination in Nouadhibou and Tiris Zemmour regions lie clearly within its jurisdiction and control,¹⁶ bringing the duty to clear unequivocally within Mauritania's international legal obligations under the APMBC. The maps provided by Mauritania in its Article 5 deadline extension request, however, show minefields clearly extending beyond its borders and into the territory of Western Sahara, although these may contain only contain anti-vehicle mines.¹⁷ Moreover, as most of the minefields are located along the borders with Western Sahara, it is possible that anti-personnel contamination extends beyond Mauritanian territory. Such contamination, if it is found to exist, is outside of Mauritania's jurisdiction or control, and therefore any clearance would need to be agreed upon with the Western Sahara. For the Adrar minefields, it is not clear if the newly reported contamination lies within Mauritania's jurisdiction or control. Mauritania stated in its latest extension request, submitted in June 2021, that the PNDHD will "Coordinate with

relevant authorities to the extent possible on areas that lie outside of Mauritanian jurisdiction but under Mauritanian de facto control".¹⁸

Mauritania previously declared completion of its Article 5 obligations in November 2018, at the Seventeenth Meeting of States Parties.¹⁹ Prior to this, at the end of 2015, Mauritania reported that it had released all known areas of anti-personnel mine contamination (which had totalled 40 mined areas covering 67km²),²⁰ but that other contaminated areas were thought to exist close to Western Sahara, which depending on the demarcation of the border, could be inside Mauritanian territory and thus within its jurisdiction.²¹ In its 2015 request for a second extension to its Article 5 clearance deadline, Mauritania stated that it "suspects that the security system along the border with Western Sahara, which comprises fortifications and minefields, crosses Mauritanian territory, especially since there is no natural border between the two". It also said that border markers from the colonial period were unclear, non-existent and/or found at intervals of between 115km and 175km.²² At the end of 2017, Mauritania reported no known or suspected areas containing anti-personnel mines following technical survey and clearance of an area with an estimated size of 1km² in Ain Bintilli district of Tiris Zemmour region.²³ The area had contained both anti-personnel and anti-vehicle mines.²⁴

Mauritania's mine contamination was a legacy of the conflict over Western Sahara in 1976-78.²⁵ A 2006 Landmine Impact Survey (LIS) had found a total of 65 SHAs covering 76km² and affecting 60 communities. This proved to be a significant overestimate of the actual extent of the mine threat. In 2010, Morocco provided detailed maps of minefields laid during the Western Sahara conflict. The minefields had been partially cleared using military procedures prior to the entry into force of the APMBC.²⁶ In its 2020 extension request, Mauritania said that the large-scale use of mines in Mauritania was typically haphazard and without the use of plans or maps.²⁷

Mauritania also reported having discovered cluster munition remnants (CMR) contamination.²⁸ Please see Mine Action Review's *Clearing Cluster Munition Remnants* report on Mauritania for more information.

13 Fourth Article 5 deadline Extension Request, June 2021, p. 10.

14 NPA, Mauritania Assessment Report, 12 April 2021, p. 2.

15 Fourth Article 5 deadline Extension Request, June 2021, p. 4.

16 Email from Lt-Colonel Moustaphaould Cheikhna, PNDHD, 15 March 2022.

17 Fourth Article 5 deadline Extension Request, June 2021, map 2, p. 6.

18 Ibid., p. 13.

19 Statement of Mauritania, APMBC 18th Meeting of States Parties (18MSP), 29 November 2018; and Third Article 5 deadline Extension Request, June 2020, p. 2.

20 Analysis of Mauritania's Second Article 5 deadline Extension Request submitted by the Committee on Article 5 Implementation to the 14th Meeting of States Parties, 17 November 2015, p. 2.

21 Ibid.

22 Article 5 deadline Extension Request, 2 April 2015, p. 4. In the original French: "nous suspectons que le dispositif de sécurité le long de la frontière avec le Sahara occidental, composé de fortification et champs de mines, interfère en territoire Mauritanien surtout qu'il n'existe aucune frontière naturelle".

23 Email from Aliouneould Menane, National Coordinator, PNDHD, 23 July 2018.

24 Article 7 Report (covering 2016), Form D; Statement of Mauritania, Committee on Article 5 Implementation, Geneva, 8 June 2017; and email from Aliouneould Menane, PNDHD, 29 March 2017.

25 Ibid., p. 2.

26 Revised Second Article 5 deadline Extension Request, 6 September 2010, p. 3; and email from Melissa Andersson, NPA, 17 September 2015.

27 Third Article 5 deadline Extension Request, June 2020, p. 2.

28 Ibid., Annex 1, p. 14.

Table 1: Anti-personnel mined area by region (at end 2021)²⁹

Region		CHA	Area (m ²)
Dakhlet Nouadhibou	Nouadhibou	12	10,454,567
Dakhlet Nouadhibou	Boulenoir	2	462,414
Dakhlet Nouadhibou	Inal	1	3,362,364
Tiris Zemmour	Bir moghrein	2	114,565
Totals		17	14,393,910

Table 2: Anti-personnel mined area by region (as at June 2021)³⁰

Region	Location ID	CHA	CHA area (m ²)	Identified mines	Type of contamination ³¹
Adrar	Mayaateg	1	585,700	PT Mi-K	AV mines
Adrar	Gunive	1	N/K	PT Mi-K	AV mines
Dakhlet Nouadhibou	Bouchon24	1	839,424	APID51, ACID51	AP and AV mines
Dakhlet Nouadhibou	Bouchon55	1	9,147,780	APID51, TM57	AP and AV mines
Dakhlet Nouadhibou	Guergara	1	1,203,880	PT Mi-K	AV mines
Dakhlet Nouadhibou	Lewej 2	1	329,829	APID51, VS50	AP mines
Dakhlet Nouadhibou	Pk 126	1	132,585	APID51	AP mines
Dakhlet Nouadhibou	Pk 173	1	3,362,364	Type 72	AV mines
Dakhlet Nouadhibou	Rbeit l'echar1	1	62,819	PT Mi-K	AV mines
Dakhlet Nouadhibou	Wettatlechyakh	1	126,578	APID51	AP mines
Dakhlet Nouadhibou	Zirezargue 1	1	28,794	VS50, TM57	AP and AV mines
Dakhlet Nouadhibou	Zirezargue 2	1	16,257	VS50, TM57	AP and AV mines
Dakhlet Nouadhibou	Zirezargue 3	1	23,638	VS50, TM57	AP and AV mines
Dakhlet Nouadhibou	Zirezargue 4	1	14,696	VS50, TM57	AP and AV mines
Dakhlet Nouadhibou	Zirezargue 5	1	75,375	VS50, TM57	AP and AV mines
Dakhlet Nouadhibou	Zirezargue 6	1	25,565	VS50, TM57	AP and AV mines
Dakhlet Nouadhibou	Zirezargue 7	1	26,654	VS50, TM57	AP and AV mines
Dakhlet Nouadhibou	Zirezargue 8	1	66,987	VS50, TM57	AP and AV mines
Tiris Zemmour	Boukhzame	1	63,796	VS50	AP mines
Tiris Zemmour	Guemgoum	1	50,769	APID51	AP mines
Totals		20	16,183,490		

AP = anti-personnel AV = anti-vehicle N/K = not known.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The PNDHD, which was created in 2000, coordinates mine action operations in Mauritania.³² Since 2007, the programme has been the responsibility of the Ministry of Interior and Decentralisation, with oversight from an interministerial steering committee.³³ The PNDHD has its headquarters in the capital, Nouakchott, with a regional mine action centre located at Nouadhibou. As at April 2021, the PNDHD had one operational manager and six staff responsible for quality management (QM).³⁴

29 Email from Lt-Colonel Moustaphaould Cheikhna, PNDHD, 15 March 2022.

30 Fourth Article 5 deadline Extension Request, June 2021, p. 5; NPA, Mauritania Assessment Report, 12 April 2021, p. 6; email from Melissa Andersson, NPA, 26 April 2021; and Mine Action Review data; Mauritania's Article 7 report (covering 2020) provides incomplete contamination data and is missing pages 4 and 5.

31 Mauritania's fourth Article 5 deadline Extension Request did not specify the contamination type. This data is provided by Mine Action Review based on the mine types Mauritania reported.

32 Decree No. 1960/MDAT/MDN establishing the PNDHD, 14 August 2007; and Third Article 5 deadline Extension Request, June 2020, p. 2.

33 Decree No. 001358/MDAT establishing the Steering Committee of the PNDHD, 3 September 2007; and Third Article 5 deadline Extension Request, June 2020, p. 2.

34 Mauritania Assessment Report, NPA, 12 April 2021, p. 10.

Mauritania estimates in its latest extension request, submitted in June 2021, that it requires a total five-year budget of US\$9.65 million of international funding to address the newly reported mine contamination.³⁵ This is four times the amount Mauritania had initially intended to mobilise from international donors in its previous extension request, submitted in June 2020, which totalled US\$2.5 million.³⁶ Mauritania's contribution to the demining project will include human resources, office space, and the coordination of operations, including liaison with national and local governmental and military officials.³⁷ Mauritania allocated a budget of €91,000 to its mine action programme in 2021.³⁸

In its most recent Article 7 report submitted in July 2021, Mauritania identified the following areas as in need of support: logistical (replacement of equipment, furniture and vehicles), "organisational" in terms of workspace; staffing and revision of national standards; technical support and training of personnel of PNDHD central and regional offices; operational support and support of personnel during

survey, quality management, quality control, and awareness campaigns.³⁹

In July 2022, MAG said that it had secured Norwegian government funding for Mauritania, subject to contract signature, which as at September 2022 was expected shortly. Under the planned project, MAG will conduct the following activities: capacity and needs assessments; put in place a capacity development plan with the national authorities; review of Information Management System for Mine Action (IMSMA) (quality control of existing/historical data and update/upgrade of the database for future data inputs); provide equipment and training for information management; support the review of NMAS; conduct a contamination baseline assessment, non-technical survey, and EORE. The planned project will benefit the whole mine action programme, but MAG planned to prioritise CCM Article 4 compliance.⁴⁰ The donor agreement, which covers August 2022 to December 2025, does not cover technical survey or clearance costs.⁴¹

ENVIRONMENTAL POLICIES AND ACTION

Mauritania is not thought to have environmental standards or a policy on management system in place. It is not known if Mauritania takes environmental considerations into account during survey and clearance activities.

GENDER AND DIVERSITY

It is believed that the PNDHD does not have policies in relation to gender and diversity in its mine action programme. Gender and diversity are not referenced in Mauritania's latest Article 7 report (covering 2020) or its latest Article 5 deadline extension request submitted in July 2021.

Mauritania stated in its responses to the Committee on Article 5 Implementation that it considered gender and diversity to be important cross-cutting issues for its mine action programme, and that it intends to ensure that all groups are consulted when designing and implementing activities. It also stated that it will seek to achieve gender-balanced and diverse survey and clearance teams "to the extent this might be possible", while acknowledging "some limitations to achieving gender balance from the staff that would be seconded by the Corps of Engineers".⁴²

Mauritania stated that it involves civil society organisations and "target groups" in the areas of mine risk education (MRE) and ensures women's participation in both administration and operational levels. According to its statement, two women were employed in financial management and in victim assistance.⁴³

INFORMATION MANAGEMENT AND REPORTING

The national mine action database is held at the PNDHD. As at December 2017, Mauritania had strengthened its information management capacity by providing additional training to an information management specialist and migrating to Version 6 of the IMSMA software.⁴⁴ Mauritania did not disaggregate anti-personnel mine contaminated areas into CHAs and SHAs, in line with international best practice and International Mine Action Standards (IMAS) in its Article 7 report covering 2020 or its Article 5 deadline extension request submitted in June 2021. Mauritania often provides inconsistent and inaccurate contamination and clearance figures in its reports, and as at September 2022, had yet to submit its Article 7 report for 2021.

35 Fourth Article 5 deadline Extension Request, June 2021, pp. 11–12.

36 Third Article 5 deadline Extension Request, June 2020, p. 10.

37 Fourth Article 5 deadline Extension Request, June 2021, pp. 11–12; and email from Lt-Colonel Moustaphaould Cheikhna, PNDHD, 15 March 2022.

38 Convention on Cluster Munitions (CCM) Article 7 Report (covering 2021), Form F.

39 Article 7 Report (covering 2020), p. 12.

40 Email from Roxana Bobolicu, International Policy Manager, MAG, 19 July 2022.

41 Emails from Roxana Bobolicu, MAG, 19 July and 9 September 2022.

42 Fourth Article 5 deadline Extension Request, additional information, 10 September 2021, p. 4.

43 Third Article 5 deadline Extension Request, additional information, 16 September 2020, response 5.

44 Article 7 Report (covering 2017), Form D.

In 2021–22, the PNDHD created an interactive platform that provides updated contamination data, including the locations of identified mined and cluster munition-contaminated areas, surface area, and photos documenting the found items, in addition to a record of all technical and non-technical survey, clearance, and victim data.⁴⁵

In March 2022, two participants from the PNDHD participated in the Arab Regional Cooperation Programme (ARCP) IMSMA Core workshop organised by the Geneva International Centre of Humanitarian Demining (GICHD).⁴⁶

PLANNING AND TASKING

In March 2017, Mauritania developed a national mine action strategic plan for 2017–20 with a view to complete clearance of all the remaining contaminated areas, establish a strategy for residual contamination, and declare its compliance with Article 5 before January 2021.⁴⁷ Since its expiry in 2020, Mauritania's national mine action strategic plan has not been updated.

Mauritania's latest Article 5 deadline extension request envisages five years to technically survey and clear the anti-personnel mined areas identified. This includes six months to mobilise the necessary resources (funding, staffing, and equipment) as well as for team deployment.⁴⁸ Mauritania has issued an action plan for its proposed extension period.⁴⁹ The plan, however, lacks detail.

According to its Article 7 report submitted in 2020, part of the international cooperation and assistance sought by Mauritania is to support efforts to draft a new mine action strategy.⁵⁰ In its 2021 Article 5 deadline extension request, Mauritania said it would prioritise survey and clearance of the newly reported contaminated areas based on humanitarian impact, taking into account gender and diverse needs of the mine-affected communities.⁵¹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Survey and clearance operations are conducted in accordance with the NMAS (Les normes Mauritaniennes de l'action antimines), which are said to be compliant with IMAS. The NMAS, which include standards on non-technical survey, technical survey, mine clearance, and quality control (QC), were adopted in 2007. They were revised with the help of the GICHD in partnership with operators, especially NPA in 2010, and were translated into Arabic in 2011.⁵² The NMAS are supposed to be reviewed once every three years,⁵³ but have not been revised since 2006.⁵⁴ In March 2022, the PNDHD reported having revised and adapted the NMAS to the "new ways of working",⁵⁵ but did not make clear what is meant by this.

In 2021, Mauritania recognised that an update to its NMAS is due and committed to "carry out an analysis of its NMAS to ensure that they are up to date and fit for purpose to address the remaining challenge".⁵⁶ Subject to signing of contract with the Norwegian government, MAG intends to support Mauritania to review its NMAS as part of its capacity development plan.⁵⁷

OPERATORS AND OPERATIONAL TOOLS

In accordance with a 2006 decree, all clearance activities were conducted by the Army Engineer Corps operating under the PNDHD.

MAG has been working in Mauritania since November 2017, supporting the safe storage of state-held arms and ammunition depots, and providing training to local security and defence force personnel on the same topic.⁵⁸ As noted above, MAG reported in July 2022 that it had potentially secured Norwegian funding for capacity development support to the PNDHD, and to conduct a contamination baseline assessment, non-technical survey, and EORE.⁵⁹

45 Statement of Mauritania, APMBBC Intersessional Meetings, Geneva, 20–22 June 2022.

46 Email from Lubna Allam, Programme Officer, GICHD, 10 June 2022.

47 Email from Aliouneould Menane, PNDHD, 23 July 2018.

48 Fourth Article 5 deadline Extension Request, June 2021, pp. 9–10.

49 Ibid, pp. 14–15.

50 Article 7 Report (covering 2019), pp. 13–14.

51 Fourth Article 5 deadline Extension Request, June 2021, p. 12.

52 Email from Alioune O. Mohamed El Hacen, PNDHD, 17 April 2011; and Third Article 5 deadline Extension Request, June 2020, pp. 5 and 8.

53 Third Article 5 deadline Extension Request, June 2020, pp. 5 and 8.

54 CCM Article 7 Report (covering 2019), Annex II.

55 Email from Lt-Colonel Moustaphaould Cheikhna, PNDHD, 15 March 2022.

56 Fourth Article 5 deadline Extension Request, June 2021, p. 9; and Mauritania's answers to the CCM Analysis Group, 29 July 2021, p. 2.

57 Email from Roxana Bobolicu, MAG, 19 July 2022.

58 MAG website, accessed on 28 May 2022, at: <https://bit.ly/3NFVEKD>.

59 Email from Roxana Bobolicu, MAG, 19 July 2022.

Mauritania requires a clearance capacity of eight teams, each of ten deminers, sustained for about five years to technically survey and clear the mined areas. The teams are expected to work for 250 days a year, and each team is expected to clear 250m² a day.⁶⁰ Mauritania also said it will consider the use of mine detection dogs (MDDs) in Nouadhibou where there is a potential presence of conventionally undetectable or deeply buried mines.⁶¹

At the end of 2021, the PNDHD had four demining teams, five cars, and one ambulance. The total number of personnel was not reported.⁶²

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

For 2021, Mauritania reported release through clearance of 1.2km² of mined area.⁶³ The number of mines destroyed was not reported and as at September 2022, Mauritania had yet to submit its Article 7 report covering 2021.

SURVEY IN 2021

Mauritania conducted both technical and non-technical surveys in 2021, but these did not result in any land release in 2021, although additional mined area was identified.⁶⁴

CLEARANCE IN 2021

The PNDHD cleared 1.2km² of anti-personnel mined area in the region of Dakhlet Nouadhibou in 2021.⁶⁵ The number of anti-personnel mines destroyed, if any, is unknown.

Table 3: Mine clearance in 2021⁶⁶

Region	Operator	Area cleared (m ²)
Dakhlet Nouadhibou	PNDHD	1,203,880
Total		1,203,880

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the latest extension granted by States Parties in 2021), Mauritania is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than the end of 2026. Mauritania is unlikely to meet this deadline.

Mauritania's Article 5 deadline has already been extended four times and it previously declared fulfilment of its Article 5 obligations at the 17MSP in November 2018, but in June 2020, submitted an interim extension request, reporting that it had discovered new mined areas in the regions of Dakhlet Nouadhibou, Tiris Zemmour, and Adrar.⁶⁷ Mauritania said it needed a one-year interim period, through to 31 January 2022, to better understand the contamination, collect more information and be in a better position to submit its "final" request for extension. In June 2021, Mauritania submitted its fourth extension request seeking a new deadline of 31 December 2026.

60 Fourth Article 5 deadline Extension Request, June 2021, p. 10; NPA, Mauritania Assessment Report, 12 April 2021, p. 11; and email from Melissa Andersson, NPA, 26 April 2021.

61 Fourth Article 5 deadline Extension Request, June 2021, p. 13.

62 Email from Lt-Colonel Moustapha ould Cheikhna, PNDHD, 15 March 2022.

63 Ibid.

64 Ibid.

65 Ibid.

66 Ibid.

67 Third Article 5 deadline Extension Request, June 2020, p. 2; Article 7 Report (covering 2019), p. 3; and online presentation by Mauritania, Intersessional Meetings, 2 July 2020, available at: <http://bit.ly/3iBV1Dd>.

The five-year period sought based on an operational capacity of eight demining teams, working for 250 days a year and each team clearing 250m² per day, meaning clearance of half a square kilometre a year. The period also estimates a final reduction of CHAs by an average 37%.⁶⁸ Further, the almost five-year estimated period includes all mined area, including the 5.15km² containing only anti-vehicle mines which does not fall under the APMBC. On the other hand, Mauritania's extension request does not consider the time needed to bring in and register international operators, or the time needed to set up the groundwork before commencing clearance, which can take up to one year.⁶⁹ Mauritania factored in the first six months of 2022 to complete its resource mobilisation,⁷⁰ but as at July 2022, only MAG has secured funding from Norway for mine action⁷¹ but the funds do not include mine clearance.

Mauritania is working on the bold assumption that no or limited additional contamination will be discovered in the course of the coming four years.⁷²

Mauritania has requested US\$9.65 million of financial support, including an initial investment of US\$650,000 to

purchase vehicles, detectors, personal protective equipment (PPE), and other field equipment. In addition, an annual budget of US\$1.8 million for five years was requested to cover running costs.⁷³ The government of Mauritania will contribute staff, provide office space, and coordinate the clearance operation.⁷⁴

Mauritania participated in an individualised approach initiative meeting with the support of the Committee on the Enhancement of Cooperation and Assistance on 17 June 2021. Mauritania also appealed for international support during the APMBC Intersessional Meetings in June 2022, as well as the CCM Intersessional Meetings and Tenth Meeting of States Parties in 2022.

Mauritania committed in 2021 to keeping States Parties informed of developments at treaty meetings and through its Article 7 reporting,⁷⁵ and to "coordinate with the relevant authorities, to the extent possible, on areas that lie outside of Mauritanian jurisdiction but under its de-facto control".⁷⁶ But as at September 2022 it had yet to submit its latest Article 7 report.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

In its Fourth Article 5 deadline Extension Request, submitted in June 2021, Mauritania reported that it will "continue to strengthen and maintain a capacity in-country that is equipped to deal with residual risk", and that in the event of discovering new contamination after the newly proposed deadline, Mauritania will "as soon as possible take action to accurately identify the extent of the contaminated areas identified and destroy all mines found in accordance with international and national standards".⁷⁷

In the same request, Mauritania made clear that it may discover additional contamination in the course of the five-year clearance period and beyond. According to its statement: "In an area as large as the deserts of Mauritania, with both vast areas and very limited population numbers, it has always been known that in the future additional previously unknown contamination could be identified. Even when the previously known and newly identified areas are cleared this time, it is still possible that new currently unknown areas of mine contamination may be identified in the future".

Since the closure of NPA's programme in 2015, additional contaminated areas were identified, surveyed, and cleared by the PNDHD with United Nations Development Programme (UNDP) support.⁷⁸ The PNDHD, despite its limited capacity, continued to survey and clear contamination in 2021. Previously, PNDHD had reported that one of the main aims of Mauritania's work plan for 2017–20 was to establish a strategy for residual contamination.⁷⁹ It subsequently confirmed its commitment to building national capacity to address any residual contamination.⁸⁰

68 Fourth Article 5 deadline Extension Request, June 2021, p. 10; NPA, Mauritania Assessment Report, 12 April 2021, p. 11; and email from Melissa Andersson, NPA, 26 April 2021.

69 Interview with Hans Risser and Melissa Andersson, NPA, 19 April 2021.

70 Fourth Article 5 deadline Extension Request, June 2021, p. 9.

71 Email from Roxana Bobolicu, MAG, 19 July 2022.

72 Fourth Article 5 deadline Extension Request, June 2021, p. 3.

73 Ibid., p. 11.

74 Ibid., p. 12.

75 Ibid., p. 12.

76 Ibid., p. 13.

77 Ibid., p. 11.

78 NPA, Mauritania Assessment Report, 12 April 2021, p. 4.

79 Email from Aliouneould Menane, PNDHD, 23 July 2018.

80 Email from Lt-Colonel Moustaphaould Cheikhna, PNDHD, 15 March 2022.

ARTICLE 5 DEADLINE: 31 DECEMBER 2024
NOT ON TRACK TO MEET DEADLINE

KEY DATA

**ANTI-PERSONNEL (AP)
MINE CONTAMINATION: LIGHT**
PRECISE EXTENT UNCLEAR

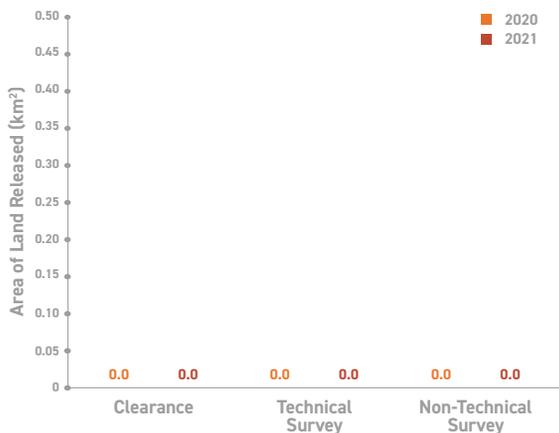
AP MINE
CLEARANCE IN 2021

0
M²

AP MINES
DESTROYED IN 2021

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Half-way through the latest four-year extension to its Article 5 deadline, Niger has indicated it will not be able to complete clearance within the allotted time. No clearance appears to have taken place in 2021 or 2020, putting in serious doubt Niger's compliance with Article 5 of the Anti-Personnel Mine Ban Convention (APMBC).

RECOMMENDATIONS FOR ACTION

- Niger should present a revised Article 5 deadline extension request giving details of any release of mined areas and providing realistic targets of what it can achieve in the time remaining under the present extension.
- The National Commission for the Collection and Control of Illicit Weapons should draw up a strategic plan for mine action providing details of the human and financial resources that Niger is able to commit to survey and clearance of hazardous areas for the remainder of its current Article 5 deadline and subsequently.
- Niger should put in place monitoring capacity and a database to support systematic collection of data and reporting on explosive ordnance incidents and casualties.
- Niger should submit comprehensive, annual Article 7 transparency reports and include details regarding anti-personnel mines of an improvised nature.
- Niger should provide details of its resource mobilisation strategy and what engagement it has had or proposes with international donors and international organisations.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	6	Niger has identified a small amount of anti-personnel mine contamination in the Agadez region but it also now faces escalating attacks by non-State armed groups employing mines of an improvised nature.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	5	Niger has conducted limited mine action in the past five years but while calling for international funding to make further progress it has not availed itself of support offered by humanitarian organisations.
GENDER AND DIVERSITY (10% of overall score)	2	2	Niger's limited statements and Article 7 reporting on mine action make no reference to gender or diversity.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	3	Inconsistent reporting on mine clearance points to weak information management. Niger has submitted Article 7 reports only intermittently since 2012, each covering multiple years. The next, in 2018, covered almost five years from 2013. The latest report, submitted in May 2022, covered three years 2019–21. Annual reporting is an obligation under the APMBC.
PLANNING AND TASKING (10% of overall score)	3	3	Niger lacks a strategic plan for mine action as well as detailed work plans. Its Article 5 deadline extension request submitted in May 2020 and seeking four years left out key details, including proposed timelines for clearance and available demining capacity. In 2022, it said it would not fulfil its obligations under this request and would submit a revised work plan for 2022–24.
LAND RELEASE SYSTEM (20% of overall score)	4	4	Niger has reported that it has national standards that are compliant with the International Mine Action Standards (IMAS) but it is not known if they have been formally adopted.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	2	3	In its latest Article 7 report covering 2019–21 Niger reported having cleared 18,483m ² . Based on earlier information contained in its Article 5 deadline extension request, this clearance took place between July 2019 and March 2020. This suggests that no clearance took place in 2021.
Average Score	3.8	3.9	Overall Programme Performance: VERY POOR

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Commission Nationale pour la Collecte et le Contrôle des Armes Illicites (CNCCAI)

NATIONAL OPERATORS

- CNCCAI

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Niger is believed to have only a small amount of mine contamination but its varying statements about contamination and clearance in recent years have left uncertainty about the precise extent. An Article 7 report submitted by Niger in May 2022 said its remaining contamination amounted to 177,760m²,¹ a figure consistent with the level of contamination identified in its 2020 request for an extension of its Article 5 deadline and its statement to the Eighteenth Meeting of States Parties in November 2020.²

¹ Article 7 Report (covering 2019, 2020, and 2021), p. 9.

² Statement of Niger, 18th Meeting of States Parties, Geneva, 16–20 November 2020.

The outstanding contamination appears to consist of a suspected hazardous area (SHA) near Madama, a military base in the north-eastern Agadez region of the country. In 2018, Niger reported that it had two mined areas totalling 235,557m² near Madama, including a confirmed hazardous area (CHA) of 39,304m² and an SHA of 196,253m² containing both anti-personnel and anti-vehicle mines.³ Its latest Article 7 report (covering 2019–21) said the entire CHA and 18,483m² of the SHA had been cleared.⁴ Based on earlier information contained in Niger's last Article 5 deadline extension request in 2020, the CHA had been cleared previously, and clearance of the 18,483m² of SHA had taken place between July 2019 and March 2020.⁵ It does not appear that any clearance was conducted in 2021.

Niger has faced sporadic but increasing attacks by groups affiliated with Islamic State or al-Qaida, adding a new challenge in the form of improvised explosive devices (IEDs), some of them victim activated and therefore constituting mines of an improvised nature covered by the APMB. Five Nigerien soldiers were killed in an IED explosion in February

2022 in the Gotheye district of the Tillabery region where the borders of Niger, Burkina Faso, and Mali intersect. Seven election officials were killed in the Tillabery region when their vehicle detonated a mine or improvised device in February 2021.⁶ The Office of the United Nations High Commissioner for Refugees (UNHCR) reported that four people had died in two separate incidents in the Bosso region of Niger in February and March 2020.⁷

Niger had previously identified five additional SHAs in the Agadez region (in Achouloulouma, Blaka, Enneri, Orida, and Zouzoudinga) but said non-technical and technical survey in 2014 had determined they were not contaminated by anti-personnel mines and that communities in the area had reported accidents only involving anti-vehicle mines.⁸ A PRB M3 anti-vehicle mine was also discovered in March 2019 near the town of Intikane, also in the Agadez region.⁹ The areas are all located in a remote desert area, 450km from the rural community of Dirkou in Bilma department and reported to contain mines that date back to the French colonial era.¹⁰

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The national mine action programme is managed by the National Commission for the Collection and Control of Illicit Weapons (Commission Nationale pour la Collecte et le Contrôle des Armes Illicites, CNCCAI), which reports directly to the President.

All demining is thought to have been carried out by the Nigerien army. However, Niger's latest Article 7 report said it had created a humanitarian demining cell with the support of security forces and "civilians involved in the clearance of mines".¹¹ In 2015, Niger said it had 60 deminers but lacked sufficient equipment for them to be able to work at the same time.¹² It has not provided further information since.

Norwegian People's Aid (NPA) conducted evaluation missions to Niger in May 2015 and December 2017 to assess the possibility of assisting Niger to meet its Article 5 deadline. Contacts continued in 2019, exploring the possibility of NPA setting up a programme to support CNCCAI clearance operations, but in the end the authorities did not proceed.¹³

ENVIRONMENTAL POLICIES AND ACTION

Niger does not have a national mine action standard for the environment or a policy on mitigating the environmental impact of mine action.

GENDER AND DIVERSITY

Niger's last two Article 5 deadline extension requests, submitted in 2016 and 2020, made no reference to gender or diversity. Niger reported that women made up eight of the forty deminers deployed in June 2019 in the resumption of clearance operations.¹⁴

3 Article 7 Report (covering 2013 to April 2018), Annex I, p. 19.

4 Article 7 Report (covering 2019, 2020 and 2021), p. 9.

5 2020 Article 5 deadline Extension Request, p. 8.

6 "Seven Niger election officials killed by landmine on poll day", BBC, 21 February 2021, at: <https://bbc.in/3DB0eaS>.

7 "Landmines, improvised explosive devices pose deadly risks for displaced in Sahel and Lake Chad", Statement by Babar Baloch, UNHCR spokesman, 28 July 2020.

8 2016 Article 5 deadline Extension Request, pp. 6–8.

9 "Explosive developments: The growing threat of IEDs in Western Niger", The Armed Conflict Location & Event Data (ACLED) Project, 19 June 2019, p. 3.

10 Executive Summary of Niger's Second Article 5 deadline Extension Request, 27 November 2015; and Statement of Niger, Third APMB Review Conference, Maputo, 24 June 2014.

11 Article 7 Report (covering 2019, 2020 and 2021), p. 3.

12 Statement of Niger, Intersessional Meetings (Committee on Article 5 Implementation), Geneva, 25 June 2015.

13 Emails from Jean-Denis Larsen, DRC Country Director, NPA, 19 July 2017, 3 October 2018, and 15 August 2019.

14 Statement of Niger, Fourth APMB Review Conference, 27 November 2019.

INFORMATION MANAGEMENT AND REPORTING

Niger submitted Article 7 transparency reports every year between 2002 and 2006 but has only provided five in the 16 years since. The report submitted in 2018 was its first since 2012 and covered five years from 2013 to 2017. The last report submitted in May 2022 covered three years from 2019 to 2021. Niger delivered statements to the Fourth Review Conference in Oslo in 2019 and the Meeting of States Parties in 2020.

The APMBC Committee on Article 5 Implementation noted that Niger's Article 7 reports were not compliant with International Mine Action Standards (IMAS) and lacked details on a range of issues including an updated work plan with adjusted milestones, financial commitments to implementation of Article 5 extension request or its information management system.¹⁵

PLANNING AND TASKING

Niger does not have a strategic plan for mine action. Its Article 7 Report for 2013–18 set out a rudimentary operational timeline providing for clearance of 196,253m² by 2020: 56,000m² in 2018, 100,253m² in 2019, and 40,000m² in 2020.¹⁶ It did not meet any of these targets.

Niger's fourth Article 5 deadline extension request, submitted in May 2020, called for four additional years to complete clearance of 177,760m², but did not provide annual clearance targets or a detailed work plan or identify what operating capacity was available for survey and clearance. It projected the costs of completion at US\$1,143,750, of which US\$400,000 is to come from national sources.¹⁷

The Committee on Article 5 implementation called on Niger to submit a detailed work plan with annual clearance targets

and to submit annual reports detailing adjustments to milestones, criteria for clearance priorities, and the extent to which security was affecting access, survey and clearance. It also requested information on how implementation efforts take into consideration the different needs and perspectives of women, girls, boys and men and the diverse needs and experiences of people in affected communities.¹⁸ In May 2022, however, Niger said it could not fulfil its obligations in the time available and it would submit a new plan for 2022–24.¹⁹

Niger's security forces announced in April 2021 that they were undertaking an explosive ordnance risk education (EORE) programme distributing 50,000 brochures provided by the United States military.²⁰

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In its third Article 5 deadline extension request, Niger reported that it had drafted national mine action standards (NMAS) in accordance with the IMAS and standard operating procedures (SOPs).²¹ No information has been provided on whether Niger's NMAS have been finalised and adopted.

OPERATORS AND OPERATIONAL TOOLS

CNCCA reports that it has created a humanitarian demining cell supported by Niger's security forces and civilians in the sector but gave no details of available capacity.²² Niger's army engineers are the only capacity that has been identified as conducting clearance. No international operators are active in Niger.

Niger's 2020 Article 5 extension request gave no details of active demining capacity but said it planned to conduct refresher training for deminers and establish a "reserve pool" of 60 deminers available as needed for demining operations but has not provided further information on follow-up actions.²³

An NPA team's visit to Madama in December 2017 noted that manual clearance was the main tool of demining by Niger's army engineers but highlighted the operational challenges. The M-51 mines mostly found in the area contained no metal components and were largely undetectable by conventional detectors and sufficiently small as to make detection by ground penetrating radar (GPR)-based detectors unreliable. This means that full manual excavation may be the only effective methodology. The process is slow and the sandy environment, prone to subsidence and back-filling, makes it difficult to maintain consistent excavation depths.

¹⁵ Preliminary Observations, Committee on Article 5 Implementation, Intersessional Meetings, 20-22 June 2022.

¹⁶ Article 7 Report (covering 2013 to April 2018), Annex 1, p. 23.

¹⁷ 2020 Article 5 deadline Extension Request, pp. 12–14.

¹⁸ Statement to the 18th Meeting of States Parties by the Chair of the Committee on Article 5 Implementation on the Analysis of the Request for Extension submitted by Niger, 16–20 November 2020.

¹⁹ Article 7 Report (covering 2019, 2020 and 2021), p. 9.

²⁰ I. Chékaré, "Lancement de la sensibilisation sur les engins explosifs improvisés (EEI): Fournir à la population civile des informations sur la manière de reconnaître et signaler les objets dangereux", *Le Sahel*, 15 April 2021; "L'armée américaine fournit au Niger 50.000 brochures de sensibilisation sur le danger des engins explosifs improvisés", *TamTamInfo.com*, 15 April 2021.

²¹ 2016 Article 5 deadline Extension Request, pp. 8–9.

²² Article 7 Report (covering 2019, 2020, and 2021), p. 3.

²³ 2020 Article 5 deadline Extension Request, p. 8.

Mechanical excavation using sifting and screening equipment would dramatically improve the speed of technical survey and clearance but faces severe logistical challenges because of the long distances, absence of roads, limited provisions for maintenance and cost. Mine detection dogs have also been deemed unsuitable because of the extreme climate and the potential for deeply-buried mines.²⁴

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

CLEARANCE IN 2021

In its latest Article 7 report covering 2019–21 Niger reported having cleared 18,483m², but did not provide additional details.²⁵ Based on previous information contained in its Article 5 deadline extension request, this clearance took place between July 2019 and March 2020.²⁶ Niger reported that no clearance took place in 2021 due to lack of resources and international donor support.²⁷

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBBC (and in accordance with the four-year extension request granted by States Parties in 2020), Niger is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2024.

Niger said it had made no progress implementing the plans submitted in support of its fourth Article 5 deadline extension request and stated that it would soon submit a revised plan that would “take into account” the amount of time remaining in its current extension. It could not guarantee clearance of its mine contamination by the end of 2024.²⁸ Niger has cleared less than 0.02km² of mined area in the last five years (see Table 1), with clearance only occurring between July 2019 and March 2020. This puts into doubt its compliance with Article 5.

Table 1: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	0
2020	*0.01
2019	*0.01
2018	0
2017	0
Total	0.02

* 9,080.8m² was cleared between July and November 2019 and 9,402.6m² between December 2019 and February 2020.²⁹

Niger attributed the lack of progress to its scant national resources and the absence of external donor support. It cited a range of other factors hampering progress: sandstorms, intense heat and cold, and a lack of security necessitating a military escort for the 2,000km-long journey from the capital Niamey to Madama. Niger also said a proliferation of terrorist attacks and illegal weapons constituted new priorities for the government.³⁰

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Niger does not have plans in place to address residual contamination once its Article 5 obligations have been fulfilled.

24 NPA, “End of Mission Report: CTA-HMA Inputs”, undated but 2018.

25 Article 7 Report (covering 2019, 2020, and 2021), p. 9.

26 Article 5 deadline Extension Request, 28 May 2020, p. 8.

27 Article 7 Report (covering 2019, 2020, and 2021), p. 9; and Preliminary Observations, Committee on Article 5 Implementation, APMBBC Intersessional Meeting, Geneva 20-22 June 2022.

28 Article 7 Report (covering 2019, 2020 and 2021), p. 9.

29 Article 5 deadline Extension Request, 28 May 2020, pp. 22–24.

30 Article 7 Report (covering 2019, 2020, and 2021), p. 9.

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

**ANTI-PERSONNEL (AP)
MINE CONTAMINATION:
EXTENT UNKNOWN**

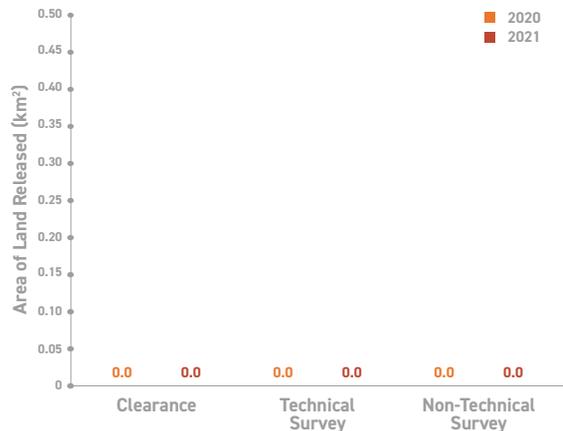
AP MINE
CLEARANCE IN 2021

0M²

AP MINES
DESTROYED IN 2021

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Nigeria has extended its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline to the end of 2025 but again in 2021 made little or no progress towards meeting it. Nigeria's compliance with the APMBC is in serious doubt.

RECOMMENDATIONS FOR ACTION

- Nigeria should establish a national mine action centre as a matter of urgency to provide direction, coordination, and momentum to the mine action sector.
- Nigeria should develop a national mine strategy in consultation with implementing partners.
- Nigeria should establish a central mine action database providing humanitarian agencies timely access to comprehensive data on the location, type, and extent of mine contamination and items cleared by security forces.
- Nigeria should, as a matter of urgent priority, build national and regional capacities to enable mine clearance to be conducted.
- Nigeria's Inter-Ministerial Committee on the Convention should expedite the preparation and official adoption of national mine action standards.
- Nigeria should submit annual Article 7 reports providing comprehensive, disaggregated data and details on the progress of mine action in compliance with its obligations under the Convention (including with respect to anti-personnel mines of an improvised nature) and international law more broadly.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	3	Not scored	An explosive ordnance incident map compiled by national and international organisations outlines the area of conflict while community liaison surveys provide more detailed information on particular locations. Significant areas of contamination are suspected but insecurity has severely restricted access and systematic field operations, limiting non-technical survey to community assessments of the presence of explosive ordnance.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	Not scored	Nigeria does not have a functioning mine action programme. It established an inter-ministerial committee in 2019 mandated to develop a mine action programme, set up a national mine action authority, develop a national strategy, and draft national mine action standards, but has yet to deliver these objectives.
GENDER AND DIVERSITY (10% of overall score)	3	Not scored	Nigeria has not articulated any policy on gender and diversity. The United Nations (UN) supports age- and gender-appropriate policies and Danish Refugee Council (DRC) and Mines Advisory Group (MAG) employ women and speakers of minority languages.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	3	Not scored	Nigeria does not have a national mine action database but has proposed to establish one within 2022. The UN Mine Action Service (UNMAS) operates an Information Management System for Mine Action (IMSMA) database collating and inputting data on explosive incidents provided mainly by MAG and DRC and community reports of contamination. Nigeria has not submitted an Article 7 report since 2012.
PLANNING AND TASKING (10% of overall score)	4	Not scored	Nigeria's Article 5 deadline extension request calls for development of a national mine action strategy "within 2022" but there has been little visible progress prompting questions about the level of priority national authorities accord this sector. In the meantime, humanitarian organisations task themselves but coordinate activities with a mine action sub-working group co-chaired by the State Ministry of Reconstruction, Rehabilitation and Resettlement and by UNMAS.
LAND RELEASE SYSTEM (20% of overall score)	2	Not scored	Nigeria has no national mine action standards in place. It planned to develop them in 2021–22 but explosive ordnance risk education (EORE) standards drafted by UNMAS in consultation with operators had not received official endorsement as of June 2022. UNMAS was in the process of drafting standards for non-technical survey and victim assistance. International organisations meantime follow their own technical standards and standard operating procedures.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	1	Not scored	Only Nigerian military and police conduct clearance of explosive ordnance but there is no record of outcomes. Nigeria has said the Police Explosive Ordnance Disposal (EOD) Unit's competencies do not meet technical requirements and is calling for capacity building and access to more modern equipment.
Average Score	2.6	Not scored	Overall Programme Performance: VERY POOR

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority or mine action centre

NATIONAL OPERATORS

- Army
- Police
- Royal Heritage Foundation

INTERNATIONAL OPERATORS

- Danish Refugee Council Humanitarian and Disarmament and Peacebuilding Sector (DRC) (formerly Danish Demining Group, DDG)
- Mines Advisory Group (MAG)

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

Nigeria experiences heavy casualties from widespread use of improvised explosive devices (IEDs), particularly mines of an improvised nature, by Boko Haram and other jihadist groups in the north eastern states of Adamawa, Borno, and Yobe. The extent of contamination is not known.¹

Deteriorating security has continued to prevent systematic survey of contamination and the nature of the insurgency has not yet allowed clearly delineated areas of contamination to be identified. Instead, the scale of the mine threat is measured in the number of explosive incidents rather than the size of suspected or confirmed hazardous areas (CHAs/SHAs) (see Table 1). However, the United Nations Mine Action Service (UNMAS) has reported that "it is suspected that significant contamination exists".²

Nigeria reports improvised mines and explosive devices affect a total of 34 Local Government Areas (LGAs) in three states, including 18 of 27 LGAs in Borno, the worst-affected state; 5 of 21 LGAs in Adamawa state, and 11 of 17 LGAs in

Yobe.³ However, use of mines or improvised mines by criminal elements has been reported in other states, including the central Niger state.⁴

The main threat is posed by improvised mines on roads. UNMAS recorded 255 incidents of IEDs placed on roads in 2021 (see Table 1), an increase of 37% and more than double the number two years ago. Another 220 explosive incidents were recorded in the first three months of 2022.⁵ UNMAS determined that more than 100 of the 117 devices placed on roads in 2019 were victim-activated, including by pressure plates. The few pressure-plate devices that were inspected were capable of being detonated by the weight of a person, meaning that they are covered by the APMBC.⁶ Insecurity has hindered survey but available data indicated the types of device used remained largely unchanged in 2021⁷ and the overwhelming majority of devices were mines of an improvised nature.⁸

Table 1: Explosive ordnance incidents in north-east Nigeria (2017–21)⁹

Year	Road-emplaced IED	Body-borne IED	Vehicle-borne IED	Other IED	Explosive remnants of war (ERW)	Total incidents
2017	165	211	4	1	0	381
2018	149	99	10	0	9	267
2019	117	32	4	4	32	189
2020	186	23	5	2	31	247
2021	255	6	10	23	17	311

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Nigeria announced in 2020 that it planned to set up a national mine action programme, but as at September 2022 none had yet been established. Nigeria set up an Inter-Ministerial Committee on the APMBC in September 2019 to lead the process of setting up a national mine action centre (NMAC).¹⁰ This included the Ministries of Defence, Foreign Affairs, and Humanitarian Affairs; the Office of Disaster Management and Social Development; the National Emergency Management Agency; the North-east Development Commission; and the National Commission for Refugees, Migrants and IDPs. In 2021, Nigeria requested support from UNMAS in creating the NMAC¹¹ and said it would expand the Inter-Ministerial Committee to include the Police, National Security and Civil Defence Corps (NSCDC), and the Federal Ministry of Education.¹²

1 2021 Article 5 deadline extension request, p. 4.

2 Email from Harshi Gunawardana, Programme and Communications Officer, UNMAS, 7 May 2021.

3 2021 Article 5 deadline extension request, p. 24.

4 See, e.g., "Landmine kills four security personnel in central Nigeria," *Agence France Presse*, 21 February 2022.

5 Email from Gilles Delecourt, Senior Programme Manager, UNMAS, 22 May 2022.

6 Emails from Lionel Pechera, Programme Coordinator, UNMAS, Nigeria, 11 March and 20 July 2020.

7 Email from Gilles Delecourt, UNMAS, 22 May 2022.

8 Email from Pierluigi Candier, Country Director, MAG, 2 June 2022.

9 Emails from Harshi Gunawardana, UNMAS, 7 May 2021; and Gilles Delecourt, UNMAS, 22 May 2022; and 2021 Article 5 deadline extension request, p. 11.

10 Statement of Nigeria, 19th Meeting of States Parties, 15 November 2021.

11 Email from Gilles Delecourt, UNMAS, 22 May 2022.

12 2021 Article 5 deadline Extension Request, p. 15.

ENVIRONMENTAL POLICIES AND ACTION

It is not known whether Nigeria has a national mine action standard on environmental management and/or a policy on environmental management. It is also not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of anti-personnel mines in order to minimise potential harm from clearance.

GENDER AND DIVERSITY

Nigeria, lacking a mine action programme, has not taken up gender in the context of mine action.

The UN humanitarian response programme for 2019–21 unveiled in December 2018 said all groups living in, or potentially returning to, areas suspected or known to be contaminated with mines or other explosive devices would be involved in all stages of mine action programming. It called for “age- and gender-appropriate risk education activities to minimize loss of life and injuries as a result of explosive remnants of war”, targeting 200,000 girls, 178,000 boys, 51,000 women, and 45,000 men.¹³

UNMAS commissioned a gender baseline assessment for the Nigeria Police Force and the NSCDC in north-east Nigeria to identify ways of strengthening the role of women and the explosive ordnance disposal capabilities in these bodies.¹⁴ The assessment, which was conducted between August 2020 and February 2021, found the security services had not embraced gender mainstreaming. It called for inclusion of more women officers, the amending of obsolete recruitment practices and repeal of discriminatory regulations, and said UNMAS should engage with both organisations on the need for gender parity.¹⁵

Danish Refugee Council Humanitarian and Disarmament and Peacebuilding Sector (DRC, formerly Danish Demining Group (DDG)) employed eight women, including a team leader, as non-technical survey/explosive ordnance risk education (EORE) staff in 2021, making up one third of their non-technical survey/EORE capacity. The number of female employees fell by half in 2022 as one DRC project came to an end. The remaining female staff consisted of a team leader and three non-technical survey/EORE officers.¹⁶

Mines Advisory Group (MAG)'s staff of 34 included 18 women in 2021, including two in managerial or supervisory positions, one woman in a support role, and 15 women in field roles, mainly community liaison. Before any risk education or other activities, community liaison teams consult community elders and other key actors to identify high risk groups, whether they are men and boys collecting scrap metal or women and girls who collect water and firewood. All staff participated in a week-long workshop with MAG's Gender Diversity and Inclusion adviser in October 2021 aimed at developing an action plan on gender and diversity inclusion for implementation in 2022.¹⁷

INFORMATION MANAGEMENT AND REPORTING

Nigeria does not have a national information management system or database recording hazardous areas or explosive incidents. UNMAS manages an Information Management System for Mine Action (IMSMA) Core database that collects data from mine action stakeholders and humanitarian organisations on explosive incidents, the results of surveys, and risk education beneficiary data.¹⁸ The planned NMAC would be the custodian of the national database for mine action, responsible for maintaining it accurately and keeping it up-to-date, and UNMAS plans to train national authorities on information management when it is established.¹⁹

In the meantime, operators say there is a need for standardised data collection. Operators say collection of risk education data is standardised and they use a form for collecting victim data that was updated by MAG in 2020 and endorsed by UNMAS, but data sharing between stakeholders remains reportedly weak.²⁰ DRC said it recorded all activity in IMSMA-compatible format which was shared with UNMAS.²¹

As of writing, Nigeria had last submitted an Article 7 report almost 10 years ago at the end of 2012. It is required by the APMB to submit a report annually.

13 UN, “Humanitarian Response Strategy January 2019 – December 2021”, December 2018, pp. 43 and 48.

14 Email from Gilles Delecourt, UNMAS, 22 May 2022.

15 UNMAS, “Summary of Gender Baseline Assessment”, May 2021.

16 Email from Goran Knezevic, Mine Action Manager, DRC, 23 September 2022.

17 Email from Pierluigi Candier, MAG, 2 June 2022.

18 Emails from Harshi Gunawardana, UNMAS, 7 May 2021; and John Sorbo, DRC, 3 July 2021.

19 Email from Gilles Delecourt, UNMAS, 22 May 2022.

20 Email from Pierluigi Candier, MAG, 2 June 2022.

21 Email from Goran Knezevic, DRC, 23 September 2022.

PLANNING AND TASKING

Nigeria requested an Article 5 deadline extension in May 2021 that set out a number of broad aims:

- establish a National Mine Action Centre to address the explosive ordnance threat
- develop National Mine Action Standards
- strengthen the coordination and delivery of risk education
- continue to collect information on the threat posed by anti-personnel mines; and
- develop a national mine action strategy and a work plan for implementation.²²

The request indicates that the establishment of a NMAC, development of national standards, and a study visit to another mine action programme were all planned for 2021 to 2022. The request stated that a national mine action strategy would be developed “within 2022” when Nigeria also proposed to convene a strategy and prioritisation workshop with participation by the inter-ministerial committee, the Nigerian Police explosive ordnance disposal (EOD) unit,

UNMAS, national and international non-governmental organisations (NGOs), and civil society organisations.²³ But stakeholders said that as of early 2022 they had detected little movement towards implementation, calling into serious question the degree of national commitment to this programme.

In the absence of a national mine action plan or strategy, Nigeria’s mine action sector lacks any coordinated tasking process or any criteria for prioritising survey. MAG reported that its teams carry out focus group discussions with communities which have travelled through areas that are suspected to be contaminated with explosive ordnance. These are based on analysis of International NGO Safety Organisation reports of accidents and incidents as well as information collected from risk education sessions and community liaison.²⁴ DRC said it conducted non-technical survey activities on the basis of a combination of internal desk assessments, recommendations from UNMAS, and referrals of possible explosive ordnance locations by other agencies.²⁵

STANDARDS AND LAND RELEASE EFFICIENCY

Nigeria does not have national mine action standards (NMAS) though in 2021 it had identified development of NMAS as an objective in its Article 5 extension request that it expected to address in 2021 and 2022.²⁶ The absence of a national mine action authority, however, has slowed progress. UNMAS drafted national standards for risk education in consultation with MAG and DRC in 2021 but as of August 2022 they had not received official endorsement. In 2022, UNMAS drafted national standards for non-technical survey and discussed victim assistance standards with members of the Mine Action sub-working group.²⁷

Nigeria’s extension request said it would release land through non-technical and technical survey, by clearance and by cancellation, referring to a process that apparently would be applied before survey. The process draws attention to a concern that communities may exaggerate the extent of contamination and their reports will be subjected to “an integrity test”. If they fail the test, the area would be cancelled for purposes of survey. More controversially, the request says such areas would also be declared safe.²⁸ The comment underscores the challenge Nigeria faces building up credible baseline contamination data at a time when access by trained survey teams is severely curtailed by insecurity.

Nigeria’s 2021 Article 5 deadline extension request noted the need for a comprehensive programme of capacity building for its security services and national commercial operators. It said the capacity of the Nigeria Police Force (EOD Unit) was “far from adequate to address our current needs” and called for training and supply of modern equipment.²⁹

OPERATORS AND OPERATIONAL TOOLS

All clearance of explosive ordnance is conducted by the Nigerian army and police primarily for military purposes and with support from paramilitary groups.³⁰ The EOD and improvised explosive device disposal (IEDD) capacity of the Nigerian security forces is not known. After conducting a needs assessment with police commanders in Borno and Adamawa states, UNMAS organised an IEDD course for security forces in Maiduguri in October 2020 that provided training for 26 operators.³¹ In 2021, UNMAS also provided IEDD training for 20 members of the Nigeria Police Force’s EOD units, including two women.³² UNMAS has previously delivered training in non-technical survey and risk education to 14 members of the Youths Awaken Foundation, a national NGO.³³

22 2021 Article 5 deadline Extension Request, p. 8.

23 Ibid., p. 32.

24 Email from Pierluigi Candier, MAG, 2 June 2022.

25 Email from Goran Knezevic, DRC, 23 September 2022.

26 2021 Article 5 deadline Extension Request, p. 33.

27 Emails from Gilles Delecourt, UNMAS, 22 May 2022, and Pierluigi Candier, MAG, 2 June 2022.

28 2021 Article 5 deadline Extension Request, p. 25.

29 Ibid., p. 31.

30 Emails from Lionel Pechera, UNMAS, 11 March 2020; and Gilles Delecourt, UNMAS, 22 May 2022.

31 Email from Harshi Gunawardana, UNMAS, 7 May 2021.

32 Email from Gilles Delecourt, UNMAS, 22 May 2022.

33 Email from Harshi Gunawardana, UNMAS, 17 August 2021.

MAG started working in Nigeria in 2016, focusing at that time on arms management and destruction and has been engaged in mine action in the country since 2017. In 2021, its capacity was 31 staff (3 international and 28 national personnel), working from a head office in Abuja and a field office in the Borno state's capital, Maiduguri. MAG operated with nine EORE/community liaison teams who worked in 12 LGAs across Nigeria's most affected states in the north-east. There were eight LGAs in Borno state, and two LGAs in each of Adamawa and Yobe states. MAG also worked with a national implementing partner, the Royal Heritage Foundation.³⁴

DRC's mine action programme employed a total staff of 28 in 2021, of which two were internationals. The mine action component included two technical managers and

four non-technical survey/community liaison teams with 24 personnel working in Adamawa, Borno, and Yobe states. One of DRC's main projects funded by the United Kingdom Foreign, Commonwealth and Development Office (FCDO) ended in December 2021 and the mine action team reduced in 2022 to one international and fifteen national staff. It also ceased working in Yobe state. DRC puts emphasis on training community focal points (CFPs) and engaged with some 70 CFPs in the three states, building community awareness of explosive threats and seeking to increase community reporting on explosive incidents and contamination. DRC has also provided EOD Levels 1 and 2 training for the Nigerian police.³⁵

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

SURVEY IN 2021

Survey activity in Nigeria is severely restricted by the continuing conflict which prevents access and systematic field investigation of affected areas and limits non-technical survey to community assessments of the location of explosive ordnance. Operators work on an ad hoc basis responding to community reports of the presence of explosive items when security makes it possible to visit the area.³⁶ UNMAS coordinated 125 non-technical community surveys in 2021 which were conducted by implementing partners in 14 LGAs of Adamawa, Borno, and Yobe states and resulted in the reporting of 35 items of explosive ordnance, including aircraft bombs.³⁷

DRC said it conducted more than 120 non-technical surveys in 2021 and also identified 39 EOD spot tasks which it communicated to Nigerian security forces for action.³⁸ MAG reported supporting five non-technical survey teams, which were implemented by its partner, the Royal Heritage Foundation. MAG also conducted 180 remote community-based assessments (RCBA) in 2021 using this information to build understanding of the location and types of explosive ordnance affecting the civilian population. This information also informs risk education priorities and was used to support the Inter-Ministerial Committee on the APMBC in preparing Nigeria's 2021 Article 5 deadline extension request.³⁹

CLEARANCE IN 2021

Clearance is conducted exclusively by Nigerian security forces and paramilitary groups. All explosive ordnance items identified in the course of surveys and community assessments are reported to national authorities for removal but there is no record of items cleared in the course of EOD and IEDD operations.

ARTICLE 5 DEADLINE AND COMPLIANCE



³⁴ Email from Pierluigi Candier, MAG, 2 June 2022.

³⁵ Emails from John Sorbo, DRC, 3 July 2021; and Goran Knezevic, DRC, 23 September 2022.

³⁶ Email from Pierluigi Candier, MAG, 2 June 2022.

³⁷ Email from Gilles Delecourt, UNMAS, 22 May 2022.

³⁸ Email from Goran Knezevic, DRC, 23 September 2022.

³⁹ Email from Pierluigi Candier, MAG, 2 June 2022.

Under Article 5 of the APMBC (and in accordance with the four-year extension granted by States Parties in 2021), Nigeria is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. It is unlikely to meet this deadline.

Nigeria declared it had cleared all known anti-personnel mines from its territory in November 2011 at the Eleventh Meeting of States Parties, three months in advance of its original Article 5 deadline of 1 March 2012.⁴⁰

In November 2020, prompted by the growth of jihadist insurgency making extensive use of improvised mines in northern states, Nigeria requested and received a one-year extension until 31 December 2021 in which to prepare a detailed assessment of contamination and propose steps to mitigate it. UNMAS, in consultation with MAG, DRC, and Youths Awaken Foundation, a national NGO, prepared an initial draft which was first reviewed by the APMBC Implementation Support Unit and then forwarded to the

Ministry of Defence to provide government input.⁴¹ In May 2021, it submitted a request for a four-year extension until 31 December 2025, which was granted at the Nineteenth Meeting of States Parties.

Nigeria expressed optimism that the security challenges Nigeria faces in the north-east would abate enabling the start of humanitarian demining. However, it said it would apply for another extension if the insecurity persisted.⁴² Indeed, the extension request acknowledged that insecurity had prevented comprehensive survey or a determination of the extent of contamination thus far. Nigeria proposed to use the additional time to create the framework and institutions for a national mine action programme, including a national mine action authority, national mine action standards and a mine action strategy.⁴³ As of June 2022, none of these proposed actions had taken place. The request did not provide any estimate of costs of a mine action programme, plans for resource mobilisation, or the results of engagement with potential donors.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Nigeria does not have plans in place to address residual contamination once its Article 5 obligations have been fulfilled.

40 Statement of Nigeria, 11th Meeting of States Parties, Phnom Penh, 29 November 2011.

41 Email from Harshi Gunawardana, UNMAS, 7 May 2021.

42 Statement of Nigeria, 19th Meeting of States Parties, 15 November 2021.

43 2021 Article 5 deadline Extension Request, p. 8.

ARTICLE 5 DEADLINE: 1 FEBRUARY 2025
ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

NATIONAL ESTIMATE

0.5KM²

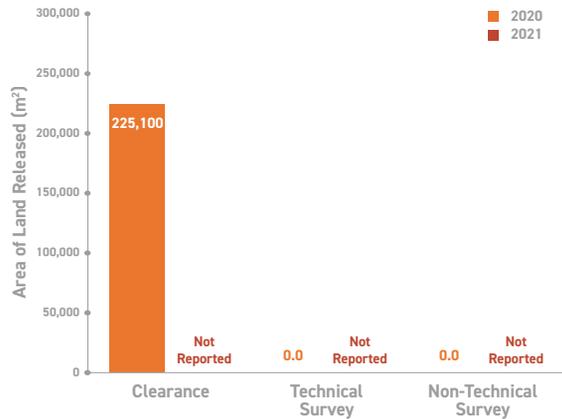
AP MINE CLEARANCE IN 2021

NOT REPORTED

AP MINES DESTROYED IN 2021

NOT REPORTED

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **HIGH**

KEY DEVELOPMENTS

Oman still plans to complete release of all areas ahead of its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline of 1 February 2025. But progress in 2021 had not been reported as of writing, with Oman still to submit its Article 7 report late as at September 2022.

RECOMMENDATIONS FOR ACTION

- Oman should establish a mine action centre to oversee its national programme as soon as possible.
- Oman should ensure the release of all mined areas as soon as possible but not later than its February 2025 Article 5 deadline.
- Oman should ensure it conducts land release operations according to international standards, applying non-technical and technical survey to confirm contamination prior to clearance whenever possible.
- Oman should integrate a gender and diversity plan in its mine action programme.
- Oman should ensure timely submission of its Article 7 reports, and report in a manner consistent with the International Mine Action Standards (IMAS).

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	Oman does not have any confirmed mined areas, but does have suspected contamination resulting from mine use during the 1960s and 1970s. Oman has reported earlier clearance of most of the mined areas but is now "re-clearing" certain areas to make sure they are free of anti-personnel mines.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	All clearance is conducted by the Executive Operational Unit of the Ministry of Defence (MoD). Oman does not have a mine action centre but its mine action programme is fully nationally owned.
GENDER AND DIVERSITY (10% of overall score)	2	2	Oman's statements on mine action make no reference to the issue of gender and diversity. In 2021, women were not represented in Oman's mine action programme.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	6	7	Oman does not have an integrated database for mine action data but relies instead on monthly reports shared by the demining army engineers. This data is then mapped and recorded digitally and on paper by the Executive Operational Unit. Oman submits annual Article 7 transparency reports detailing its progress in re-clearance. As at September 2022, however, Oman had yet to submit its Article 7 report covering 2021.
PLANNING AND TASKING (10% of overall score)	6	6	In its Article 7 transparency report submitted in 2020, Oman included a work plan to release all remaining suspected mined areas before its 2025 Article 5 deadline. According to the plan, clearance is expected to conclude by April 2024, leaving a buffer of nine months to accommodate delays due to adverse weather or unexpected events.
LAND RELEASE SYSTEM (20% of overall score)	4	4	The standards to which Oman conducts its land release are not known, nor is their compliance to the International Mine Action Standards (IMAS). It is also not known if Oman conducts evidence-based technical or non-technical survey prior to clearance, to better target its efforts.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	7	As at the end of 2020, Oman had completed 68% of the total area identified for re-clearance and was on track to complete re-clearance by its February 2025 Article 5 deadline. The area of land released in 2021, if any, had yet to be reported as of writing.
Average Score	5.8	5.9	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority or mine action centre

NATIONAL OPERATORS

- Royal Army of Oman

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Oman is suspected to be contaminated by mines, though the precise location and extent of any residual threat is not known. In its initial Article 7 report, submitted in 2015, Oman declared that no areas in the Sultanate were confirmed as mined, but reported "many" suspected mined areas in the south, particularly in the Dhofar region.¹ In a statement to the APMBC Intersessional Meetings in Geneva in June 2018, and in its Article 7 reports submitted in 2020 and 2021, Oman repeated there were no confirmed

¹ Initial Article 7 Report, 2015, pp. 4–5.

mined areas and no record of any mine casualties for more than 20 years, but referenced the previously mentioned suspected mined areas requiring “re-search”/re-clearance in order to confirm they were free of anti-personnel mines.²

According to Oman’s 2015 Article 7 report, during the mid 1960s to mid 1970s, the presence of rebel movements in Dhofar led to “vast” areas being affected by anti-personnel and anti-vehicle mines. There was small-scale use of mines by militants without maps or records of where mines were laid. Government forces reported clearing an area of contamination they had laid immediately following the end of military actions in 1976 and the Armed Sultan’s Engineering Unit Forces initiated clearance of the areas suspected to have been mined by the militants.³

However, Oman has reported that it is impossible to be sure that the areas were fully cleared and therefore re-clearing certain areas is required to ensure no anti-personnel mines remain.⁴ This is for three reasons: the size of the region

(about 99,000km²); the lack of maps or marking; and the terrain (which includes mountains and valleys), with many mined areas located on steep slopes. In addition, rain over the years may have scattered any residual mines.⁵

In 2001, it had been reported that the Royal Army of Oman had mapped seven zones of suspected mined areas based on historical records of battlefield areas, unit positions, and mine incident reports.⁶

As at the end of 2020, Oman reported a total area of 0.5km² across seven suspected hazardous areas (SHAs) as potentially contaminated with anti-personnel mines and had set out on a plan to re-clear them between February 2021 and April 2024.⁷ As at September 2022, the amount of mined area as at the end of 2021 had still to be reported by Oman. It is not clear whether areas Oman describes as “potentially contaminated” can be technically considered as SHAs as per the definition understood by the mine action sector.

Table 1: Anti-personnel mined area by area (at end 2020)⁸

Area	SHAs	Area (m ²)	Total area (m ²)
East of Doukah valley	1	52,800	52,800
Line of Demafend	1	145,200	145,200
Tadhou Wadi Bouthaina	1	52,800	52,800
Sarfeit, Seik valley	1	105,600	105,600
Ain Gharnout, Afeit, Aswad valley	1	52,800	52,800
Tawi Atir	1	52,800	52,800
Thent valley	1	52,800	52,800
Totals	7	514,800	514,800

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Oman’s mine action programme is fully nationally owned.⁹ Clearance is performed by the Executive Operational Unit of the national Army engineers.¹⁰ Oman reports its national clearance plan was elaborated in consultation with the administrative regional units.¹¹

Oman stated in June 2018 that it began implementing a national programme in 2017 and was planning to set up a national mine action centre and would then appeal for supply of equipment but it did not specify when this would occur.¹² As at June 2021, however, Oman had no plans to establish a mine action centre, stating that its existing national capacities could meet the demand and maintain the ongoing clearance operations without need for a coordinating body.¹³

2 Statement of Oman, Intersessional Meetings, Geneva, 7–8 June 2018; and Article 7 Reports (covering 2018 and 2019, respectively).

3 Initial Article 7 Report, submitted in 2015.

4 Article 7 Reports submitted in 2015, in 2020 (covering 2019), and in 2021 (covering 2020).

5 Initial Article 7 Report, 2015, pp. 4–5.

6 “Humanitarian Demining”, *Journal of Mine Action*, 2001, p. 49.

7 Article 7 Report (covering 2020), p. 14.

8 Ibid.

9 Email from Oman Ministry of Defence (MoD), 23 June 2021.

10 Article 7 Report (covering 2018).

11 Article 7 Report (covering 2017), p. 2.

12 Statement of Oman, Intersessional Meetings, Geneva, 7–8 June 2018.

13 Email from Oman MoD, 23 June 2021.

ENVIRONMENTAL POLICIES AND ACTION

Oman is not thought to have an environmental management plan specific to mine action, but the Ministry of Defence (MoD) reported in April 2022 that its clearance operations follow certain environmental standards that aim to preserve the ecosystems, including open pastures, and protect water sources and wildlife.¹⁴

GENDER AND DIVERSITY

Oman reports that its national programmes, including that of mine action, follow clear guidelines that consider the needs of different groups, including those of different genders.¹⁵ Women, however, did not occupy supervisory, administrative, or operational positions in Oman's mine action programme in 2021.¹⁶ Women have, though, been permitted to serve in the Oman Army for a decade.¹⁷

INFORMATION MANAGEMENT AND REPORTING

Oman does not have a national information management database, but the Executive Operational Unit generates monthly operational reports. Maps of the cleared areas are then produced and retained both digitally and on paper.¹⁸

After becoming a State Party to the APMB in 2015, Oman has submitted annual Article 7 reports covering progress in the previous calendar year. The report for 2020 disaggregated data key data on contamination and clearance, and updated its work plan. Oman submitted its Article 7 report for 2020 two months before the treaty deadline of end April 2021. As at September 2022, Oman had yet to submit its Article 7 report covering 2021.

PLANNING AND TASKING

In its Article 7 report submitted in February 2021, Oman provided a work plan that foresees the release of all remaining suspected mined area before its Article 5 deadline in 2025.¹⁹ According to the compilation of data provided in the annual Article 7 reports for 2018–20, Oman has implemented 68% of its planned mine re-clearance and expected to complete land release by April 2024, leaving a buffer of nine months ahead of its February 2025 deadline.²⁰

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Oman reports the following standards are applied during clearance: pre-clearance field survey based on maps and available records; determination and provision of administrative and medical requirements; implementation of operational safety measures; and preservation of wildlife and the environment.²¹ It is not clear whether these standards are documented and acted upon as national mine action standards (NMAS), as the term is generally understood in mine action, or to which extent they accord with the International Mine Action Standards (IMAS). Oman reported that mined areas were earlier cleared "in accordance with the resources available".²²

In 2020, as in the previous three years, no anti-personnel mines were discovered during re-clearance. Oman said the absence of anti-personnel mines "confirms the areas had previously been cleared".²³ Oman reports that its current operational procedures are efficient, follow the established work plan, and that they are reviewed and updated regularly.²⁴

¹⁴ Email from Oman MoD, 3 April 2022.

¹⁵ Email from Oman MoD, 23 June 2021.

¹⁶ Email from Oman MoD, 3 April 2022.

¹⁷ "Women officers set to join army in Oman", *Khaleej Times*, 21 December 2011, at: <http://bit.ly/3dYcDaH>.

¹⁸ Emails from Oman MoD, 23 June 2021 and 3 April 2022.

¹⁹ Article 7 Report (covering 2020), p. 14.

²⁰ Article 7 Report (covering 2020).

²¹ Email from Oman MoD, 23 June 2021.

²² Article 7 Report (covering 2018).

²³ Article 7 Report (covering 2019).

²⁴ Email from Oman MoD, 23 June 2021.

OPERATORS AND OPERATIONAL TOOLS

The Executive Operational Unit of Oman's army engineers is solely responsible for mine/explosive remnants of war (ERW) clearance.²⁵ In 2021, as per the previous year, the Unit comprised 83 deminers. Oman expected to maintain the same capacity throughout 2022.²⁶

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

As at September 2022, Oman was yet to report on its land release outputs for 2021.

In 2020, Oman re-cleared a total of 225,100m² in three areas: Arqoum, Maghseel, and Taqa & Khortaqa, all located in the south-western Dhofar governorate. No anti-personnel mines or ERW were found during clearance.²⁷

Clearance output in 2020 was a significant increase compared to the 130,100m² of mined area cleared between February and December 2019.²⁸ This increase is attributed to the development of the Executive Operational Unit through acquiring additional and more modern mine detection and inspection equipment, personal protective equipment (PPE), and transportation vehicles.²⁹

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC, Oman is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 February 2025. It is on track to do so.

In its Article 7 report submitted in 2020, Oman presented a plan to complete clearance of remaining suspected mined areas by its Article 5 deadline.³⁰ According to the compilation of data provided in the regular Article 7 reports covering 2018–20, Oman expects to complete release of all mined areas by April 2024.³¹

Oman has cited the challenges it faces in locating and clearing mines in large and remote areas of desert in addition to the tropical cyclones that hit the south of the country in 2018.³²

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Oman's mine action programme is fully nationally owned and the Executive Operational Unit has the capacity to address any previously unknown mined areas discovered following completion (i.e. residual contamination).³³

25 Ibid.

26 Email from Oman MoD, 3 April 2022.

27 Article 7 Report (covering 2020), pp. 8–13.

28 Article 7 Report (covering 2019).

29 Email from Oman MoD, 23 June 2021.

30 Article 7 Report (covering 2020), p. 14.

31 Ibid.

32 Statement of Oman, 17th Meeting of States Parties, Geneva, 29 November 2018.

33 Email from Oman MoD, 23 June 2021.

ARTICLE 5 DEADLINE: 1 JUNE 2028
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

PROBABLY LESS THAN 5 KM²

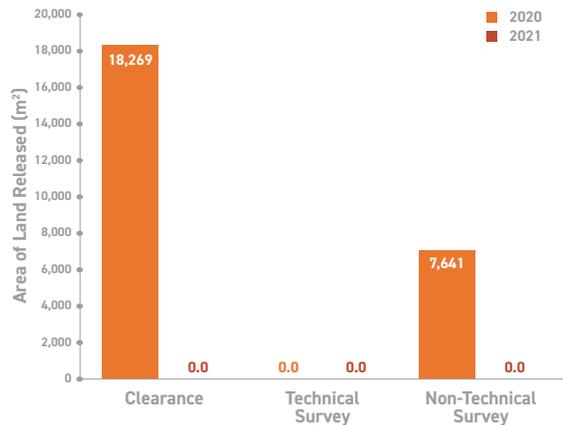
AP MINE CLEARANCE IN 2021

0 M²

AP MINES DESTROYED IN 2021

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

All mined areas in Palestine are located in territory under Israeli control. To date, Israel has not authorised the Palestinian Mine Action Centre (PMAC) to conduct demining. The HALO Trust's clearance activities in the West Bank were suspended at the end of 2020, primarily because of a lack of funding, and no land was released in 2021. However, HALO Trust secured funding to restart clearance in the West Bank in 2022 where it planned to clear three priority minefields by the end of 2023.

RECOMMENDATIONS FOR ACTION

- Israel should allow survey and clearance of all mined areas on Palestinian territory to proceed as a matter of urgency.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Higher Committee for Mine Action
- Palestine Mine Action Centre (PMAC)

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- The HALO Trust

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

In its initial Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report, submitted in November 2018, Palestine reported 69 areas suspected to contain anti-personnel mines on the border with Jordan, covering a total area of 18.51km². All of the mined areas were said to be under Israeli control.¹ Palestine said it was not in a position to know whether further mined areas are located in East Jerusalem or in other areas of Palestine under Israeli control, including in the region of Israeli settlements or closed military zones.²

The Israeli Defence Forces (IDF) informed The HALO Trust in 2012 about the presence of 90 minefields in the West Bank, 13 of which were laid by the Jordanian military in 1948–67, while the remaining 77 were laid by the Israeli military along the Jordan River after the 1967 war. The minefields are located east of the security fence, inside a military buffer zone, and do not carry immediate threat to civilians. All the minefields, including those laid by the Jordanian military, are under Israeli military control.³ There are no known mined areas in the Gaza strip.⁴

The HALO Trust conducts clearance operations in Palestine and works under the auspices of both the Israeli National Mine Action Authority (INMAA) and PMAC. Clearance operations must be coordinated with the Israeli authorities and PMAC, and, under Israeli law, must be quality assured by an Israeli company.⁵

In 2019, HALO Trust was made aware of three other anti-personnel mined areas in the Jordan Valley, namely at Shademot Mehola (65,000m²) and Sokot (228,000m²), containing a mix of anti-personnel and anti-vehicle mines; and at Taysir (5,500m²), which contains only anti-vehicle mines. Sokot is an Israeli-laid minefield while the other two minefields were laid by Jordanian forces.⁶ In 2020, HALO discussed the possibility of surveying these three minefields with both Palestinian and Israeli authorities. However, given the current political sensitivity over the Jordan Valley, these minefields had to be put on hold until the INMAA or the IDF decide to clear the areas themselves.⁷

Clearance of the Jordanian-laid minefields in Tulkarem and Jenin is not funded by either the Palestinian or the Israeli governments and HALO has faced significant challenges raising funds for their clearance from donor countries.⁸ However, having secured funding from The Netherlands and the US Department of State, The HALO Trust planned to complete clearance at the site in Tulkarem in 2022⁹ and will clear the remaining two sites in Jenin by the end of 2023. The funding may also be used to clear land in the Jordan Valley, if the donors agree.¹⁰

As at end of 2021, there was nearly 0.26km² of confirmed mined area (excluding the Jordan Valley) across three minefields in Palestine and two minefields in no-man's-land between the West Bank and Israel (see Table 1).¹¹ All five minefields had been laid by the Jordanian army.

Table 1: Mined area (excluding the Jordan Valley) (at end 2021)¹²

Governorate	Minefield Task	Contamination	CHAs	Area (m ²)
Jenin	Qabatiya	AV and AP mines	1	8,212
	Yabad	AV and AP mines	1	40,032
Tulkarem	Nur a-Shams	AV and AP mines	1	24,100
Ramallah	No Man's Land Yalo	AV and AP mines	1	104,226
	No Man's Land - Canada Park	AV and AP mines	1	85,708
Totals			5	262,278

CHAs = Confirmed hazardous areas AV = Anti-vehicle AP = Anti-personnel

1 Palestine Initial Article 7 Report, dated 26 November 2018, Form D and Annex 2.

2 Ibid., Form D.

3 Emails from Tom Meredith, Desk Officer, HALO Trust, 24 June and 23 October 2015; and Sonia Pezier, Junior Programme Officer, United Nations Mine Action Service (UNMAS), 14 April 2015; and Ronen Shimoni, Programme Manager, HALO Trust, 13 June 2021.

4 Email from Ronen Shimoni, HALO Trust, 13 June 2021.

5 Email from Soula Kreitem, Programme Support Officer, UNMAS, 30 June 2021.

6 Emails from Ronen Shimoni, HALO Trust, 21 September 2019, 20 April 2020, and 17 May 2022.

7 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

8 Ibid.

9 Email from Ronen Shimoni, HALO Trust, 17 May 2022.

10 Ibid.

11 Emails from Ronen Shimoni, HALO Trust, 23 April 2021 and 17 May 2022.

12 Emails from Maj. Wala Jarrar, External and Internal Relations Officer, PMAC, 13 May 2020 and 15 June 2022; and Ronen Shimoni, HALO Trust, 23 April 2021 and 17 May 2022.

The total extent of anti-personnel mine contamination at the end of 2021 is the same as at the end of the previous year, reflecting the fact that The HALO Trust was unable to perform any clearance in 2021.¹³

Mine action is subject to the 1995 Interim Agreement on the West Bank and the Gaza Strip, commonly known as the Oslo II accord, under which the West Bank is divided into three areas: Area A is under full Palestinian civil and security control; Area B is under full Palestinian civil control and joint Israeli-Palestinian security control; and Area C refers to areas where Israel has full civil and security control.¹⁴ Most

mined areas are located in Area C of the West Bank, along the border with Jordan. Area C covers approximately 60% of the West Bank.¹⁵

Palestine is also contaminated with explosive remnants of war (ERW). According to the United Nations Mine Action Service (UNMAS), PMAC has identified 46 ERW-contaminated areas in the West Bank. These areas are predominantly Israeli military training sites. In 2020, UNMAS also conducted an ERW impact survey in some locations close to these areas to better understand the impact of the contamination on the residents.¹⁶

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

PMAC was established in accordance with Palestinian Minister of Interior decision on 25 March 2012,¹⁷ which appointed a director and created a Higher Committee for Mine Action as an interministerial body, with 27 members representing the ministries of education, foreign affairs, health, intelligence, interior, justice, and military liaison, as well as the police and the Palestinian Red Crescent Society. The Higher Committee for Mine Action, which serves as the national mine action authority, is tasked with developing mine action legislation and allocating resources for the sector.¹⁸

PMAC, which is located in the Ministry of Interior in Ramallah, is mandated to coordinate all aspects of mine action in the West Bank. It receives technical advice from UNMAS.¹⁹ PMAC has established a number of subcommittees to deal with technical issues, risk education, legal affairs, foreign affairs, and health and safety.²⁰

In 2016, Palestine announced it was seeking to enact a mine action law. Palestine was hopeful of completing the legal procedures within a year and then presenting the draft law to the legislative council for endorsement, followed by signature by the President.²¹ Palestine confirmed on 20 April 2022 that it was working to issue a mine action law in accordance with the APMBC, and that preparations were underway.²² As at June 2022, however, the process of developing and adopting the legislation was still ongoing.²³ In November 2017, Palestine's constitutional court ruled that, in an event

of any contradiction, obligations in international conventions, including the APMBC, override national legislation.²⁴

PMAC, which has 11 employees,²⁵ is staffed with personnel from the Palestinian National Security Forces, Civil Police, and Civil Defence. In 2013, 36 PMAC personnel were trained by UNMAS for demining but were not subsequently authorised by Israel to conduct clearance.²⁶ The Civil Police have an explosive ordnance disposal (EOD) unit with 42 personnel in Bethlehem, Hebron, Jenin, Nablus, Qalqilya, Ramallah, and Tulkarem, who conduct rapid response to locate and remove items of unexploded ordnance (UXO). The EOD unit is only permitted to work in Area A of the West Bank.²⁷ All West Bank Police EOD Units are poorly equipped and lack EOD training. Due to poor IT systems none of the EOD teams shares information with PMAC, although this is changing.²⁸

PMAC does not have its own budget, and the Palestinian authority only provides funding for the salaries of PMAC employees and the costs of the PMAC office.²⁹ As at July 2022, Israel had not granted Palestine authorisation to conduct mine clearance operations in the West Bank.

HALO Trust's land release operations of the priority minefields in the West Bank are funded by international donors. Both the INMAA and PMAC support HALO's activities and provide the necessary coordination and involvement.³⁰

13 Email from Ronen Shimoni, HALO Trust, 17 May 2022.

14 Email from Celine Francois, Programme Officer, UNMAS Jerusalem, 5 July 2012.

15 Ibid.; and "UNMAS 2013 Annual Report".

16 Email from Soula Kreitem, UNMAS, 30 June 2021.

17 Minister of Interior Decision No. 69, 25 March 2012.

18 Emails from Celine Francois, UNMAS Jerusalem, 19 July 2012; and Imad Mohareb, Planning Department, PMAC, 31 March 2013.

19 Emails from Celine Francois, UNMAS Jerusalem, 5 and 19 July 2012; and UN, "2012 Portfolio of Mine Action Projects", New York, 2013.

20 Email from the Planning Department, PMAC, 9 May 2016.

21 Statement of Palestine, APMBC 15th Meeting of States Parties, Santiago, 29 November 2016.

22 Preliminary Observations Committee on Cooperative Compliance, Intersessional Meetings, Geneva, 20–22 June 2022, p. 6.

23 Statement of Palestine, Fourth APMBC Review Conference, Oslo, 25 November 2019; and email from Wala Jarrar, PMAC, 17 June 2022.

24 Initial APMBC Article 7 Report, 26 November 2018, Form A.

25 Email from Wala Jarrar, PMAC, 13 May 2021.

26 Initial Article 7 Report, 26 November 2018, Form D.

27 Email from staff member in the Planning Department, PMAC, 26 June 2018.

28 Email from Patrick McCabe, Chief of Operations, UNMAS Palestine, 22 August 2022.

29 Interview with Brig. Osama Abu Hananeh, PMAC, Geneva, 7 February 2019; and email from Wala Jarrar, PMAC, 24 May 2020.

30 Email from Ronen Shimoni, HALO Trust, 24 July 2022.

In September 2020, UNMAS provided a one-year grant to PMAC to enable the Centre to mainstream gender in its explosive ordnance risk education (EORE) activities. The project aimed to train particularly women to provide EORE in at-risk communities in the West Bank.³¹

ENVIRONMENTAL POLICIES AND ACTION

HALO has a policy and a standard operating procedure (SOP) on the environmental impact of clearance operations and mitigation³² and all clearance operations are planned and conducted to minimise any environmental impact. Where impact cannot be avoided, plans are made to mitigate this and to make good any damage caused, for example replacing soil and replanting vegetation. Landowners and communities are included in the development of clearance plans, and mitigation and remedial measures.³³

GENDER AND DIVERSITY

PMAC has said it has a gender policy and implementation plan, that it disaggregates data by sex and age,³⁴ and that qualified women and men have equal access to employment.³⁵ As a result of the one-year grant by UNMAS for the mainstreaming of gender in its EORE activities, the number of women working and volunteering at PMAC increased. Forty per cent of PMAC's employees were women in 2021 (an increase from 27% in 2020), all are in managerial or supervisory positions, and 50% are in operational positions.³⁶ Half of EORE volunteers were women.³⁷

The HALO Trust has a global policy on gender and diversity. When conducting operations, HALO's Palestine programme deploys all-male deminers from Georgia due to "cultural considerations". HALO's Palestinian employees include mechanical operators, medical and support teams. The representation of female employees varies according to the operation. For managerial positions within HALO's West Bank office team there is said to be equal access to employment for qualified women and men.³⁸

UNMAS has a female liaison officer in Ramallah who works with PMAC on a daily basis.³⁹

INFORMATION MANAGEMENT AND REPORTING

PMAC uses an old version of the Information Management System for Mine Action (IMSMA), but is planning to update it.⁴⁰ The Police EOD systems are also old and EOD teams have not been inputting information into IMSMA.⁴¹ UNMAS is investigating the possibility of funding new information management (IM) equipment and training for PMAC staff on IMSMA Core, and there is a donor funding proposal for 2022 and 2023.⁴²

The HALO Trust follows the INMAA's national standards and, when undertaking operations in the West Bank, provides daily and weekly reports as well as completion reports for every task. The information is shared with PMAC weekly, along with completion reports and Geographic Information System (GIS) data for every completed task.⁴³ As a result, all three entities are in possession of HALO Trust survey and clearance data relating to demining operations in the West Bank.

Palestine submitted an initial Article 7 report in November 2018, as required by the APMBC.⁴⁴ As at September 2022, Palestine had not submitted Article 7 reports for 2020 or 2021.

31 Email from Soula Kreitem, UNMAS, 30 June 2021.

32 Email from Ronen Shimoni, HALO Trust, 17 May 2022.

33 Ibid.

34 Email from Wala Jarrar, PMAC, 24 May 2020.

35 Email from Wala Jarrar, PMAC, 12 May 2021.

36 Email from Wala Jarrar, PMAC, 15 June 2022.

37 Ibid.

38 Emails from Ronen Shimoni, HALO Trust, 23 April and 13 June 2021, and 17 May 2022.

39 Email from Patrick McCabe, UNMAS, 17 August 2022.

40 Email from Wala Jarrar, PMAC, 15 June 2022.

41 Email from Patrick McCabe, UNMAS, 17 August 2022.

42 Ibid.

43 Emails from Ronen Shimoni, HALO Trust, 3 Sept 2018 and 18 June 2020.

44 Initial Article 7 Report, 26 November 2018, Form D.

PLANNING AND TASKING

PMAC had a Strategic Plan for 2017–20,⁴⁵ in which the primary objectives are the clearance of the Nur a-Shams, Qabatiya, and Yabad minefields.⁴⁶ As of June 2022, a new strategic plan was reported to be in the pipeline but was not finalised.⁴⁷ According to PMAC, there were no annual work plans in place for 2020, 2021, or 2022.⁴⁸

HALO Trust's survey and clearance schedule in the West Bank is set in agreement with PMAC, INMAA, and its international donors.⁴⁹ In 2022, HALO completed clearance operations in Nur a-Shams (in Tulkarem) between June and July, and planned to clear 20% of the minefield in Qabatiya (in Jenin) between August and December 2022, clearing the remainder of the contaminated land in Qabatiya and Yabad (in Jenin) by the end of 2023.⁵⁰

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The HALO Trust's SOPs, which are based on its international standards and comply with national standards, are approved by the INMAA. The HALO Trust usually submits its SOPs annually, including any necessary amendments, to INMAA for approval.⁵¹ They were last submitted and approved in June 2020 and have not been amended since.⁵²

OPERATORS AND OPERATIONAL TOOLS

As indicated, Israel does not authorise PMAC to conduct demining operations in the West Bank. In September 2013, however, the INMAA gave formal authorisation to The HALO Trust to clear two minefields in the West Bank deemed high priority by PMAC. Following INMAA authorisation, HALO Trust began clearance in April 2014, and has continued demining operations in the West Bank since then, though operations paused in 2021 due to lack of funding.⁵³

The HALO Trust works under the auspices of both INMAA and PMAC. Its manual clearance team in the West Bank is composed of deminers from Georgia with capacity varying between 15 and 22 deminers according to the task/work cycle, though in 2021, HALO maintained only essential staff at its office in the West Bank given the lack of funding for survey or clearance.⁵⁴

The HALO Trust's work in the West Bank complies with the Israeli Institute for Standards, in particular ISO 9001, 14001, and 18001.

The HALO Trust carries out its own internal quality control (QC), which is conducted by senior programme staff, and which complies with the ISO standards and HALO Trust's own SOPs. In addition, the INMAA requires external INMAA-certified companies to undertake QA/QC of HALO's clearance operations in line with Israeli law National Mine Action Standards.

When undertaking operations, HALO Trust performs survey as part of its clearance operations of the Jordanian-laid minefields in Area C of the West Bank. It is part of pre-clearance task preparation and is of CHAs already recorded in PMAC's database and on maps.⁵⁵ The HALO Trust conducts both manual and mechanical clearance. It also uses a drone for survey and mapping, and the maps generated are shared with all parties involved for planning and follow-up.⁵⁶

45 Palestine's Article 7 report covering 2017 indicated that the strategic plan covers 2017–22. It is not clear whether Palestine's strategic plan expired in 2020 or is valid until 2022.

46 PMAC, "Strategic Plan 2017–2020", undated.

47 Email from Wala Jarrar, PMAC, 15 June 2022.

48 Emails from Wala Jarrar, PMAC, 24 May 2020, 12 May 2021, and 15 June 2022.

49 Email from Ronen Shimoni, HALO Trust, 18 June 2020.

50 Email from Ronen Shimoni, HALO Trust, 17 May 2022; and online interview on 28 July 2022.

51 Email from Ronen Shimoni, HALO Trust, 14 May 2018.

52 Email from Ronen Shimoni, HALO Trust, 17 May 2022.

53 Ibid.

54 Ibid.

55 Emails from staff member in the Planning Department, PMAC, 9 May 2016; and Ronen Shimoni, HALO Trust, 14 June 2020.

56 Email from Ronen Shimoni, HALO Trust, 10 April 2019.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

The HALO Trust released no land in 2021 as it had no funding for demining operations.⁵⁷ This is in contrast to 2020, when HALO released 25,910m² of land in the West Bank, including the Jordan valley. Of the released land in 2020, 7,641m² was cancelled while 18,269m² was cleared. A total of 515 anti-personnel mines were destroyed in the process.⁵⁸

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR PALESTINE: 1 JUNE 2018



ORIGINAL ARTICLE 5 DEADLINE: 1 JUNE 2028

NOT ON TRACK TO MEET ARTICLE 5 DEADLINE. COMPLETION IS CONTINGENT ON POLITICAL FACTORS, AVAILABILITY OF FUNDS, AND DEMINING PROGRESS MADE BY ISRAEL AND THE HALO TRUST, AS PALESTINE DOES NOT HAVE CONTROL OF MINED AREAS UNDER ITS JURISDICTION. LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Clearance in the West Bank is constrained by available funding,⁵⁹ and is impacted by political factors, including the lack of authorisation granted by Israel for Palestine to conduct mine clearance operations.⁶⁰ PMAC has reported that concluding clearance and meeting the 2025 deadline is highly dependent on the facilitation of the Israeli authorities and the availability of funds.⁶¹

The HALO Trust, which began mine clearance operations in April 2014, had cleared six minefields in Area C of the West Bank by the end of 2020,⁶² and by September 2021 had secured funding to clear the minefields at Qabatiya and Yabad (in Jenin governorate), and the remaining mined area of Nur a-Shams (in Tulkarem governorate). After completion of the three priority Jordanian-laid minefields, HALO Trust plans to look into clearance of certain mined areas in the Jordan Valley, one third of which are Israeli-laid.⁶³

In February 2019, INMAA had hoped that clearance of mined areas in the West Bank would be finished in two years. According to INMAA, the Yalo and Canada Park minefields will both be cleared, but according to humanitarian prioritisation, noting that the minefields are fenced and marked, and claiming that they have little humanitarian impact.⁶⁴ As at

April 2021, clearance in these minefields had not yet started and as at July 2022, the INMAA website did not indicate any progress.

INMAA began survey of the Jordan Valley minefields in the West Bank in 2017, using Israeli national budget and operating with Israeli companies. INMAA sees significant potential for cancellation and reduction of land in the Jordan Valley, and is using various technologies and scientific tools to assess the likelihood of mine drift.⁶⁵

Table 2: Five-year summary of AP mine clearance

Year	Area cleared (m ²)
2021	0
2020	18,269
2019	13,976
2018	5,221
2017	41,857
Total	79,323

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Palestine does not have plans in place to address residual contamination once its Article 5 obligations have been fulfilled.

57 Email from Ronen Shimoni, HALO Trust, 17 May 2022.

58 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

59 Email from Ronen Shimoni, HALO Trust, 17 May 2022.

60 Initial Article 7 Report, 26 November 2018, Form D; and interview with Brig. Osama Abu Hananeh, PMAC, in Geneva, 7 February 2019.

61 Email from Wala Jarrar, PMAC, 12 May 2021.

62 Emails from Ronen Shimoni, HALO Trust, 20 April 2020; and Wala Jarrar, PMAC, 12 May 2021.

63 Emails from Ronen Shimoni, HALO Trust, 22 April 2017, 14 May 2018, and 18 June 2020; and telephone interview, 3 August 2017.

64 Interview with Marcel Aviv, INMAA, in Geneva, 7 February 2019.

65 Interview with Michael Heiman, INMAA, in Geneva, 15 February 2018; and emails, 23 July and 10 August 2017; and, after leaving INMAA, 26 May 2018.

ARTICLE 5 DEADLINE: 31 DECEMBER 2024
JUST ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: LIGHT

MINE ACTION REVIEW ESTIMATE

0.1 km²

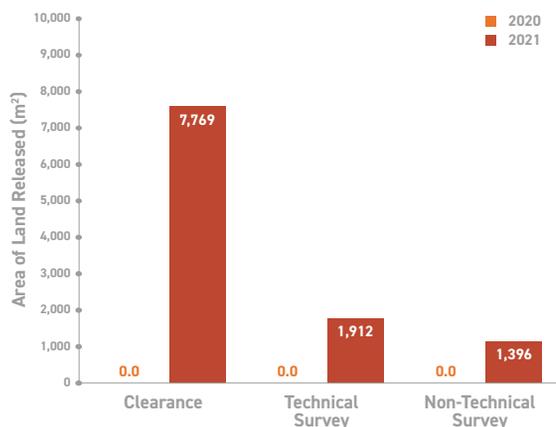
AP MINE
CLEARANCE IN 2021

7,769 m²

AP MINES
DESTROYED IN 2021

188

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **MEDIUM**

KEY DEVELOPMENTS

Peru restarted demining in 2021 after a year without clearance due to the COVID-19 pandemic and released just over 11,000m² of mined area. Peru should still be able to meet its Article 5 deadline provided it can secure the necessary funding to increase its land release output to earlier levels and secure a better understanding of remaining anti-personnel mine contamination.

RECOMMENDATIONS FOR ACTION

- Peru should survey its outstanding mined areas to develop a more accurate baseline of anti-personnel mine contamination and report the resultant data.
- Peru should develop and implement new policies for land release to ensure that targeted clearance is being conducted as part of a comprehensive land release methodology.
- Peru should provide an updated plan through to completion setting out the area to be addressed annually.
- Peru should develop and implement criteria for the prioritisation of survey and clearance.
- Peru should develop a gender and diversity policy and implementation plan.
- Peru should elaborate a resource mobilisation strategy with an estimate of the funding needed to complete clearance by its Article 5 deadline and how much will be allocated from State resources.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	4	There was a reduction in the estimate of anti-personnel mine contamination from 2020 to the end of 2021 due to the clearance that took place during the year. All outstanding contamination continues to be recorded as suspected hazardous area (SHAs) with the size and extent of the 102 mined areas varying widely.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	6	Peru has in place the legislation and management structure it needs to oversee demining operations. Peru allocated over \$800,000 to demining operations in 2021 and has also requested international funding assistance.
GENDER AND DIVERSITY (10% of overall score)	5	5	Peru does not have a gender and diversity policy and implementation plan for mine action. While women and children participate in mine risk education activities it is not known if this extends to survey. It is not known what proportion of the Peruvian Mine Action Centre (CONTRAMINAS) staff were women in 2021.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	Peru submitted a timely Article 7 report covering 2021, which provides detail on its actions in accordance with the Oslo Action Plan.
PLANNING AND TASKING (10% of overall score)	5	5	Peru exceeded its meagre land release target for 2021 in its plan from the Article 7 report covering 2020. Peru should be able to meet its land release target for 2022 of just over 18,000m ² but the plan for 2023 and 2024 lacks detail and is based on numbers of mined areas rather than the extent of contamination.
LAND RELEASE SYSTEM (20% of overall score)	7	7	Peru introduced mine detection dogs (MDDs) in 2019 and stated that in 2021 they were being used for quality control after clearance had been conducted. Peru conducted demining in 2021 but did not provide details of how many personnel were deployed for clearance.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	4	Peru restarted demining operations in 2021, after a year's suspension due to COVID-19, releasing just over 11,000m ² . Peru should be able to meet its Article 5 deadline, but this is contingent on a dramatic increase in land release output to levels achieved in previous years. This is partly dependent on availability of funding and capacity.
Average Score	5.3	5.1	Overall Programme Performance: AVERAGE

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- Peruvian Mine Action Centre (CONTRAMINAS)

NATIONAL OPERATORS

- Peruvian Army's Directorate General for Humanitarian Demining (DIGEDEHUME)
- CONTRAMINAS Security Division (DIVSECOM)
- Joint Ecuador-Peru Binational Humanitarian Demining Unit (Not operational in 2019)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2021, Peru estimated that anti-personnel mine contamination covered a total of 358,135m² across 102 suspected hazardous areas (SHAs) within four "sectors" (see Table 1). Peru has not identified any confirmed hazardous areas (CHAs).¹

¹ Article 7 Report (covering 2021), Form F.

Table 1: Anti-personnel mined area by sector (at end 2021)²

Sector	SHAs	Area (m ²)
Santiago	42	70,690
Tiwinza	5	15,773
Cenepa	37	90,707
Achuime	18	180,965
Totals	102	358,135

The size and extent of the 102 mined areas varies widely, with one area only 5m² in size, while the largest, by far, is estimated to extend over 160,000m².³ In fact, most of this large mined area should be released by survey, without the

need for recourse to full clearance. The true amount of contaminated land is probably no more than 100,000m² as Peru does not use polygons to delineate hazardous areas, despite having detailed mine maps of almost all the affected areas.

In its 2016 Article 5 extension request and “Updated National Plan for Humanitarian Demining 2018–2024” Peru stated that it would carry out survey activities to determine the size and location of the mined areas using minefield records.⁴ No survey was conducted in 2021, and all of Peru’s outstanding contamination continued to be recorded in SHAs.

Mine contamination in Peru results from a 1995 border conflict with Ecuador. The mined section of the border was predominantly in the Condor mountain range that was at the centre of the dispute.

NEW CONTAMINATION

In 2019, following technical survey, two additional areas of previously unrecorded legacy anti-personnel mine contamination were located in the Tiwinza sector (Montufar Nuevo and CG-DC-5_Nuevo) of 400m² each. In the Cenepa sector, a mined area estimated at 68,000m² (PV La Media), which was previously thought to be in Ecuadorian territory, was found to be located in Peruvian territory and was therefore added to Peru’s national mine action database.

Peru reported at the Anti-Personnel Mine Ban Convention (APMBC)’s Eighteenth Meeting of States Parties (18MSP), that since October 2020 it has been working with Ecuador to clarify the location of an estimated 10,182m² of mined area (PV Gutiérrez) with approximately 2,000 anti-personnel mines.⁵ As at June 2022, it was not known if this area had been confirmed.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The national mine action programme is managed by the Peruvian Mine Action Centre (Centro Peruano de Acción contra las Minas Antipersonal, CONTRAMINAS). CONTRAMINAS is responsible for setting strategy and priorities and for overall coordination of mine action activities. It consists of an Interministerial Executive Council, chaired by the Ministry of Foreign Affairs, and a Technical Secretariat, which oversees the Ministry of Foreign Affairs’ Directorate of Security and Defence.⁶

CONTRAMINAS was created in December 2002 after the issuance of a “Supreme Decree”, and an additional “Supreme Decree” issued in July 2005 provides additional regulation.⁷ Directive 001 governs demining operations at the Peruvian Army’s Directorate General for Humanitarian Demining (DIGEDEHUME) while Directive 006, issued by the Head of the Joint Command of the Armed Forces in 2001, regulates compliance under the APMBC.⁸

In its revised second Article 5 deadline extension request, submitted in August 2016, Peru estimated that US\$38 million would be needed to finish the job, all of which was to be funded

by the Peruvian government.⁹ This estimate was also included in its Updated National Plan for Humanitarian Demining 2018–2024.¹⁰ Since 2010, Peru has reported contributing about \$1.4 million annually for anti-personnel mine survey and clearance which is less than the annual amount Peru believes is needed to complete clearance by 2024.

According to Peru, the largest proportion of the annual budget goes towards the payment of helicopter flight hours and other transportation, deminers’ life insurance, food, and maintenance of equipment. In 2020, Peru allocated 3,000,000 Soles (approx. US\$767,832) to demining operations but these funds were diverted towards supporting the COVID-19 health emergency within the country. In 2021, Peru allocated 3,050,000 Soles (approx. US\$811,723) and requested international assistance to fund five priority areas: emergency aerial evacuation and life insurance (\$1.1 million), capacity development and training (\$65,000), use of the Light Detection and Ranging (LIDAR) system (\$330,000), land release operations (unspecified amount), demining equipment (\$33,000).¹¹

2 Ibid., Forms C and I.

3 Ibid., Form I.

4 Revised 2016 Article 5 deadline Extension Request, July 2016, pp. 20–21; and Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 15.

5 Statement of Peru, APMBC Eighteenth Meeting of States Parties, 16–20 November 2020.

6 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 3.

7 Supreme Decree No. 113-2002-RE; and Supreme Decree No. 051-2005-RE.

8 Directive No. 001/2009/DIGEDEHUME-SINGE; and Directive No. 006.

9 Revised 2016 Article 5 deadline Extension Request, July 2016, p. 18.

10 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 10.

11 Article 7 Report (covering 2021), Form J; and Presentation by Peru’s Director General for Humanitarian Demining, Army Brig.-Gen. Jorge Agramonte Aguilar, OAS, “Regional Stakeholders Dialogue on Humanitarian Demining: Peru-Ecuador: A Shared Path (virtual meeting), 10–11 February 2021.

ENVIRONMENTAL POLICIES AND ACTION

It is not known whether Peru has a national mine action standard on environmental management and/or a policy on environmental management. It is also not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of anti-personnel mines in order to minimise potential harm from clearance.

GENDER AND DIVERSITY

CONTRAMINAS does not have a gender and diversity policy but it does comply with gender equality legislation established in a 2019 decree.¹² It is not known if gender and diversity are mainstreamed through the national mine action standards (NMAS) but gender or diversity in relation to Article 5 do not feature in Peru's 2016 Article 5 deadline extension request, in its Updated National Plan for Humanitarian Demining, or in its latest Article 7 report.

Women and children are included in mine risk education activities but it is not known to what extent they are consulted directly during survey and community liaison. CONTRAMINAS reported that it consults the National Service for Protected Natural Areas (SERNANP) about the needs of ethnic and minority groups when planning demining activities. Victim data are disaggregated by sex and age but it is not known if other relevant mine action data are disaggregated. In 2019, 20% of operational roles were staffed by women and 50% of management and supervisory positions.¹³ Peru has not provided data on this issue for 2020 or 2021.

INFORMATION MANAGEMENT AND REPORTING

CONTRAMINAS uses the Information Management System for Mine Action (IMSMA) database.¹⁴ In 2019, Peru linked IMSMA with ArcGIS software to improve its capabilities to map anti-personnel mine contamination.¹⁵

Peru submits its Article 7 reports on a timely basis and reports on its progress in Article 5 implementation at intersessional meetings and meetings of States Parties.

PLANNING AND TASKING

The Updated National Plan for Demining for 2018–24 projected that some 0.49km² spread across 127 SHAs will be released by 31 December 2024. Peru expects to clear 8,089 mines from these areas (see Table 2).¹⁶

Table 2: Planned mine clearance in 2018–24 (Updated Plan)¹⁷

Year	Sector	Mined areas	Area (m ²)	AP mines
2018	Tiwinza	16	119,415	2,697
2019	Cenepa	13	92,850	627
2020	Achuime	20	9,458	746
2021	Cenepa	16	12,301	653
2022	Cenepa–Santiago	18	180,965	392
2023	Santiago	16	28,225	838
2024	Santiago	28	48,065	2,136
Totals		127	491,279	8,089

12 Supreme Decree No. 008-2019-MIMP.

13 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

14 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 8.

15 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

16 Decisions on the request submitted by Peru for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 1 December 2016, para. (g).

17 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 11.

In its Article 7 report covering 2020, Peru planned to release six mined areas totalling 9,150m² in Tiwinza.¹⁸ Peru exceeded this target by releasing 11,077m² across six mined areas. It included an updated plan to release 102 mined areas by the end of 2024, although this does not detail the amount of area it plans to release each year (see Table 3).¹⁹ In 2022, Peru planned to release 23 mined areas totalling 18,613m² and destroy 374 anti-personnel mines.²⁰

Peru's criteria for prioritising survey and clearance operations are unclear. In its decision on Peru's 2016 extension request, the Article 5 Committee called on Peru to prioritise operations based on the socio-economic impact of mined areas.²¹ One of the activities listed for CONTRAMINAS' policy work was to set priorities for clearance, in coordination with DIGEDEMUME and CONTRAMINAS' Security Division DIVSECOM.²² Peru reportedly prioritises clearance by sector.²³

Table 3: Planned mine clearance in 2021–24 (Article 7)²⁴

Year	Sector	Mined areas
2022	Tiwinza	5
	Cenepa	18
2023	Santiago	20
	Cenepa	19
2024	Santiago	22
	Achuime	18
Total		102

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Peru has 16 national NMAS which form part of the Humanitarian Demining Procedures Manual, and which are based on the International Mine Action Standards (IMAS).²⁵ According to CONTRAMINAS, the NMAS and associated standard operating procedures (SOPs) are reviewed annually.²⁶

One of CONTRAMINAS four objectives in Peru's 2016 extension request was to develop new policies for land release, with the aim of finalising these policies within six months of the plan's approval. The same objective was included in its Updated National Plan for Demining for 2018–24.²⁷ According to CONTRAMINAS, new land release policies are formulated annually as mine clearance progresses and these are then reflected in the operation orders.²⁸ As noted by the Fifteenth Meeting of States Parties, Peru should conduct evidence-based survey to define its SHAs and also seek to identify CHAs.²⁹

OPERATORS AND OPERATIONAL TOOLS

DIGEDEMUME, which is responsible for demining on the border with Ecuador, has two teams each comprising 60 personnel.³⁰ DIVSECOM, which is responsible for supporting DIGEDEMUME with demining operations, has 40 police officers trained in demining.³¹

In its 2016 extension request, Peru committed to strengthen the capacity of CONTRAMINAS' Humanitarian Demining School, with the aim of increasing its capacity by one-fifth in the second semester of 2017. This was deferred to the second semester of 2018 in Peru's Updated National Plan for Demining for 2018–24.³² Peru expected to increase the number of non-technical survey personnel in 2020 and focus on further training, through the Humanitarian Demining School, of the existing demining companies in light of the COVID-19 outbreak.³³ As at June 2022, Peru had not reported on whether this has happened.

18 Article 7 Report (covering 2020), Form J.

19 Article 7 Report (covering 2021), Form F.

20 Article 7 Report (covering 2021), Form J.

21 Decisions on the request submitted by Peru for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 1 December 2016, para. 15.

22 Updated National Plan for Humanitarian Demining 2018–2024, p. 15.

23 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

24 Article 7 Report (covering 2021), Form J.

25 Email from Mario Espinoza Llanos, CONTRAMINAS, 16 June 2020.

26 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

27 Revised Second Article 5 deadline Extension Request, July 2016, p. 36; and Updated National Plan for Humanitarian Demining 2018–2024, p. 14.

28 Email from Mario Espinoza Llanos, CONTRAMINAS, 16 June 2020.

29 Decisions on the request submitted by Peru for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 1 December 2016, para. (d).

30 Updated National Plan for Humanitarian Demining 2018–2024, pp. 10 and 12.

31 Ibid.

32 Ibid., p. 16.

33 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

The joint Ecuador-Peru Binational Humanitarian Demining Unit has been deployed to areas that were at the centre of the conflict between the two nations, but it did not carry out any demining operations in 2021. In November 2019, according to the “Tumbes Declaration”, the presidents of Ecuador and Peru committed to continue their binational cooperation and pledged to allocate the necessary resources to continue demining operations in both countries, but no further details were provided.³⁴

In its revised second Article 5 deadline extension request, Peru announced it would be using both machines and mine detection dogs (MDDs) for demining.³⁵ In its updated multi-year plan submitted in May 2018, one of Peru’s strategic objectives for 2018–24 included the development, design, and implementation of new humanitarian demining techniques, such as with machines or dogs.³⁶ In 2019, the United States donated four MDDs to Peru with two dogs used to conduct technical survey during the year. According to CONTRAMINAS, the plan is to also use dogs to identify mined areas and for use during clearance.³⁷ In its Article 7 report covering 2021, Peru stated that MDDs were being used for quality control (QC) of demined areas.³⁸ In 2020, discussions began between CONTRAMINAS and the Peruvian Army’s Directorate of Research and Development on the possibility of employing drones with hyperthermal cameras that conduct aerial analysis of the decomposition of explosives.³⁹ As at June 2022, Peru had not reported on whether it plans to deploy drones.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

A total of 11,077m² of mined area was released in 2021, of which 7,769m² was cleared, 1,912m² was reduced through technical survey, and 1,396m² was cancelled through non-technical survey.⁴⁰ A total of 188 anti-personnel mines were found and destroyed during land release operations.⁴¹ Demining operations were restarted in Peru from August to November 2021 after being suspended during 2020 due to the COVID-19 pandemic when no survey or clearance activities took place.⁴²

ARTICLE 5 DEADLINE AND COMPLIANCE

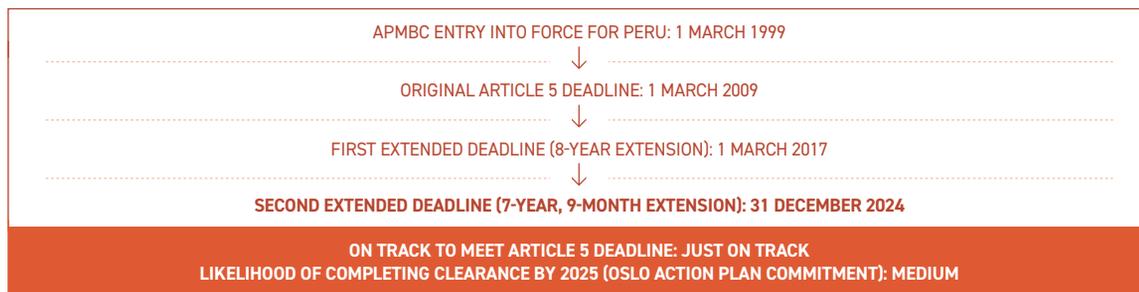


Table 4: Five-year summary of AP mine clearance

Year	Area cleared (m ²)
2021	7,769
2020	0
2019	81,948
2018	15,576
2017	*9,246
Total	114,539

* Covers March 2017 to March 2018

Under Article 5 of the APMBC (and in accordance with the 7-year, 9-month extension granted by States Parties in 2016), Peru is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2024. Peru plans to release 18,613m² in 2022, which means it would need to release an average of 169,776m² per year in 2023 and 2024. This should be achievable, particularly as the current estimate of contamination is likely to be overinflated. Peru outlined three scenarios for the completion of clearance by the 2024 deadline in its Updated National Plan for Demining for 2018–24. This was said to be contingent on an increase in budget, in personnel, and in international support.⁴³

34 Statement of Peru, Fourth APMBC Review Conference, Oslo, 27 November 2019.

35 Revised Second Article 5 deadline Extension Request, July 2016, pp. 5–6.

36 Updated National Plan for Humanitarian Demining 2018–2024, pp. 15–16.

37 Emails from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020 and 16 June 2020.

38 Article 7 Report (covering 2021), Form J.

39 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

40 Article 7 Report (covering 2021), Form F.

41 Ibid., Form G.

42 Article 7 Report (covering 2020), Form F.

43 Updated National Plan for Humanitarian Demining 2018–2024, p. 13.

In order to complete clearance by its Article 5 deadline, Peru has requested international assistance to cover some of the costs, although it is unclear what amount is sought and what proportion will be allocated from the State budget. Peru should concentrate its limited resources on establishing a more accurate baseline of contamination because it is likely that a large proportion of the total can be released through survey without having to resort to full clearance.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

CONTRAMINAS reported that, after Article 5 completion, and in coordination with its Ecuadorian counterpart, the National Centre for Humanitarian Demining (CENDESMI), it will be responsible for managing any residual contamination that is encountered.⁴⁴

⁴⁴ Email from Mario Espinoza Llanos, CONTRAMINAS, 16 June 2020.

ARTICLE 5 DEADLINE: 1 MARCH 2026

NOT ON TRACK TO MEET DEADLINE AND COMPLIANCE WITH ARTICLE 5 IN SERIOUS DOUBT

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: LIGHT, UNCLEAR

CONFIRMED

0.5 KM²

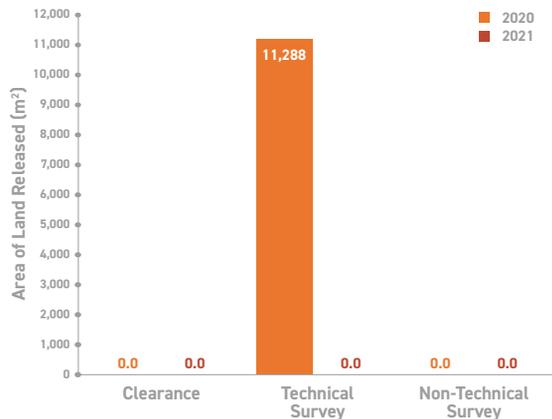
AP MINE CLEARANCE IN 2021

0 M²

AP MINES DESTROYED IN 2021

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

The European Union (EU) agreed to provide €1.5 million for mine action, the first donor funding since support from the United States ended in 2019. The absence of donor support in 2021 resulted in no land being released through survey or clearance for the second successive year. The European Union (EU) funding enabled Humanity and Inclusion (HI) to resume operations in the Casamance in May 2022. The Senegalese National Mine Action Centre (CNAMS) also received support from Mines Advisory Group (MAG) in updating its Information Management System for Mine Action (IMSMA) database and revising national standards.

RECOMMENDATIONS FOR ACTION

- Senegal must clear mined areas around its military base at Djirak on the border with Guinea-Bissau as an urgent priority and clarify who laid them and when.
- Senegal should complete non-technical survey as soon as possible to establish a comprehensive baseline estimate of its remaining mine contamination.
- CNAMS should prepare and submit a new work plan to replace the now-obsolete plan in its last Article 5 deadline extension request.
- The Government of Senegal should demonstrate commitment to its Anti-Personnel Mine Ban Convention (APMBC) obligations by making national funding and resources available for demining operations.
- Senegal should provide details of the arrangements and capacity available for tackling current and residual contamination identified after completion.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	4	Senegal remains unclear about the extent of its mine contamination 21 years after adhering to the APMBC. It reports 37 confirmed hazardous areas affecting close to 0.5km ² and nine suspected hazardous areas of unknown size, but also estimates that total contamination affects nearly 1.6km ² . Survey came to standstill in 2020 and 2021 with Senegal having made minimal progress assessing the extent of contamination in the past five years.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	3	3	Senegal relies on donor funding to cover the costs of mine clearance. The government reportedly provided funding in 2015 but it is unclear if it has made any subsequent financial allocations to the mine action sector. Senegal's apparent failure to demine mined areas around military installations calls into serious question its compliance with the APMBC and even the prohibition on use of landmines.
GENDER AND DIVERSITY (10% of overall score)	5	5	CNAMS reports employing women in senior positions and appointing staff on the basis of qualifications and without regard for gender. In 2021, it had five female employees including the staff member heading information management. HI included two women in its team of 10 deminers and consulted all groups in the course of community liaison activities, including women, minorities, and persons with disabilities.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	4	CNAMS maintains an IMSMA database but has cited shortages of funds as an obstacle to upgrading it. The quality of data in IMSMA is unknown but MAG provided support in 2021 to update the database. Senegal has submitted Article 7 transparency reports annually.
PLANNING AND TASKING (10% of overall score)	4	4	Senegal submitted an Article 5 deadline extension request in 2020 including a work plan with timelines for survey and clearance but it assumed the availability of operating capacity that is not present in Senegal and faced major challenges, including insecurity and a lack of international financial support calling into question the feasibility of its targets.
LAND RELEASE SYSTEM (20% of overall score)	5	4	CNAMS introduced national mine action standards in 2009 and updated them in 2013 but planned further revision. CNAMS started another revision in 2021, which will be supported by MAG in 2022, focusing on standards for non-technical and technical survey, clearance, accreditation, risk education, and marking.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	2	3	Senegal did not release any land through survey or clearance in 2020 or 2021. Senegal received a five-year extension to its Article 5 deadline but implementation is dependent on mobilising significant new sources of international donor funding. The absence of such support in 2021 meant the work plan set out in the extension request needs immediate updating.
Average Score	3.9	3.8	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Commission for the Implementation of the Ottawa Convention
- Senegalese National Mine Action Centre (CNAMS)

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- Humanity and Inclusion (HI)
- Mines Advisory Group

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Senegal does not have a precise estimate of its mine contamination more than 20 years after becoming a State Party to the Anti-Personnel Mine Ban Convention (APMBC). It continues to report the presence of mines in four of its forty-five departments (Bignona, Godoump, Oussoye, and Ziguinchor), all of them in the Casamance region, an area of low-level insurgency since the 1980s.

In 2022, Senegal repeated earlier estimates that it had 37 confirmed hazardous areas (CHAs) covering 0.49km², with more than 60% in Goudomp province (see Table 1), and nine suspected hazardous areas (SHAs), which it has not been able to survey and whose size is unknown. It also reported 118 locations that need to be assessed for mine contamination, including 101 in

Bignona province, 4 in Oussoye and 13 in Ziguinchor.¹ Senegal's Article 5 deadline extension request submitted in June 2020 also reported 37 CHAs covering 491,086m² but estimated the total mined area at 1,593,487m², indicating it had also identified 1.1km² of suspected contamination.² From past experience, it believed the areas were contaminated mainly with anti-personnel and anti-vehicle mines.³ The basis for this estimate is unclear. Some officials have estimated contamination at up to 1.7km².⁴

Table 1: Anti-personnel mine contamination⁵

Province	CHAs	Area (m ²)	SHAs	Area (m ²)
Bignona	10	111,575	8	Not reported
Goudomp	16	299,871	1	Not reported
Oussoye	9	77,240	0	Not reported
Ziguinchor	2	2,400	0	Not reported
Totals	37	491,086	9	1,102,401

Mine contamination in Senegal is the result of more than 40 years of fighting between the armed forces and a non-state armed group, the MFDC (Mouvement des Forces Démocratiques de Casamance). Sporadic fighting with some factions of the MFDC has continued despite a ceasefire in place since 2004 blocking access to mine-affected areas, and Senegal continued to suffer civilian casualties from mines and other explosive ordnance in 2021.⁶ Senegal says the contamination hinders the socio-economic recovery of a region where thousands of people have been displaced, and access to pastures, forests, water sources, and government services have been limited.⁷

According to Norwegian People's Aid (NPA), there is overwhelming evidence that the laying of landmines by rebel forces was sporadic, while the Senegalese Armed Forces placed hundreds, if not thousands, of mines around military outposts in Casamance.⁸ Lack of accurate and consistent reporting on demining military bases has raised concerns about Senegal's compliance with the APMB. Senegal claimed previously that it already demined the mined areas around its military bases.⁹ In 2020, however, it informed the Committee on Article 5 Implementation that one location remained mined: a Senegalese army cantonment at the village of Djirak on the border with Guinea-Bissau, which stands opposite the headquarters of one faction of the MFDC.¹⁰ Senegal has still to clarify who laid the mines and when and when it will clear them.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The National Commission for the Implementation of the Ottawa Convention, created in 2005, serves as the national mine action authority for Senegal charged with developing a mine action strategy, promoting economic rehabilitation of mine-affected areas, and overseeing the work of a national mine action centre. The commission, which is chaired by the Minister of Foreign Affairs, includes representatives of the presidency of Senegal and government ministries. Senegal has said the Commission's effectiveness had suffered from high turnover of ministerial representatives, resulting in delays in decision-making and even from a lack of rules on decision-making.¹¹

Demining operations in Casamance are coordinated by the Centre Nationale d'Actions anti-mines au Sénégal (CNAMS), which was set up by decree in August 2006 with three divisions, including Operations and information management; Risk education; and Administration, finance and logistics.¹² Regional mine action coordination committees have been established in Kolda, Sédhiou, and Ziguinchor departments. CNAMS is responsible for promoting the national mine action programme, mobilising resources, coordinating survey and conducting demining, designing and implementing a victim assistance programme, accrediting demining organisations, and monitoring and evaluating activities.¹³

¹ Article 7 Report (covering 2021), p. 4; email from Ibrahima Seck, Head of Operations and Information Management, CNAMS, 21 May 2020.

² Article 5 deadline Extension Request, 15 June 2020, p. 53.

³ Analyse de la demande soumise par Le Sénégal en vue de la prolongation du délai fixée à l'article 5 de la Convention pour la destruction complète des mines antipersonnel, APMB 18th Meeting of States Parties, 16–20 November 2020.

⁴ Email from Catherine Gillet, Programme Director for Afrique Cap Ouest, HI, 10 May 2021.

⁵ Article 7 Report (covering 2021), Form D. The total figure for suspected contamination is extrapolated from reported total contamination.

⁶ See e.g. "Mine antipersonnel à Kandiahiou: il s'agirait d'une pose récente (témoin)", *Pulse News*, 24 October, 2021.

⁷ CNAMS request for funding, undated but June 2020.

⁸ CNAMS, "Updated Workplan for Senegal's Article 5 Extension 2016–21", April 2017; and CNAMS, "Updated Workplan for Senegal's Article 5 Extension 2016–2021", 13 October 2017, p. 21.

⁹ Email from Ibrahima Seck, CNAMS, 18 August 2017.

¹⁰ "Clarifications du Sénégal aux questions du comité d'examen de la 3ème demande d'extension", 22 September 2020.

¹¹ Article 5 deadline Extension Request, 15 June 2020, pp. 9, 75.

¹² *Ibid.*, p. 10.

¹³ Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.

Senegal reported that the government made an annual allocation of CFCA 200 million (approximately US\$300,000) to mine action in 2015, but there is no indication of payments received.¹⁴ CNAMS noted that there are "still delays" in government payments.¹⁵

ENVIRONMENTAL POLICIES AND ACTION

Senegal has not reported any policy or standards for environmental management and protection in mine action. It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Senegal in order to minimise potential harm from clearance.

GENDER AND DIVERSITY

CNAMS asserts there is no gender discrimination in Senegal's mine action programme and staff are recruited on the basis of competence. CNAMS said in 2020 that its staff of 17 included six women of whom two were heads of division and two were heads of offices.¹⁶ CNAMS reported it employed five women in 2021, including its information management manager.¹⁷ Senegal has not provided any indication of whether survey that produced existing estimates of contamination took account of the perspectives of women and girls as well as men and boys.¹⁸

INFORMATION MANAGEMENT AND REPORTING

CNAMS information management resources consist of two staff with a single desktop computer provided more than five years ago by NPA which operates an IMSMA New Generation database and a laptop provided by MAG in 2021 to support GIS.¹⁹ CNAMS said measures to improve the database were not possible in 2019 due to funding shortages while improvements planned for 2020 had been suspended because of the COVID-19 pandemic.²⁰ In 2021, however, CNAMS received support from MAG, which conducted a preliminary assessment of the IMSMA database preparatory to further system and capacity development. MAG has also initiated coordination with the Geneva International Centre for Humanitarian Demining (GICHD) and HI.²¹

PLANNING AND TASKING

Senegal included a work plan in the Article 5 deadline extension request submitted in June 2020, which called for non-technical survey of all 118 identified SHAs by the end of 2021. It proposed survey of 40 SHAs in 2020 and the remaining 78 in 2021. The work plan did not foresee any clearance in 2020 but aimed to complete clearance of 37 CHAs by the end of 2023, tackling 12 CHAs covering 113,975m² in 2021, 16 CHAs affecting 299,871m² in 2022, and the remaining 9 CHAs covering 77,240m² in 2023. In 2024, Senegal planned to survey nine SHAs and in 2024–25 to clear CHAs identified from the 2020–21 non-technical survey of 118 areas.²²

Implementing the work plan, however, was contingent on access to mine-affected areas and attracting donor support, conditions which did not apply in 2021 and no action was taken. Senegal indicated in 2021 that it planned to update its strategy but it later reported that was not possible due to the COVID-19 pandemic and it planned to update its plans in 2022 instead.²³ No clearance was conducted either.

However, Senegal has reported receiving funding of €1.5 million from the EU which, together with improvements in the security environment that made it possible to resume survey and clearance, notably in Ziguinchor and Goudomp departments.²⁴ CNAMS reported it planned to conduct non-technical surveys in 15 locations not previously visited to determine the extent of contamination and to conduct technical survey or clearance in some confirmed hazardous areas. CNAMS said it gives priority to areas where security permits access, there is pressure from the population to return to the land and socio-economic projects are planned or delivering benefits to the population.²⁵

14 Committee on Article 5 Implementation, Preliminary Observations, Intersessional Meetings, Geneva, 20–22 June 2022.

15 Email from Ibrahima Seck, CNAMS, 23 May 2022.

16 Email from Ibrahima Seck, CNAMS, 21 May 2020.

17 Email from Ibrahima Seck, CNAMS, 23 May 2022.

18 Committee on Article 5 Implementation, Preliminary Observations, Intersessional Meeting, 20–22 June 2022.

19 Email from Melanie Broquet, Regional Programme Manager, Sahel & West Africa, MAG, 25 August 2022.

20 Email from Ibrahima Seck, CNAMS, 21 May 2020.

21 Emails from Ibrahima Seck, CNAMS, 23 May 2022; and Melanie Broquet, MAG, 25 August 2022.

22 Article 5 deadline Extension Request, 15 June 2020, pp. 93–98.

23 Article 7 Report (covering 2020), Form A.

24 Statement of Senegal, Intersessional Meetings, Geneva, 20–22 June 2022; and email from Ibrahima Seck, CNAMS, 23 May 2022.

25 Email from Ibrahima Seck, CNAMS, 23 May 2022.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Senegal's national mine action standards were developed in 2009 and partially revised in 2013²⁶ when amendments were made to standards for accreditation, technical investigation, the minimum depth for mine clearance, and the use of machines and mine detection dogs in demining.²⁷

The Committee on Article 5 Implementation commented in 2020 on the importance of Senegal ensuring as soon as possible that the most relevant land release standards, policies, and methodologies, in line with the International Mine Action Standards (IMAS), are in place and applied for the full and expedient implementation of this aspect of the Convention.²⁸

CNAMS started another revision in 2021, which was to be supported by MAG in 2022, focusing on standards for non-technical and technical survey, clearance, accreditation, explosive ordnance risk education (EORE), and marking.²⁹

OPERATORS AND OPERATIONAL TOOLS

CNAMS has a total of fourteen operations staff, including one six-strong manual clearance team, a non-technical survey team of five, and one mechanical team with three people.³⁰

HI was the only international demining operator in Senegal from 2014. It suspended operations in October 2017 because of lack of funding.³¹ With new funding from the United States, operations resumed in 2019 when HI had a total staff of 20 in mine action: 5 deminers, 3 mechanical operators, and 12 support staff. In 2020, HI hired only 10 staff who were deployed to Ziguinchor province but in October 2021 it signed a partnership agreement with the EU for a €1.5 million project in the Casamance area of southern Senegal, under which €1 million is earmarked for non-technical survey, technical survey, and clearance as well as for delivery of EORE with a partner organisation, Association des Victimes de mines en Casamance (ASVM). The remaining €0.5 million is earmarked for support to conflict-affected communities and for the return of displaced people.³²

In mid 2022, HI reported it had established an operating base 50km from Ziguinchor and said it was working with a team of 20 people comprising a chief of project, a chief of operations, two team leaders, six deminers, a machine operator, two community liaison staff, two medics, two development staff, and three drivers. Operations started on 2 June 2022 with technical survey of two confirmed hazardous areas, Singhère Escalé (a 2,390 metre-long track) and Singhère Bainouk (a 788 metre-long track). The project was due to continue until March 2023.³³

MAG received organisational accreditation in Senegal in 2021 and in 2022 planned to apply for accreditation for non-technical survey as well as a range of other activities, including a peace and conflict analysis, a workshop on land release, an information management needs assessment, and consolidation of victim data. MAG had a regional manager for humanitarian mine action based in Dakar and was in the process of adding three more regional staff for information management, a community liaison manager and an adviser on capacity development.³⁴

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

CNAMS reported that no survey or clearance took place in 2021.³⁵

Senegal said it obtained financing of €1.5 million from the EU at the end of the third quarter of 2021 to support operations that HI started on 2 June 2022.³⁶ HI resumed operations in the Casamance region of southern Senegal working in Kaour commune in the Sédhiou region (Goudomp department) and Adéane commune in Ziguinchor. The project, set to continue until March 2023, involves conducting manual clearance supported by a mechanical digger and to conduct EORE in partnership with

26 Email from Ibrahima Seck, CNAMS, 21 May 2020.

27 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.

28 APMBC Article 5 Committee, "Draft decisions on the request submitted by Senegal for an extension of the deadline for completing the destruction of anti-personnel mines", 20 November 2020.

29 Emails from Ibrahima Seck, CNAMS, 23 May 2022; and Roxana Bobolicu, MAG, 29 September 2022.

30 Email from Ibrahima Seck, CNAMS, 21 May 2020.

31 Email from Julien Kempeneers, HI, 26 September 2016.

32 Emails from Catherine Gillet, HI, 10 May 2021; and Emmanuel Sauvage, Programme Director, HI, 13 April and 6 September 2022.

33 Email from Emmanuel Sauvage, HI, 6 September 2022; and "Sénégal: Nouvelles opérations de déminage en Casamance", HI website, 23 June 2022.

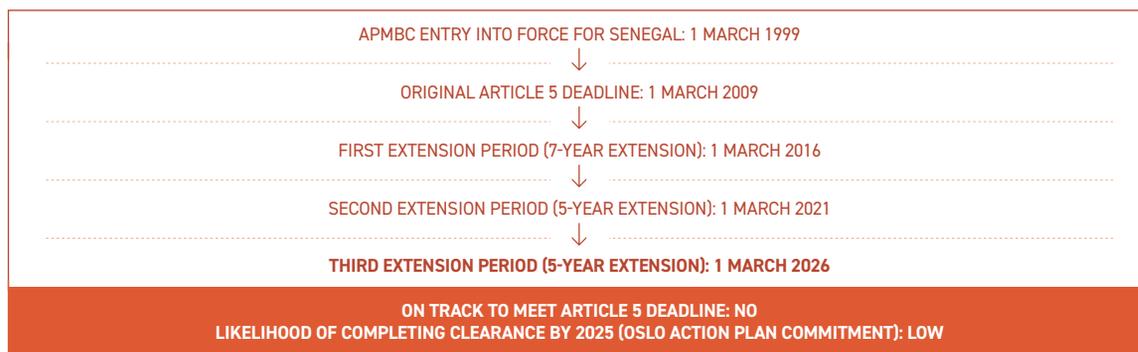
34 Email from Melanie Broquet, MAG, 25 August 2022.

35 Article 7 Report (covering 2021), Form D; and email from Ibrahima Seck, CNAMS, 23 May 2022.

36 Email from Ibrahima Seck, CNAMS, 23 May 2022; and Statement of Senegal, Intersessional Meetings, Geneva, 20–22 June 2022.

Senegal's Association of Mine Victims. The project aimed to return 100,000m² to communities and assessed that 30,000m² would require clearance.³⁷

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMB (and in accordance with the five-year extension granted by States Parties in 2020), Senegal is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2026.

Senegal's mine contamination is small in extent but it has not conducted any clearance in the last four years and its five-year clearance total amounts to 65,400m² (see Table 2). After prolonged inactivity, the operations started by HI in the Casamance in May 2022 represent a significant breakthrough but the meagre results and the challenges it still faces create uncertainty over its prospects for completing clearance within the extended Article 5 deadline.

Senegal still does not know the full extent of its mine contamination, with nine SHAs whose size has yet to be determined and 118 locations still to be investigated, more than double the number of confirmed and suspected hazardous areas. The lack of survey or clearance in Senegal since it submitted its Article 5 deadline extension request means that the work plan it set out which, among other goals, provided for clearance of 113,975m² in 2021, is already obsolete and needs to be replaced by a new work plan.

A key barrier to implementing its work plan was its failure to attract international donor support. Senegal projected the cost of survey and clearance in its Article 5 deadline extension request at \$12 million and hoped to raise \$8 million from donors. In June 2020, Senegal appealed for \$1.6 million for a period of 25 months to conduct clearance of 299,871m² and conduct non-technical survey of 118 locations in the

Sédhiou and Ziguinchor regions.³⁸ CNAMS reported that its resource mobilization plans for 2020 and 2021 were blocked by the pandemic and the €1.5 million provided by the EU appears to be the only international funding received.

Insecurity also remains a potential stumbling block. All Senegal's confirmed and suspected hazardous areas are located in the Casamance region which has experienced decades of separatist insurgency by the MFDC. Operations in 2019 were suspended after a MFDC faction briefly detained a demining team. Senegal said 10 months of negotiations preceded the resumption of non-technical survey in Bignona in early 2020 and has described security conditions as "very precarious". However, security conditions appear to have made improved in 2021 making it possible for HI to resume working in the Casamance in 2022.

Table 2: Five-year summary of anti-personnel mine clearance

Year	Area cleared (m ²)
2021	0
2020	0
2019	0
2018	0
2017*	65,400
Total	65,400

* Includes technical survey

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Senegal responded to questions from the Committee on Article 5 Implementation about plans for addressing contamination identified after completion by stating any residual mine threats would be dealt with by Senegal's military engineers. It did not provide details of military engineers' capacity.³⁹

37 "Sénégal: Nouvelles opérations de déminage en Casamance", HI website, 23 June 2022.

38 Ministry of Foreign Affairs, Request for Financing: Article 7 Report (covering 2021), Form D.

39 "Clarifications du Sénégal aux questions du comité d'examen de la 3ème demande d'extension", 22 September 2020.

ARTICLE 5 DEADLINE: 1 MARCH 2023

TWENTY-TWO MONTH INTERIM EXTENSION REQUESTED TO 31 DECEMBER 2024

KEY DATA

**ANTI-PERSONNEL (AP)
MINE CONTAMINATION: LIGHT**

MINE ACTION REVIEW ESTIMATE

AROUND 1 KM²

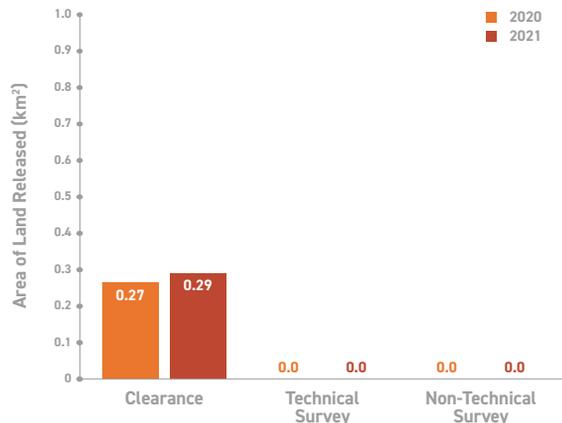
AP MINE
CLEARANCE IN 2021

0.29 KM²

AP MINES
DESTROYED IN 2021

9

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

In 2021, Serbia continued its progress in Article 5 implementation and cleared a total of 0.29km² of mined area, with the destruction of nine anti-personnel mines. The Serbian Mine Action Centre (SMAC) has yet to survey the previously unrecorded mine contamination discovered in October 2019 and August 2021 following forest fires.

Serbia has requested a 22-month extension to its clearance deadline to 31 December 2024, which will be considered at the Twentieth Meeting of States Parties in November 2022. SMAC has secured funding to clear all confirmed contamination in 2022 and planned to conduct non-technical survey of the newly discovered suspected areas in 2022–23, pending securing funding, in order to determine the amount of remaining mined area and plan for completion. Serbia then planned to submit a follow-on extension request at the end of March 2024, which will include a detailed work plan for the release of remaining anti-personnel mined area identified during the non-technical survey and for fulfilment of its obligations under Article 5 of the Convention.

RECOMMENDATIONS FOR ACTION

- Serbia should consider using its armed forces for mine clearance or inviting demining non-governmental organisations (NGOs) to help meet its treaty obligations by fulfilling its Article 5 obligations by 2023.
- Serbia should conduct as a matter of priority the planned survey of the suspected contamination identified in October 2019 and August 2021 in order to determine the size of the mined area and plan for its release.
- SMAC should conduct non-technical and technical survey rather than full clearance in instances where survey represents the most efficient means of land release for part or all of mined areas.
- SMAC should seek to develop National Mine Action Standards (NMAS) as soon as the new mine action decree is adopted.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	Serbia had 561,800m ² of existing mined area remaining at the end of 2021, all located in Bujanovac municipality, but had yet to conduct non-technical survey to determine the size of previously unrecorded mined area identified as a result of fires in October 2019 and August 2021.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	7	7	Serbia has strong national ownership of its mine action programme, which is nationally funded. Planned national funding of €350,000 for survey and clearance operations was reduced to €260,000 per annum in both 2020 and 2021, due to the COVID-19 pandemic and efforts by the Serbian government to tackle it. The funds were matched with donor funds through the ITF.
GENDER AND DIVERSITY (10% of overall score)	4	4	SMAC does not have a gender policy in place and does not disaggregate relevant mine action data by sex and age. However, it does ensure women and children, as well as ethnic or minority groups, are consulted during survey and community liaison activities and that there is equal access to employment for qualified women and men in survey and clearance.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	7	Serbia submits accurate and comprehensive annual Article 7 reports on Article 5 progress, which are consistent between reporting periods, and provides regular updates on progress at Anti-Personnel Mine Ban Convention (APMBC) meetings. SMAC plans to install the Information Management System for Mine Action (IMSMA), with the support of the Geneva International Centre for Humanitarian Demining (GICHD).
PLANNING AND TASKING (10% of overall score)	7	7	Serbia planned to clear all confirmed mined area in 2022, but had yet to survey the previously unknown mined area discovered through forest fires in 2019 and 2021. Serbia planned to complete the survey in 2022–23, and to then submit a final extension request and work plan in March 2024 that will be based on the results of the non-technical survey and a clearer understanding of the extent and location of remaining mined area. Serbia produces revised annual work plans based on actual progress. In addition to mine clearance, Serbia is simultaneously addressing contamination from cluster munition remnants and other explosive remnants of war (ERW) that hinder socio-economic development.
LAND RELEASE SYSTEM (20% of overall score)	5	5	Serbia does not currently have national mine action standards. While SMAC continues to express a preference for full clearance of SHAs and only conducted clearance tasks in the last three years, it has said it is willing to conduct technical survey where appropriate. Clearance capacity deployed is typically manual teams, as the terrain and climate tend not to be suitable for mine detection dogs or machines.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	6	Clearance output in 2021 was a slight increase on the previous year. Serbia planned to complete clearance of existing known mined area in 2022, and to conduct non-technical survey in 2022–23 of the previously unrecorded mined areas discovered in October 2019 and August 2021. Serbia has requested an Article 5 deadline extension to 31 December 2024 and planned to submit a follow-on deadline extension request in March 2024, for the release of all remaining mined area identified through the non-technical survey. Serbia remains committed to the APMBC's 2025 completion aspiration. Meeting the deadline is largely contingent on securing sufficient funding and on how much mined area is identified during the non-technical survey.
Average Score	5.7	5.7	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Sector for Emergency Management, under the Ministry of Interior (acts as the national mine action authority)
- Serbian Mine Action Centre (SMAC)

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- In 2021, 11 companies/organisations (6 from Serbia and 5 from Bosnia and Herzegovina) were accredited for demining, but only one NGO (with a subcontractor) conducted clearance of anti-personnel mines in 2021:
 - NGO Stop Mines (contractor) and NGO IN Demining (subcontractor)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

As at March 2022, three areas in Bujanovac municipality, covering more than 0.56km², were suspected to contain anti-personnel mines (see Table 1). However, this excludes previously unrecorded anti-personnel mine contamination that was revealed as a result of fires in Bujanovac municipality in October 2019 and in August 2021, the size of which is not yet known.¹ The contamination as at March 2022, was a reduction on the 0.86km² of mined area as at end of 2020,² due to clearance of mined area in 2021.

Table 1: Anti-personnel mined area by village (at March 2022)³

Municipality	Village	SHAs	Area (m ²)
Bujanovac	Ravno Bučje	1	390,300
	Končulj	1	143,500
	Dobrosin	1	28,000
Totals		2	*561,800

SHA = Suspected Hazardous Area * Excludes the newly discovered suspected mined areas

On 2–3 October 2019, in response to a request from local authorities, SMAC visited the villages of Đorđevac, Končulj, Lučane, Ravno Bučje, and Veliki Trnovac where fires had recently occurred and members of the local community had reported hearing explosions in several places, indicating the presence of mines. Representatives of SMAC and Emergency Management Staff of the municipality of Bujanovac visited the sites and interviewed local residents, local authority representatives, and firefighters, as well as police and the military. Mine incident questionnaires were completed in accordance with the International Mine Action Standards (IMAS), and suspected mined areas were marked with signs in both Serbian and Albanian, as the population in this area is multi-ethnic.⁴ Fires also occurred in August 2021 too, in different area of the municipality of Bujanovac, during which there were also reports of explosions.⁵ The newly discovered contamination is not included in Table 1 above.

Subject to securing the necessary funding, SMAC had planned to conduct survey in 2021 to determine the size of the newly discovered contamination.⁶ Survey did not take

place in 2021, but was tentatively planned for 2022 and 2023 subject to funding. In response to questions from the Anti-Personnel Mine Ban Convention (APMBC) Committee on Article 5 implementation, and in its revised 2022 deadline extension request, Serbia said that the planned non-technical survey of the previously unknown mined areas would involve survey and risk education of nearly 4.37km² (divided into five projects/areas, all located in the municipality of Bujanovac). The whole of the municipality is 461km² in size and has 38,300 inhabitants, 59 villages, and 30 local communities. Of the 4.37km² expected to be surveyed, SMAC expected that nearly 2.37km² will be cancelled, 1.5km² reduced, and 0.5km² cleared.⁷

Bujanovac is the only municipality in Serbia still affected by mines. According to SMAC, the contamination is from mines of an unknown origin and type which have not been emplaced to follow a pattern, and for which no minefield records exist.⁸ According to the national authorities, previous surveys found insufficient evidence for mined areas to be classified as confirmed hazardous areas (CHAs), so they remain as suspected hazardous areas (SHAs).⁹ The fact that contamination is suspected makes it all the more important that SMAC conducts technical survey to confirm the presence of anti-personnel mines, before conducting full clearance. According to SMAC, the baseline of anti-personnel mine contamination has been established through inclusive consultation with women, girls, boys, and men, including, where relevant, from minority groups.¹⁰ SMAC does not possess data on explosive ordnance contamination of military areas in Serbia.¹¹

Historically, mine contamination in Serbia can be divided into two phases. The first exists as a legacy of the armed conflicts associated with the break-up of Yugoslavia in the early 1990s. The second concerned use of mines in 2000–01 in the municipalities of Bujanovac and Preševo by a non-State armed group, the Liberation Army of Preševo, Bujanovac and Medvedja (OVPBM). The contamination remaining in Serbia is a result of this later phase.¹² Contamination also exists within Kosovo (see Mine Action Review's *Clearing the Mines* report on Kosovo for further information). SMAC requests that it be noted that all references to Kosovo should be understood to be in the context of United Nations Security Council Resolution 1244 (1999).¹³

1 2022 Revised Article 5 deadline Extension Request, p. 6; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, Senior Advisor for Planning, International Cooperation and European Integrations, SMAC, 13 April 2022.

2 Article 7 Report (covering 2020), Form D; and email from Slađana Košutić, SMAC, 26 March 2021.

3 2022 Revised Article 5 deadline Extension Request, p. 7; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 13 April 2022.

4 Statements of Serbia on Clearance, Fourth APMBC Review Conference, Oslo, 27 November 2019 and APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020; Article 7 Reports (covering 21); and 2022 Revised Article 5 deadline Extension Request, pp. 26 and 30.

5 Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 14 September 2022.

6 Statements of Serbia on Clearance, Fourth APMBC Review Conference, Oslo, 27 November 2019 and APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020; Article 7 Reports (covering 2019 and 2020); and email from Slađana Košutić, SMAC, 26 March 2021.

7 Serbia, 'Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia', 3 August 2022; and 2022 Revised Article 5 deadline Extension Request, p. 40.

8 2022 Revised Article 5 deadline Extension Request, pp. 6 and 34; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 23 April 2020.

9 Article 7 Report (covering 2020), Form D.

10 Email from Slađana Košutić, SMAC, 23 April 2020; and Article 7 Report (covering 2020 and 2021), Form D.

11 Email from Slađana Košutić, SMAC, 13 April 2022.

12 2013 Article 5 deadline Extension Request, p. 5; and Article 7 Report (covering 2014), Form C.

13 Email from Slađana Košutić, SMAC, 11 May 2021.

Serbia is also contaminated with cluster munition remnants (CMR) and other explosive remnants of war (ERW), which are either the result of the 1999 North Atlantic Treaty Organization (NATO) bombing campaign, remain from previous conflicts, or are the result of explosions or fire at military depots¹⁴ (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Serbia for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

According to a Government Decree on Protection against Unexploded Ordnance, the Sector for Emergency Management, under the Ministry of Interior, acts as the national mine action authority (NMAA).¹⁵ The NMAA is responsible for developing standard operating procedures (SOPs), accrediting demining operators, and supervising SMAC.¹⁶

SMAC was established on 7 March 2002, with a 2004 law making it responsible for coordinating survey and clearance; collecting and managing mine action information (including casualty data); and surveying SHAs. It also has a mandate to plan demining projects, conduct quality control (QC) and monitor operations, ensure implementation of international standards, and conduct risk education.¹⁷ As from 1 January 2014, according to the Government Decree on Protection against Unexploded Ordnance, the Sector for Emergency Management, under the Ministry of Interior, was made responsible for accrediting demining operators. Previously, SMAC was responsible for doing so.¹⁸

A new director of SMAC was appointed by the Serbian government in July 2019.¹⁹ As at March 2022, nine people were employed at SMAC – the Director, two assistant directors, and six other employees.²⁰

In November 2020, representatives from the Geneva International Centre for Humanitarian Demining (GICHD) visited SMAC. It was jointly concluded that the GICHD could usefully provide support to SMAC for the development of national mine action standards (NMAS) through the provision of training and assistance with information management.²¹

SMAC is fully funded by Serbia, including salaries and running costs, as well as for survey activities, development of project tasks for demining and clearance of contaminated areas, follow-up on implementation of project tasks, and quality assurance (QA) and QC of demining. In 2021, Serbia reported that around €320,000 per annum was allocated from the national state budget for the work of SMAC,²² an increase on the €270,000 provided in 2020.²³ In addition, the unexploded ordnance (UXO) disposal work of the Sector for Emergency Situations of the Ministry of Interior is also State funded.²⁴

Planned national funding of €350,000 for survey and clearance operations in 2020 was reduced to €260,000 due to the COVID-19 pandemic and efforts by the Serbian government to tackle it. It remained at the reduced level of €260,000 for 2021, matched with available donor funds through ITF Enhancing Human Security.²⁵ In addition to the €1,040,000 of total national funding pledged for 2022–25, Serbia estimated it will also need to secure an additional €2 million from international donors.²⁶

In June 2018, during the APMBC intersessional meetings, Serbia and the Committee on the Enhancement of Cooperation and Assistance convened an "Individualised Approach Platform" meeting, to hold a frank discussion with relevant stakeholders on the current status of Serbia's national programme, the needs and challenges in completing its Article 5 obligations.²⁷ SMAC reports having a resource mobilisation strategy for Article 5 implementation.²⁸ No formal in-country national platform for dialogue exists, but SMAC said that it cooperates closely with the Bujanovac national authorities and other relevant stakeholders, in particular the Ministry of Interior, Ministry of Foreign Affairs, and Ministry of Defence (MoD), as well as embassies of donor nations.²⁹

14 2018 Article 5 deadline Extension Request, p. 7.

15 Official Gazette of the Republic of Serbia, No. 70/13.

16 Emails from Darvin Lisica, Regional Programme Manager, Norwegian People's Aid (NPA), 6 May and 12 June 2016; and 2022 Revised Article 5 deadline Extension Request, p. 20.

17 Law of Alterations and Supplementations of the Law of Ministries, Official Gazette, 84/04, August 2004; interview with Petar Mihajlović and Slađana Košutić, SMAC, Belgrade, 26 April 2010; and 2022 Revised Article 5 deadline Extension Request, pp. 20–21.

18 2022 Revised Article 5 deadline Extension Request, p. 20.

19 Email from Slađana Košutić, SMAC, 23 April 2020.

20 Email from Slađana Košutić, SMAC, 25 March 2022.

21 Statement of Serbia on International Cooperation and Assistance, APMBC 19th Meeting of States Parties (19MSP) (virtual meeting), 15–19 November 2021.

22 Email from Slađana Košutić, SMAC, 25 March 2022. Serbia's Article 7 report (covering 2021), put the figure for government support to SMAC at €350,000.

23 Article 7 Report (covering 2019), Section 4; and email from Slađana Košutić, SMAC, 26 March 2021.

24 SMAC, "Mine situation", accessed 8 May 2019, at: <http://bit.ly/1Nom1V7>.

25 Statement of Serbia on Clearance, 19MSP (virtual meeting), 15–19 November 2021; 2022 Revised Article 5 deadline Extension Request, pp. 9 and 37; and email from Slađana Košutić, SMAC, 13 April 2022.

26 Statement of Serbia on Clearance, APMBC (virtual meeting), 15–19 November 2021; and 2022 Revised Article 5 deadline Extension Request, pp. 9 and 37.

27 APMBC Individualised Approach Meeting, intersessional meetings, Geneva, 7 June 2018; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.

28 Email from Slađana Košutić, SMAC, 23 April 2020.

29 Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 13 April 2022.

In March 2020, SMAC and the Serbian Armed Forces General Staff of the Ministry of Defence, signed an Agreement on Cooperation in the field of demining and UXO/ERW removal. The Agreement is reported to envisage, among others, the joint participation in training of personnel to conduct demining and UXO/ERW demolition operations, training certification, joint participation in survey, collection of data on UXO/ERW-suspected and contaminated areas, as well as implementation of UXO/ERW removal projects, with monitoring and implementation of the IMAS and regulations in the field of demining. The initial focus will reportedly be on the training of personnel in UXO/ERW demolition operations,³⁰ and not on clearance of mined areas.³¹

In late 2019, the Serbian government approved funds for the establishment of a training centre within SMAC. The training centre became operational in 2020. Together with experts from the Ministry of Interior, SMAC will provide different training modules, including on ERW recognition, IMAS, medical aspects, and risk reduction.³² A "train-the-trainer" course for explosive ordnance disposal (EOD) levels 1 and 2 was held on 25 October–19 November 2021 at the training centre, in a cooperation between SMAC and the MoD, with financial support from the European Union (EU) delegation in Belgrade. The training involved both SMAC and MoD staff.³³

In 2021, the United States (US) Department of State donated two terrain vehicles, a number of detectors and "multifunctional devices", and personal protective equipment to SMAC, through the ITF.³⁴

ENVIRONMENTAL POLICIES AND ACTION

SMAC said that it has been committed to taking environmental aspects into account and minimising potential harm from demining activities ever since its foundation. It reported that for each survey or clearance project task there is an obligation on the contractor (the demining operator) to include in its execution plan an environmental protection and a fire protection plan, together with a plan for health and safety at work.

Illustrative examples related to environment being taken into consideration during CMR clearance operations include contaminated areas cleared in Kopaonik National Park. For these tasks, a special regime was required for the protection of native trees and other plant species. The chopping down of trees, and the cutting of tree branches and blueberry and juniper bushes, as well as the removal of plants could only be conducted in justified cases and after obtaining the consent of relevant authorities.³⁵

GENDER AND DIVERSITY

In 2014, following the initiative of the Prime Minister, Deputy Prime Minister, and the Minister of Construction, Transportation and Infrastructure, a Coordination Body for Gender Equality was formed as a national coordinating mechanism for gender equality in Serbia. The coordination body recognises the importance of improving the position of women, focusing in particular on increasing the number of female entrepreneurs, as well as their equal participation in management bodies in education, science, culture, information, sports, agriculture, and rural development, among others.³⁶

At SMAC, four of the nine employees (just over 44%) are women, with two of the women (22% of total employees) holding managerial/supervisory level positions and two (22% of total employees) in operations positions.³⁷ SMAC does not have a gender policy in place and does not disaggregate relevant mine action data by sex and age. However, it does

ensure women and children are consulted during survey and community liaison activities,³⁸ and SMAC cooperates closely with the local authorities and other relevant stakeholders in this regard. SMAC also ensures ethnic or minority groups are consulted, which is important, as remaining mined areas are all located in the municipality of Bujanovac, which is an area with a multi-ethnic population. SMAC reports that it cooperates with Bujanovac municipality officials, including the mayor and deputy mayor, who are from different ethnic groups, and other employees in charge of community liaison activities.³⁹

With respect to the new mined area identified as a result of fires in October 2019 and August 2021, SMAC planned to conduct a survey which will include representatives of Serbian and Albanian personnel.⁴⁰

Serbia reports there is equal access to employment for qualified women and men in survey and clearance operations.⁴¹

30 Article 7 Report (covering 2020), Form H.

31 Email from Slađana Košutić, SMAC, 26 March 2021.

32 Emails from Slađana Košutić, SMAC, 23 April 2020 and 26 March 2021.

33 Statement of Serbia on International Cooperation and Assistance, 19MSP (virtual meeting), 15–19 November 2021; 2022 Revised Article 5 deadline Extension Request, p. 22; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 25 March 2022.

34 2022 Revised Article 5 deadline Extension Request, p. 19.

35 Email from Slađana Košutić, SMAC, 25 March 2022.

36 2022 Revised Article 5 deadline Extension Request, p. 22.

37 Email from Slađana Košutić, SMAC, 25 March 2022.

38 Article 7 Report (covering 2021), Form D.

39 Email from Slađana Košutić, SMAC, 23 April 2020.

40 Statement of Serbia, APMB 18th Meeting of States Parties (virtual meeting), 16–20 November 2020; and Article 7 Report (covering 2021), Form D.

41 Article 7 Report (covering 2020), Form D.

INFORMATION MANAGEMENT AND REPORTING

SMAC currently uses its own information management system. In early 2020, following initial discussions several years previously, SMAC informally discussed with the GICHD the possibility of installing the Information Management System for Mine Action (IMSMA).⁴² In 28 June–2 July 2021, representatives from the GICHD visited SMAC to assess SMAC's information management capabilities and needs, as well as to offer detailed recommendations to SMAC to advance its information management processes and systems.⁴³ As at March 2022, SMAC was in the final stage of completing an administrative procedure which will enable the GICHD to support SMAC to implement IMSMA Core.⁴⁴

PLANNING AND TASKING

In its 2018 Article 5 deadline extension request, Serbia included a costed plan for the completion of demining, with clear milestones, for 2018–23.⁴⁵ Serbia subsequently updated the plan in its annual Article 7 reports. SMAC achieved release of 294,230m² of mined area in 2021, as per its plan for the year.

In its 2022 revised Article 5 deadline extension request, which was being considered at the APMBT Twentieth Meeting of States Parties, Serbia reported that it planned to release all known mined (561,800m²) in 2022, and to conduct non-technical survey of the previously unreported mined area in 2022–23.⁴⁶

The Government of Serbia adopts SMAC's annual work plans and medium term plans.⁴⁷ SMAC's 2022 annual work plan includes two mine clearance project tasks of 143,500m² and 28,000m² each, and one technical survey task of 390,300m², totalling 561,800m². Together this would address all three confirmed mined areas remaining.⁴⁸

SMAC also hoped to conduct an assessment/non-technical survey of the previously unknown mined areas in 2022 and 2023, in order to determine the location and extent of remaining contamination and plan for completion.⁴⁹

SMAC has tentatively provided funding to conduct this and was in negotiations with ITF regarding possible US State Department Bureau of Political-Military Affairs (PM/WRA) funding. SMAC expects that the non-technical survey project

will take up to one year and will include the areas where the forest fires occurred in October 2019 and August 2021, when explosions could be heard. It will also include all other areas in Bujanovac municipality where "the existence of other mine indicators might be reported". During this period, technical survey and clearance projects will then be developed, and explosive ordnance risk education (EORE) activities will be conducted in all 59 villages of Bujanovac municipality.

Upon completion of non-technical survey, SMAC expected to have a better picture of the remaining contamination with which to then inform a follow-on deadline extension request to be submitted in March 2024 and considered by the Fifth Review Conference in 2024, including a detailed work plan for fulfilment of Serbia's Article 5 obligations.⁵⁰

Serbia prioritises the demining of areas which directly affect the local population, such as those close to settlements where local people have abandoned their houses and stopped cultivating land due to fear of landmines. Prioritisation of hazardous areas takes place between Serbia, SMAC, and donors according to agreed criteria. SMAC also noted that donors themselves sometimes also influence the choice of the areas which will be demined first, depending on availability and amount of their funds.⁵¹

Progress is, however, contingent on funding and Serbia has stated that if it cannot secure international support for demining, its work plan will be directly affected.⁵²

42 Email from Slađana Košutić, SMAC, 23 April 2020.

43 Statement of Serbia on International Cooperation and Assistance, 19MSP (virtual meeting), 15–19 November 2021; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 25 March 2022.

44 Email from Slađana Košutić, SMAC, 25 March 2022.

45 2018 Article 5 deadline Extension Request, pp. 8, 9, 31, and 32.

46 2022 Revised Article 5 deadline Extension Request, p. 7.

47 Ibid., p. 21; email from Slađana Košutić, SMAC, 26 March 2019; and interview with Bojan Glamočtija, SMAC, in Geneva, 14 February 2020.

48 2022 Revised Article 5 deadline Extension Request, pp. 7–8; and email from Slađana Košutić, SMAC, 13 April 2022.

49 2022 Revised Article 5 deadline Extension Request, pp. 7 and 41; and email from Slađana Košutić, SMAC, 13 April 2022.

50 2022 Revised Article 5 deadline Extension Request, pp. 7–8, and 35; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 13 April 2022.

51 Email from Slađana Košutić, SMAC, 12 April 2018 and 25 March 2022; Article 7 Report (covering 2020), Form D; and 2022 Revised Article 5 deadline Extension Request, pp. 26 and 41.

52 Emails from Slađana Košutić, SMAC, 23 April 2020 and 26 March 2021; Statements on Clearance, Fourth APMBT Review Conference, Oslo, 27 November 2019 and 18th Meeting of States Parties (virtual meeting), 16–20 November 2020; and Article 7 Report (covering 2020), Form D.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

According to SMAC, survey and clearance operations in Serbia are conducted in accordance with the IMAS.⁵³

Serbia is planning to adopt a new decree on protection against ERW. The draft decree, developed by SMAC and the Ministry of Interior, foresees the development of national mine action standards (NMAS); formally introduces the concept of land release, which was not defined in the former decree; aims to improve the accreditation, monitoring, and evaluation process; and prohibits the previous practice of independent ammunition technicians being hired by infrastructure companies (which will instead be done through tasking and coordination from SMAC).⁵⁴ As at August 2022, the Decree was in the final stages of being adopted by the government.⁵⁵

Under new directorship in late 2015, SMAC reassessed its land release methodology in order to prioritise full clearance over technical survey of hazardous areas.⁵⁶ This does not correspond to international best practice and is an inefficient use of scarce clearance assets. In February 2016, the then new director of SMAC reported to Mine Action Review that while SMAC supports the use of high quality non-technical survey to identify suspected mined areas, it will fully clear these areas, rather than using technical survey to identify the boundaries of contamination more accurately.⁵⁷

As at March 2022, SMAC's position on its preferred land release methodology remained the same under the current Director, but there was a continued willingness to conduct technical survey in a form "adjusted to the context of Serbia", in response to the stated preference of international donors for technical survey above clearance, where appropriate.⁵⁸ As previously mentioned, in a positive development, a new decree developed by SMAC and the Ministry of Interior and due to be adopted in 2021, introduces the concept of land release, which was not defined in the former decree.⁵⁹

SMAC's reluctance to apply technical survey to delineate confirmed mined area is due to its lack of confidence that such survey can effectively identify groups of unrecorded mines, not planted in specific patterns.⁶⁰ According to SMAC,

incidents involving people or animals have occurred in most of these suspected areas or else mines have been accidentally detected.⁶¹ In its Article 7 report (covering 2021) and in response to questions asked by the Committee on Article 5 implementation, Serbia said that "the size of the area to be cleared is determined on the basis of processed data which have been collected by a non-technical survey",⁶² suggesting that technical survey is not typically deployed to reduce mined areas.

SMAC has reported that the results of the initial survey data are analysed and then further non-technical survey is conducted to assess conditions in the field, and to gather statements by the local population, hunters, foresters, representatives of Civil Protection, and the police, among others. Data on mine incidents is another significant indicator.⁶³ Also, in the context of Serbia, there is reportedly limited potential to obtain additional information on the location of mined areas from those who laid the mines during the conflict.⁶⁴

Technical survey is employed "to additionally collect information by technical methods on a suspected area and in case when the data collected by a non-technical survey are not sufficient for suspected areas to be declared hazardous or safe".⁶⁵

While only clearance and not release by survey occurred in 2019–21, the reduction of mined area through technical survey in 2017 and 2018, however, does demonstrate SMAC's earlier willingness to adopt more efficient land release practices. Furthermore, a technical survey project was planned for 2022.⁶⁶ Clearance is reported to be conducted in accordance with the IMAS and to a depth of 20cm.⁶⁷

On 4–8 July 2021, as part of a study conducted by the GICHD on difficult terrain in mine action, the GICHD and SMAC jointly visited areas of "difficult terrain". The primary objective of the study is to support national authorities in their efforts to address explosive hazards and return land to safe and productive use.⁶⁸

53 SMAC, "Mine Situation, August 2022", accessed 20 August 2022, at: <http://bit.ly/1Nom1V7>; and Article 7 Report (covering 2021), Form D.

54 Article 7 Reports (covering 2020 and 2022), Form D; emails from Slađana Košutić, SMAC, 26 March and 26 July 2021; and Serbia, "Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia", 3 August 2022.

55 2022 Revised Article 5 deadline Extension Request, p. 21.

56 Interview with Jovica Simonović, SMAC, in Geneva, 18 February 2016.

57 Ibid.

58 2022 Revised Article 5 deadline Extension Request, p. 41; and email from Slađana Košutić, SMAC, 25 March 2022.

59 Article 7 Report (covering 2020), Form D; and email from Slađana Košutić, SMAC, 26 March 2021.

60 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.

61 Article 7 Report (covering 2020), Form D; and Statement on Clearance, Fourth APMB Review Conference, Oslo, 27 November 2019.

62 Article 7 Report (covering 2021), Form D; and Serbia, "Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia", 3 August 2022.

63 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and Article 7 Report (covering 2020), Form D.

64 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017.

65 Article 7 Report (covering 2020), Form D.

66 2022 Revised Article 5 deadline Extension Request, p. 38; and email from Slađana Košutić, SMAC, 13 April 2022.

67 Article 7 Report (covering 2020), Form D.

68 Statement of Serbia on International Cooperation and Assistance, 19MSP (virtual meeting), 15–19 November 2021; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 25 March 2022.

OPERATORS AND OPERATIONAL TOOLS

SMAC does not itself carry out clearance or employ deminers but does conduct survey of areas suspected to contain mines, CMR, or other ERW. Clearance is conducted by commercial companies and NGOs, which are selected through public tender procedures executed by the ITF, supported by international funding.⁶⁹

Serbia said productivity per deminer, depending on the mine situation, terrain configuration, land characteristics and vegetation, was up to 150m² per deminer per day.⁷⁰

The Ministry of Interior issues accreditation to mine action operators that is valid for one year. In 2021, 11 companies/organisations (six from Serbia and five from Bosnia and Herzegovina (BiH)), were accredited for demining,⁷¹ but only one NGO conducted clearance of mined areas (see Table 2).

Clearance capacity was broadly similar to the previous year. No survey personnel were deployed in Serbia in 2021 or 2020.

The Serbian Armed Forces maintain a capability to survey, detect, clear, and destroy landmines. This capability includes many types of detection equipment, mechanical clearance assets, disposal expertise, and specialist search and clearance teams.⁷² An EOD department within the Sector for Emergency Management, in the Ministry of Interior, responds to call-outs for individual items of ERW, and is also responsible for demolition of items found by SMAC survey teams and by contractors/operators during clearance.⁷³

Technical survey and clearance in Serbia are primarily conducted manually. Mine detection dogs (MDDs) were used

in technical survey and clearance operations in 2018 to release land,⁷⁴ but according to the authorities most of the mines are in mountainous areas with challenging terrain (with a slope of 5–10% and in several places up to 40%) and thick vegetation and are not appropriate for the use of MDDs or machinery.⁷⁵ The fact that these areas have not been accessed since the end of the conflict (2001), owing to the suspected presence of mines, means that the land is unmanaged, making it even less accessible.⁷⁶ Serbian armed forces use their machines and vehicles (excavators, trucks etc.) to improve the quality of access roads, ahead of clearance by contracted companies.⁷⁷

SMAC uses data obtained by unmanned aerial vehicles to develop and monitor clearance and technical survey projects.⁷⁸

In 2021, SMAC representatives attended a global non-technical survey course organised by the GICHD in Switzerland in August; a regional technical survey course organised by the GICHD in partnership with Norwegian People's Aid (NPA) in BiH in September; a regional quality management course organised by the GICHD in cooperation with SMAC in Serbia in November–December; and an online IMSMA training course organised by the GICHD in December.⁷⁹

SMAC said that it had tentatively secured donor funds to start a non-technical survey project of the previously unknown mined areas, which will require recruitment and training of two mixed survey teams (one Serbian and one Albanian team of two surveyors each). SMAC will supervise and monitor the non-technical survey in cooperation with the local authorities.⁸⁰

Table 2: Operational clearance capacities deployed in 2021⁸¹

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**
NGO Stop Mines (and NGO IN Demining subcontracted)	4	24	3 dogs and 6 handlers	0
Totals	4	24	3 dogs and 6 handlers	

* Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters.

69 2018 Article 5 deadline Extension Request, p. 18.

70 Serbia, Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia", 3 August 2022.

71 2022 Revised Article 5 deadline Extension Request, p. 36.

72 Article 7 Report (covering 2018), Form J.

73 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; Article 5 deadline Extension Request (2018), p. 18; and email from Slađana Košutić, SMAC, 3 June 2022.

74 Email from Slađana Košutić, SMAC, 26 March 2019.

75 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; 2022 Revised Article 5 deadline Extension Request, p. 23; and Serbia, "Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia", 3 August 2022.

76 Email from Slađana Košutić, SMAC, 26 March 2019; and Article 7 Report (covering 2019), Section 4.

77 Serbia, "Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia", 3 August 2022; and 2022 Revised Article 5 deadline Extension Request, p. 37.

78 Email from Slađana Košutić, SMAC, 26 March 2019.

79 Statement of Serbia on International Cooperation and Assistance, 19MSP (virtual meeting), 15–19 November 2021; 2022 Revised Article 5 deadline Extension Request, p. 22; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 25 March 2022.

80 2022 Revised Article 5 deadline Extension Request, p. 9; and email from Slađana Košutić, SMAC, 13 April 2022.

81 Email from Slađana Košutić, SMAC, 13 April 2022.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

A total of 0.29km² of mined area was released through clearance in 2021, destroying nine anti-personnel mines and four items of UXO.⁸² No mined area was reduced through technical survey or cancelled through non-technical survey in 2021.⁸³

SURVEY IN 2021

No mined area was reduced through technical survey or cancelled through non-technical survey in 2021 or in 2020.⁸⁴

CLEARANCE IN 2021

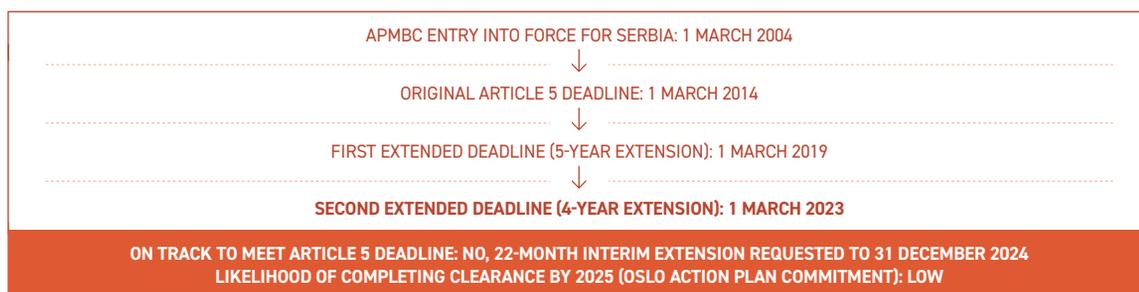
In 2021, a total of 294,230m² of mined area was cleared, destroying nine anti-personnel mines and four items of UXO (see Table 3).⁸⁵ Clearance was funded by the Serbian government, matched through ITF with available funds from the US PM/WRA and the Republic of Korea.⁸⁶ Clearance output in 2021, was broadly consistent compared to 2020, when 269,280m² of mined area was cleared, destroying 1 anti-vehicle mine along with 1,586 items of UXO, but no anti-personnel mines.⁸⁷

Table 3: Mine clearance in 2021⁸⁸

Municipality	Village	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Bujanovac	Končulj	NGO Stop Mines	294,230	9	0	4
Totals			294,230	9	0	4

SMAC did not have available data on the number of mines destroyed by the EOD department within the Sector for Emergency Management during spot tasks in 2021.⁸⁹

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the second extension (for four years) granted by States Parties in 2018), Serbia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2023. Serbia will not meet this deadline and in March 2022 it submitted a request to extend its deadline by a further two years to 1 March 2025. In August 2022, in response to feedback from the Committee on Article 5 implementation, Serbia then resubmitted a revised 22-month extension request to request an interim deadline of 31 December 2024 instead of 1 March 2025. In doing so, Serbia is requesting only the period of time necessary to complete non-technical survey of Bujanovac municipality and gather necessary information to design a work plan for completion as part of a subsequent request to be submitted in March 2024. Serbia's aim is to project with greater certainty the number and size of remaining mined areas and the amount of time and funds required to release the areas and fulfil its Article 5 obligations. The global goal of a mine free world by 2025 remains its objective.⁹⁰

82 2022 Revised Article 5 deadline Extension Request, p. 14; and Article 7 Report (covering 2021), Form D and Annex III.

83 Email from Slađana Košutić, SMAC, 13 April 2022.

84 Email from Slađana Košutić, SMAC, 26 March 2021.

85 Article 7 Report (covering 2021), Form D and Annex III; and email from Slađana Košutić, SMAC, 13 April 2022.

86 2022 Revised Article 5 deadline Extension Request, p. 13.

87 Article 7 Report (covering 2020), Form D and Annex III.

88 Ibid.; and email from Slađana Košutić, SMAC, 13 April 2022.

89 Email from Slađana Košutić, SMAC, 13 April 2022.

90 2022 Revised Article 5 deadline Extension Request, p. 7.

Serbia planned to make every effort to complete technical survey and clearance of the three known mined areas (totalling 561,800m²) in 2022 and had secured national and international funding for this.⁹¹

Then, in 2022–23, Serbia planned to complete non-technical survey of the areas where forest fires occurred October 2019 and August 2021 and explosions could be heard, enabling it to determine a complete picture of the remaining mined areas and a detailed work plan for completion, with which to inform its fourth, and hopefully final, deadline extension request in 2024. As at August 2022, Serbia was in negotiations with ITF and the PM/WRA regarding seeking funding for the non-technical survey.⁹² SMAC expects it will take a year to recruit survey teams; conduct training and survey; input and analyse data; and create a prioritised plan for clearance. Upon completion of the non-technical survey, SMAC will have a clear picture of the remaining contamination, and can develop an updated work plan for completion.⁹³ Funds for the land release of any newly identified mined areas had yet to be secured as at August 2022, but SMAC estimated that it required €1.04 million of national funding and €2 million from the ITF and other sources of funding.⁹⁴

Serbia has stated that it remains fully committed to fulfilling its Article 5 obligations, in order to provide safety of local populations, safe exploitation of woods, safe use of roads, environmental protection, and reduction of fire risks.⁹⁵ Serbia planned to submit a follow-on deadline extension request in March 2024, which will include a detailed work plan for the release of any mined areas identified through non-technical survey in 2022–23. It also said that the global 2025 completion goal remains its objective.⁹⁶

According to SMAC, the following circumstances have impeded it from meeting its extended 1 March 2023 deadline: unregistered mine contamination, emplaced in groups and not patterns; discovery of previously unknown mine suspected areas in 2019 and 2021; climatic conditions preventing access to contaminated areas for some of the year (the temperature must be above 5°C for demining operations to take place); and reduction in national funding for demining operations due to the COVID-19 pandemic. SMAC is also faced with explosive ordnance contamination other than mines, including clearance operations triggered by infrastructure development projects.⁹⁷ In its extension

request, Serbia further highlighted the challenge of the lack and unpredictability of secure financial resources.⁹⁸

Furthermore, Serbia's claim to continued jurisdiction over Kosovo entails legal responsibility for remaining mined areas under Article 5 of the APMBC.⁹⁹ However, Serbia did not include such areas in either its first or second extension request estimates of remaining contamination or plans for the extension periods. In its 2022 APMBBC Article 5 deadline extension request, however, Serbia stated that: "In the territory of the Autonomous Province of Kosovo and Metohija, there are mined areas, as well as areas contaminated with cluster bombs remaining after the armed conflicts. Pursuant to Resolution 1244 of the United Nations Security Council (Annex II, item 6), it is envisaged that after the withdrawal, an agreed number of the Republic of Serbia personnel will be allowed to return to perform certain functions, including marking and clearing minefields. As this provision of Annex II has not been implemented, this issue is still within the competence of UNMIK in accordance with Resolution 1244."¹⁰⁰

In the last five years Serbia has cleared a total of 1.46km² of mined area (see Table 4).

Table 4: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	0.29
2020	0.27
2019	0.61
2018	0.29
2017	*0
Total	1.46

*0.28km² was reduced through technical survey, during which three anti-personnel mines were destroyed.

The Serbian government has allocated €260,000 for demining operations in 2022 to release the three areas of known mined area (excluding the previously unknown mined areas discovered in 2019 and 2021), which will be matched by funding from PM/WRA and the Republic of Korea.¹⁰¹

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

SMAC expects to need both national and international capacity to deal with any residual contamination that may be discovered following completion of planned mine clearance.¹⁰² SMAC has reported that it has been cooperating with the Ministry of Interior and the Ministry of Defence to plan for sustainable national capacity to address previously unknown mined areas post fulfilment of its Article 5 clearance obligations.¹⁰³

91 Statement of Serbia on Clearance, 19MSP (virtual meeting), 15–19 November 2021; 2022 Revised Article 5 deadline Extension Request, p. 7; Article 7 Report (covering 2021), Form D; and email from Slađana Košutić, SMAC, 13 April 2022.

92 Serbia, "Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia", 3 August 2022.

93 Article 7 Report (covering 2021), Form D.

94 Serbia, "Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia", 3 August 2022.

95 Article 7 Report (covering 2021), Form D.

96 2022 Revised Article 5 deadline Extension Request, p. 35; and email from Slađana Košutić, SMAC, 13 April 2022.

97 2022 Revised Article 5 deadline Extension Request, p. 34; Article 7 Report (covering 2021), Form D; email from Slađana Košutić, SMAC, 13 April 2022; and Serbia, "Replies to the Committee on Article 5 Implementation on Questions Concerning the Requisition Submitted by Serbia", 3 August 2022.

98 2022 Revised Article 5 deadline Extension Request, p. 7.

99 See also in this regard UN Security Council Resolution 1244 (1999).

100 2022 Revised Article 5 deadline Extension Request, p. 10.

101 Article 7 Report (covering 2021), Form D.

102 Email from Slađana Košutić, SMAC, 23 April 2020.

103 Email from Slađana Košutić, SMAC, 26 March 2021.

ARTICLE 5 DEADLINE: 1 OCTOBER 2027
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

7 KM²

AP MINE CLEARANCE IN 2021

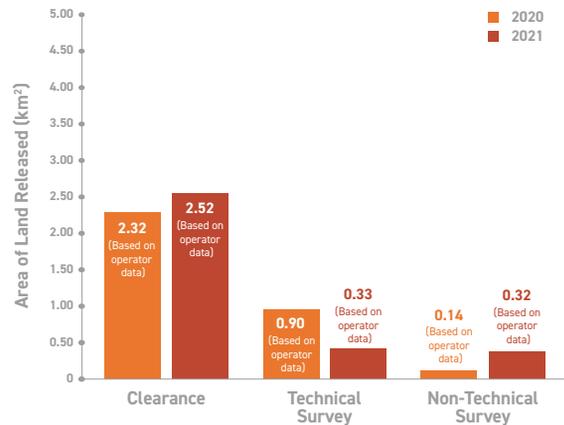
2.52 KM²

AP MINES DESTROYED IN 2021

74

(19 DESTROYED DURING SPOT TASKS)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

Somalia lacks an accurate baseline of anti-personnel mine contamination but according to Somalia's Anti-Personnel Mine Convention (APMBC) Article 5 deadline extension request nationwide non-technical survey was due to commence in October 2022. Operators conducted non-technical survey of some areas in 2021 with Norwegian People's Aid (NPA) committing to complete survey of Puntland state by early 2023. While clearance increased slightly, overall land release output decreased slightly in 2021 compared to the previous year and the number of anti-personnel mines found and destroyed remains extremely low. The Somali Explosive Management Authority (SEMA), while recognised as a government institution by presidential decree in 2012, still lacks access to State funding, significantly impeding its ability to fulfil its coordination function effectively.

RECOMMENDATIONS FOR ACTION

- Somalia should elaborate a new National Mine Action Strategic Plan, updating the National Mine Action Strategic Plan 2018-2020.
- Somalia should develop a more detailed and structured work plan which should include detailed information on the planned non-technical survey (including what proportion of mined areas are currently accessible for survey and which, due to security concerns, are not), as well as land release targets.
- Somalia should submit comprehensive, annual Article 7 transparency reports and include details regarding anti-personnel mines of an improvised nature.
- Somalia should also make available its capacity development plan and resource mobilisation strategy, both of which will be essential for the success of Article 5 implementation in Somalia.
- Somalia should ensure that the most relevant land-release standards, policies and methodologies, in line with International Mine Action Standards (IMAS), are in place to ensure that targeted clearance is being conducted as part of a comprehensive land release methodology.

- Somalia should strengthen national coordination including by ensuring regular dialogue with national and international stakeholders on challenges in implementing its Article 5 clearance obligations.
- Somalia should detail its plans for establishing a sustainable national capacity to address the discovery of previously unknown mined areas following completion (i.e. residual contamination).
- Having been recognised as a government institution by presidential decree in 2013, SEMA's status should be officially recognised in law and national resources budgeted annually for its operating costs.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	4	There is no accurate baseline of anti-personnel mine contamination in Somalia, and the authorities have not provided an estimate of anti-personnel mine contamination since the end of 2019. According to Somalia's Article 5 deadline extension request, a nationwide non-technical survey was due to begin in October 2022. In 2021, the HALO Trust conducted non-technical survey in parts of the Southwest State, Hirshabelle State, and Galmudug State while NPA has completed non-technical survey of mine contamination in one of the border districts of Puntland and has committed to completing non-technical survey in Puntland by early 2023.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	4	SEMA was recognised as a government institution by presidential decree in 2013, but legislation and budget approval remained pending and the Federal Government of Somalia (FGS) still does not fund its operations. SEMA continued to receive external capacity development and financial support for salaries throughout 2021 from The HALO Trust.
GENDER AND DIVERSITY (10% of overall score)	5	5	Somalia's National Mine Action Strategic Plan 2018–2020 includes provisions on gender and diversity. SEMA has been positive towards action on gender and diversity, particularly within survey and community liaison teams. However, cultural challenges exist to achieving gender mainstreaming in Somalia. Clan affiliation is also an important consideration when considering diversity. SEMA has not reported on any additional progress on this issue in 2021.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	4	SEMA has assumed full ownership and responsibility for the national mine action database, resulting in reported improvements in information management. As at September 2022, Somalia had still to submit its Article 7 report covering 2021.
PLANNING AND TASKING (10% of overall score)	5	5	Somalia's National Mine Action Strategic Plan 2018–2020 was approved in 2020 and extended for one year to allow SEMA sufficient time to develop a new strategy, but as at September 2022, SEMA had not reported on whether a new strategy has been developed. SEMA stated in the extension request that it is working with stakeholders on a costed operational work plan that was to be presented in 2021 but as at September 2022 this had yet to be published. Operators reported that while improvements had been made in tasking by SEMA, the process would benefit from greater ownership by the authority while SEMA expressed concern that operators task themselves without any agreement from its side.
LAND RELEASE SYSTEM (20% of overall score)	5	5	A process to revise Somalia's National Technical Standards and Guidelines was due to be completed in 2019 but was still awaiting approval as of writing. Current standards are not deemed fit for purpose.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	4	Somalia is not on track to meet its Article 5 deadline. While clearance output increased slightly in 2021, compared to the previous year, survey output and overall land release fell in 2021.
Average Score	4.6	4.4	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Somali Explosive Management Authority (SEMA)
- Mine Action Department within the Somaliland Ministry of Defence (MoD)

NATIONAL OPERATORS

- Federal Member States (FMS) non-governmental organisation (NGO) consortium

INTERNATIONAL OPERATORS

- The HALO Trust
- Norwegian People's Aid (NPA)
- Ukroboronservice

OTHER ACTORS

- United Nations Development Programme (UNDP)
- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

Somalia has not provided an estimate of anti-personnel mine contamination as at the end of 2021. However, in November 2021, SEMA reported its remaining total explosive ordnance challenge as 74 suspected hazardous areas (SHAs), covering an estimated 68.44km² and 122 confirmed hazardous areas (CHAs) covering an estimated 58.2km².¹ Operators report that CHAs containing landmines are mainly concentrated along Somalia's border with Ethiopia. Data gathered through historical surveys indicate that most recorded minefields were contaminated with anti-vehicle mines or had very minimal information about the type of contamination.² Anti-personnel mine contamination in Somalia is believed to be low.³ That said, the United Nations Mine Action Service (UNMAS) reports that all reported mined areas are believed to have mixture of anti-personnel mines, anti-vehicle mines, and unexploded ordnance (UXO).⁴

Contamination from mines and explosive remnants of war (ERW) exists across Somalia's three major regions: south-central Somalia, including the capital Mogadishu; Puntland; and Somaliland, a self-proclaimed, though unrecognised state in the north-west. Mines along the border with Ethiopia, mainly in legacy minefields, also continued to affect civilians in south-central Somalia.⁵

Previously, SEMA had reported 125 suspected and confirmed mined areas across Somalia covering an estimated total area of 16.2km² as at end of 2019 (see Table 1).⁶ This estimate includes CHAs and SHAs believed to contain a mixture of anti-personnel and anti-vehicle mines, as well as those believed to contain only anti-personnel mines.

Table 1: Mine contamination (at end 2019)⁷

Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
AP mines	29	6,098,846	1	0
AP/AV mines	91	9,999,390	4	121,744
Totals	120	16,098,236	5	121,744

AP = Anti-personnel AV = Anti-vehicle SHA = suspected hazardous area

It was estimated, at the end of 2019, that 29 CHAs contained only anti-personnel mines, covering a total area of 6.1km², along with one suspected hazardous area (SHA) of an unknown size in Puntland, see Table 2.⁸ This is a massive reduction from the more than 72.2km² of anti-personnel mine contamination across 72 SHAs/CHAs reported in Somalia's Article 7 report (covering 2018).⁹ SEMA, however, believes that the true extent of contamination is far greater.

1 Presentation by Dahir Abdirahman Abdulle, National Director General, SEMA, of Somalia's request for an Article 5 deadline extension, 19th MSP to the APMBC, virtual meeting, 15–19 November 2021.

2 Emails from Mustafa Bawar, Head of Programme Management Office, UNMAS, 17 March 2020; and Claus Nielsen, Country Director, NPA, 23 July 2020.

3 Emails from Mustafa Bawar, UNMAS, 17 March 2020; and Lawrie Clapton, Country Director, HALO Trust, 14 June 2020.

4 Email from Clemence Nyamandi, UNMAS, 21 August 2022.

5 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", undated, pp. 6 and 12.

6 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

7 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

8 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

9 Article 7 Report (covering 2018), Form J.

Table 2: Anti-personnel mine contamination, excluding mixed anti-personnel and anti-vehicle mine contamination (at end 2019)¹⁰

State	CHAs	Area (m ²)	SHAs	Area (m ²)	Total CHAs/SHAs	Total area (m ²)
Galmudug	18	3,482,660	0	0	18	3,482,660
Hirshabelle	3	381,922	0	0	3	381,922
Puntland	1	N/K	1	N/K	2	N/K
South-West	7	2,234,264	0	0	7	2,234,264
Totals	29	6,098,846	1	0	30	6,098,846

N/K = Not known

While no comprehensive estimates yet exist of mine contamination in Somalia, surveys completed in 2008 in Bakol, Bay, and Hiraan regions revealed that, of a total of 718 communities, around one in ten was contaminated by mines and/or ERW.¹¹ Other contaminated areas lie along the border with Ethiopia, in Galguduud and Gedo regions, as well as in Hiraan. Non-technical survey initiated in 2015 identified more than 6km² of mined area.¹² However, a baseline of mine contamination is still lacking in Somalia, primarily due to a lack of resources to deploy sufficient survey teams and lack of access to areas due to security concerns and al-Shabaab control.¹³ According to the 2021 Article 5 deadline extension request, a nationwide non-technical survey is planned to be carried out between October 2022 and October 2027.¹⁴

In Somalia's 2021 Article 5 deadline extension request, a two-phase work plan has been provided of which non-technical survey of currently accessible areas is a key focus. Phase one which is from April 2021 to 1 October 2022 (the period prior to the date from which the extension request becomes effective) will focus on the planning of non-technical survey, while phase two will focus on implementation.¹⁵ Lack of safe access continues to be a major obstacle to the completion of survey. Fighting between clans and the presence of Al-Shabaab restricts mobility and places operators' and security personnel at risk.

In 2021, the HALO Trust conducted non-technical survey across Southwest state, Hirshabelle state, and Galmudug state, recording 1,427,664m² of landmine contamination across 31 CHAs. Of these, four newly surveyed minefields have a confirmed or suspected anti-personnel mine threat, totalling 213,767m².¹⁶

In Somaliland, The HALO Trust reported that, as at June 2022, 5.46km² remains to be cleared. This includes 18 mixed anti-personnel and anti-vehicle minefields with a total size of 3.9km² as well as 65 roads with a mine threat equalling 1.4km².¹⁷ This compares to the almost 5.8km² that remained at July 2020.¹⁸

The HALO Trust continued to deploy survey teams across Somaliland in order to build a more accurate assessment of the remaining contamination. While the general extent of contamination has been established by comprehensive survey that HALO has undertaken over the last 20 years in Somaliland, a combination of low-density minelaying and lack of first-hand survey information means that new contaminated areas are still being found.¹⁹

In the Puntland state administration, mine contamination was assessed during Phase 2 of a Landmine Impact Survey (LIS), implemented by the Survey Action Centre (SAC) and the Puntland Mine Action Centre (PMAC) in the regions of Bari, Nugaal, and the northern part of Mudug.²⁰ Norwegian People's Aid (NPA), funded by the UN Development Programme (UNDP), has completed non-technical survey of mine contamination in one of the border districts of Puntland. NPA has committed to complete non-technical survey across the whole of the Puntland state by the early 2023.²¹ In 2021, NPA identified 90 SHAs measuring a total of 2,666,998m² within Puntland state which are mainly suspected to contain anti-vehicle mines. However, given the nature and history of the minefields in Somalia, the chance of finding anti-personnel mines in the same minefields is possible.²²

10 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020. Somalia submitted its Article 7 report (covering 2019) in September 2020 and there were some minor differences in the contamination figures (the number of CHAs is 18 and total area of CHA was 6,098,836m²; the number of SHAs is 11 and total area of SHA was 10.4km² (recorded as only 10.4m² in the Article 7 report)), but the overall estimate of contamination and total CHAs/SHAs were the same.

11 UNMAS, "Annual Report 2011", New York, August 2012, p. 68.

12 Email from Tom Griffiths, Regional Director North Africa, HALO Trust, 25 May 2016.

13 Emails from Claus Nielsen, NPA, 14 May 2019; and Lawrie Clapton, HALO Trust, 14 June 2020.

14 Revised Article 5 deadline extension request, September 2021, p. 58.

15 2021 Article 5 deadline extension request, pp. 43-44.

16 Email from Daniel Redetlinghuys, Country Director, HALO Trust, 29 May 2022.

17 Email from Tobias Hewitt, Programme Manager - Somaliland, HALO Trust, 20 June 2022.

18 Email from Lawrie Clapton, HALO Trust, 10 July 2020.

19 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

20 Email from Mohamed Abdulkadir Ahmed, Director, SEMA, 14 October 2016; and SAC, "Landmine Impact Survey, Phase 2: Bari, Nugaal and Northern Mudug Regions", 2005, p. 5. Phase 1 and Phase 3 of the Landmine Impact Survey (LIS) covered regions of Somaliland in 2003 and 2007, respectively.

21 Emails from Robert Iga Afedra, Country Director, NPA, 1 June and 20 August 2022.

22 Email from Robert Iga Afedra, NPA, 1 June 2022.

As a result of the Ethiopian-Somali wars in 1964 and 1977–78 (also known as the Ogaden war), and more than 20 years of internal conflict, Somalia has both mines and especially ERW contamination. According to the UN, mines were laid as recently as 2012 in the disputed regions of Sool and Sanaag.²³ According to SEMA, Somalia has seen an increase in the use of mines of an improvised nature in recent years. The extent of the threat is not well known, and SEMA was planning to begin recording this information in 2020.²⁴ NPA has reported that non-State actors are using mines of an improvised nature in areas of Northern Puntland, which has been confirmed by the Puntland Ministry of Security. In 2020, eight mines of an improvised nature collected by locals in Puntland were disposed of outside task sites.²⁵ No improvised mines were reportedly found during 2021.

Somalia also has a limited contamination from cluster munition remnants (see Mine Action Review's *Clearing Cluster Munition Remnants 2022* report on Somalia for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Mine action management in Somalia is the responsibility of SEMA. There is a separate regional office in Somaliland, the Mine Action Department within the Somaliland Ministry of Defence (formerly, the Mine Clearance Information and Coordination Authority (MCICA), and before that the Somaliland Mine Action Centre, SMAC) in Somaliland.²⁶

SEMA maintains a presence across Somalia through its five Federal Member States (FMS): the Galmudug State Office, Hirshabelle State Office, Jubaland State Office, Puntland State Office, and South West State Office.²⁷ Under each of the five states is an independent consortium of non-governmental organisations (NGOs) implementing mine action activities.

SEMA was established in 2013 as the mine action centre and serves as the de facto mine action authority for Somalia, replacing the Somalia National Mine Action Authority (SNMAA) created two years earlier.²⁸ SEMA's aim was to assume full responsibility for all explosive hazard coordination, regulation, and management by December 2015.²⁹ SEMA was established by presidential decree in 2013 with endorsement from the Cabinet of Ministers, and legislation and a budget for SEMA were submitted to the Federal Parliament for approval in 2015.³⁰ However, SEMA's legislative framework was not approved by the Parliament in 2016 as expected, and progress was further stalled by elections in February 2017 that resulted in a period of government paralysis.³¹ Due to this lack of parliamentary approval, SEMA has not received funding from the Federal

Government of Somalia since the expiry of its grant in 2015.³² Salaries at SEMA were covered by NPA from 2015 to March 2021.³³ UNMAS was supporting SEMA state offices with operational incentives from January to December 2021.³⁴ UNDP supported SEMA with two months of stipends for staff from January 2022.³⁵ Throughout 2021 and to date at the time of writing, SEMA had received financial support for salaries from The HALO Trust. As well as an absence of government funding, SEMA highlights lack of international funding as a major impediment to being able to fulfil its role effectively.³⁶

The Government of Somalia does not provide any national funding for survey or clearance.³⁷ However, the Ministry of Defence in Somaliland provides a financial allocation to two manual clearance teams totalling 18 personnel.³⁸

In its revised Article 5 deadline extension request, Somalia reported that SEMA expected to receive parliamentary approval in 2022 but, as at June 2022, this had still to happen.³⁹

UNMAS, the Geneva International Centre for Humanitarian Demining (GICHD), The HALO Trust, and NPA all provided capacity development support to SEMA during 2021. UNMAS provided technical and financial support to SEMA to participate in national and international advocacy forums; information management capacity support; "extensive" technical support for the Somalia's Article 5 deadline extension request; and training in Gender and Diversity in Mine Action.⁴⁰

23 UNMAS, "Annual Report 2012", New York, 2013, p. 21. Sovereignty over these territories is claimed by both the self-declared independent Republic of Somaliland and Puntland.

24 Emails from Claus Nielsen, NPA, 14 April 2020; and Lawrie Clapton, HALO Trust, 14 June 2020.

25 Email from Claus Nielsen, NPA, 6 April 2021.

26 Email from Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016; and telephone interview with Dahir Abdirahman Abdulle, SEMA, 19 August 2020.

27 Email from Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.

28 Interview with Mohamed Abdulkadir Ahmed, SEMA, in Geneva, 9 April 2014; and email from Kjell Ivar Breili, UNMAS, 12 July 2015.

29 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.

30 "UNMAS Somalia – #NDMUN24 Booth", Global Protection Cluster, accessed 24 September 2022 at: <https://bit.ly/3UA110C>.

31 Emails from Mohamed Abdulkadir Ahmed, SEMA, 14 June 2016; and Hilde Jørgensen, NPA, 3 May 2017.

32 Emails from Terje Eldøen, Programme Manager, NPA, 22 October 2016; and Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.

33 Email from Claus Nielsen, NPA, 26 May 2021.

34 Emails from Mustafa Bawar, UNMAS, 3 August 2020 and 4 July 2021.

35 Email from Helen Olafsdottir, UNDP, 7 June 2022.

36 Email from Dahir Abdirahman Abdulle, SEMA, 23 September 2022.

37 Email from Daniel Redelinghuys, HALO Trust, 29 May 2022.

38 Email from Tobias Hewitt, HALO Trust, 21 May 2022.

39 Revised APMBC Article 5 deadline extension request, September 2021, p. 61.

40 Email from Clemence Nyamandi, UNMAS, 17 March 2022.

In 2021, SEMA was one of the virtual participants in online activities conducted by the GICHD, which could not take place in person due to COVID-19 restrictions. Activities included workshops and webinars on national mine action standards, mine action operations, information management, and gender and diversity. In addition, SEMA received in-person training on the gender focal point capacity development programme, which aims to improve gender and diversity mainstreaming in mine action operations and employment policies.⁴¹

In 2021 and early 2022, the HALO Trust provided support to SEMA on information management, geographic information systems (GIS), and quality management.⁴² NPA is providing support to the Puntland State Office on information management until 2023.⁴³

UNDP launched a capacity development project in January 2022 with funding allocated to NPA to conduct non-technical survey in Puntland state and provide information management capacity building to SEMA; to The HALO Trust to provide capacity development support to SEMA on technical survey and land release; and for IT equipment and a vehicle provided directly to SEMA.⁴⁴ A draft capacity development framework was also jointly developed by NPA, UNMAS, and HALO Trust, and submitted to SEMA for approval. At the time of writing, approval was still pending. It is hoped that the framework will improve coordination of capacity development support to SEMA and avoid duplication of activities by partners.⁴⁵

SEMA concurs that, together with operators, it should establish a comprehensive capacity development framework for Somalia.⁴⁶ SEMA also believes that capacity-building support for mine action in Somalia is “crucial” to land release efforts, including in areas such as coordination and management, and has appealed to the international community for technical support.⁴⁷

SEMA began conducting quarterly meetings with all mine action implementing partners in 2018, with a focus on monitoring of operations.⁴⁸ However, SEMA has raised concerns about the level of coordination by the operators, on issues such as tasking and prioritisation.⁴⁹ In turn, operators have reported that coordination remains ineffective due to the uncertain legal status of SEMA.⁵⁰ In 2021, SEMA announced plans to convene regular technical meetings with operators as well as broader national level meetings.⁵¹

The lack of parliamentary approval of SEMA is seen as a major obstacle to mine action in Somalia as this hampers SEMA's ability to become an integrated part of the annual State budget and hinders their capacity for long-term planning for staff. This results in high staff turnover within SEMA outside senior management.⁵² Somalia is currently wholly reliant on international financial resources for its mine action programme. In its 2021 Article 5 deadline extension request, Somalia provided an estimate of the annual cost for implementing the operational work plan to 2027 which is estimated to be US\$6.4 million per year. This includes: SEMA operations at Federal and State levels (five offices) at US\$900,000 per year; UN agency support to Article 5 compliance at US\$500,000 per year; and implementation of projected land release at US\$5 million per year.⁵³ However, there is no information on where this funding will come from and how much will be contributed by the FGS.

In 2021, in accordance with the extension request, SEMA was working with local stakeholders on a national capacity-building plan, a resource mobilisation strategy, and a detailed budget for activities under the work plan.⁵⁴ UNMAS confirms that, in line with Somalia's Article 5 deadline extension, it will work with SEMA to develop an Action Plan that will map capacity building of the national authority and prioritisation of land release activities during the extension period.⁵⁵

ENVIRONMENTAL POLICIES AND ACTION

A section on environmental management is contained within Somalia's national mine action standards. As at June 2022, however, they were still awaiting approval.⁵⁶

41 Emails from Noor Zangana, Advisor, Information Management Capacity Development, GICHD, 6 May and 16 June 2022.

42 Email from Daniel Redelinghuys, HALO Trust, 29 May 2022.

43 Email from Robert Iga Afedra, NPA, 12 March 2022.

44 Email from Helen Olafsdottir, Technical Specialist, UNDP, 7 June 2022.

45 Email from Robert Iga Afedra, NPA, 20 August 2022.

46 Email from Dahir Abdirahman Abdulle, SEMA, 22 June 2022.

47 Presentation by Dahir Abdirahman Abdulle, SEMA, APMBC Intersessional meetings, Geneva, 22 June 2022.

48 Emails from Chris Pym, HALO Trust, 9 May 2019; and Claus Nielsen, NPA, 13 April 2019.

49 Email from Dahir Abdirahman Abdulle, SEMA, 3 July 2021.

50 Email from Robert Iga Afedra, NPA, 12 March 2022.

51 Email from Clemence Nyamandi, UNMAS, 17 March 2022.; and Revised Article 5 deadline extension request, September 2021, p. 52.

52 Email from Claus Nielsen, NPA, 6 April 2021.

53 2021 Article 5 deadline Extension Request, p. 47.

54 Ibid., p. 10.

55 Email from Clemence Nyamandi, UNMAS, 5 July 2022.

56 Email from Clemence Nyamandi, UNMAS, 17 March 2022.

UNMAS, NPA, and the HALO Trust all reported that they have an environmental policy in place.⁵⁷ In 2021, UNMAS and the United Nations Office for Project Services (UNOPS) adopted the Health, Safety, Social and Environment (HSSE) standards for mine action sites, which is a social and environmental management plan for mine action operational sites. This, along with UNMAS's health and safety plan for mine action sites, make up the two plans needed for operational compliance with their HSSE obligations. The HSSE standards cover the following major areas:

- Waste Management
- Site specific social/environmental risk assessment
- Social and Environmental Quality Assurance; and
- Contractor Monthly Reporting.⁵⁸

All UNMAS tasks are preceded by a comprehensive situational analysis report on the various security and environmental factors surrounding the specific task site. These are then reviewed by the UNMAS project team, along with UNMAS Security and senior management if required, for mitigation where necessary and for an alternative task site selection if the situation is untenable.⁵⁹ The HALO Trust mitigates the environmental impact of clearance by removing the minimum vegetation necessary to conduct safe demining in Somalia, recognising that most of the mined land in Somalia is located along the Ethiopian border where most livelihoods are dependent upon grazing lands for animals and where drought is extremely common.⁶⁰

PUNTLAND

The SEMA Puntland State Office, formerly known as the Puntland Mine Action Centre (PMAC), was established in Garowe with UNDP support in 1999. Since then, on behalf of the regional government and SEMA, the Puntland State Office has coordinated mine action with local and international partners, NPA, and the Puntland Risk Solution Consortium.⁶¹

In 2021, SEMA reported that the Puntland State Office coordinated mine action under SEMA, working with its international partner, NPA.⁶²

In 2021, NPA relocated its main country office from Mogadishu to Puntland in order to be closer to its operations. SEMA stated that this move was done without its permission.⁶³ A decision was taken in August 2021 to re-focus NPA operations on non-technical survey of Puntland as the amount of contamination found during land release to date has been consistently low and it was deemed a better use of resources to define existing hazardous areas with the intention of cancelling areas without contamination before any further clearance takes place. It is expected that non-technical survey will be completed by April 2023.⁶⁴ NPA will solely focus its land release activities on completion within Puntland state for the foreseeable future while maintaining a lean coordination office in Mogadishu to support its conflict preparedness and protection (CPP) project and provide capacity development support to SEMA.⁶⁵

SOMALILAND

As part of a larger process of government reform in early 2018, the Somalia Mine Action Centre (SMAC), which was responsible for coordinating and managing demining in Somaliland since 1997, was restructured and renamed the Mine Clearance Information and Coordination Authority (MCICA). The Agency underwent a change of line ministry from the Office of the Vice President to the Ministry of Defence.⁶⁶ It was renamed the Mine Action Department in January 2019.⁶⁷

In Somaliland, The HALO Trust, working in collaboration with the government and through Swiss consulting firm, Small Arms Survey, is developing a National Action Plan to include a comprehensive plan for Explosives Hazards Management. At the time of writing, this was expected to be completed by mid-2022 and will be a five-year plan.⁶⁸

GENDER AND DIVERSITY

Somalia's National Mine Action Strategic Plan 2018–20 recognises gender and diversity as cross-cutting issues for the national mine action programme, in line with Somalia's National Development Plan objectives to "implement gender equality in education and mainstream gender in all of its programmes with a focus on adolescent girls". The National Mine Action Strategic Plan stipulates that the mine action programme must reflect gender objectives and ensure the specific needs of women, girls, boys, and men are taken into account, including through delivery of gender-equality programming and adoption of a gender-sensitive approach by consortia and implementing partners. The Plan also recognises the importance of conducting context analyses in areas of mine action operations to clarify important gender and diversity issues, such as clan

57 Ibid.; and emails from Robert Iga Afedra, NPA, 12 March 2022; and Daniel Redelinghuys, HALO Trust, 29 May 2022.

58 Email from Clemence Nyamandi, UNMAS, 17 March 2022.

59 Ibid.

60 Email from Daniel Redelinghuys, HALO Trust, 29 May 2022.

61 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", p. 9; and emails from Claus Nielsen, NPA, 23 July 2020 and 26 May 2021. SEMA has claimed that this NGO is no longer functioning.

62 Email from Dahir Abdirahman Abdulle, SEMA, 22 June 2022.

63 Email from Dahir Abdirahman Abdulle, SEMA, 17 June 2022.

64 Emails from Robert Iga Afedra, NPA, 12 March and 20 August 2022.

65 Email from Robert Iga Afedra, NPA, 12 March 2022.

66 Email from Chris Pym, HALO Trust, 9 May 2019.

67 Email from Chris Pym, HALO Trust, 2 June 2019.

68 Email from Tobias Hewitt, HALO Trust, 26 June 2022.

affiliation, movement patterns of local populations, and barriers to participation for different gender and age groups.⁶⁹ SEMA reported that gender and diversity have also been integrated into the national mine action standards.⁷⁰

In May 2019, SEMA informed Mine Action Review that it does not have an internal gender or diversity policy or implementation plan. It acknowledged that this was “unfortunate” and pledged that it would strive for gender balance in the future, by ensuring equal employment opportunities for qualified men and women.⁷¹ In Somalia's revised Article 5 deadline extension request, a gender policy for mine action was due to be developed by October 2022.⁷²

SEMA also reported that within the federal State national mine action NGO consortia, emphasis was placed on gender balance in survey and community liaison teams to ensure the inclusive participation of all affected groups, including women and children.⁷³ Operators are working towards gender-balanced survey and clearance teams. This is a challenge in Somalia as a traditionally patriarchal society where women are not usually encouraged to engage in physical work or to take up leadership roles.⁷⁴ SEMA confirmed that data collection was disaggregated by sex and age, and gender considered in the prioritisation, planning, and tasking of survey and clearance activities,⁷⁵ although it is unclear how gender is being taken into account.

All operators confirmed that clan affiliation was also an important consideration when recruiting and deploying operational staff. It is important that the hiring process includes people from across the different clan and ethnic groups to ensure diversity and that there is sensitivity to this when teams are deployed.⁷⁶ Employing more women typically enables operators to access all strata of Somali society to gain information and consider the views of all relevant groups.⁷⁷ In Somaliland, 35% of the population are nomadic pastoralists, with many transiting between Somaliland and Ethiopia. HALO in Somaliland ensures that it employs survey staff from both a rural and urban background, and from

various regions in Somaliland, to ensure there is a strong understanding of all sections of Somaliland society.⁷⁸

In 2021, 39% of NPA's total workforce were women with 4% of managerial/supervisory roles held by women and 12% of operational roles. NPA has four women embedded within its non-technical survey teams, two of whom have been seconded from the police.⁷⁹

When contracting an implementing partner, UNMAS provides targets on the proportion of women and young people that should make up the operator's team including aiming for a minimum of 50% women and 35% young people. However, UNMAS acknowledges that this target is difficult to achieve due to Somalia's traditional patriarchal society where women are generally discouraged from participating in manual demining. This challenge notwithstanding, the proportion of women among all recruited teams by UNMAS implementing partners was up to 15% with up to 35% youth recruitment. In 2021, 42% of all UNMAS Somalia personnel overall were women. However, only 20% of all managerial/supervisory positions and 22% of operational positions were occupied by women.⁸⁰

Since 2020, HALO Somaliland has been making an active effort to recruit women to its demining teams and in support of these efforts has worked with local communities to increase acceptance of women spending time away from their communities and families to work as deminers. Additionally, to promote retention of female recruits, HALO Somaliland has implemented 20-week-long maternity leave, a childcare stipend for mothers of children up to two years old, yearly medical check-ups, and hygiene kits made available in camps. Overall, 10% of HALO Somaliland staff are female with four women in managerial/supervisory positions and forty women in operations positions.⁸¹ In HALO Somalia, 23% of all employees are women, filling 14% of managerial/supervisory positions and 18% of operations positions.⁸² In SEMA, 17% of the workforce in 2021 were female.⁸³

69 SEMA, “Somalia National Strategic Plan, 2019”, pp. 21–22.

70 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

71 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.

72 Revised APMB Article 5 deadline extension request, September 2021, p. 50.

73 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.

74 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

75 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.

76 Emails from Mustafa Bawar, UNMAS, 17 March 2020; Claus Nielsen, NPA, 14 April 2020; and Lawrie Clapton, HALO Trust, 14 June 2020.

77 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

78 Ibid.

79 Email from Robert Iga Afedra, NPA, 12 March 2022.

80 Email from Clemence Nyamandi, UNMAS, 17 March 2022.

81 Email from Tobias Hewitt, HALO Trust, 21 May 2022.

82 Email from Daniel Redelinghuys, HALO Trust, 29 May 2022.

83 Email from Mustafa Bawar, UNMAS, 4 July 2021.

INFORMATION MANAGEMENT AND REPORTING

In 2017, ownership of the national Information Management System for Mine Action (IMSMA) database was fully transferred from UNMAS to SEMA, with support and capacity-building from NPA.⁸⁴ SEMA received technical advisory support on information management from the GICHD and UNMAS during 2021, with UNMAS supporting SEMA with the recruitment of an Information Management (IM) Assistant in September 2021 and providing IMSMA training to the IM assistant. UNMAS will also be providing IT equipment to SEMA which was expected to be delivered in 2022.⁸⁵ The HALO Trust provided training for SEMA personnel on IMSMA and database quality control to improve the quality of data in the mine action database. The HALO Trust has continued to work with SEMA in 2022 on database information quality and information sharing.⁸⁶

SEMA decided to upgrade its database to IMSMA Core starting in 2022 but the data within the database are considered to be of poor quality, which leads to issues with reporting. Although data collection forms have been introduced there is no sustainable process of entering the data into the information management system.⁸⁷

That said, SEMA states that, working with international partners, it has made significant progress towards elaborating an accurate picture of existing contamination through data consolidation and confirms they will continue to work on this with partners. SEMA has also restated its intention to migrate data to IMSMA Core to improve operations, planning, and survey capabilities.⁸⁸ Implementation of IMSMA Core began in July 2022 and a work plan and timeline for completion were being finalised at the time of writing. In collaboration with the GICHD and UNMAS, work has also begun on developing the system design documentation.⁸⁹

In 2021, NPA established an IMSMA database for the Puntland State Office and provided training on information

management to its staff. It is expected that this will improve information sharing of mine action data between the Puntland authorities and SEMA. NPA has fully synchronised its land release, risk education, and survey assessment data for Puntland state with the IMSMA database at the Puntland State Office. Once the non-technical survey of Puntland state is completed this will also be updated in the IMSMA database so that baseline contamination data are accurate and available for planning.⁹⁰

The Mine Action Department, the mine action authority in Somaliland, manages a separate IMSMA database. The HALO Trust stated that its data undergo monthly QA before being reported to the Mine Action Department, which uploads it onto the central database. In Somaliland, HALO creates its own data collection forms, which it says ensure accurate collection of data by its survey teams.⁹¹

In July 2018, SEMA submitted its first Article 7 transparency report for several years covering calendar year 2017, reflecting improvements in its information management and reporting capacity and greater transparency and efforts to engage with the APMBC community. However, subsequent reporting has been of poor quality, lacking basic details on the size of and progress to address remaining contamination, and with considerable inconsistencies in year-to-year reporting. In September 2020, Somalia submitted its Article 7 report covering 2019, though there were some data discrepancies between national authority and operator data.

In April 2021, SEMA submitted Somalia's Article 5 deadline extension request seeking an extension through to 2027, but it was poorly formulated and requires significant revisions as it lacks sufficient detail and clarity. SEMA has stated that it will present a detailed costed operational work plan in addition to the request in 2021 although, as at September 2022, SEMA has yet to submit the work plan or its latest Article 7 report.

PLANNING AND TASKING

Somalia's National Mine Action Strategic Plan 2018–2020 was developed with input from SEMA, UNMAS, international operators, national NGO consortia, and international institutions in late 2017.⁹² The strategic plan finally received approval from the Somali Minister of Internal Security at the end of 2020 and has been extended for one year to provide SEMA with sufficient time for the development of a new strategy.⁹³ As at September 2022, SEMA has not reported on whether a new strategy has been developed.

84 Email from Claus Nielsen, NPA, 22 March 2018.

85 Email from Clemence Nyamandi, UNMAS, 17 March 2022.

86 Email from Daniel Redelinghuys, HALO Trust, 29 May 2022.

87 Email from Noor Zangana, GICHD, 6 May 2022.

88 Presentation by Dahir Abdirahman Abdulle, SEMA, APMBC Intersessional meetings, Geneva, 22 June 2022.

89 Email from Rory Logan, Head of Strategies, Performance and Impact, GICHD, 12 July 2022.

90 Email from Robert Iga Afedra, NPA, 12 March 2022.

91 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

92 Emails from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019; and Claus Nielsen, NPA, 13 April 2019.

93 Email from Claus Nielsen, NPA, 26 May 2021.

The old plan focused on setting “achievable” goals over the three-year period. The strategy’s five goals, identified by SEMA, were as follows:

- To enhance SEMA’s ability to lead and enable effective and efficient mine action
- To develop the Somali mine action consortia into a wholly national mine action capacity
- To engage with stakeholders in order to understand, and better respond to, their mine action needs
- To achieve a mine-impact-free Somalia; and
- To comply with treaties binding Somalia on mines and other explosive threats.

In February 2018, an updated second “phase” of the five-year “Badbaado Plan for Multi-Year Explosive Hazard Management for 2018–2022”, first developed in 2015 by SEMA, UNMAS, and the UN Assistance Mission in Somalia (UNSOM), was officially launched in Geneva. It claimed to be a plan to “make Somalia mine free by 2022”, but it is not realistic, without detail as to the amount of contamination remaining or targets for completion.⁹⁴ According to UNMAS, the Badbaado plan lacked consultation with other stakeholders and will be usurped by Somalia’s strategic plan.⁹⁵ In Somaliland, The HALO Trust has encountered a lack of political will to conclude a strategic plan or handle residual risk.⁹⁶

SEMA developed a mine action work plan for 2020, in cooperation with the SEMA state offices, and operators. NPA supported SEMA with an implementation plan for 2021 for SEMA specific activities, an overall operational implementation plan was also discussed but due to time constraints was postponed until 2022.⁹⁷ According to Somalia’s Article 5 extension request SEMA is working with stakeholders on a costed operational work plan, which will include plans for desktop survey and non-technical survey, to be presented in addition to its extension request. SEMA said

it would produce a detailed budget in 2021 for activities under the work plan.⁹⁸ As at September 2022, this had still to be submitted and in the draft decision the 19th Meeting of States Parties requested that Somalia submit an updated detailed, costed and multi-year work plan for survey and clearance by 30 April 2023.⁹⁹

Somalia has split its extension request into two phases but does not provide any annual projections for land release or provide a timeline for planned activities. Phase 1 is for April 2021–1 October 2022 (i.e. the period prior to the date from which the extension request becomes effective) and will focus on capacity building of national demining institutions, planning of non-technical survey in accessible areas, and continuation of land release activities. Phase 2 is from 1 October 2022 to 1 October 2027. During this period Somalia will continue with phase 1 activities but with a greater focus on the implementation of non-technical survey in currently accessible areas to identify the extent of contamination.¹⁰⁰

NPA reported that in Puntland survey and clearance task dossiers are issued in a timely and effective manner.¹⁰¹ The HALO Trust reported an improvement in tasking in Somalia since the new Director of SEMA was appointed with the Authority becoming much more responsive to requests.¹⁰² This remains an area needing further strengthening. According to UNMAS, there are no agreed prioritisation criteria and task dossiers are not issued in a timely and effective manner due to the limited capacity of the national mine action authority responsible for task issuance.¹⁰³ SEMA, however, expressed concern that operators task themselves without its agreement.¹⁰⁴ A clear tasking order request system was planned to be developed and implemented by October 2022.¹⁰⁵ However, at the time of writing no update on this was available. In Somaliland, The HALO Trust manages its own tasking and prioritisation.¹⁰⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national mine action legislation in Somalia. UNMAS developed National Technical Standards and Guidelines (NTSGs) for Somalia in 2012–13.¹⁰⁷ However, according to The HALO Trust, since their introduction they have not been updated and do not accurately reflect the clearance standards required for Somalia. They allow for methodologies such as

94 SEMA, “Badbaado Phase II: Meeting the Obligations of the Anti-Personnel Mine Ban Treaty 2018–2022”.

95 Interview with Qurat-al-Ain, UNMAS, Geneva, 14 February 2020.

96 Email from Lawrie Clapton, HALO Trust, 10 July 2020.

97 Skype interview with Claus Nielsen, NPA, 10 February 2020; and email, 26 May 2021.

98 2021 Article 5 deadline extension request, p. 10.

99 Decisions on the request submitted by Somalia for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 19 MSP, 16 November 2021.

100 2021 Article 5 deadline Extension Request, p. 43–44.

101 Email from Claus Nielsen, NPA, 6 April 2021.

102 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021.

103 Email from Mustafa Bawar, UNMAS, 4 April 2021.

104 Email from Dahir Abdirahman Abdulle, SEMA, 3 July 2021.

105 Revised Article 5 deadline extension request, September 2021, p. 53.

106 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

107 Email from Terje Eldøen, NPA, 5 June 2016; and response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.

detector-assisted prodding, which should be critically reviewed on the basis that it has resulted in missed mines in Somalia.¹⁰⁸ SEMA conducted a review of the NTSGs in 2019 with technical support from NPA and in compliance with IMAS. It was expected that the NTSGs would receive approval from the Ministry of Internal Security during 2021¹⁰⁹ but, as at September 2022, no update on this had been provided.

In Somaliland, The HALO Trust confirmed that the Mine Action Department Information Management Unit occasionally visit survey and clearance operations.¹¹⁰

OPERATORS AND OPERATIONAL TOOLS

In 2021, international NGO, The HALO Trust, conducted both battle area clearance (BAC) and mine clearance operations in Somalia and Somaliland, along with UNMAS-contracted commercial clearance company, Ukroboronservice. NPA conducted clearance of mined areas.¹¹¹

Table 3: Operational mine and battle area clearance capacities deployed in 2021¹¹²

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
Ukroboronservice (UNMAS)	6	120	0	0	Increase from 6 teams of 46 deminers in 2020. Conduct BAC and mine clearance.
HALO Somalia	20	190	0	0	Increase from 20 teams of 169 deminers in 2020. Conduct BAC and mine clearance although increased focus on mine clearance in 2021.
HALO Somaliland	32	289	0	3	Increase from 34 teams of 272 personnel in 2020. Conducting manual and mechanical clearance.
NPA	2	9	2 dogs/2 handlers	0	Increase from one team of 6 in 2020. Conduct mine clearance.
Totals	60	608	2 dogs/2 handlers	3	

* Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters.

UNMAS, through its implementing partner Ukroboronservice, deployed two quick reaction teams totalling ten personnel which conducted non-technical survey and technical survey and four teams of community liaison officers totalling eight people conducted non-technical survey.¹¹³ UNMAS increased its clearance capacity from 2020 to 2021 with a total of 120 deminers deployed in Galmudug and Puntland states. In 2022, UNMAS expected capacity to decrease due to a reduction in funding.¹¹⁴

In 2021, HALO Somalia increased its focused on manual mine clearance with improved security conditions enabling access for clearance along the Ethiopian border. There was an increase in survey and clearance personnel deployed from 2020 to 2021 due to greater funding with the amount of personnel also expected to increase again in 2022. The HALO Trust reported no significant change in operational capacity in Somaliland between 2020 and 2021. As well as clearance teams, HALO Somaliland also deployed two survey and EOD teams totalling ten personnel (eight survey personnel and two drivers), 35 technical survey teams totalling 311 personnel, and two "Village by Village" teams of three people each. The Village by Village teams plan to review all villages in Somaliland by the end of 2023, to assess whether they are "mine-impact free". HALO Somaliland expected no significant change in operational capacity in 2022.¹¹⁵

¹⁰⁸ Email from Lawrie Clapton, HALO Trust, 14 June 2020.

¹⁰⁹ Revised APMBC Article 5 deadline extension request, September 2021, p. 38.

¹¹⁰ Email from Chris Pym, HALO Trust, 20 May 2021.

¹¹¹ DDG and MAG continued to operate in Somalia and Somaliland in 2021, but did not carry out demining.

¹¹² Emails from Clemence Nyamandi, UNMAS, 17 March 2022; and Robert Iga Afedra, NPA, 12 March 2022; and Daniel Redelinghuys, HALO Trust, 29 May 2022.

¹¹³ Email from Clemence Nyamandi, UNMAS, 17 March 2022.

¹¹⁴ Ibid.

¹¹⁵ Emails from Tobias Hewitt, HALO Trust, 21 May and 26 July 2022.

In 2021, NPA was working in Puntland conducting survey and clearance and capacity building, entering into partnership with the local NGO consortia. NPA reported no significant change in operational capacity compared to 2020. NPA deployed six non-technical survey teams totalling 12 personnel with its clearance capacity also conducting technical survey. From August 2021, all field personnel could also undertake non-technical survey. NPA did not expect any major change to capacity in 2022.¹¹⁶

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

A total of 3.17km² of mined area was released in 2021 across Somalia and Somaliland, of which 2.52km² was cleared, 0.33km² was reduced by technical survey, and 0.32km² was cancelled by non-technical survey. A total of 74 anti-personnel mines were found and destroyed, of which 19 were destroyed during EOD spot tasks and 4 during BAC.

SURVEY IN 2021

In 2021, a total of 0.65km² was released through survey: 0.32km² was cancelled through non-technical survey (see Table 4) and 0.33km² was reduced through technical survey (see Table 5).¹¹⁷ This is a decrease from 2020 when a total of 1.03km² was released through survey: 0.14km² was cancelled through non-technical survey and close to 0.90km² was reduced through technical survey.¹¹⁸

CLEARANCE IN 2021

In 2021, a total of 2.52km² of mined area was cleared with the destruction of 51 anti-personnel mines, 35 anti-vehicle mines, and 22 items of UXO. The vast majority of anti-personnel mines were found and destroyed in Somaliland.¹¹⁹ This is a slight increase on overall clearance of 2.32km² in 2020.¹²⁰

In addition, eight anti-personnel mines and four anti-vehicle mines were destroyed during EOD spot tasks by The HALO Trust in Somalia in 2021.¹²¹ In Somaliland, HALO Trust destroyed 11 anti-personnel mines during EOD spot tasks.¹²²

In 2021, NPA cleared one task with no explosive ordnance contamination found totalling 165,068m².¹²³ The HALO Trust cleared one task in Somaliland with no mines found totalling 138,499m².¹²⁴ In the rest of Somalia, all mined areas The HALO Trust cleared proved to have anti-personnel mines.¹²⁵

In Puntland, The HALO Trust also destroyed four anti-personnel mines during BAC. HALO notes that the majority of their tasks in Somalia concern areas containing only anti-vehicle-mines. They found and destroyed a single anti-vehicle mine during clearance of a mined area covering 230,101m².¹²⁶

Table 4: Cancellation through non-technical survey in 2021¹²⁷

State	Operator	Area cancelled (m ²)
Galmudug	HALO Trust	196,388
Hirshabelle	HALO Trust	95,730
Puntland	HALO Trust	22,465
South West Somalia	HALO Trust	5,460
Total		320,043

Table 5: Reduction through technical survey in 2021¹²⁸

Province	Operator	Area reduced (m ²)
Mudug	NPA	332,629
Total		332,629

116 Email from Robert Iga Afedra, NPA, 12 March 2022.

117 Ibid.; and Daniel Redelinghuys, HALO Trust, 29 May 2022.

118 Emails from Claus Nielsen, NPA, 6 April 2021; and Chris Pym, HALO Trust, 20 May 2021.

119 Email from Robert Iga Afedra, NPA, 12 March 2022; Clemence Nyamandi, UNMAS, 17 March 2022; Tobias Hewitt, HALO Trust, 21 May 2022; Daniel Redelinghuys, HALO Trust, 29 May 2022; and Jasmine Dann, Operations Officer, HALO Trust, 18 July 2022.

120 Emails from Abdullah Alkhasawneh, HALO Trust, 16 May 2021; Claus Nielsen, NPA, 6 April 2021; and Mustafa Bawar, UNMAS, 4 April 2021.

121 Email from Daniel Redelinghuys, HALO Trust, 29 May 2022.

122 Email from Tobias Hewitt, HALO Trust, 21 May 2022.

123 Email from Robert Iga Afedra, NPA, 12 March 2022.

124 Email from Tobias Hewitt, HALO Trust, 21 May 2022.

125 Email from Daniel Redelinghuys, HALO Trust, 29 May 2022.

126 Email from Jasmine Dann, HALO Trust, 18 July 2022.

127 Emails from Daniel Redelinghuys, HALO Trust, 29 May 2022; and Aislinn Redbond, Programme Officer, HALO Trust 27 August 2022.

128 Email from Robert Iga Afedra, NPA, 12 March 2022.

NPA reported no significant change in land release output from 2020 to 2021.¹²⁹ The area cleared by the HALO Trust through manual mine clearance substantially increased in 2021. This increase was due to a greater focus on manual mine clearance rather than BAC and security conditions enabling clearance with minimal interruptions along the Ethiopian border.¹³⁰ UNMAS reported a reduction in overall explosive ordnance clearance from 2020 to 2021 as a result of fewer clearance teams deployed throughout the year.¹³¹

Table 6: Mine clearance in 2021¹³²

Location	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Mudug (Puntland)	NPA	47,630	0	1	3
Mudug (Puntland)	HALO	256,541	0	1	0
Galmudug State (MF-0052)	UNMAS/HALO Somalia	263,236	6	3	1
Galmudug State (MF-0016)	HALO Somalia	41,485	0	0	
Galmudug State (MF-0079)	HALO Somalia	*9,950	0	0	0
Galmudug State (MF-0124)	HALO Somalia	129,697	0	7	0
Hirshabelle State	UNMAS/HALO Somalia	96,842	1	1	0
Western Somaliland (Maroodi Jeex)	HALO Somaliland	308,111	20	0	9
Central Region (Togdheer)	HALO Somaliland	1,085,422	24	8	8
South West State	HALO Somalia	283,309	0	14	1
Totals		2,522,223	51	35	22

* This task has been suspended due to security concerns.¹³³

ARTICLE 5 DEADLINE AND COMPLIANCE



¹²⁹ Email from Robert Iga Afedra, NPA, 12 March 2022.

¹³⁰ Email from Tobias Hewitt, HALO Trust, 21 May 2022.

¹³¹ Email from Clemence Nyamandi, UNMAS, 17 March 2022.

¹³² Emails from Clemence Nyamandi, UNMAS, 17 March 2022; Robert Iga Afedra, NPA, 12 March 2022; Tobias Hewitt, HALO Trust, 21 May 2022; Daniel Redelinghuys, HALO Trust, 29 May 2022; Jasmine Dann, HALO Trust, 18 July 2022; and Aislinn Redbond, HALO Trust, 23 July and 4 September 2022.

¹³³ Email from Aislinn Redbond, HALO Trust, 23 July 2022.

Table 7: Five-year summary of AP mine clearance

Year	Area cleared (km ²)
2021	2.52
2020	2.32
2019	1.82
2018	1.60
2017	0.89
Total	9.15

Under Article 5 of the APMBBC, Somalia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 October 2027. It is unlikely that Somalia will be able to meet this deadline.

Overall land release decreased slightly in 2021 compared to the previous year. The number of anti-personnel mines found and destroyed during clearance was also lower than 2021 with 51 anti-personnel mines found during clearance activities, compared to 146 anti-personnel mines found and destroyed during clearance in 2020.

Based on stakeholder engagement during preparation of the Article 5 Extension Request, Somalia identified the following six major challenges which impeded its ability to complete clearance by its Article 5 deadline:

- Insufficient information about the extent of contamination.
- Insufficient information about the impact of contamination.
- Limited access to contaminated areas, due to security concerns.
- Limited access to supervise teams in contaminated areas, due to security concerns.
- Other types of contamination, (such as improvised explosive devices (IED)), having taken priority.
- Lack of training, lack of resources and lack of effective coordination and prioritisation.¹³⁴

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

According to NPA, Somalia's new national mine action strategy will include provisions for addressing previously unknown areas, with capacity in place to conduct survey and clearance, as necessary.¹³⁹ Somalia is planning to introduce state-level consortia of local NGOs who will be tasked with dealing with residual contamination.¹⁴⁰ There is no reference to this in Somalia's latest Article 5 deadline extension request.

SEMA describes the lack of funding as a "serious concern", which could impede Somalia's ability "to make incremental progress towards clearance".¹³⁵ A further impediment is that SEMA's legislative framework has yet to be approved by the FGS. This has hindered effective coordination by SEMA and negatively impacted staff turn-over and is likely to continue to do so until SEMA is incorporated into the state budget. This issue has been ongoing since 2016 and has meant that salaries and other costs at SEMA have been covered by external funding. It is unclear when SEMA will be granted parliamentary approval.

In 2021, insecurity in Somalia continued to impede both access to some contaminated areas, and the progress of ongoing clearance operations. In some areas, inter-clan clashes broke out, forcing clearance teams to temporarily retreat to safe locations.¹³⁶ UNMAS, NPA, and the HALO Trust reported instances of demining equipment being confiscated by clan militia, a vehicle being hijacked and used as a battle wagon, and a member of staff being taken hostage along with demining equipment, respectively.¹³⁷ In other locations, teams could not access task sites due to disagreements among the affected community regarding the benefits that could be derived from the clearance operations. Some areas are under the control of armed opposition groups, which means that where teams do have access an escort is required.¹³⁸

Somalia has made the decision to not include Somaliland in its plans within the extension request despite the fact that Somaliland remains part of Somalia de jure and is therefore under the jurisdiction of the FGS. However, the FGS have reported that Somaliland is currently under their de facto control for the purposes of planning, coordinating, and conducting clearance of anti-personnel mines. Therefore, Somalia interprets its current obligations under the APMBBC to encompass anti-personnel mine contamination in the remaining states of Somalia. The FGS has reported that it will keep the situation under review and report any changes in its Article 7 reports. This is, however, legally incorrect as Article 5 extends over *either* jurisdiction *or* control of mined areas.

134 Statement of Somalia, 19th MSP to the APMBBC (virtual meeting), 15–19 November 2021.

135 Presentation by Dahir Abdirahman Abdulle, SEMA, APMBBC Intersessional meetings, Geneva, 22 June 2022.

136 Email from Clemence Nyamandi, UNMAS, 17 March 2022.

137 Ibid.; and emails from Robert Iga Afedra, NPA, 12 March 2022; and Daniel Redelinghuys, HALO Trust, 29 May 2022.

138 Email from Clemence Nyamandi, UNMAS, 17 March 2022.

139 Email from Claus Nielsen, NPA, 14 April 2020.

140 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

SOUTH SUDAN



CLEARING THE MINES 2022

ARTICLE 5 DEADLINE: 9 JULY 2026
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

5 KM²

AP MINE
CLEARANCE IN 2021

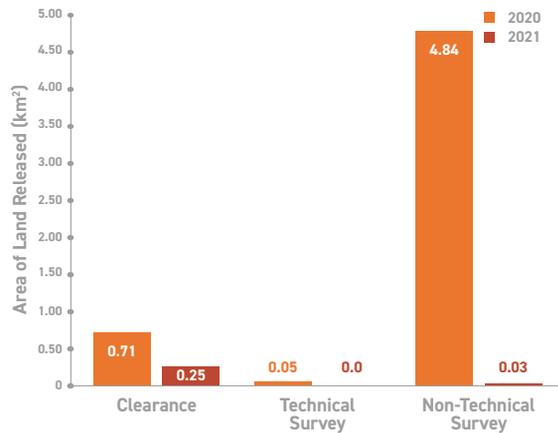
0.25 KM²

AP MINES
DESTROYED IN 2021

53

(INCLUDING 22 DESTROYED
DURING SPOT TASKS)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Release of anti-personnel mined area through survey and clearance fell again in 2021 compared to the previous year following a significant drop in funding for mine action and a shift in prioritisation towards other types of explosive ordnance causing higher numbers of victims. A number of revisions were made to South Sudan's National Technical Standards and Guidelines (NTSGs) in 2021, to ensure they were both in line with the International Mine Action Standards (IMAS) and adapted to the national context. South Sudan intends to clear all types of explosive ordnance contamination by July 2026 but it is currently not on track to meet this target with continued insecurity and increased flooding, including of mined areas, restricting access to contaminated areas. In addition, large amounts of previously unrecorded area are still being added to the database each year. In parallel, international funding for clearance activities has fallen significantly.

RECOMMENDATIONS FOR ACTION

- South Sudan should increase its financial support for mine action operations as well as to the National Mine Action Authority (NMAA).
- South Sudan should clarify the steps it is taking to mainstream gender across its mine action programme to ensure that diverse needs are duly considered.
- South Sudan should ensure that the information management system is nationally owned and can be sustainably managed post-completion.
- South Sudan should finalise its updated work plan through to 2026 and produce a revised detailed budget and annual targets for land release disaggregated type of contamination.
- South Sudan should report periodically during the extension request period on its progress in establishing a sustainable and long-term national capacity (for both demining and information management) to deal with residual contamination.
- South Sudan should finalise its resource mobilisation strategy increasing its international advocacy to attract new and former donors.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	8	There has been no significant change in the estimate of anti-personnel mine contamination from 2020 to 2021. Targeted re-survey to better define the estimated size of the suspected hazardous areas (SHAs) and database review began in 2018 and is ongoing, although access to some SHAs is dependent on improvements in the security situation.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	4	The National Mine Action Authority (NMAA) continued to face serious financial and technical limitations, preventing it from managing mine action operations effectively in 2021, with the United Nations Mine Action Service (UNMAS) still assuming that function. Funding for mine action in South Sudan dropped dramatically from more than US\$40 million in 2020 to just over \$6.4 million in 2021.
GENDER AND DIVERSITY (10% of overall score)	6	6	South Sudan's second national mine action strategy for 2018–22 includes a section on gender, as do South Sudan's NTSGs. These include a focus on ensuring gender-balanced survey teams and gender- and age-sensitive data collection and community outreach. Planned workshops on gender mainstreaming were postponed due to COVID-19. SafeLane Global conducted a basic demining training course in the first quarter of 2021 where 20% of the candidates were female and Mines Advisory Group (MAG) has ring-fenced training opportunities for women and in 2021, a woman was awarded an explosive ordnance disposal (EOD) Level 2 qualification for the first time.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	7	The comprehensive review of all data in South Sudan's Information Management System for Mine Action (IMSMA) database which began in 2018, along with re-survey of recorded suspected and confirmed hazardous areas, has resulted in significant gains in the understanding of mine contamination. Transition to IMSMA Core started in 2021, and was ongoing as of August 2022.
PLANNING AND TASKING (10% of overall score)	6	6	South Sudan has a National Mine Action Strategy 2018–22, which underwent a mid-term review in 2020. South Sudan provided annual targets for land release to 2026 in its Article 5 deadline extension request, separated into manual and mechanical clearance but not disaggregated by type of mine; the updated work plan to 2026, published in 2022, rectifies this. Its Article 7 report (for 2019) contains annual targets for land release for anti-personnel mines but it was not able to meet the target for 2021.
LAND RELEASE SYSTEM (20% of overall score)	8	8	A number of revisions were made to South Sudan's NTSGs during 2021, including on survey, land release, quality management, accreditation of mine action organisations, and manual mine clearance. Demining teams continued to be reconfigured in 2021, increasing from eight-lane to ten- or fifteen-lane teams with a view to increasing clearance efficiency.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	7	South Sudan's land release output of anti-personnel mined area fell dramatically in 2021 although this type of contamination is not being prioritised for clearance over other explosive ordnance as they pose a greater threat to life. It looks increasingly unlikely that South Sudan will meet its Article 5 deadline of July 2026.
Average Score	6.7	6.9	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Mine Action Authority (NMAA)

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- Danish Church Aid (DCA)
- Danish Refugee Council – Mine Action (DRC-MA) (previously Danish Demining Group (DDG))
- G4S Ordnance Management (G4S)
- Mines Advisory Group (MAG)
- The Development Initiative (TDI)
- SafeLane Global

OTHER ACTORS

- UN Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

As at the end of 2021, South Sudan had a combined total of 114 hazardous areas, of which 65 were confirmed hazardous areas (CHAs) and 49 were suspected hazardous areas (SHAs) covering a total area of just over 7.4km² (see Table 1).¹ This is a small increase in the estimated extent of contamination from 2020.² Since targeted re-survey and a comprehensive database review of all contamination data began in 2018, South Sudan has released significant areas of anti-personnel mined area.³ It is expected that further contaminated area will be released through survey as, while the average task size of a confirmed mined area is less than 45,000m², one SHA in Jonglei has an estimated size of nearly 1.98km².⁴

Table 1: Anti-personnel mined area by state (at end 2021)⁵

State	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Central Equatoria	38	1,342,456	27	224,819	65	1,567,275
Eastern Equatoria	16	747,217	5	41,836	21	789,053
Jonglei	5	214,626	8	3,596,842	13	3,811,468
North Bahr El Ghazal	1	4,290	1	99,549	2	103,839
Upper Nile	3	386,259	0	0	3	386,259
Warrap	0	0	1	40,000	1	40,000
West Bahr El Ghazal	1	201,738	0	0	1	201,738
Western Equatoria	1	95,450	7	410,810	8	506,260
Totals	65	2,992,036	49	4,413,856	114	7,405,892

According to the United Nations Mine Action Service (UNMAS), at the end of 2021 South Sudan, also had 72 suspected and confirmed anti-vehicle mined areas, covering just under 4.2km² (see Table 2).⁶

Table 2: Mined area (at end 2021)⁷

Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
Anti-personnel mines	65	2,992,036	49	4,413,856
Anti-vehicle mines	46	1,655,862	26	2,510,894
Totals	111	4,647,898	75	6,924,750

In 2017, UNMAS initiated a review of the national Information Management System for Mine Action (IMSMA) database, which led to the conclusion that the extent of much of the anti-personnel mine contamination has been over-estimated. UNMAS consequently initiated a process of targeted re-survey aimed at better defining the size of SHAs.

While significant progress has been made in defining the extent of anti-personnel mine contamination remaining, further survey is needed since SHAs make up some 60% of the contamination in the database. In 2021, survey teams identified nine previously unrecorded anti-personnel mined areas totalling 101,711m². UNMAS reported that re-survey is an ongoing process and, as at March 2022, 38 tasks have been prioritised comprising a total area of almost 4.17km².⁸

South Sudan is contaminated by anti-personnel and anti-vehicle mines as well as explosive remnants of war (ERW), including cluster munition remnants (CMR). The weapons were used during nearly 50 years of Sudanese civil war in 1955–72 and 1983–2005. The signing of the Comprehensive Peace Agreement in January 2005 led to the secession and independence of South Sudan in July 2011. Following two years of independence and relative peace in South Sudan, heavy fighting erupted in the capital, Juba, in December 2013, initiating new armed conflict across the country. This expanded in July 2016, leading to widespread displacement, distress, and destitution.

1 Email from Fran O'Grady, Chief of Mine Action, United Nations Mission in South Sudan (UNMISS), 9 March 2022.

2 Article 7 Report (covering 2020), pp. 1–2; and email from Richard Boulter, Senior Programme Manager, UNMAS, 11 April 2021.

3 Revised 2020 Article 5 extension request, p. 11.

4 Article 7 Report (covering 2021), p. 8.

5 Email from Fran O'Grady, UNMISS, 9 March 2022; and Article 7 Report (covering 2021) pp. 5 and 8–9.

6 Email from Fran O'Grady, UNMISS, 9 March 2022.

7 Ibid.

8 Ibid.

With the signing of the Revitalized Agreement on the Resolution of the Conflict in the Republic of South Sudan (R-ARCSS) in September 2018, the security situation across the country has improved, and there is now access to many areas that security issues previously rendered inaccessible.⁹ However, the security situation remains fluid, with widespread intercommunal violence, banditry and

politically motivated violence affecting survey and clearance operations.¹⁰ It is likely that unreported mined areas exist in areas which are currently inaccessible and there are some areas with high levels of contamination, such as Central and Eastern Equatoria, which are sparsely populated, rendering it difficult to collect and verify contamination information.¹¹

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The South Sudan Demining Authority (SSDA)–since renamed the South Sudan National Mine Action Authority (NMAA)–was established by presidential decree in 2006 to act as the national agency for planning, coordination, and monitoring of mine action in South Sudan.¹² There is no national mine action legislation in place.¹³

In 2011, UN Security Council Resolution 1996 tasked UNMAS with supporting South Sudan in demining and strengthening the capacity of the NMAA. UNMAS and the NMAA have been overseeing mine action across the country through UNMAS's main office in Juba, and sub-offices in Bentiu, Bor, Malakal, and Wau. Together, UNMAS and the NMAA accredit, task, monitor, and evaluate mine action organisations; conduct route verification and clearance; provide escorts for convoys on high-threat routes to enable the delivery of humanitarian assistance; and collect data and map hazardous areas.¹⁴

It is planned that the NMAA will assume full responsibility for all mine action activities throughout the country in the next four years. However, according to UNMAS, the NMAA continued to face serious financial and technical limitations preventing it from doing so effectively and accordingly, UNMAS continued with support to the NMAA during 2021.¹⁵

In addition to the training of NMAA staff in planning, quality management, and field monitoring, an NMAA mobile explosive ordnance disposal (EOD) team was trained and mentored to respond to unexploded ordnance (UXO) spot tasks and to conduct basic reporting.¹⁶ In 2021, UNMAS reported that a resource mobilisation strategy was under development but, as at March 2022, this was still in progress.¹⁷

In 2021, UNMAS and Mines Advisory Group (MAG) were the co-coordinators of the mine action sub-cluster.¹⁸ The sub-cluster coordinates with the national- and state-level Inter-Cluster Working Groups. This enables information to be shared on mines and UXO; for UN agencies and non-governmental organisations (NGOs) to inform mine action actors about their own priority locations for clearance; and for information to be integrated into the annual Humanitarian Needs Overview and Humanitarian Response Plan.¹⁹ The subcluster meets at least once per quarter and holds ad hoc meetings as necessary; in 2021, six meetings were held.²⁰

The Government of South Sudan should fund the costs of NMAA staff salaries and its sub-offices across the country, in Wau and Yei, although, as at March 2022, use of the Yei office continued to be suspended due to the security situation. However, South Sudan's most recent Article 7 report indicated that funding for salaries was inadequate and that salaries had not been paid for six months. Furthermore, the NMAA did not provide any funding for survey or clearance.²¹ The government's total support was reported as below US\$100,000 for the year.²²

In South Sudan's revised 2020 Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request, completing all mine clearance by July 2026 was estimated to cost US\$148 million.²³ In 2022, the cost of all clearance (including battle area clearance) was estimated at \$143.5 million.²⁴ In 2021, South Sudan received just over US\$6.4 million for mine action from external sources, a dramatic decrease from the more than US\$40 million received in 2020.²⁵

9 Revised 2020 Article 5 deadline Extension Request, p. 52.

10 Article 7 Report (covering 2020), p. 4; and email from Goran Tomasevic, UNMAS Deputy Chief of Operations, (UNMISS), 10 July 2022.

11 Emails from Brendan Ramshaw, Operations Manager, Danish Church Aid (DCA), 22 April 2021; and Lisa Mueller-Dormann, Programme Officer, Mines Advisory Group (MAG), 9 May 2021.

12 "South Sudan De-Mining Authority", undated, at: <http://bit.ly/2Y5Eb4o>.

13 Email from Ayaka Amano, UNMAS, 2 May 2019.

14 UNMAS, "Mine Action Portfolio 2019".

15 Email from Fran O'Grady, UNMISS, 9 March 2022.

16 Ibid.

17 Ibid.

18 Email from Lisa Mueller-Dormann, MAG, 9 May 2021.

19 UNMAS, "Mine Action Portfolio 2019".

20 Email from Fran O'Grady, UNMISS, 9 March 2022.

21 Article 7 Report (covering 2021), pp. 10 and 24.

22 Email from Fran O'Grady, UNMISS, 9 March 2022.

23 Revised 2020 Article 5 deadline extension request, p. 75.

24 Updated Work Plan for 1 January 2020–30 June 2026, as presented at the Intersessional Meetings, Geneva, 22 June 2022.

25 UNMAS, "Mine Action Portfolio 2019", pp. 20–21; and emails from Richard Boulter, UNMAS, 11 April 2021; and Fran O'Grady, UNMISS, 9 March 2022.

ENVIRONMENTAL POLICIES AND ACTION

South Sudan has an NTSG on Health & Safety, Social & Environment (HSSE), which was introduced in 2018 and is in line with IMAS 07.13 on Environmental Management in Mine Action.²⁶ Implementing partners in South Sudan establish their own standard operating procedures (SOPs) and policies based on the NTSGs to safeguard the environment. When survey and clearance operations are completed the area should be restored in accordance with the wishes of the local community. At a minimum, restoration should include removal of large items of scrap metal, the filling in of any pits or craters due to EOD, and the fencing off of any areas where residual non-explosive, hazardous materials may be left in the ground.²⁷

GENDER AND DIVERSITY

South Sudan's second national mine action strategy for 2018–22 includes a section on gender, focusing on how different gender and age groups are affected by mines and ERW and have specific and varying needs and priorities. Guidelines on mainstreaming gender considerations in mine action planning and operations in South Sudan are also incorporated in the strategy, including on the collection of data disaggregated by sex and age.²⁸ UNMAS reported that the programme was also implementing the UN Gender Guidelines for Mine Action, monitored by a gender focal point, who also encourages the implementing partners to provide equal employment opportunities and consider the role and the behaviour of male and female beneficiaries when planning, implementing, and managing projects.²⁹

South Sudan's NTSGs require all community liaison teams to tailor activities on the basis of the gendered needs of beneficiaries, and to address the specific risks faced by women and girls.³⁰ All teams are reportedly gender balanced in composition and trained to be inclusive, for example by ensuring outreach through non-technical survey and risk education is done separately for different age and gender groups, and taking into consideration local cultural practices.³¹ At the same time, UNMAS reported that task prioritisation was predominantly dependent on security and that resources were concentrated on tasks within limited geographical areas rather than on the basis of gender needs.³² Ethnic identity is taken into account within survey and clearance teams to ensure safe access and acceptance by the respective local communities.³³

In 2019–20, UNMAS provided workshops for the NMAA and mine action partners on gender equality, gender-based violence (GBV), and gender mainstreaming programming in mine action, with the aim of GBV prevention practices

being mainstreamed in mine action and there being equal opportunity in decision making regardless of gender.³⁴ As at June 2022, it was not known if these had yet happened. Implementation had been delayed due to COVID-19 and related restrictions.

UNMAS has said that, in theory, employment opportunities for qualified men and women in survey and clearance teams across the organisations operating in South Sudan are equal. However, redressing the gender balance is a long-term challenge and a work in progress.³⁵ As part of its initiatives to recruit female deminers, UNMAS's implementing partner, SafeLane Global, conducted a basic demining training course in the first quarter of 2021 where 20% of the candidates were female.³⁶ In 2021, 12% of staff in operational roles were women (or, if international operators are included, 14%), while 16% of staff in managerial or supervisory positions were women.³⁷

All of the community liaison teams within MAG are mixed gender and the organisation reports that it consults with all affected community members, including women and children. MAG also holds women-only focus groups to ensure that their voices are heard. MAG also aims to recruit team members from the more than 60 ethnic groups within South Sudan and tries to ensure that at least one team member speaks the local language of the planned area of deployment. As at March 2022, three women held managerial positions within MAG, and 35% of survey and clearance team members were women. MAG has ring-fenced training opportunities for women to improve their likelihood of securing leadership roles. In 2021, a woman was awarded an EOD Level 2 qualification for the first time and received accreditation from UNMAS. Further specific opportunities for women were to be made available in late 2022 and early 2023.³⁸

26 Ibid.

27 Article 7 Report (covering 2020), Form B.

28 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.

29 Emails from Ayaka Amano, UNMAS, 2 May 2019; and Fran O'Grady, UNMISS, 9 March 2022.

30 Email from Ayaka Amano, UNMAS, 2 May 2019.

31 Ibid.

32 Ibid.

33 Email from Richard Boulter, UNMAS, 8 July 2020.

34 UNMAS "Mine Action Portfolio 2019".

35 Email from Ayaka Amano, UNMAS, 2 May 2019.

36 Email from Richard Boulter, UNMAS, 11 June 2021.

37 Email from Fran O'Grady, UNMISS, 9 March 2022.

38 Email from Lisa Mueller-Dormann, MAG, 22 March 2022.

INFORMATION MANAGEMENT AND REPORTING

A comprehensive review of all data in South Sudan's IMSMA database began in 2018, along with re-survey of recorded SHAs and CHAs whose size was thought to be exaggerated or location misrecorded. Through the database review it was found that past efforts to upgrade the IMSMA software package had led to serious data loss, which inhibited efforts to present an accurate record of the history of mine action in South Sudan. The ongoing database review has, though, resulted in significant gains in the understanding of mine and ERW contamination. UNMAS informed Mine Action Review that, wherever possible, the database disaggregates mined areas, CMR-contaminated areas, and other ERW-contaminated areas, including spot tasks.³⁹

In 2021, South Sudan was supported by the Geneva International Centre for Humanitarian Demining (GICHD) to upgrade its IMSMA database to IMSMA Core. All relevant reports, including external quality assurance, hazard/completion, and incident/accident reports were successfully transferred.⁴⁰

South Sudan has submitted an Article 7 report every year since 2012. Its latest Article 7 report, covering 2021, was not available online until September 2022 despite being dated 30 April 2022.

PLANNING AND TASKING

South Sudan's National Mine Action Strategy 2018–2022, developed with support from the GICHD and with funding from Japan, was officially launched in September 2018.⁴¹

The strategy has three goals with related targets:⁴²

Strategic Goal 1: Advocacy and communication of South Sudan's mine/ERW problem continues through national and international awareness-raising and adoption and implementation of international conventions to facilitate a mine- and ERW-free South Sudan.

Strategic Goal 2: The size of the mine/ERW contamination area is clarified and confirmed and the problem is addressed through appropriate survey and clearance methods, ensuring safe land is handed back to affected communities for use.

Strategic Goal 3: Safe behaviour is promoted among women, girls, boys, and men to reduce mine/ERW accidents and promote safe livelihood activities.

A mid-term strategic review of South Sudan's national strategy was conducted in January 2020 supported by the GICHD. National and international stakeholders were brought together in Juba to determine progress, discuss challenges, and identify the best way forward.⁴³ The results of the review were considered when elaborating the operational clearance plan for 2020–21 by adopting a pragmatic approach to prioritisation and focusing on efficient deployment of resources. The operational focus for 2021–22 was on securing safe access and creating a more secure

environment for affected communities and returnees by conducting survey, mechanical and manual area clearance, and road clearance.⁴⁴

In its revised 2020 extension request South Sudan presented a work plan through to 2026, which was updated in 2022.⁴⁵ The amount of hazardous area reported in 2022 (114 "hazards" covering 7.4km²) is to be addressed in the following manner: 38 hazards (almost 4.17km²) are to be surveyed; 33 hazards (0.87km²) require manual clearance, and 43 hazards (2.36km²) require mechanical clearance.⁴⁶ The work plan acknowledges the high number of overestimated hazards and that 56% of the remaining threat (the 38 hazards covering almost 4.17km²) need detailed non-technical survey. The plan also makes clear that estimated progress is based on predicted clearance rates and homogenous minefield sizes. Furthermore, it is only an indication of likely progress, which will be affected by external factors such as security, flooding, clearance capacity, and funding. The work plan puts the overall cost of meeting the 2026 Article 5 deadline at \$143.5 million (including all mine and battle area clearance) and indicates that the revision of the work plan is ongoing.⁴⁷ The Government of South Sudan has not allocated any budget for the implementation of the work plan.⁴⁸

South Sudan's Article 7 report (covering 2019) contained annual targets for release of all areas containing anti-personnel mines to 2026. The projected land release target for 2021 was 1.83km² with South Sudan releasing only 0.28km².⁴⁹

39 Email from Ayaka Amano, UNMAS, 2 May 2019; and 2020 Article 5 deadline extension request, p. 9.

40 Emails from Fran O'Grady, UNMISS, 9 March 2022; and Sasha Logie, Country Focal Point, GICHD, 21 April 2022.

41 Email from Ayaka Amano, UNMAS, 2 May 2019.

42 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018; and Richard Boulter, UNMAS, 6 June 2018.

43 Email from GICHD, 29 June 2021.

44 Email from Fran O'Grady, UNMISS, 9 March 2022.

45 Updated Work Plan for 1 January 2020–30 June 2026, as presented at Intersessional Meetings, Geneva, 22 June 2022.

46 Ibid.; and email from Goran Tomasevic, UNMISS, 23 August 2022.

47 Updated Work Plan for 1 January 2020–30 June 2026, as presented at Intersessional Meetings, Geneva, 22 June 2022.

48 Article 7 Report (covering 2021), p. 10.

49 Article 7 Report (covering 2019), Form 4.

In its 2020 Article 5 deadline Extension Request, South Sudan indicated that it intended to address all contamination, including from anti-vehicle mines, CMR, and other ERW, by its 2026 Article 5 deadline. To that end, aside from those tasks where specific humanitarian interventions are planned, the intention was to be pragmatic in the sequencing of tasks and to deploy clearance teams through a prioritisation process that aims to balance security, logistical requirements, and concentration of effort.⁵⁰ In the updated 2020–26 work plan, as indicated above, South Sudan highlighted issues that will impede its ability to meet its Article 5 deadline, which it had outlined in the 2020 extension request – limited funding, access restrictions due to lack of security, road conditions, and flooding.⁵¹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

South Sudan's NTSGs, which outline the technical requirements expected of all demining operators working in South Sudan, are adapted from the IMAS. The NTSGs are annually reviewed and revised by UNMAS and the implementing partners and then approved by the NMAA.⁵² In 2021, revisions were made to a number of NTSGs in consultation with implementing partners. Reporting procedures were improved in the NTSG on survey; the land release NTSG was amended to align with the updated IMAS land release standard; in the quality management NTSG, the minimum frequency for organisational senior management quality assurance visits was specified, and IMSMA Core reporting introduced to external monitoring; and in the manual mine clearance NTSG, the prodding drill standard and burning of vegetation in uncleared areas were both removed from the standard.⁵³

UNMAS noted that the NTSGs require all mine action teams to conduct regular internal quality assurance (QA), along with QC sampling of 10% of each area cleared.⁵⁴ In addition, 100% QC of all manual mine clearance was introduced as a mandatory requirement under the NTSGs 2021.⁵⁵

OPERATORS AND OPERATIONAL TOOLS

UNMAS reported that 30 teams from one international demining non-governmental organisations (MAG), and three commercial companies (G4S Ordnance Management, G4S; The Development Initiative, TDI; and SafeLane Global) conducted anti-personnel mine survey and clearance tasks in 2021. UNMAS estimated the number of operational personnel involved in anti-personnel mine survey and clearance at peak capacity at 378 during the year (see Table 3). The teams were not deployed exclusively onto anti-personnel mined area, but also conducted EOD and/or non-technical survey.⁵⁶

Table 3: Operational clearance capacities deployed in 2021⁵⁷

Operator	Manual clearance teams	Total clearance personnel	Dog teams (dogs and handlers)	Mechanical assets
G4S QRT	6	48	0	0
G4S MTT	8	120	0	0
G4S ICC	2	20	0	2
TDI RACC	2	30	6	0
MAG MTT	4	40	0	0
SafeLane Global MTT	8	120	0	0
Totals	30	378	6	2

MTT = Multi-Task teams QRT = Quick Response Teams ICC = Integrated Clearance Capacity
RACC = Route Assessment and Clearance Capacity

South Sudan's revised extension request provides a detailed breakdown of the capacity needed to complete mine clearance. South Sudan plans to deploy the full demining toolbox to address the remaining contamination, including light and heavy machines, mine detection dogs (MDDs), and manual deminers equipped with appropriate detectors.

50 2020 Article 5 deadline Extension Request, p. 64.

51 Updated Work Plan for 1 January 2020–30 June 2026, as presented at Intersessional Meetings, Geneva, 22 June 2022.

52 Article 7 Report (covering 2019), Form 4.

53 Email from Fran O'Grady, UNMISS, 9 March 2022.

54 Email from Ayaka Amano, UNMAS, 2 May 2019.

55 Email from Goran Tomasevic, UNMISS, 10 July 2022.

56 Email from Fran O'Grady, UNMISS, 9 March 2022.

57 Emails from Fran O'Grady, UNMISS, 9 March 2022; and Lisa Mueller-Dormann, MAG, 22 March 2022. MAG reported two clearance teams totalling 20 deminers with one mechanical asset.

It is expected that operators will reconfigure their clearance teams to allow for more deminers and fewer support staff on each task to increase efficiency. From November 2020, UNMAS reconfigured eight multi-task teams from eight-lane to ten- or fifteen-lane demining teams. MAG has standardised its teams with ten deminers per team.⁵⁸ Before being reconfigured, demining capacity was divided into smaller mobile teams which were ideally suited to conducting survey and clearance of EOD spot tasks in an environment with widespread insecurity, but less well suited to conducting efficient clearance.⁵⁹ In 2021, UNMAS contracted an additional eight 15-lane demining teams, bringing the total to sixteen, exceeding its target in the revised extension request, and is considering implementing a linear, section-based manual mine clearance methodology aimed at directly improving operational efficiency in 2022.⁶⁰ However, these teams are not exclusively dedicated to manual anti-personnel mine clearance.⁶¹ It is expected that there would be up to 25 teams with 15-lane capacity deployed in South Sudan in 2022.⁶²

South Sudan disaggregated its mine clearance projections in its extension request into manual and mechanical clearance.

The manual clearance teams of 15-lane demining teams were expected to clear 300m² per team per day, which equates to 52,800m² per team per year. It was expected that the manual clearance teams would clear 2.94km² plus 10% additional clearance through to 2026 to account for newly identified tasks and the impacts of other unforeseen circumstances.⁶³ Mechanical clearance teams were projected to clear 2,000m² per day during the period of the extension request,⁶⁴ clearing 46 tasks totalling 2.41km² plus 10% area as a margin of safety.⁶⁵ In June 2022, in its updated work plan, the NMAA estimated that daily manual mine clearance would remain at 300m² per day with mechanical clearance estimated at 2,500m² per day.⁶⁶ Total manual clearance between 2020 and the end of 2025 was estimated at 5.8km² with the total areas to be cleared by mechanical clearance estimated at 4.2km² (including any new contaminated areas identified).⁶⁷

In 2021, UNMAS contracted teams with all-terrain capability, consisting of four tracked and four amphibious six-wheel vehicles, to deploy to remote areas regardless of the time of the year and conduct survey and clearance.⁶⁸

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

A total of just over 0.28km² of anti-personnel mined area was released through survey and clearance in 2021. Of this, 0.03km² was cancelled through non-technical survey and 0.25km² was cleared, with a total of 31 anti-personnel mines found and destroyed. No area was reduced through technical survey.

SURVEY IN 2021

In 2021, 0.03km² was cancelled through non-technical survey activities and no area was reduced through technical survey (see Table 4).⁶⁹ This is a massive decrease in output from the 4.84km² that was cancelled through non-technical survey in 2020.⁷⁰ Since the review of the national database and nationwide re-survey began in 2018, annual cancellation rates through non-technical survey have been very high. However, as South Sudan moves towards an estimate of mine contamination that is more representative of the actual contamination in the country cancellation rates are slowing.⁷¹

Table 4: Cancellation through non-technical survey in 2021⁷²

State	Operator	Area cancelled (m ²)
Central Equatoria	DCA	1,273
Central Equatoria	G4S	5,740
Central Equatoria	MAG	750
Central Equatoria	SafeLane Global	0
Central Equatoria	TDI	19,429
Eastern Equatoria	G4S	7,350
Total		34,542

58 Email from Lisa Mueller-Dormann, MAG, 5 August 2021.

59 Revised 2020 Article 5 deadline extension request, p. 7.

60 Email from Goran Tomasevic, UNMISS, 10 July 2022.

61 Email from Richard Boulter, UNMAS, 11 April 2021.

62 Email from Fran O'Grady, UNMISS, 9 March 2022.

63 Revised Article 5 deadline extension request, pp. 72–73.

64 Email from Richard Boulter, UNMAS, 26 August 2020.

65 2020 Article 5 deadline Extension Request, p. 63.

66 Updated Work Plan for 1 January 2020–30 June 2026, as presented at the Intersessional Meetings, Geneva, 22 June 2022).

67 Ibid.

68 Email from Fran O'Grady, UNMISS, 9 March 2022.

69 Ibid.

70 Article 7 Report (covering 2020), p. 12.

71 Presentation by Richard Boulter, UNMAS, "South Sudan – Achieving Article Five compliance, and Delivering a Long-Term Solution", NDM-UN23, 12 February 2020.

72 Email from Fran O'Grady, UNMISS, 9 March 2022.

CLEARANCE IN 2021

A total of just under 0.25km² of mined area was cleared in 2021 with the destruction of 31 anti-personnel mines (see Table 5).⁷³ This is a substantial decrease from the 0.7km² cleared in 2020 but an increase in the amount of area cleared per mine found, from 1 mine per 3,066m² in 2020 to 1 mine per 8,061m² in 2021.⁷⁴

Table 5: Mine clearance in 2021⁷⁵

State	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Central Equatoria	DCA	1,311	0	0	0
Central Equatoria	G4S	7,003	1	2	4
Central Equatoria	MAG	25,640	6	0	3
Central Equatoria	SafeLane Global	743	1	0	0
Central Equatoria	TDI	215,196	23	0	50
Eastern Equatoria	G4S	0	0	0	0
Totals		249,893	31	2	57

AP = Anti-personnel AV = Anti-vehicle

In addition, 22 anti-personnel mines and 29 anti-vehicle mines were destroyed during EOD spot tasks in 2021.⁷⁶

In 2021, UNMAS reported that one hazardous area of 7,003m² was cleared with no mines found while MAG reported that three hazardous areas of 28,655m² were cleared with no mines found.⁷⁷

There was an overall large overall decrease in the amount of anti-personnel mined area released: from 5.63km² in 2020 to 0.28km² in 2021. UNMAS prioritised land release of other types of explosive ordnance as they posed a greater risk to life according to incident data. For all explosive ordnance contamination there was an increase in the amount of area cleared and reduced through technical survey and a decrease in area cancelled through non-technical survey.⁷⁸

COVID-19 did affect some aspects of clearance activities in 2021 mainly related to interaction with local communities, but it did not influence the outputs linked to the land release.⁷⁹ Survey and clearance operations were affected by the security situation with mine action teams denied access to the south, west, and north-west of Juba from April to November 2021 which resulted in the deployment of a large number of teams to the east of Juba state.⁸⁰ According to MAG, due to insecurity its clearance teams had to withdraw from highly contaminated areas with large hazardous areas in March 2021. These teams were then relocated to other operational areas, but other organisations were already operational and few hazardous areas were available for clearance.⁸¹

ARTICLE 5 DEADLINE AND COMPLIANCE



⁷³ Ibid.; and Article 7 Report (covering 2022), p. 9.

⁷⁴ Article 7 Report (covering 2020), p. 12.

⁷⁵ Article 7 Report (covering 2022), p. 9; and emails from Fran O'Grady, UNMISS, 9 March 2022; and Lisa Mueller-Dormann, MAG, 22 March 2022. MAG reported that it cleared 44,595m² in Central Equatoria destroying 3 AP mines, 1 AV mine, and 1 item of UXO.

⁷⁶ Email from Fran O'Grady, UNMISS, 9 March 2022.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Email from Lisa Mueller-Dormann, MAG, 22 March 2022.

Under Article 5 of the APMB, and in accordance with the five-year extension granted by States Parties in 2020, South Sudan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 9 July 2026. South Sudan will not meet this deadline.

Total land release of anti-personnel mined area fell by 95% in 2021 compared to the previous year, although UNMAS has explained that, according to the data, anti-personnel mines are the least significant threat to life for the people of South Sudan when compared to other types of explosive ordnance and prioritising anti-personnel mine clearance over other explosive hazards often makes “little sense” other than when treaty compliance is the sole consideration.

South Sudan released nearly 10.63km² of explosive ordnance contamination (including anti-personnel mines) during 2020. But large amounts of contaminated area are being added to the database each year.

South Sudan has categorised clearance by region and clearance method, and estimated the time needed under each method.⁸² The plan is to structure manual mine clearance teams into larger teams to have larger clearance capacity with 15+ deminers/detectors per team. Nevertheless, South Sudan is clear about the challenges it faces in meeting its Article 5 deadline.

South Sudan reported in its extension request that insecurity has been the greatest impediment to fulfilling its clearance obligations. Since 2011, there have been numerous outbreaks of armed conflict and violence, most notably in 2013 and 2016, with sporadic fighting continuing to this day. This violence, as well as intercommunal violence, and banditry that is

prevalent in areas that lack the rule of law, has persistently inhibited the deployment of mine clearance teams and has been an obstacle to a countrywide survey.⁸³ In 2021, two mine action personnel from TDI were shot during an attack (but later recovered) while in another attack a MAG vehicle was damaged.⁸⁴ In addition to the threat from insecurity, the effects of climate change are also obstacles to completion for South Sudan. In 2021, South Sudan had its worst recorded flooding ever, after three years of record rainfall, making a number of minefields inaccessible to the demining teams.⁸⁵

It looks highly unlikely that South Sudan will meet its Article 5 deadline of July 2026. While there have been some positive developments in line with the commitments in the extension request, as well as large amounts of new explosive ordnance contamination being added to the database every year, donor interest in South Sudan has been declining as funding is diverted towards the humanitarian crisis in Ukraine, which directly affected mine action efforts. Funding in 2021 decreased by 84% from 2020.⁸⁶

Table 6: Five-year summary of AP mine clearance

Year	Area cleared (km ²)
2021	0.25
2020	0.71
2019	1.00
2018	2.08
2017	1.71
Total	5.75

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

UNMAS reported it has been working with the NMAA to develop plans for a national capacity that will be responsible for clearing residual contamination.⁸⁷ A pilot project to form and mentor an EOD mobile team within the national authority between August 2021 and March 2022 was successfully launched.⁸⁸

82 Updated Work Plan for 1 January 2020–30 June 2026, as presented at the Intersessional Meetings, Geneva, 22 June 2022.

83 Revised 2020 Article 5 deadline Extension Request, p. 16, and email from Goran Tomasevic, UNMISS, 10 July 2022.

84 Emails from Fran O’Grady, UNMISS, 9 March 2022; and Lisa Mueller-Dormann, MAG, 22 March 2022.

85 Email from Fran O’Grady, UNMISS, 9 March 2022; and UN News, “Dire impact from floods in South Sudan as new wet season looms”, at: <https://bit.ly/3NSH7M8>.

86 Email from Fran O’Grady, UNMISS, 9 March 2022; and “Millions at risk in South Sudan as Ukraine war forces slashing of aid”, *The Guardian*, 14 June 2022, at: <https://bit.ly/3tCMua5>.

87 Emails from Richard Boulter, UNMAS, 22 July 2019 and 8 July 2020.

88 Email from Fran O’Grady, UNMISS, 9 March 2022.

ARTICLE 5 DEADLINE: 1 JUNE 2028
ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION: MEDIUM

NATIONAL AUTHORITY ESTIMATE

> 20 KM²

AP MINE
CLEARANCE IN 2021

4.37 KM²

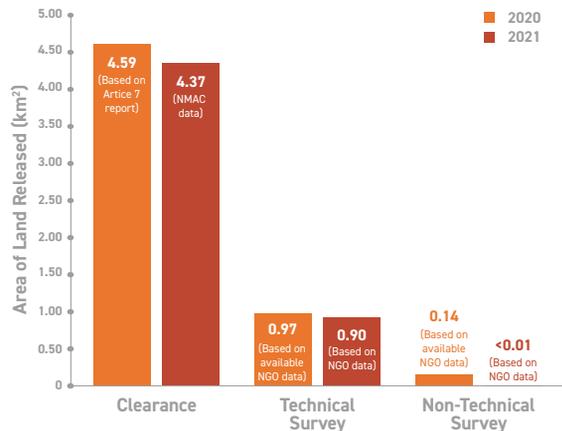
(NMAC DATA)

AP MINES
DESTROYED IN 2021

23,266

(NMAC DATA)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

Despite significant negative impacts from the COVID-19 pandemic during 2021, Sri Lanka made good progress in clearing mined areas and also in establishing a clear “completion process” methodology, with support from the Geneva International Centre for Humanitarian Demining (GICHD) and in close collaboration with NGOs.

The “completion process” framework will enable Sri Lanka to document and demonstrate compliance with Article 5 of the Anti-Personnel Mine Ban Convention (APMBC), which requires affected State Parties to make every effort to identify all remaining mined areas and address them. As part of the completion process, the National Mine Action Centre (NMAC) began a non-technical survey of all war-affected districts in September 2021, to identify previously unknown mined areas and determine an accurate baseline of contamination which will inform Sri Lanka’s new national mine action strategy. NMAC will also introduce a “completion survey” process, by which Garama Niladaris (village officers) in each district will be required to declare that they are not aware of any further contamination at that time. The completion process was presented to stakeholders, including all operators, during a Mine Action Programme donor meeting in Colombo in October 2021.

In November 2021, Sri Lanka announced that in line with the decision taken by the Cabinet of Ministers on 30 May 2021, approval was granted to publish the Prohibition of Anti-Personnel Mines Bill in the Government Gazette and for it to be tabled in Parliament for approval. The Bill was subsequently certified on 17 February 2022.

RECOMMENDATIONS FOR ACTION

- NMAC should complete the non-technical survey of all mine-contaminated districts (currently underway) and conduct its planned “completion survey” which will require village leaders to confirm that they are not aware of additional contaminated areas. The non-technical survey and completion survey will enable Sri Lanka to demonstrate that every effort has been made to identify remaining mined areas, which it has then released.
- NMAC has a completion plan it is following, but should ensure the finalisation and adoption of a new national mine action strategy as soon as possible to replace the existing strategy which expired at the end of 2020.
- Sri Lanka should adopt, without further delay, the revised national mine action standards (NMAS), which were developed with support from the GICHD and input from clearance operators in 2018.

- Greater efforts should be devoted to information management, including ensuring that the national database is up to date and that survey and clearance reports are sent to NMAC and entered into the national database in a timely fashion. In particular, Sri Lanka should make the necessary changes to its Information Management System for Mine Action (IMSMA) database to enable “sections” of large tasks that have been released to be recorded as “closed” and therefore reflected in the database.
- Sri Lanka should continue to develop plans for the Sri Lankan Army (SLA) Humanitarian Demining Units (HDUs) to manage residual contamination (i.e. mines found after a declaration of fulfilment of Article 5), and ensure the SLA HDU is fully resourced to undertake this responsibility.
- Based on clear timelines for completion, the Sri Lankan government should continue to support operators to demobilise their workforce safely and with minimal disruption to the local economy and stability of the communities by equipping the approximately 3,000 deminers and support staff with further skills, assets, and employment opportunities.
- NMAC should establish an in-country forum/platform to bring together all relevant national and international stakeholders regularly to discuss progress and challenges in Article 5 implementation and help strengthen coordination.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	Sri Lanka gained better clarity on the extent of confirmed contamination, through a district-by-district re-survey in 2015–17 of known hazardous area, which resulted in the cancellation of more than 42km ² of mined area. However, previously unknown mined areas have continued to be discovered and in September 2021, NMAC commenced a new non-technical survey of all war-affected districts to identify any previously unknown contamination. Previous non-technical survey had not covered all conflict-affected areas, and, in recent years, non-technical survey has been reactive rather than proactive. This is most prevalent in areas where there is limited human interaction with the land and thus the contamination was less well known and lower priority. An example of this is the Mullaitivu jungle. As part of its completion process, NMAC will also conduct a “completion survey”, which will require each village leader to sign a document to say they are not aware of any remaining explosive ordnance contamination at this time.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	7	7	Sri Lanka’s national mine action programme is nationally owned, with committed funding from the national government, and significant from the Armed Forces through its dedicated SLA HDUs. NMAC suffers from frequent leadership and institutional changes, which impede good governance and reduce its effectiveness. In 2021, coordination by NMAC was strengthened with support from the GICHD, including a virtual online workshop with NMAC and all operators in June 2021 on “setting the scene and sharing good practice” and a mine action programme donor meeting in Colombo in October 2021 at which the completion process was presented.
GENDER AND DIVERSITY (10% of overall score)	7	7	Following a mid-term review in 2018, Sri Lanka’s National Mine Action Strategy 2016–2020 contained a section on gender and diversity as cross-cutting themes for all mine action. NMAC said gender and diversity were also being included in the new national mine action strategy being elaborated. In 2021, 40% of NMAC’s employees were female, including 25% of managerial positions and 25% of operational positions – a notable increase on the previous year. While none of the Army’s Humanitarian Demining Units (HDUs)’s employees in 2021 was a woman, two female demining teams were trained and became operational in 2022.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	Sri Lanka is in the early stages of preparations to migrate to IMSMA Core, which is planned to take place in 2023. Data reporting between operators and NMAC continued to reflect a number of disparities and inconsistencies. In a positive development, Sri Lanka reported disaggregated land release outputs for non-technical survey, technical survey, and clearance in 2021. However, while NMAC reported annual land release output for 2021 to Mine Action Review, Sri Lanka only reported the cumulative multi-year land release totals for 2002–21 in its Article 7 report covering 2021. Also, Sri Lanka’s baseline of mined area reported in its Article 7 report did not include the previously unrecorded mined area discovered in 2021, therefore understating the known extent of contamination.

Criterion	Score (2021)	Score (2020)	Performance Commentary
PLANNING AND TASKING (10% of overall score)	7	7	Sri Lanka's National Mine Action Strategy 2016–2020, which was reviewed in 2018 with the support of the GICHD, expired in 2020. Elaboration of a new national mine action strategy was hindered by general elections in Sri Lanka and the COVID-19 pandemic. However, with support from the GICHD, progress was made during the course of 2021 to agree a "completion process". The GICHD supported the inclusive process to develop a new strategy through a stakeholder workshop in Colombo in 2022, with plans for an official launch in 2023.
LAND RELEASE SYSTEM (20% of overall score)	7	7	Revisions were made to Sri Lanka's NMAS in 2017 and in 2018 through an extensive review process with input from operators and support from the GICHD. However, NMAC has chosen not to adopt the revised NMAS, despite an NMAC board of inquiry accident investigation which recommended updates to the NMAS. Survey and clearance operations in Sri Lanka are conducted by the SLA HDU, national NGOs DASH and SHARP, and INGOs, HALO Trust and MAG. Demining capacity increased in 2021 compared to the previous year. In a positive development, NMAC/the Regional Mine Action Office (RMAO) have re-established operations meetings with all operators, which are now held every few months.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	8	NMAC reported clearance of nearly 4.37km ² of mined area in 2021, a slight decrease on the previous year due to the impacts of the COVID-19 pandemic. A significant amount of previously unknown mined area has been discovered as the result of a non-technical survey of all war-affected districts, which commenced in September 2021 and which was 98% complete as at August 2022. The new baseline of mined area will help inform Sri Lanka's new national mine action strategy and will enable NMAC to determine a timeline more accurately for completion of its Article 5 commitments
Average Score	7.0	7.0	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Ministry of Urban Development and Housing
- National Mine Action Centre (NMAC)

NATIONAL OPERATORS

- Delvon Assistance for Social Harmony (DASH)
- Skavita Humanitarian Assistance and Relief Project (SHARP)
- Sri Lankan Army (SLA) Humanitarian Demining Units (HDUs)

INTERNATIONAL OPERATORS

- The HALO Trust
- Mines Advisory Group (MAG)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

As at end of 2021, NMAC reported that total mined area in Sri Lanka stood at almost 11.9km² across 360 mined areas: this comprised more than 10.9km² across 336 confirmed hazardous areas (CHAs) and almost 1km² across 24 suspected hazardous areas (SHAs) (see Table 1).¹ However, this excludes more than 8.8km² (almost 7.1km² in 193 CHAs and more than 1.7km² in 64 SHAs) of previously unknown mined area as at May 2022, identified during the ongoing non-technical survey which began in September 2021 and which was 98% complete as at August 2022 (see Table 2).² Therefore, the true baseline of mined area as at August 2022 totalled at least 20.73km².

This is a significant increase in the baseline of confirmed and suspected mined areas compared to 12.8km² reported as at the end of March 2021.³

1 Article 7 Report (covering 2021), Form C; and email from Mahinda Bandara Wickramasingha, Assistant Director/Senior IMSMA Officer, NMAC, 2 August 2022. At the 19th Meeting of States Parties to the APMB in November 2021, Sri Lanka reported that its remaining mined area stood at 12.55km².

2 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

3 Article 7 Report (covering 2020), Form 5.

Table 1: Mined area (at end 2021, excluding previously unknown mined area discovered)⁴

Province	District	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHAs and CHAs	Total area (m ²)
Northern	Jaffna	19	1,080,102	1	0	20	1,080,102
	Kilinochchi	63	2,202,267	0	0	63	2,202,267
	Mannar	74	1,134,049	2	76,177	76	1,210,226
	Mullaitivu	136	5,512,460	11	250,505	147	5,762,965
	Vavuniya	25	654,263	2	612,159	27	1,266,422
Eastern	Trincomalee	18	327,223	8	24,623	26	351,846
North Central	Anuradhapura	1	18,945	0	0	1	18,945
Totals		336	10,929,309	24	963,464	360	11,892,773

Table 2: Additional previously unknown mined area discovered as at May 2022⁵

Province	District	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHAs and CHAs	Total area (m ²)
Northern	Jaffna	2	126,314	1	2,108	3	128,422
	Kilinochchi	10	936,752	0	0	10	936,752
	Mannar	41	466,146	15	101,180	56	567,326
	Mullaitivu	107	5,196,205	15	613,414	122	5,809,619
	Vavuniya	2	16,175	0	0	2	16,175
Eastern	Trincomalee	7	57,222	21	83,529	28	140,751
North Central	Anuradhapura	24	301,031	12	937,561	36	1,238,592
Totals		193	7,099,845	64	1,737,792	257	8,837,637

Sri Lanka has long been extensively contaminated by mines and explosive remnants of war (ERW). After a major clearance operation, most remaining contamination is located in Sri Lanka's five northern districts, the focus of almost three decades of armed conflict between the government and the Liberation Tigers of Tamil Eelam (LTTE), which ended in May 2009. Both sides made extensive use of mines, including belts of P4 Mk I and Mk II blast anti-personnel mines laid by the Sri Lankan Army (SLA), and long defensive lines with a mixture of mines and improvised explosive devices (IEDs), including anti-personnel mines of an improvised nature, laid by the LTTE.⁶ Indian peacekeeping forces also used mines during their presence from July 1987 to January 1990.⁷ Much progress in land release has been achieved over the course of the last decade.

The SLA used both anti-personnel and anti-vehicle mines, with all minelaying said to have been recorded⁸ and made available to the national mine action programme.⁹ In Jaffna,

where the minefields were laid by the SLA, the extent of contamination is well understood.¹⁰ The HALO Trust, in coordination with NMAC and its Regional Mine Action Office (RMAO), has now cleared the majority of accessible SLA-laid minefields in Jaffna district. Since most of the High Security Zone is currently only accessible to the SLA, the HALO Trust hopes to work in partnership with the SLA to assess and clear any remaining contamination when areas of the High Security Zone are made accessible.¹¹ NMAC reported in August 2022 that only eight sites remain in the High Security Zone, of which two were currently being cleared and the remaining six have been allocated to the SLA Humanitarian Demining Unit (HDU).¹²

Minefield maps and information on mine-laying strategy are not readily available for the LTTE-laid minefields, which pose more of a challenge to clear.¹³ Typically, LTTE minelaying was less predictable and more sporadic, added to which many of the minefields the group laid are in jungle areas, where

4 Article 7 Report (covering 2021), Form C; and email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

5 Article 7 Report (covering 2021), Form C; and email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

6 Interviews with demining operators, Colombo, 29 March–2 April 2010; and with Maj. Pradeep Gamage, Officer-in-Charge, North Jaffna Humanitarian Demining Unit (HDU), Jaffna, 3 April 2007.

7 Ministry of Prison Reforms, Rehabilitation, Resettlement, and Hindu Religious Affairs, "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6; and Article 7 Report (covering 2020), Form 1.

8 Ministry of Prison Reforms, Rehabilitation, Resettlement, and Hindu Religious Affairs, "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6; interview with Rob Syfret, Operations Manager, HALO Trust, in Kilinochchi, 12 September 2016; and Article 7 Report (covering 2020), Form 1.

9 Article 7 Report (covering 2020), Form 1.

10 Email from Belinda Vause, HALO Trust, 3 April 2020.

11 Emails from Belinda Vause, HALO Trust, 14 July 2020; and Eleanor Porritt, Programme Manager, HALO Trust, 2 May 2021.

12 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

13 Email from Belinda Vause, HALO Trust, 3 April 2020; and Statement of Sri Lanka, Fourth APBC Review Conference, Oslo, 29 November 2020.

limited human activity occurs.¹⁴ Operators have encountered a wide range of LTTE devices, including anti-personnel mines with anti-tilt and anti-lift mechanisms. Tripwire-activated Claymore-type mines and, to a lesser extent, anti-vehicle mines, were also used by the LTTE, along with a number of forms of improvised devices to act as fragmentation mines, bar mines, electrical and magnetically initiated explosive devices, and mines connected to detonating cord to mortar and artillery shells.¹⁵ Almost all the mines they used were manufactured by the LTTE themselves.¹⁶

Estimates of total contamination have fallen sharply: down from 506km² at the end of 2010. A district-by-district re-survey in 2015–17 of all registered SHAs in the national database resulted in cancellation of more than 42km² of mined area and helped provide greater clarity on the extent of remaining contamination.¹⁷ While significant progress has been made in releasing mined area in recent years, at the same time new, previously unknown mined areas have continued to be identified and added to the national database. This is in part because contamination is often discovered when communities return, settle, and try to rebuild their livelihoods.¹⁸

To address this, in September 2021, NMAC began a comprehensive non-technical survey of all war-affected districts to identify previously unknown mine and ERW contaminated areas in order to determine its baseline of mined area more accurately.¹⁹ The non-technical survey is resulting in identification of significant amounts of mined area not previously discovered. Past non-technical survey had not covered all conflict-affected areas, and, in recent years non-technical survey has been reactive rather than proactive. This is most prevalent in areas where there is limited human interaction with the land and thus the contamination was less well known and lower priority e.g. Mullaitivu jungle.²⁰ Many of the newly discovered mined areas are in forests in areas to which communities have only recently returned. Furthermore, some of the CHAs registered previously have turned out to be significantly larger than expected.²¹ The results of the non-technical survey will help determine what resources are required to address the additional mined area discovered and to inform elaboration of Sri Lanka's new national mine action strategy.²²

The non-technical survey is being conducted jointly by the SLA HDU and four clearance non-governmental organisations

(NGOs): international non-governmental organisations (INGOs) The HALO Trust and Mines Advisory Group (MAG), and national NGOs Delvon Assistance for Social Harmony (DASH) and Skavita Humanitarian Assistance and Relief Project (SHARP).²³ As at May 2022, 8.8km² of previously unknown mined area had been identified (7.1km² of confirmed mined area in 193 CHAs and more than 1.7km² of suspected mined areas in 64 SHAs). The non-technical survey was 98% complete as at August 2022, and was expected to be completed by the end of 2022.²⁴

The non-technical survey forms part of a broader "completion process", which is the umbrella framework for the Sri Lankan Government to document and demonstrate Article 5 compliance whereby every effort is being taken to identify and remove mine contamination. In addition to ongoing land release through non-technical survey, technical survey, and clearance, the completion process also introduces documentation to allow Garama Niladaris (GNS – village officers) to sign when there is no further evidence of explosive ordnance (EO) contamination in their respective areas, which are then considered to be free of mined areas. When all GNS within a district are complete, the district authority will sign it off as 'mine free'.²⁵ NMAC expected this district-level "completion survey" process as it is known, to begin in October 2022 once the standing operating procedure (SOP) is completed.²⁶

NMAC said the current baseline of anti-personnel mine contamination has been established through inclusive consultation with women, girls, boys, and men, including, where relevant, from minority groups.²⁷ According to Sri Lanka, all areas known or suspected to contain anti-personnel mines have been marked and warning signs in Sinhala, Tamil, and English prominently displayed.²⁸

Aside from mines, Sri Lanka remains contaminated with a wide range of ERW, including unexploded air-dropped bombs (although these are very rarely discovered), artillery shells and missiles, mortar bombs, hand-held anti-tank projectiles, and rifle and hand grenades. Large caches of abandoned explosive ordnance (AXO) also exist, particularly in the north.²⁹ These are being cleared at the same time as the remaining minefields.³⁰

14 Email from Belinda Vause, HALO Trust, 3 April 2020.

15 Email from Valon Kumnova, HALO Trust, 11 April 2014; and "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6.

16 Article 7 Report (covering 2019), Form 1.

17 Emails from Belinda Vause, HALO Trust, 3 April 2020; Valentina Stivanello, MAG, 6 April 2020; and GICHD, 13 May 2020.

18 Emails from Valentina Stivanello, MAG, 6 April 2020 and 19 April 2019; and Article 7 Report (covering 2019), Form 2.

19 Statement of Sri Lanka on clearance, 19MSP (virtual meeting), 15–19 November 2021; emails from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022; and GICHD, 13 April 2022; and Article 7 Report (covering 2021), Form C.

20 Email from Stephen Hall, Programme Manager, HALO Trust, 5 September 2022.

21 Email from Asa Masselberg, GICHD, 30 August 2022.

22 Statement of Sri Lanka on clearance, APMB 19MSP (virtual meeting), 15–19 November 2021; emails from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022, and GICHD, 13 April 2022; and Article 7 Report (covering 2021), Form C.

23 Emails from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022; and Cristy McLennan, MAG, 29 April 2022.

24 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

25 Article 7 Report (covering 2021), Form J.

26 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

27 Email from V. Premachanthiran, NMAC, 25 August 2020.

28 Statement of Sri Lanka on clearance, APMB 19MSP (virtual meeting), 15–19 November 2021.

29 "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6; and Article 7 Report (covering 2019), Form 1.

30 Email from Matthew Hovell, Regional Director, HALO Trust, 30 September 2018.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

NMAC now sits within the Ministry of Urban Development and Housing, after a re-shuffle in August 2022.³¹ Prior to this, NMAC had sat under the Ministry of Rural Home Construction and Building Material Industry Promotion, under new leadership personnel, following the parliamentary elections in August 2020;³² under the Ministry of Community Empowerment and Estate Infrastructure Development following the November 2019 presidential election;³³ and prior to that under the Ministry of National Policies, Economic Affairs, Resettlement, Rehabilitation, Northern Development, Vocational Training, Skills Development, and Youth Affairs. NMAC has responsibilities for priority setting, information management, quality assurance (QA) and quality control (QC), coordination with demining organisations and cooperation partners, and establishing policy and standards.³⁴

NMAC suffers from frequent leadership and institutional changes, including under which ministry within the Sri Lankan government the Centre sits, while the Director of NMAC is a political appointee and is the Secretary of the ministry in question. Lack of consistent leadership can impede management of the mine action centre and reduce its effectiveness.

Clearance operations are coordinated, tasked, and quality managed by a RMAO in Kilinochchi, working in consultation with District Steering Committees for Mine Action. The Committees are chaired by government agents heading district authorities.³⁵ NMAC and RMAO also suffer from the impact of a high turnover of staff, following national elections, and also as military personnel are seconded and generally rotate fairly quickly.³⁶

In November 2021, Sri Lanka announced that in line with the decision taken by the Cabinet of Ministers on 30 May 2021, approval was granted to publish the Prohibition of Anti-Personnel Mines Bill in the Government Gazette and for it to be tabled in Parliament for approval. The Bill (Act. No 3 of 2022), which focuses on the prohibitions in Article 1 of the APMBC rather than on regulation of the mine action programme, was subsequently certified on 17 February 2022.³⁷

The Sri Lankan Government provided 50 million Sri Lankan rupees (approx. US\$139,000 based on exchange rates as at

writing) to cover the cost of NMAC in 2021, and 150 million Sri Lankan rupees (approx. US\$420,000) to cover the cost of mine action activities by the SLA HDU.³⁸

The SLA continued to support the sector through conducting daily demolitions, providing security oversight at all work sites, and significantly through ensuring that the demining sector gained key worker status after the initial six-week curfew period caused by COVID-19. This was crucial in ensuring that demining teams were able to get back to work (with suitable COVID-19 mitigation measures in place) and continue to conduct clearance operations.³⁹

The Sri Lankan Cabinet has approved the continuance of demining until 2023 and consequently all demining organisations signed memorandums of understanding (MoUs) in February 2021, with respect to both its 2020 and 2021 demining operations.⁴⁰ The constant review of the application process for international staff is reported to have become slow and cumbersome following the NGO secretariat's move under the Ministry of Defence.⁴¹ This remained the case in 2021,⁴² although The HALO Trust found that it improved towards the end of the year and HALO managed to secure visas for its six permanent international staff without any significant issue.⁴³ In July 2022, the NGO secretariat (responsible for issuing visas to NGO personnel) was assigned to the Ministry of Public Security.⁴⁴

MAG reported the delay in importation of some of its equipment due to the length of time it takes to receive import approvals from multiple government departments, as well as supply chain issues, increased air freight costs, and ongoing COVID-19 restrictions.⁴⁵

In 2021, the GICHD, HALO Trust, and MAG all provided support and training to help develop NMAC and SLA HDU capacity.⁴⁶

The GICHD has worked very closely with NMAC since early 2015 and in 2021, it supported the national authorities on Sri Lanka's completion process, programme coordination, strategic planning, and information management.⁴⁷ With support from the GICHD, NMAC organised several coordination meetings in 2021, including an online workshop with NMAC and

31 Emails from Asa Masselberg, GICHD, 30 August 2022; and Stephen Hall, HALO Trust, 5 September 2022.

32 Email from Belinda Vause, HALO Trust, 2 September 2020.

33 Email from Belinda Vause, HALO Trust, 3 April 2020.

34 Article 7 Report, submitted in 2019, p. 12.

35 "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 9.

36 Email from GICHD, 13 May 2020.

37 Statement of Sri Lanka on cooperative compliance, APMBBC 19MSP (virtual meeting), 15–19 November 2021; "Sri Lanka approves law implementing anti-land mine treaty", *AP News*, 10 February 2022; and Article 7 Report (covering 2021), Form A.

38 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

39 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

40 Emails from Eleanor Porritt, HALO Trust, 2 May 2021; and Valentina Stivanello, MAG, 19 April 2021.

41 Email from Valentina Stivanello, MAG, 19 April 2021.

42 Email from Cristy McLennan, MAG, 29 April 2022.

43 Email from Stephen Hall, HALO Trust, 16 May 2022.

44 Email from Stephen Hall, HALO Trust, 5 September 2022.

45 Email from Cristy McLennan, MAG, 29 April 2022.

46 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

all operators in June, on “setting the scene and sharing good practice”, at which the APMBC Implementation Support Unit (ISU) gave a presentation on key Article 5 obligations. With the GICHD’s support, a mine action programme donor meeting took place in Colombo in October 2021, in which operators and donors participated, and during which the completion process and timeline was presented.⁴⁸

HALO Trust continued to provide capacity development support to NMAC in 2021 and in December HALO’s global mechanised officer delivered a five-day mechanised QA management training course for 10 participants from RMAO. In addition, HALO’s global information management (IM) officer also provided one-to-one training (half a day) for NMAC staff whilst visiting the programme.⁴⁹

In 2021, MAG provided equipment and training support to national authorities to help increase the capacity of NMAC and RMAO to successfully monitor and follow up the activities conducted by the mine action operators during non-technical survey. MAG donated a drone and four tablets and two laptop to the RMAO in 2021, as well as one laptop to NMAC. In addition, MAG supported three NMAC officers to attend a 250-hour, eight-month part-time data analyst training

programme conducted by Wewiwa tech training.⁵⁰ MAG is also supporting the livelihood transition strategy of deminers in Sri Lanka (see ‘Planning for Management of Residual Contamination’ for details).

NMAC and the four operators (DASH, HALO Trust, MAG, and SHARP) maintained a positive relationship throughout 2021. This was achieved despite a very challenging year due to COVID-19. Ongoing talks and collaborative discussions with the GICHD have ensured that progress was made to establish a completion process and towards development of a new national mine action strategy. Operators remain fully engaged in the process and are regularly consulted by the national authorities on sector issues.⁵¹

While no regular formal in-country platform exists for coordination of all stakeholders, national and international operators are in regular communication by a variety of means – email, Skype, office visits, and sector meetings on specific topics, for example information management, safeguarding, reallocation of tasks, among others.⁵² In addition, several multi-stakeholder meetings were convened in 2021, with the support of the GICHD, as part of the process to develop and present Sri Lanka’s completion process.

ENVIRONMENTAL POLICIES AND ACTION

Sri Lanka does not have a separate national standard or policy for the environmental management. However, NMAC said that several of Sri Lanka’s National Mine Action Standard (NMACS) chapters and some of the Technical Working Group (TWG) meeting notes, clearly include environmental management. NMAC said it is studying the IMAS 07.13 on environmental management in mine action to incorporate it within the NMACS.⁵³

NMAC, operators, the Department of Wildlife, and the Department of Forestry conducted a TWG meeting in the Northern province to prepare guidelines for operators to conduct clearance in forested areas. The guidelines will include how demining should be conducted in wildlife and forest reserves in order to minimise potential environmental harm.⁵⁴

DASH does not have an environmental policy or SOP in place, but said that preserving the environment is considered a top priority in its clearance operations. DASH keeps vegetation removal to the bare minimum. Where possible, fauna, flora, and soil layers are protected, as they are essential elements of the jungle, agriculture, and other livelihood activities post-clearance. When working in contaminated forested areas, DASH obtains permission from the Departments of

Wildlife Conservation, Forest Conservation, and Archaeology for clearance of land belonging to them. Their officials conduct routine visits to help ensure no harm is done to wildlife, forests, and land of archaeological value.⁵⁵

The HALO Trust has a global environmental policy (published in June 2020) and country-specific mitigation measures to reduce the impact upon the environment and cultural heritage during mine clearance. Prior to demining, HALO conducts an environmental screening checklist for each minefield to mitigate impact. HALO Sri Lanka is also closely liaising with the Sri Lankan National Forestry and Wildlife Commissions, and Archaeology Department who are monitoring HALO mine action activity. A set of guidelines is currently being agreed with the Forestry and Wildlife Departments to allow the use of small mechanised assets in forested / jungle areas. HALO is also working with a local environmental NGO to replant mangroves in two coastal areas on the fringes of the large Muhamalai minefield.⁵⁶

MAG has an Environmental Management SOP, based on international standards. MAG submitted the SOP for approval to NMAC in 2021, but it had yet to be approved as at April 2022.⁵⁷

47 Emails from Asa Masselberg, GICHD, 13 April and 28 February 2022.

48 Ibid.

49 Email from Stephen Hall, HALO Trust, 16 May 2022.

50 Email from Cristy McLennan, MAG, 29 April 2022.

51 Emails from Brig. (ret.) Ananda Chandrasiri, Director, DASH, 28 April 2022; Stephen Hall, HALO Trust, 16 May 2022; Cristy McLennan, MAG, 29 April 2022; and Lt.-Col. (ret.) Sarath Jayawardhana, Director, SHARP, 5 August 2022.

52 Emails from Eleanor Porritt, HALO Trust, 2 May 2021; Valentina Stivanello, MAG, 19 April 2021; Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021; and Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 9 September 2021.

53 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

54 Ibid.

55 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022.

56 Emails from Stephen Hall, HALO Trust, 16 May and 5 September 2022.

57 Email from GICHD, 13 April 2022.

SHARP does not have a policy or SOP on the environment, but said that it conducts its operations with great care to prevent any damage to the environment.⁵⁸

GENDER AND DIVERSITY

Gender and diversity were included in Sri Lanka's National Mine Action Strategy for 2016–20, following the mid-term review in 2018. The strategy contains a specific section on gender and diversity, which it emphasises are cross-cutting issues for the planning, implementation, and monitoring of all mine action initiatives. It further recognises that mine action in Sri Lanka should be tied to the implementation of the Women, Peace, and Security Agenda and Sustainable Development Goal 5 on Gender Equality and the empowerment of women, noting that the safeguarding of non-discriminatory employment opportunities and the promotion of gender equality and empowerment of women has been a particularly successful aspect of Sri Lanka's national mine action programme.⁵⁹

NMAC said gender and diversity are taken into consideration throughout the national mine action process in Sri Lanka and have been included in the new national mine action strategy, which was planned to be adopted in 2022.⁶⁰ Sri Lanka recognises that women, girls, boys, and men may be affected differently by mine/ERW contamination due to their roles and responsibilities and might therefore have specific and varying needs and priorities. It is therefore making every effort to ensure gender and diversity considerations are taken into consideration in the planning, implementation and monitoring phases of mine clearance. When recruiting for survey and community liaison teams, NMAC recruits personnel to represent ethnic or minority groups in each area.⁶¹ Relevant mine action data are disaggregated by sex and age.⁶²

NMAC reported that 40% of its total employees in 2021 were female, including 25% of managerial level positions and 25% of operational positions,⁶³ a notable increase on previous years.⁶⁴ The SLA HDU trained two female demining teams in 2022, who began clearance in April 2022.⁶⁵ This is a notable development, as previously none of the SLA HDU's 450 employees was a woman.⁶⁶

DASH and fellow national operator, SHARP, have both sought to progressively increase the number of women employed, including in operational positions, recognising the positive

impact employment has on women and their families' well-being.⁶⁷

DASH considers gender equality and employment of women important to its programme. As at April 2022, 24% of DASH's total employees were female, with women holding 21% of operational positions, but only 3% of managerial/supervisory level positions. DASH survey and community liaison teams are in close consultation with beneficiaries and are comprised of people of the affected minority community in the Northern province.⁶⁸

As at April 2022, 13% of SHARP's total employees were female, with women holding 13% of operational positions, and 20% of managerial/supervisory level positions. SHARP conducts its clearance operations in very close liaison with the village heads and members of the local community.⁶⁹

International operators The HALO Trust and MAG confirmed that they have gender policies in place, with a focus on achieving equal access to employment, gender-balanced survey and clearance teams, gender-focused community liaison outreach, disaggregated data collection, and a gender focus to be employed during pre- and post-clearance assessments.⁷⁰

The HALO Trust reported that as at May 2022, 37% of its total staff in Sri Lanka were women. This included 35% of all operations staff and 23% of managerial/supervisory level positions, a slight decrease compared to the previous year.⁷¹ HALO's deployment structure is designed to allow demining teams to be deployed daily from bases in Kilinochchi, Jaffna, and Jeyapuram, in order to allow female staff to return to their homes at the end of each working day, rather than being based in remote camps for lengthy periods of time. This ensures that women who have dependents at home are able to provide for their families while maintaining their daily home lives. HALO Trust also reported specific efforts to encourage women's employment through advertising maternity leave policies.⁷² Tamils make up the overwhelming population in Northern province and are a minority group within Sri Lanka, comprising approximately two million

58 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022.

59 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 6.

60 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

61 Statement of Sri Lanka on Victim Assistance, APMBC 19MSP (virtual meeting), 15–19 November 2021.

62 Email from GICHD, 13 April 2022.

63 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

64 Ibid.

65 Ibid.

66 Email from V. Premachanthiran, NMAC, 25 August 2020; and Article 7 Report (covering 2019), Form 2.

67 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 6; and Article 7 Report (covering 2020), Form 5.

68 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022.

69 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022.

70 Emails from Belinda Vause, HALO Trust, 9 August 2019 and 3 April 2020; Beth Lomas, MAG, 26 July 2019; and Valentina Stivanello, MAG, 6 April 2020.

71 Email from Stephen Hall, HALO Trust, 16 May 2022.

72 Email from Belinda Vause, HALO Trust, 9 August 2019.

(10%) of the total population. HALO's workforce is nearly all Tamil. To enable collaboration with the SLA or Sinhalese population, a Sri Lankan army (Sinhalese) soldier is embedded into teams as required.⁷³

MAG reported that as at April 2022, 34% of its total staff in Sri Lanka were female, including 24% of operational staff and 15% of managerial/supervisory positions.⁷⁴ Most of MAG's operational areas are inhabited by Tamils, the ethnic minority in Sri Lanka. MAG's Community Liaison Teams (CLTs) members come from its operational areas and consist of different ethnicity and minority groups. Their knowledge

of minorities and ethnic groups in the affected communities is taken into consideration when identifying SHAs and releasing land. Some 41% of MAG CLTs are female and 59% are male, which has helped enable the most vulnerable households to access MAG CLTs with confidence. The majority of MAG's community liaison and survey team members are conversant in at least two local languages, which reduces communication barriers and improves the understanding of the local cultural context, thereby getting the majority of the communities on board with MAG's activities.⁷⁵

INFORMATION MANAGEMENT AND REPORTING

Sri Lanka's IMSMA database has undergone substantial and continuing improvements since the installation of an updated version in 2015 and a subsequent process of data entry and ground verification.⁷⁶

The GICHD received an official request to support NMAC with the migration to IMSMA Core, which following discussions, is planned for 2023 and the data validation part of the migration started in May 2022. The process of migrating from IMSMA NG to IMSMA Core will include a lengthy process of data clarity and QA of all data stored in IMSMA.⁷⁷

Challenges to information management and establishing long-term sustainable national IM capacity, in part stem from lack of resources and also the high staff turnover at NMAC and RMAO, as military personnel are seconded and generally rotate fairly quickly.⁷⁸

Complications to data management are also posed by the existence of very large tasks on the database which consist of many "sections". These tasks show as "open" in IMSMA until all sections contained in them have been cleared, even if several sections have been reduced or cleared. This complicates land release figures and reduces the accuracy of the estimated size of mined area remaining in the database. This could be rectified with minor changes to IMSMA by allowing cleared sections to be recorded as "closed", thereby

providing greater clarity on the remaining problem. The GICHD had offered support to NMAC to make the required minor changes to the database,⁷⁹ but no changes had been made as at writing. The HALO Trust reported that while the hazardous status has not yet been changed to reflect this, there had been firm guidance from NMAC on larger tasks, for operators to release land in sections on the ground. This was primarily to enable resettlement of internally displaced persons (IDP) and return of land to productive use as quickly as possible, but also has the benefit of helping improve progress monitoring in IMSMA.⁸⁰

While NMAC officers have been trained by the GICHD to enter data into IMSMA, and also trained by HALO in geographic information system (GIS) and mapping, most have limited formal training in database theory, management, and query design. It is hoped that training in the design of simple querying and reporting tools will allow NMAC to generate reports much easier and will allow them more time to focus on the quality of the data.⁸¹

In its latest Article 7 transparency report covering 2021, Sri Lanka reported the cumulative amount of mined area cancelled, reduced, and cleared in 2002–21, but not annual survey and clearance output for 2021, which the Treaty requires it to report.⁸²

73 Email from Stephen Hall, HALO Trust, 16 May 2022.

74 Email from Cristy McLennan, MAG, 29 April 2022.

75 Ibid.

76 Email from Alistair Moir, MAG, 8 August 2018.

77 Emails from GICHD, 13 April 2022; and Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

78 Email from GICHD, 13 May 2020.

79 Email from Asa Massleberg, GICHD, 23 June 2020.

80 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

81 Email from Belinda Vause, HALO Trust, 3 April 2020.

82 Article 7 Report (covering 2021), Form F.

PLANNING AND TASKING

Sri Lanka's previous National Mine Action Strategy 2016–20 was guided by the vision of Sri Lanka to become “free from the threat of landmines and ERW by 2020, enabling women, girls, boys and men to live in a safe environment where the needs of mine/ERW victims are met”.⁸³ Following a review of the strategy in 2018, the revised strategy stated that “completion of clearance at the end of 2020 will only be possible if considerably more funding is made available, allowing all five operators to expand to their maximum capacity”.⁸⁴ However, donor funding was not sufficient to increase capacity to the level anticipated and progress towards the 2020 completion target was also further hampered by the discovery of new, previously unsurveyed and unrecorded mined areas⁸⁵ and the fact that some areas were significantly larger than expected and recorded.⁸⁶

The strategy expired in 2020 and the process to elaborate a new strategy beyond 2020 was twice postponed, first due to the ministerial reshuffle following the November 2019 election and in the spring of 2020 due to the COVID-19 pandemic.⁸⁷ However, with support from the GICHD, progress was made during the course of 2021 to agree a strategic planning process and timeline with NMAC and other partners, and to assess achievements and challenges in implementation of Sri Lanka's former strategy.⁸⁸

With the support of the GICHD and in collaboration with all operators, Sri Lanka has developed a “completion process”, as the framework for the Sri Lankan Government to document and demonstrate compliance with Article 5. This involves non-technical survey of all war-affected districts, to identify any previously unknown mined areas and determine an accurate baseline of contamination which will inform the Sri Lanka's new mine action strategy. It also introduces a “completion survey” process, by which each village officer in a district will confirm that they are not aware of any explosive ordnance contamination at that time. When all villages within

a district are complete, the district authority will sign it off as “mine free”.⁸⁹

The completion process was presented to stakeholders during a mine action programme donor meeting in Colombo in October 2021, attended by all operators and representatives from most international donors.⁹⁰ As at August 2022, the non-technical survey was 98% completed and NMAC expected the district-level “completion survey” to begin in October 2022, once the SOP was completed.⁹¹

GICHD facilitated a strategy stakeholder workshop in Colombo in June 2022. Sri Lanka's new national mine action strategy, which was being drafted as at August 2022, was expected to be approved and launched by early 2023.⁹² Operators remained fully engaged in the strategy process and provided input for the development of the new strategy.⁹³ The results of the non-technical survey will help determine a more accurate baseline of mined area and a realistic completion timeline for strategic planning.

No annual action plan was in place for 2021 or 2022.⁹⁴

Sri Lanka's mine action programme has a well-developed prioritisation system, outlined in NMAC's National Mine Action Strategy 2016–20. The primary priority is clearance of land for resettlement, particularly the return of IDPs. Further to this, contaminated land planned for livelihood activities (mostly agricultural land), access to public services, and large-scale infrastructure, are also prioritised in accordance with NMAC's national mine action strategy.⁹⁵ According to NMAC, despite marking of contaminated areas and sustained risk education, returnees are likely to enter contaminated areas, especially agricultural areas, to meet their basic livelihood needs. As such, socio-economic pressures and livelihood activities are vital considerations in the prioritisation process in relation to resettlement plans.⁹⁶

83 “Sri Lanka National Mine Action Strategy 2016–2020”, Revised version, September 2018, p. 11.

84 *Ibid.*, p. 4.

85 Article 7 Reports (covering 2019 and 2020), Forms 2 and 5; and Statement of Sri Lanka on clearance, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

86 Email from Asa Masselberg, GICHD, 30 August 2022.

87 Email from GICHD, 13 May 2020.

88 Emails from Asa Masselberg, GICHD, 28 February and 13 April 2022.

89 Article 7 Report (covering 2021), Form J.

90 Email from GICHD, 13 April 2022.

91 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

92 Email from Asa Masselberg, GICHD, 30 August 2022.

93 Email from Cristy McLennan, MAG, 29 April 2022.

94 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

95 Email from Belinda Vause, HALO Trust, 3 April 2020.

96 Article 7 Report, submitted in 2019, p. 3.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

A review of Sri Lanka's National Mine Action Standards (NMAS), taking into account the local context, was carried out in May 2017 with the input of all demining operators, and support from the GICHD. However, the revised version of the NMAS was never approved.

In August 2020, NMAC, under new leadership, had claimed that since Sri Lanka was in the final stages of its mine action programme there was no significant requirement for the development [revision] of NMAS and that during implementation the programme will apply the International Mine Action Standards (IMAS).⁹⁷ In August 2022, NMAC again said that it did not plan to adopt the revised NMAS and no updates were made to the NMAS in 2021.⁹⁸

However, an NMAC Board of Inquiry (BoI) investigation, following a fatal incident in Trincomalee at the end of 2021 on land that had been released, is said to have concluded that the NMAS are out of date and made some recommendations for improvement. These included the updating of SLNMAS 04.10 Non-Technical Survey, SLNMAS 04 Land Release, and SLNMAS 08 Quality Management, including the development of cancellation procedures and criteria relevant to the Sri Lanka context, and specific guidance on documentation for decision making.⁹⁹

The HALO Trust conducted an internal review of its operational SOPs and made amendments to its SOPs on Mechanical Demining Techniques (updated hand-held mine

scooper; added anti-vehicle mine rake; excavator wet-soil bucket use facing outwards), Survey (safety precautions during the survey process were updated), and Manual Demining Techniques (updated rapid excavation procedure and root-probe procedures).¹⁰⁰

MAG said that despite the standards being overdue and in need of review, the existing NMAS have not led to any major restrictions in operations in Sri Lanka. MAG did, however, report that demolitions are a constant issue, due to SLA engineers not having sufficient resources to facilitate the requirement of daily demolitions. MAG believes that if organisations were authorised to hold their own explosives and conduct demolitions as required it would allow for more efficient clearance, as well as improving site security.¹⁰¹

With respect to the completion process, the GICHD drafted a document outlining key objectives, components, and outputs. In October 2021, the GICHD organised a training in Kilinochchi on non-technical survey and the "completion survey" with the RMAO, the SLA HDU, and representatives from all national and international operators.¹⁰² As at August 2022, the NMAC was developing an SOP and declaration form for the "completion survey" in order to demarcate "mine-free" villages.¹⁰³

In a positive development, NMAC/RMAO have re-established operations/coordination meetings with all operators, which are now held every few months.¹⁰⁴

OPERATORS AND OPERATIONAL TOOLS

In 2021, demining operations continued to be conducted by the SLA HDU; national NGOs, DASH and SHARP; and INGOs, The HALO Trust and MAG. The NGOs and INGOs are entirely funded by international donors.

With respect to survey capacity in 2021, the SLA HDU deployed eight non-technical survey teams totalling fifteen personnel and 6 technical survey teams, totalling 18 personnel.¹⁰⁵ DASH had three teams conducting non-technical survey, totalling ten personnel, which included one non-technical survey team established in 2021 to help contribute to national efforts to identify previously unknown mined area.¹⁰⁶ The HALO Trust deployed up to five non-technical survey teams since November 2021, totalling 15 personnel.¹⁰⁷ MAG deployed 10 non-technical survey teams, totalling 30 personnel.¹⁰⁸ Technical survey capacity for DASH, HALO, and MAG is included in the clearance capacity table below, as clearance teams conduct both clearance and technical survey as required.¹⁰⁹

97 Email from V. Premachanthiran, NMAC, 25 August 2020.

98 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

99 Email from Stephen Hall, HALO Trust, 16 May 2022.

100 Ibid.

101 Email from Cristy McLennan, MAG, 29 April 2022.

102 Email from GICHD, 13 April 2022.

103 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

104 Email from Stephen Hall, HALO Trust, 16 May 2022.

105 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

106 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022.

107 Email from Stephen Hall, HALO Trust, 16 May 2022.

108 Email from Cristy McLennan, MAG, 29 April 2022.

109 Emails from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022; Stephen Hall, HALO Trust, 16 May 2022; and Cristy McLennan, MAG, 29 April 2022.

Table 3: Operational clearance capacities deployed in 2021¹¹⁰

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
DASH	13	271	0	0	Survey teams conduct initial technical survey to determine the perimeter of the contamination. The clearance team then conducts further technical survey to distinguish low-threat areas from high-threat areas, in support of the clearance plan. DASH's manual clearance teams are comprised of one team leader, three section leaders, two paramedics, and 21–24 deminers.
HALO Trust	76	634	0	10 front loaders, 12 excavators, 2 JCBs, 1 Beach Tech sand cleaner, 1 PrimeTech tiller machine, and 4 tractors with various attachments.	Capacity is based on the average annual number of clearance teams and deminers in 2021. It includes paramedic-trained deminers that engage in demining on a daily basis working the same demining hours as non-medical trained deminers. Deployment of mechanical assets varied each month (and within the month) depending on the season, maintenance, and repair requirements, as well as the terrain type and different challenges at minefields. Capacity in 2021 was an increase on the average of 71 clearance teams, totalling 537 deminers, reported the previous year.
MAG	50	600	0	25	MAG's Mine Action Teams (MATs) also conduct technical survey as part of the standard land release process. Each MAT consists of 12 deminers, one deputy team leader and one team leader. Each mechanical asset has a trained operator. Clearance capacity in 2021 represented an increase on the 45 teams totalling 528 deminers the previous year, due to increased spending availability.
SHARP	4	88	0	0	
SLA HDU	6	208	8 dogs (and 20 handlers)	5 (2 Bozena and 3 MV 4)	Based on information reported to Mine Action Review by NMAC in 2022.
Totals	149	Approx. 1,800	8		

* Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters.

DASH's operations in 2021 were focused in the districts of Kilinochchi and Mullaitivu in the Northern province.¹¹¹

In 2021, HALO deployed the majority of its team in Muhamalai and Manalar (jungle tasks around Kokkuthoduwai), as well as other areas of operation including Kilinochchi, Jeyapuram, Mannar, and Jaffna. HALO's clearance capacity increased in 2021, compared to the previous year.¹¹²

MAG's efforts in 2021, were mainly focused in Mannar, Mullaitivu, and Vavuniya districts in Northern province & Trincomalee district in Eastern province. MAG's clearance capacity in 2021 was an increase on 2020 capacity.¹¹³

In 2021, SHARP operated in Muhamalai, in the Northern province and maintained a capacity consistent with the previous year. Having successfully secured funding from the U.S. State Department's Bureau of Political-Military Affairs (PM/WRA), SHARP planned to increase its capacity in 2022 by two manual demining teams and one survey team.¹¹⁴

In addition to its existing capacity, the SLA HDU trained two female demining teams in 2022, which began clearance in April 2022.¹¹⁵

110 Emails from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022; Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022; Stephen Hall, HALO Trust, 16 May 2022; Cristy McLennan, MAG, 29 April 2022; and Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022.

111 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022.

112 Email from Stephen Hall, HALO Trust, 16 May 2022.

113 Email from Cristy McLennan, MAG, 29 April 2022.

114 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022.

115 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

According to NMAC data, a total of nearly 4.57km² of mined area was released in 2021, of which 4.37km² was cleared, almost 0.16km² was reduced, and more than 0.04km² was cancelled. A total of 23,266 anti-personnel mines, 60 anti-vehicle mines, and 3,513 items of UXO were destroyed during the year.¹¹⁶

Survey and clearance data from NGOs varied compared to NMAC data. Both sets of data are included below.

In its Article 7 transparency report covering 2021, Sri Lanka reported the cumulative amount of mined area cancelled, reduced, and cleared in 2002–21, but not annual survey and clearance output for 2021 as is required under the APMBC.¹¹⁷

SURVEY IN 2021

According to NMAC data provided to Mine Action Review 43,281m² was cancelled through non-technical survey in 2021 (see Table 4) and 158,761m² reduced through technical survey (see Table 6). The data reported by NMAC varied from the NGO's own survey data in some instances significantly. DASH, the HALO Trust, and MAG, reported to Mine Action Review that they cancelled a combined total of 8,610m² through non-technical survey (see Table 5) and reduced 897,911m² through technical survey (see Table 7).¹¹⁸

Table 4: Cancellation through non-technical survey in 2021 (based on NMAC data)¹¹⁹

District	Operator	Area cancelled (m ²)
Mannar	MAG	7,417
Mullaitivu	DASH	34,078
	HALO Trust	1,455
Vavuniya	MAG	331
Total		43,281

Table 5: Cancellation through non-technical survey in 2021 (based on operator data)¹²⁰

District	Operator	Area cancelled (m ²)
Mannar	MAG	6,806
Mullaitivu	DASH	1,369
Vavuniya	MAG	435
Total		8,610

Table 6: Reduction through technical survey in 2021 (based on NMAC data)¹²¹

District	Operator	Area reduced (m ²)
Jaffna	HALO Trust	2,053
Kilinochchi	HALO Trust	6,258
Mannar	MAG	62,528
	DASH	10,538
Mullaitivu	HALO Trust	5,626
	MAG	5,941
Trincomalee	MAG	2,124
Vavuniya	DASH*	44,084
	MAG	19,609
Total		158,761

* DASH informed Mine Action Review that this reduction data not relate to DASH's operations.

Table 7: Reduction through technical survey in 2021 (based on operator data)¹²²

District	Operator	Area reduced (m ²)
Jaffna	HALO Trust	5,980
Kilinochchi	DASH	2,582
	HALO Trust	11,973
Mannar	MAG	146,053
	DASH	115,333
Mullaitivu	HALO Trust	17,153
	MAG	176,948
Trincomalee	MAG	2,124
Vavuniya	MAG	419,765
Total		897,911

116 Ibid.

117 Article 7 Report (covering 2021), Form F.

118 Emails from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022; Cristy McLennan, MAG, 29 April 2022; and Stephen Hall, HALO Trust, 16 May 2022. HALO did not report cancelling any mined area through non-technical survey in 2021.

119 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

120 Emails from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022; Cristy McLennan, MAG, 29 April 2022; and Stephen Hall, HALO Trust, 16 May 2022. HALO did not report cancelling any mined area through non-technical survey in 2021. The reason for the discrepancies between NMAC and operator survey data is not known, but is likely due to data held/not held in the national IMSMA database, including a back-log of entries outstanding (including a one-week information gap between operator and NMAC data, as RMAO updates IMSMA based on the weekly progress reports of operators; and the fact that cancellation and reduction data are added by NMAC to IMSMA only upon completion of the land release process) or errors in entering or extracting the data.

121 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

122 Emails from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022; Stephen Hall, HALO Trust, 16 May 2022; and Cristy McLennan, MAG, 29 April 2022. The reason for the discrepancies between NMAC and operator survey data is not know for certain, but is likely due to data held/not held in the national IMSMA database, including a back-log of entries outstanding (including a one-week information gap between operator and NMAC data, as RMAO updates IMSMA based on the weekly progress reports of operators; and the fact that cancellation and reduction data are added by NMAC to IMSMA only upon completion of the land release process) or errors in entering or extracting the data.

NMAC also reported having discovered 8.8km² (almost 7.1km² in 193 CHAs and more than 1.7km² in 64 SHAs) of previously unknown mined area to date as at May 2022, identified during the on-going non-technical survey which began in September 2021 and which was 98% complete as at August 2022 (see Table 2 above).¹²³

In 2021, DASH reported identifying nearly 0.82km² of previously unrecorded mined area;¹²⁴ The HALO Trust

confirmed almost 2.38km² of previously unrecorded mined area across 80 CHAs in Jaffna, Kilinochchi, and Mullaitivu districts;¹²⁵ and MAG reported 0.52km² of previously unrecorded mined area across 55 CHAs.¹²⁶ SHARP carried out non-technical survey of GS Divisions in Puthukudiriypu, allocated by NMAC as part of the national survey during the latter part of 2021. It did not discover any previously unknown mined area in 2021.¹²⁷

CLEARANCE IN 2021

According to NMAC, a total of nearly 4.4km² of mined area was cleared in 2021, with the destruction of 23,266 anti-personnel mines, 60 anti-vehicle mines, and 3,513 other UXO (see Table 8).¹²⁸ This was a decrease on the nearly 4.6km² of mined area cleared in 2020, when 43,157 anti-personnel mines, 45 anti-vehicle mines, and 5,430 items of UXO were destroyed during the year, according to Sri Lanka's Article 7 report covering 2020.¹²⁹ NMAC said the decrease in clearance in 2021 was due to the impacts of the COVID-19 pandemic.¹³⁰

Clearance data for 2021 reported by NMAC varied from that reported by the NGOs directly (see Table 9). NMAC believed the main reason for the differences was due to the fact that NMAC updates its data based on completion reports, while clearance operators use daily progress reports. NMAC also noted that sometimes operators do not consider district borders or take into account their area of responsibility in their reporting.¹³¹

All anti-personnel mines are destroyed by the SLA – Engineers Brigade. As per national standards, humanitarian mine action operators are not authorised to conduct explosive ordnance disposal (EOD) in Sri Lanka.¹³²

Table 8: Mine clearance in 2021 (based on NMAC data)¹³³

District	Operator	Mine clearance (m ²)	AP mines destroyed*	AV mines destroyed	UXO destroyed
Amuradhapura	SLA HDU	51,184	130	0	3
Batticaloa	SLA HDU	7,593	454	0	2
Jaffna	HALO Trust	72,391	159	1	47
	SLA HDU	195,749	70	0	1
Kilinochchi	DASH	580,150	2,970	9	904
	HALO Trust	871,001	5,971	16	1,656
	SHARP	266,978	1,151	24	387
	SLA HDU	106,988	1,568	8	80
Mannar	MAG	672,942	2,298	2	55
Mullaitivu	DASH	103,397	2,871	0	50
	HALO Trust	598,325	1,714	0	93
	MAG	361,372	650	0	99
	SLA HDU	35,424	27	0	65
Polonnaruwa	SLA HDU	56,697	319	0	30
Trincomalee	MAG	25,680	280	0	5
Vavuniya	DASH**	22,481	490	0	12
	MAG	337,632	2,144	0	24
Totals		4,365,984	23,266	60	3,513

* Includes 86 anti-personnel mines of an improvised nature (77 in Kilinochchi and 9 in Mullaitivu) and 25 anti-personnel mines destroyed by HALO Trust during spot tasks in 2021.

** DASH informed Mine Action Review that this clearance data do not relate to DASH's operations.

123 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

124 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022.

125 Email from Stephen Hall, HALO Trust, 16 May 2022.

126 Email from Cristy McLennan, MAG, 29 April 2022.

127 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022.

128 Email from Mahinda Bandara Wickramasingha, NMAC, 13 September 2022.

129 Article 7 Report (covering 2020), Form 5.

130 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

131 Email from Mahinda Bandara Wickramasingha, NMAC, 13 September 2022.

132 Email from Valentina Stivanello, MAG, 6 April 2020.

133 Email from Mahinda Bandara Wickramasingha, NMAC, 13 September 2022.

Table 9: Mine clearance in 2021 (based on operator data for DASH, HALO, and MAG and on NMAC data for the SLA HDU)¹³⁴

District	Operator	Mine clearance (m ²)	AP mines destroyed*	AV mines destroyed	UXO destroyed
Amuradhapura	SLA HDU	51,184	130	0	3
Batticaloa	SLA HDU	7,593	454	0	2
Jaffna	HALO Trust	72,650	158	1	53
	DASH	437,058	2,966	9	901
	SLA HDU	195,749	70	0	1
Kilinochchi	HALO Trust	871,573	6,102	9	1,668
	SHARP	189,065	1,184	24	386
	SLA HDU	106,988	1,568	8	80
Mannar	MAG	672,523	2,293	2	70
Mullaitivu	DASH	129,385	3,419	0	62
	HALO Trust	599,906	1,717	0	82
	MAG	358,985	588	0	103
	SLA HDU	35,424	27	0	65
Polonnaruwa	SLA HDU	56,697	319	0	30
Trincomalee	MAG	76,081	357	0	9
Vavuniya	MAG	340,273	2,162	0	23
Totals		4,201,134	23,514	53	3,538

* Includes 124 anti-personnel mines of an improvised nature (54 by HALO Trust and 24 improvised anti-personnel fragmentation mines destroyed by MAG). In addition, HALO Trust also destroyed a further 46 anti-personnel mines during EOD spot tasks, which are not included in Table 9.

The amount of mined area HALO released through technical survey and clearance in 2021, was a decrease on 2020. HALO said this was primarily due to COVID-19 and the loss of 29 operational days, but was also compounded by clearance of tasks with a below average clearance rate due to technical challenges such as the need for full excavation due to high metal contamination, and mechanical clearance challenges such as termite mounds and clearance of bunkers and trenches.¹³⁵

MAG's land release outputs in 2021 were a slight decrease on 2020, despite its upscaling of clearance capacity in September 2021. The decrease was due to COVID-19 lockdowns, staff being quarantined, and a higher amount of days lost due to rain in 2021.¹³⁶

National NGOs, DASH and SHARP also both reported a decrease in clearance output in 2021 compared to the previous year.¹³⁷

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SRI LANKA: 1 JUNE 2018

↓

ARTICLE 5 DEADLINE: 1 JUNE 2028

ON TRACK TO MEET ARTICLE 5 DEADLINE: YES
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

¹³⁴ Emails from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022; Cristy McLennan, MAG, 29 April 2022; Stephen Hall, HALO Trust, 16 May 2022; and Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022; and Mahinda Bandara Wickramasingha, NMAC, 13 September 2022. The reason for the discrepancies between NMAC and operator clearance data is not known, but is likely due to data held/not held in the national IMSMA database, including a back-log of entries outstanding (including a one-week information gap between operator and NMAC data, as RMAO updates IMSMA based on the weekly progress reports of operators; and the fact that clearance data are added by NMAC to IMSMA only upon completion of the land release process, whereas operators report on an ongoing basis) or errors in entering or extracting the data.

¹³⁵ Emails from Stephen Hall, HALO Trust, 16 May and 5 September 2022.

¹³⁶ Email from Cristy McLennan, MAG, 29 April 2022.

¹³⁷ Emails from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022; and Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022.

Table 10: Five-year summary of AP mine clearance

Year	Area cleared (km ²)
2021	4.10
2020	4.59
2019	*2.94
2018	3.46
2017	3.25
Total	18.34

*Mine Action Review calculation

Under Article 5 of the APMB, Sri Lanka is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 June 2028. Sri Lanka should still complete clearance by this deadline if it can maintain clearance capacity.

Sri Lanka's original target to complete mine clearance by the end of 2020, was overly ambitious and contingent on significantly increasing funding and capacity. The anticipated increase in capacity of the SLA HDUs did not materialise as was hoped,¹³⁸ with expansion hindered by the army's focus on responding to the Easter Sunday terrorist attacks in April 2019 and by the subsequent COVID-19 pandemic. Furthermore, progress towards achieving the 2020 target was also hampered by the continued discovery of new, previously unknown mined area adding to the contamination baseline.

NMAC said in August 2022 that it expects to complete Sri Lanka's Article 5 obligation by 2027, as per its new draft

strategy which it planned to publish by the end of the year.¹³⁹ Whether or not this is realistic depends in part on how much more previously unknown mined area is discovered and added to the database during completion of the non-technical survey in 2022 and during the "completion survey" which will require village leaders and districts to sign a form to confirm they are not aware of any additional contamination at that time. The more accurate baseline of mined area, established through the almost completed non-technical survey, will inform Sri Lanka's new national mine action strategy. International operators believe this will be an important element in helping attract international funding.

The COVID-19 pandemic directly impacted mine action activities in Sri Lanka in 2021. There were several island-wide lockdowns imposed by the government to prevent spread of the outbreak, during which clearance works continued with a 50% capacity during some months (with the direct supervision of the Ministry of Health), and in other months operations were halted completely.¹⁴⁰

Due to the COVID-19 restrictions in 2021, the GICHD provided a lot of its support online. DASH reported that COVID-19 had a significant impact on its clearance operations in 2021, including due to the 56 days of lockdown implemented by the government. Despite this, DASH was still able to reach its estimated clearance output for the year.¹⁴¹ MAG lost 40 operational days in 2021 due to COVID-19 related lockdowns,¹⁴² and HALO lost 38 operational days, although managed to recoup nine of these during the remainder of the year.¹⁴³ SHARP reported that its mine clearance operations were suspended from 22 May to 21 June 2021 due to a resurgence of COVID-19 detections, and that it implemented strict COVID-19 mitigation throughout the year.¹⁴⁴

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Sri Lanka's National Mine Action Strategy for 2016–20 committed the government of Sri Lanka to ensure that relevant plans are in place to ensure effective management of residual contamination.¹⁴⁵ It sets out that NMAC will lead efforts to plan for a transitional phase, a process which will involve the SLA, relevant government ministries, and civil society, noting that post-completion roles and responsibilities for management of residual contamination must be clarified, transparent, and communicated to all relevant stakeholders.¹⁴⁶

On completion of clearance operations, the SLA will be responsible for dealing with residual contamination.¹⁴⁷ Sri Lanka has dedicated significant national resources to the SLD HDUs, with officers trained on EOD, QA, and IMSMA

attached to RMAO in Kilinochchi, which monitors and evaluates demining activities in Sri Lanka. This regional office consists of 90% staff from the SLA. NMAC recognises the importance of agreeing and explaining post-completion roles and responsibilities, so they are communicated to all relevant stakeholders. A fully fledged demining unit with necessary infrastructure, vehicles, and ambulances has been established at the Engineering Brigade headquarters of the SLA at Boo-Oya, Vavuniya, in the north of Sri Lanka, and will continue to be deployed after completion of Article 5. The SLA HDUs have been trained on EOD, QA, and IMSMA, and will be responsible for maintaining and updating the IMSMA database.¹⁴⁸ The EOD capacity of SLA-HDU will need to be

138 Email from Belinda Vause, HALO Trust, 9 August 2019.

139 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022.

140 Ibid.

141 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022.

142 Email from GICHD, 13 April 2022.

143 Email from Stephen Hall, HALO Trust, 16 May 2022.

144 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022.

145 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 1.

146 Ibid., p. 17.

147 Article 7 Report (covering 2020), Form 5.

148 Statements of Sri Lanka on clearance, APMB 18th Meeting of States Parties (virtual meeting), 16–20 November 2020 and APMB intersessional meetings (virtual meeting), 22–24 June 2021.

strengthened in order for them to have sufficient equipment and resources, and an autonomous capacity to manage the residual contamination.¹⁴⁹

The National Mine Action Strategy for 2016–20 also committed the government and mine action operators to develop strategies for the demobilisation of deminers as completion approaches, in order to enable them vocational training and other employment prospects.¹⁵⁰ Sri Lanka has highlighted the importance of establishing a suitable demobilisation process for local personnel employed in demining and for SLA HDUs.¹⁵¹ According to NMAC, a demobilisation strategy has been developed and will be included in the new national mine action strategy. Operators have started the first phase training for deminers as per the schedule.¹⁵²

Ahead of eventual scale-down or demobilisation, MAG supported local operators, DASH and SHARP, to identify the main vulnerabilities identified among the demining workforce employed by the two local operators in country by conducting a staff survey among their workforces. Through the survey it was identified that 23% of SHARP staff, 28% of DASH staff and 50% of MAG female staff are in a vulnerable situation as per their marital status. It was also identified that 10% of SHARP staff, 15% of DASH staff and 18% of MAG staff live in a household headed by women. MAG shared customized recommendations for DASH and SHARP to transition into alternative sources of livelihoods with a special attention on gender. A comparative summary table on the vulnerabilities of MAG, DASH, and SHARP were shared with NMAC and GICHD, to feed into the demobilisation chapter of the new national mine action strategy.¹⁵³

DASH has urged NMAC to include the redundancy/staff transition plan of operator's staff in its planning. DASH said it was grateful to MAG Sri Lanka for assisting DASH to establish its own programme in that respect.¹⁵⁴ In 2021, SHARP, with advice and support from MAG, commenced a programme for the continuation of livelihood means of the deminers on completion of demining operations.¹⁵⁵

149 Email from Cristy McLennan, MAG, 29 April 2022.

150 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 17.

151 Statements of Sri Lanka on clearance, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020 and APMBC intersessional meetings (virtual meeting), 22–24 June 2021.

152 Email from Mahinda Bandara Wickramasingha, NMAC, 2 August 2022; and Article 7 Report (covering 2021), Form J.

153 Email from Cristy McLennan, MAG, 29 April 2022.

154 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 28 April 2022.

155 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 5 August 2022.

ARTICLE 5 DEADLINE: 1 APRIL 2023
FOUR-YEAR EXTENSION REQUESTED TO 1 APRIL 2027

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

10 KM²

AP MINE
CLEARANCE IN 2021

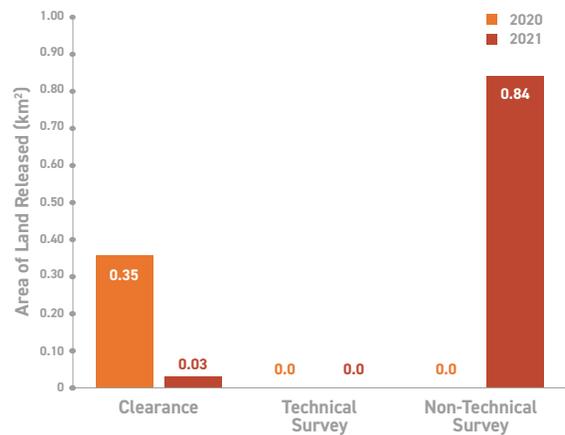
0.03 KM²

AP MINES
DESTROYED IN 2021

22

(INCLUDING 5 DESTROYED
DURING SPOT TASKS)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Sudan's land release output increased in 2021 compared to the previous year due to cancellation through non-technical survey. Although clearance output dropped, what did take place was better targeted than in 2020. Despite some improvements in access during 2021, including efforts to establish a national baseline of anti-personnel mine contamination, poor security continued to impede operations. In April 2022, Sudan submitted a four-year extension request to its Article 5 deadline, which it revised in August 2022, detailing plans for survey and clearance for all types of explosive ordnance contamination. In the remaining period of the current extension request, Sudan was aiming to complete its Article 5 obligations in West Kordofan state, in one locality in Blue Nile State, and in one locality in South Kordofan State.

RECOMMENDATIONS FOR ACTION

- Sudan should ensure it only clears land where there is firm evidence of the presence of mines and should continue to improve its land release practices ensuring more targeted and efficient land release.
- Sudan should approve and issue its national mine action strategic plan for 2019–23.
- Sudan should develop a resource mobilisation strategy increasing its international advocacy to attract new and former donors.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	Sudan initiated non-technical survey towards the end of 2019 to establish a national baseline of anti-personnel mine contamination and was ongoing in 2021. Although completion was planned by the end of 2021, insecurity and lack of access have proved major impediments with most of the impacted communities in areas that remain inaccessible.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	Sudan's national mine action programme is entirely nationally owned. It benefits from experienced national mine action centre (NMAC) staff and national mine action operators. The NMAC coordinates and receives input on Article 5 implementation with operators and other stakeholders through sub-cluster meetings and a Country Coordination Forum. The government had been providing funding for mine action at US\$2 million annually for several years although this dropped to US\$500,000 in 2021 following the devaluation of the local currency. Sudan projects that \$32.6 million is required for land release from 2022 to 2027.
GENDER AND DIVERSITY (10% of overall score)	7	6	A new gender and diversity policy was developed and endorsed in 2021 and gender is said to be mainstreamed in the national mine action strategic plan for 2019–23 (which was awaiting approval and, as of April 2022, was under review) and in the national mine action standards. An emphasis is placed on gender-balanced survey teams and the employment of women in the mine action programme. Sudan does acknowledge difficulties in employing women in operational roles due to local customs and traditions. In 2021, 30% of managerial staff in the NMAC were women, but the corresponding figure for operational roles was only 20%. A group of 28 women completed basic demining training in 2021 and were expected to become operational in 2022 and 2023.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	7	The process of upgrading Sudan's Information Management System for Mine Action (IMSMA) is ongoing, with data migration to IMSMA Core having begun in 2022. Sudan submits timely Article 7 reports and provides regular updates on progress in Article 5 implementation at the annual meetings of States Parties. In April 2022, Sudan submitted an Article 5 deadline extension request through to 1 April 2027, which is detailed and of a good quality.
PLANNING AND TASKING (10% of overall score)	7	6	A new national mine action strategic plan for 2019–23 has been finalised and, as at May 2022, was awaiting approval. Sudan provided a two-phase work plan in its 2022 Article 5 deadline extension request, with disaggregated annual targets for release of mined area. In the remaining period of the current extension request, Sudan aims to complete its Article 5 commitments in West Kordofan state, in one locality in Blue Nile State, and in one locality in South Kordofan State.
LAND RELEASE SYSTEM (20% of overall score)	7	7	Sudan reports that its revised national mine action standards have now been approved. In 2021, the Sudanese Regional Training Center was established to deliver mine action training to the Sudan programme. Operational capacity decreased during 2021 and was expected to decrease further in 2022 due to loss of funding. Mechanical road clearance was planned to begin in 2021 but it was not possible to bring machines into the country due to a change in the political situation.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	5	There was an increase in overall land release output from 2020 to 2021 and an increase in the number of mines found per square metre, suggesting improvements in the targeting of clearance. Sudan submitted its third Article 5 deadline extension request for a period of four years, but completion of clearance by the new deadline will rely on securing access to all known and suspected mined areas. This continues to be a challenge as a result of the security situation despite some improvements during 2021.
Average Score	6.9	6.5	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Sudanese National Mine Action Authority (NMAA)
- Sudan National Mine Action Centre (NMAC)

NATIONAL OPERATORS

- National Units for Mine Action and Development (NUMAD)
- JASMAR for Human Security
- Global Aid Hand

INTERNATIONAL OPERATORS

- SafeLane Global (SLG)
- Danish Refugee Council Humanitarian and Disarmament and Peacebuilding Sector (DRC) (formerly Danish Demining Group, DDG) (accredited in 2021 but not yet operational, as of writing)

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)
- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2021, Sudan reported a total of 102 areas suspected or confirmed to contain anti-personnel mines, covering a total area of 13.28km². According to the Sudanese National Mine Action Centre (NMAC), of this total, 61 mined areas covering 3.3km² are confirmed hazardous areas (CHAs), while a further 41 mined areas covering almost 10km² are suspected hazardous areas (SHAs).¹ This is an increase from the almost 13.1km² of total anti-personnel mined area reported for the end of 2020.²

Table 1: Anti-personnel mined area by state (at end 2021)³

State	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Blue Nile	5	950,274	8	117,962	13	1,068,236
South Kordofan	56	2,362,947	30	9,822,666	86	12,185,613
Western Kordofan	0	0	3	21,991	3	21,991
Totals	61	3,313,221	41	9,962,619	102	13,275,840

In addition to anti-personnel mined area, Sudan is also contaminated with anti-vehicle mines totalling 13.53km² across 29 SHAs and 22 CHAs (see Table 2).⁴ The extent of mine and explosive remnants of war (ERW) contamination within the disputed area of Abyei and the Safe Demilitarized Border Zone (SDBZ) between Sudan and South Sudan is unknown due to security and political issues.⁵

Table 2: Mined areas (at end 2021)⁶

Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Anti-personnel mines	61	3,313,221	41	9,962,619	102	13,275,840
Anti-vehicle mines	22	1,933,503	29	11,606,334	51	13,539,837
Totals	83	5,246,724	70	21,568,953	153	26,815,677

Sudan's mine and ERW contamination results from decades-long conflict since the country's independence in 1956. Twenty years of civil war, during which mines and other explosive ordnance were used heavily by all parties to the conflicts, resulted in widespread contamination that has claimed thousands of victims.⁷ In January 2005, the Comprehensive Peace Agreement (CPA) ostensibly ended the civil war. A Landmine Impact Survey (LIS) was conducted in 2007–09 covering Blue Nile, Gadaref, Kassala, Red Sea, and South Kordofan states, before armed conflict erupted again in 2011, and which continued until 2016. More contaminated areas are expected to be found, including mined areas containing anti-personnel mines. There have been "ad hoc" reports of additional mined and ERW-contaminated areas being registered as "dangerous areas" in the national database. This has caused the LIS baseline of 221 hazards to expand significantly, including by encompassing areas not originally surveyed.⁸

1 Email from Hatim Khamis Rahama, Technical Advisor, NMAC, 31 March 2022; and Article 7 Report (for 2021), Form C.

2 Email from Hatim Khamis Rahama, NMAC, 19 May 2021; and Article 7 Report (for 2020), Form C.

3 Email from Hatim Khamis Rahama, NMAC, 31 March 2022; and Article 7 Report (for 2021), Form C.

4 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

5 UNMAS, "2019 Portfolio of Mine Action Projects, Sudan".

6 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

7 Email from Ahmed Elser Ahmed Ali, Chief of Operations, NMAC, 9 May 2016.

8 Article 5 deadline Extension Request, Executive Summary, 25 November 2013, pp. 2–3.

NMAC reported that significant survey is required to more accurately determine the actual extent of anti-personnel mine contamination in Sudan.⁹ NMAC initiated non-technical survey in November 2019, across Blue Nile, South Kordofan, and West Kordofan states, and the five federal Darfur states to establish evidence-based, accurate baselines of contamination for all explosive ordnance.¹⁰ A total of 27 hazardous areas containing anti-personnel mines (AP mine) contamination, measuring 3,117,930m², was added to Sudan's database through survey from April 2019 to December 2021 following improvements in the security situation in Blue Nile and South Kordofan states.¹¹

NMAC had planned to complete all necessary survey by the end of 2021, but insecurity and lack of access have impeded this, with most known impacted communities in Blue Nile, South Kordofan, and Jebel Merra in Darfur still inaccessible.¹² When these areas become accessible, it is expected that survey will result in additional contaminated areas being identified, but also that some areas previously identified as contaminated by the LIS will be cancelled.¹³ The UN Mine Action Service (UNMAS) reported that all affected communities are being consulted during non-technical survey, with special attention paid to at-risk communities.

CLUSTER MUNITION REMNANTS AND OTHER EXPLOSIVE REMNANTS OF WAR

Sudan also has a significant problem with ERW, including limited contamination from cluster munition remnants, primarily as a result of the long civil war that led to the Comprehensive Peace Agreement in 2005 and South Sudan's independence in July 2011 (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Sudan for further information). Contamination from ERW is estimated to total nearly 6.11km² across 99 CHAs and 98 SHAs. This gives a total contaminated area from explosive ordnance of 32.91km² across 182 CHAs and 169 SHAs.¹⁴

While no mines have been found in Darfur, ERW there include unexploded air-dropped bombs, rockets, artillery and mortar shells, and grenades.¹⁵ Of the 63 localities (administrative units) in the five states of Darfur, 44 had been assessed and released by the United Nations – African Union Hybrid Operation in Darfur (UNAMID) Ordnance Disposal Office by July 2022, leaving 19 to be assessed.¹⁶ However, recent intercommunal conflict is reported to have led to new ERW contamination in some localities.¹⁷ In 2021, UNMAS implementing partners were contracted to undertake survey, explosive ordnance disposal (EOD), battle area clearance (BAC), and explosive ordnance risk education (EORE) activities, as well as a victim assistance project, in Darfur but following a deterioration of the security situation after the withdrawal of UNAMID, survey and clearance operations were suspended at the end of February 2022.¹⁸

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Sudanese National Mine Action Authority (NMAA) and NMAC manage Sudan's mine action programme. Following the independence of South Sudan, NMAC assumed full ownership of national mine action in Sudan, with responsibility for coordinating and supervising the implementation of all mine action activities, including quality assurance (QA), accreditation, and certification of clearance operators. The 2010 Mine Action Act, which comprises 29 articles across four chapters, is Sudan's national mine action legislation. Chapter four covers Sudan's Anti-Personnel Mine Ban Convention (APMBC) obligations, such as clearance of mined areas and reporting, with penalties for those who work in mine action without first obtaining a licence from NMAC.¹⁹

After starting an emergency programme in 2002, UNMAS re-established advisory and support activities in Sudan in 2015, following an invitation from the Government, with a view to further enhancing national mine action capacity and supporting the fulfilment of Sudan's APMBC obligations.²⁰ As part of its mandate, UNMAS provides organisational and individual capacity development to NMAC.²¹ In 2021, UNMAS delivered training in quality management, operations management, and survey to the national authority. In addition, basic demining training was delivered to 28 female deminers; EOD Level 1 training to 21 ex-combatants from one of the armed opposition groups; EOD Level 2 training to 20 personnel from the mine action operators; and team leadership training to 20 leaders of demining teams.

9 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

10 Ibid.; and Sudan Multiyear Operational Plan 2020 to 2023, p. 17.

11 Anti-Personnel Mine Ban Convention (APMBC) 2022 Revised Article 5 deadline Extension Request, p. 3.

12 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

13 2022 Revised Article 5 deadline Extension Request (August 2022), p. 7.

14 2022 Revised Article 5 deadline Extension Request (August 2022), p. 7.

15 UNMAS, "2018 Portfolio of Mine Action Projects, Sudan", at: <http://bit.ly/2GjD3nm>.

16 Email from Aimal Safi, UNMAS, 7 July 2022.

17 Ibid.

18 Emails from Aimal Safi, UNMAS, 27 March and 7 July 2022.

19 GICHD, "Transitioning Mine Action Programmes to National Ownership: Sudan", March 2012; and Article 7 Report (covering 2019), Form A.

20 UNMAS, "Sudan (excluding Darfur)", Updated March 2019, at: <http://bit.ly/2Y3IDUg>.

21 Email from Aimal Safi, Senior Operations and QM Advisor, UNMAS, 31 May 2020.

In 2022, UNMAS planned to deliver training on land release, online data collection, and quality management, among other issues.²² In 2021, the Geneva International Centre for Humanitarian Demining (GICHD) provided remote support for the implementation of Information Management System for Mine Action (IMSMA) Core. As at August 2022, Sudan had participated in two Arab Regional Cooperation Programme (ARCP) training workshops run by the GICHD in support of IMSMA Core implementation and EORE, and another IMSMA Core training event in June.²³

The UN Interim Security Force for Abyei (UNISFA) does not have a mandate to conduct mine clearance, but UNMAS continued its UN Security Council-mandated role in Abyei, which includes identification and clearance of mines and route assessment in the Safe Demilitarized Buffer Zone (SDBZ) between Sudan and South Sudan and Abyei. It operates through implementing partners, acting in support of peacekeeping operations, the delivery of humanitarian aid, the safe return of internally displaced populations (IDPs), and the nomadic migration of animals. UNMAS received funding of \$10.54 million for its activities in Abyei from 1 July 2021 to 30 June 2022.²⁴

In January 2021, UNMAS Sudan was integrated into the UN Integrated Transition Assistance Mission in Sudan (UNITAMS) to provide mine action in support of the mission's mandate. UNITAMS was established in June 2020 to support Sudan's democratic transition and comprehensive peace process. Mine action was stipulated in support of strategic objective (iii): "Assist peacebuilding, civilian protection and rule of law, in particular in Darfur and the Two Areas". Upon the operational closure of UNAMID in 2021, UNMAS took over responsibility for ERW response in Darfur from UNAMID's Ordnance Disposal Office.²⁵

The Government of Sudan has maintained a consistent level of national financial contribution to mine action in local currency, but due to the devaluation of the local currency against the US dollar, this has fallen from the equivalent of US\$2 million of funding in local currency in 2019 and 2020 to only US\$500,000 in 2021 and 2022. Sudan expects national funding to be maintained and potentially to increase as the political and economic situation improves in the country.²⁶

Sudan has calculated that it requires \$32.6 million for all land release activities (for all explosive ordnance, not just anti-personnel mines) from 2022 to 2027: \$6,975,000 per year for 2022 to 2025; \$3,555,000 for 2026; and \$1,150,000 for 2027. To date, international donors have been funding the mine action programme through UNMAS and the amount that has been confirmed for 2022 and 2023, \$2,902,000 and \$1,852,000 respectively, falls far short of what Sudan has projected that it needs although some additional funds have been pledged for 2022. Sudan and UNMAS have been working on resource mobilisation and have expanded the donor pool.²⁷

In Sudan, not including Jebel Merra and Abyei, UNMAS and NMAC lead mine action sub-cluster meetings to coordinate progress, tackle challenges, and support Article 5 implementation in Sudan. All relevant implementing partners, non-governmental organisations (NGOs), UN agencies, and government authorities participate. During these meetings mine action projects for the annual Humanitarian Response Plan (HRP) are developed and prioritised through a consultative process.²⁸ In addition, NMAC ordinarily holds a Country Coordination Forum with all stakeholders twice a year, though only one took place in 2021 due to the political and security situation.²⁹

ENVIRONMENTAL POLICIES AND ACTION

Sudan reports having a policy on environmental management in place, which includes information on how mine action operators should minimise potential harm from demining.³⁰ There is a dedicated national mine action standard (NMA) on environmental management and an environmental impact assessment is now part of the standard, which was due to be implemented in the course of 2022.³¹

22 Email from Aimal Safi, UNMAS, 27 March 2022.

23 Emails from Henrik Rydberg, Country Focal Point, GICHD, 13 April, 3 June, and 10 August 2022.

24 UNMAS, "Where we work: Abyei", at: <https://bit.ly/3waA8Fr>.

25 UNMAS, "Where we work: Sudan", at: <https://bit.ly/3tT8XjF>.

26 APMBC Revised 2022 Article 5 deadline Extension Request (August 2022), p. 4.

27 Ibid., pp. 8 and 30.

28 UNMAS, "2019 Portfolio of Mine Action Projects, Sudan" at: <http://bit.ly/3d0FtVH>; and email from Hatim Khamis Rahama, NMAC, 9 April 2020.

29 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

30 Ibid.

31 Email from Aimal Safi, UNMAS, 27 March 2022.

GENDER AND DIVERSITY

NMAC reported that in 2021 a new gender and diversity policy was developed and endorsed and that gender is mainstreamed in the national mine action strategic plan for 2019–23 (which was awaiting approval³² and as of August 2022, was under review)³³ and in the NMAS for EORE, survey, clearance, and victim assistance.³⁴ Under those standards, all survey and community liaison teams are to be gender balanced, and women and children must be consulted during survey and community liaison activities. Gender is also said to be considered in the prioritisation, planning, and tasking of survey and clearance, as per the NMAS and the new standard IMSMA forms.³⁵

Mine action data are disaggregated by sex and age.³⁶ UNMAS reported working with NMAC and implementing partners to improve this aspect of mine action reporting and information management because sex- and age-disaggregated data of land release beneficiaries were not being captured in IMSMA.³⁷ New reporting tools were added to the system and new reporting formats were developed for NGOs to include this information.³⁸

NMAC reported that ethnic minority groups in affected communities are consulted during survey and considered during the planning of mine action activities. Survey teams are also structured to address all affected groups within a community, including ethnic minorities.³⁹ As part of the implementation of the Juba Peace Agreement and peacebuilding efforts, 21 ex-combatants from one of the Sudan People's Liberation Movement-North (SPLM-N) factions, Malik Agar, located in the Bau/Ulu locality and Ingasana mountains, completed training in IMAS EOD Level 1 during 2021. They have been integrated into mine action

operations to conduct land release in the Ulu and Ingasana areas, which are heavily mined (and also contaminated with ERW, including cluster munition remnants).⁴⁰

NMAC says it always encourages women to apply for employment in the national programme, whether at the office level or in the field. In 2021, 30% of NMAC staff employed at the managerial or supervisory levels were women, as were 20% of staff in operational positions.⁴¹ The first female deminer was employed in late 2019.⁴² In 2021, a group of 28 women from different states and ethnic groups completed basic demining training. They were due to begin working within the different mine action operators by April 2023, the existing Article 5 deadline.⁴³

UNMAS reported that, as at March 2022, around half of the non-technical survey team members were women. UNMAS Sudan has 16 staff members, of whom four programme officers are women along with one of the support service staff. In addition, within the national operators contracted by UNMAS there are women working in managerial positions and the medics and community liaison officers in most of the field teams are female.

In 2020–21, NMAC took part in the Arab Regional Cooperation Programme (ARCP) Gender Equality and Inclusion programme run by the GICHD. Two participants from NMAC received training and guidance from experts in the Gender and Mine Action Programme (GMAP) on how to mainstream gender and diversity in all mine action activities. The NMAC then created a dedicated Gender Focal Point (GFP) who connected with other GFPs from the region to share experiences and good practice.⁴⁴

INFORMATION MANAGEMENT AND REPORTING

In 2018, NMAC began upgrading the IMSMA software to a more recent New Generation version, with assistance from the GICHD. Significant efforts to correct errors in the database were also undertaken.⁴⁵ In 2022, Sudan began the migration to IMSMA Core, which was ongoing as of writing.⁴⁶ In 2021, an IMSMA Officer deployed from the Swiss government was embedded within the NMAC to support the information management department and an agreement was signed to grant Sudan a licence for the geographic information system (Arc GIS) software.⁴⁷

32 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

33 2022 Revised Article 5 deadline Extension Request (August 2022), p. 20.

34 Email from Aimal Safi, UNMAS, 27 March 2022.

35 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

36 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

37 Email from Aimal Safi, UNMAS, 31 May 2020.

38 Email from Aimal Safi, UNMAS, 22 July 2020.

39 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

40 2022 Revised Article 5 deadline Extension Request (August 2022), p. 23.

41 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

42 Email from Aimal Safi, UNMAS, 12 April 2021.

43 2022 Revised Article 5 deadline Extension Request (August 2022), p. 22.

44 Email from GICHD, 29 June 2021.

45 Emails from Ahmed Elser Ahmed Ali, NMAC, 9 May and 8 June 2016; and Third APMB Article 5 deadline Extension Request, March 2018, pp. 37–38.

46 Email from Henrik Rydberg, GICHD, 3 June 2022.

47 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

NMAC still does not receive reports from the disputed region of Abyei. However, UNMAS United Nations Security Force for Abyei (UNISFA) provides monthly achievement reports to NMAC and UNMAS Sudan.⁴⁸ This information is not entered on the IMSMA database,⁴⁹ so the database continues to contain out-of-date information on Abyei.⁵⁰ UNMAS had stated in June 2019 that UNISFA was working with NMAC on database sharing. It had co-located an IMSMA officer within the NMAC office in Khartoum to help share historical data and was already providing monthly reports to NMAC on activities in Abyei.⁵¹

Sudan submits timely Article 7 transparency reports and gives regular statements on progress at the meetings of States Parties to the APMBC. In April 2022, Sudan submitted an Article 5 deadline extension request to 1 April 2027 which is comprehensive and of a good quality despite the ongoing challenges faced by the mine action programme. In August 2022, Sudan submitted a revised deadline extension request, containing additional information.

PLANNING AND TASKING

In March 2022, NMAC reported that the new national mine action strategic plan for 2019–23 had been finalised but was still awaiting approval.⁵² In its 2022 APMBC Article 5 deadline extension request, Sudan reported that the national mine action strategy was being reviewed to align it with the extension period and amend the current deadlines and strategic objectives related to land release, risk education and accident prevention, victim assistance, resource mobilisation, gender and diversity, national capacity-building, and the management residual risk of ERW. These amendments and updates, which will be based on consultation with mine action stakeholders, were planned to be made before the end of 2022 with the updated mine action strategy to be issued in February 2023.⁵³

Sudan has provided various targets for land release in 2021 but none is disaggregated by type of ordnance. They are also inconsistent, ranging from 1,171,461m² in the 2018 Article 5 deadline extension request, to 9,243,370m² in the Multiyear Operational Plan 2020 to 2023.⁵⁴ According to Sudan's latest Article 7 report, a total of 1,955,407m² of area with explosive ordnance contamination was released and handed over to local communities in 2021.⁵⁵

In its 2022 Article 5 deadline extension request, Sudan submitted a two-phase work plan. Phase 1 from 2023 to 2025 includes the release of all accessible hazardous areas, including new areas identified through survey. In Phase 2, from 2025 to 2027, the remaining contamination in the database that is currently inaccessible is to be released.⁵⁶ Sudan provided a table of annual land release targets to 2027 and in the revised extension request it provided disaggregated targets for release of mined area.⁵⁷ In addition, Sudan states that it has drawn up a detailed action plan for survey in Blue Nile, South Kordofan, and West Kordofan as the security situation in these states improves.⁵⁸

Sudan specifies that during the remaining period of the current extension request (i.e. before 1 April 2023) it aims to fully complete its Article 5 commitments in one state—West Kordofan (covering the localities of Abyei and Lagawa)—as well as in one of three contaminated localities in Blue Nile State (Giessan) and in one of five contaminated localities in South Kordofan State (Abu Jubeeha).⁵⁹

During Phase 1, Sudan will then aim to complete its Article 5 commitments in the remaining two localities in Blue Nile (Bau and Kurmuk) and one of four remaining localities in South Kordofan (Rashad). During phase 2, Sudan aims to complete survey and clearance of the three remaining localities in South Kordofan.⁶⁰

In the revised 2022 Article 5 deadline extension request, NMAC underlines its commitment to address the impact of all types of explosive ordnance (EO) contamination on affected populations although the main focus is landmines. It highlights how the return of refugees and IDPs to residential areas, agricultural land, and pasture since the start of the Juba Peace Talks and Peace Agreement have been obstructed by EO, including on roads and routes, which has blocked livelihoods and the provision of humanitarian assistance. In addition, NMAC highlights how Sudan's rainy season, which lasts between three and five months, isolates EO-affected communities which then lack access to basic essentials while roads that could be used during the rainy season are not usable due to anti-vehicle mine contamination. For these reasons, NMAC states it has developed a work plan which outlines the release of anti-personnel landmine-, anti-vehicle mine- and ERW-contaminated areas during the period of the Article 5 extension.⁶¹

To achieve its Article 5 deadline by 2027, Sudan has indicated that it aims to improve its land release process and

48 Email from Dr Aimal Safi, UNMAS, 19 June 2022.

49 Ibid.

50 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

51 Email from Dandan Xu, Associate Programme Management Officer, UNMAS, 28 June 2019.

52 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

53 2022 Revised Article 5 deadline Extension Request (August 2022), p. 20.

54 2018 Article 5 deadline Extension Request, Detailed Narrative, 17 August 2018, Table 14, p. 18; and Multiyear Operational Plan 2020–23, p. 21.

55 Article 7 Report (for 2021), Form F.

56 2022 Revised Article 5 deadline Extension Request (August 2022), pp. 46–50.

57 Ibid., pp. 50–58.

58 An unofficial deadline extension request number 3, presented at the Intersessional Meetings, Geneva, June 2022.

59 2022 Revised Article 5 deadline Extension Request (August 2022), p. 49.

60 Ibid., p. 50.

61 2022 Revised Article 5 deadline Extension Request (August 2022), pp. 7 and 44.

methodology. This will involve releasing more area through survey; enhancing the capacity of mine action operators in survey, clearance, and information management; increasing mechanically assisted demining; using new multitask teams (MTTs with eight or more deminers) and quick-response teams (QRTs); and introducing advanced detection equipment and tools.⁶² In addition, to meet the 2027 deadline, Sudan hopes that the international community will provide the required financial resources and that access to informants will enhance land release decision-making. NMAC will work with UNMAS and other stakeholders to enhance its resource mobilisation strategy.⁶³

Sudan has promised to provide annual updates to the other States Parties in its Article 7 reports regarding a) changes in security and changes in access to mined areas; b) progress

in survey implementation, including survey outputs and the impact of survey on Sudan's remaining challenge; and c) updated annual milestones for land release. It will provide annual work plans and an updated work plan for Phase 2 (2025–27). As the situation changes Sudan may be required to request additional time and resources, as necessary.⁶⁴

UNMAS reported that all task dossiers relating to survey and clearance are issued in accordance with agreed criteria and prioritisation. NMAC and UNMAS are working together on planning and tasking to meet the need for further development.⁶⁵ In 2021, a systematic prioritisation system was introduced as part of the new NMAS and linked with IMSMA with each SHA and CHA classified as high, medium, or low impact and prioritised accordingly.⁶⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In May 2021, NMAC reported that a review of Sudan's NMAS had been completed and the revised standards had been endorsed.⁶⁷ The NMAS were reviewed by a technical committee comprised of representatives from NMAC, UNMAS, and national operators with the support of an international expertise from UNAMID. UNMAS is working with the NMAC and national operators to develop their standing operating procedures (SOPs) to ensure they are compliant with the new NMAS.⁶⁸

In 2021, the Sudanese Regional Training Centre was established to deliver mine action training to the Sudan programme. The Centre will also provide support to mine action programmes in neighbouring countries.⁶⁹ In addition, two NMAC staff participated in a technical survey training course organised by the GICHD as part of the ACRP.⁷⁰

OPERATORS AND OPERATIONAL TOOLS

National operators that conducted demining operations in Sudan in 2021 were JASMAR for Human Security (JASMAR), National Units for Mine Action and Development (NUMAD), and Global Aid Hand.⁷¹ There are also two international operators, SafeLane Global, which became operational in December 2020, and Danish Refugee Council (DRC) (previously Danish Demining Group, DDG), which was accredited during 2021.⁷²

Table 3: Operational clearance capacities deployed in 2021⁷³

Operator	Manual clearance teams (MCTs) or Multitask teams (MTTs)	Total deminers*	Dogs and handlers	Machines
NUMAD	0	0	2 dogs & 2 handlers	RVCT mainly for road clearance
JASMAR	1 MCT 9 MTTs	8 32	0	0
SLG	2 MTTs	10	0	0
Global Aid Hand	1 MTT	4	0	0
Totals	13	54	2 dogs & 2 handlers	0

* Excluding team leaders, medics, and drivers.

62 Ibid., pp. 44–45.

63 Ibid., p. 45.

64 Ibid., p. 66.

65 Email from Aimal Safi, UNMAS, 31 May 2020.

66 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

67 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

68 Email from Aimal Safi, UNMAS, 12 April 2021.

69 Email from Hatim Khamis Rahama, NMAC, 31 March 2022.

70 Emails from Henrik Rydberg, GICHD, 3 June and 11 August 2022.

71 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

72 2022 Revised Article 5 deadline Extension Request (August 2022), p. 47.

73 Emails from Hatim Khamis Rahama, NMAC, 31 March 2022; and Aimal Safi, UNMAS, 27 March 2022.

Table 4: Operational survey capacities deployed in 2021⁷⁴

Operator	NTS teams	Total NTS personnel	TS teams	Total TS personnel
JASMAR	3	12	10	44
NUMAD	0	0	1	8
Global Aid Hand	5	20	3	12
Totals	8	32	14	64

NTS = Non-technical survey TS = Technical survey

The MTTs and MCT were deployed for the clearance of all priority hazardous areas, with a focus on anti-personnel mined areas. There was a slight decrease in operational capacity from 2020 to 2021 as NUMAD had "internal issues" and could not take part in tendering process. Due to a decrease in funding, operational capacity might decrease further for the operational year 2022–23.⁷⁵

During the period of the extension request Sudan plans to deploy two mechanical teams (for road/route clearance); six multitask teams of eight deminers, each which will be supported by the mechanical teams and mine detection dogs (MDDs) as required; and twelve quick-response teams of four deminers, each of which could become additional multitask teams.⁷⁶

Demining in Sudan is carried out primarily using manual clearance, though MDD teams are also used for technical survey, route/road clearance, and quality assurance. No machines are employed in demining. In 2020, NMAC worked with UNMAS to develop a mechanical capacity for Sudan for road/route clearance. It was planned that this capacity would become operational by the middle of 2021 but due to changes in the political situation it has not been possible to bring the machines into the country. Instead, UNMAS plans to procure Dual Sensor Detectors (VMR3G "Minehound") to be used for the detection of minimum metallic mines, especially those laid on the roads and routes. UNMAS also plans to run technical workshops during 2022 aimed at improving the efficiency of land release.⁷⁷

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

A total of 0.87km² of anti-personnel mined area was released in 2021, of which 0.03km² was cleared and 0.84km² was cancelled through non-technical survey, with a total of 17 anti-personnel mines found and destroyed. (A further five anti-personnel mines were destroyed during EOD spot tasks.) No area was reduced through technical survey in 2021.

SURVEY IN 2021

In 2021, a total of 838,298m² was cancelled through non-technical survey by JASMAR and NUMAD in Blue Nile and South Kordofan. No areas were reported as reduced through technical survey.⁷⁸ This is an increase from 2020 when no areas were released through survey.⁷⁹

Table 5: Non-technical survey of anti-personnel mined area in 2021⁸⁰

State	Operator	Area cancelled (m ²)
Blue Nile	JASMAR	815,398
	SafeLane Global	0
South Kordofan	NUMAD	22,900
	Global Aid Hand	0
	JASMAR	0
Total		838,298

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ 2022 Revised Article 5 deadline Extension Request (August 2022), pp. 8–9.

⁷⁷ Emails from Aimal Safi, UNMAS, 12 April 2021 and 27 March 2022; and Hatim Khamis Rahama, NMAC, 19 May and 5 August 2021.

⁷⁸ Emails from Hatim Khamis Rahama, NMAC, 31 March 2022; and Aimal Safi, UNMAS, 27 March 2022; and Article 7 Report (for 2021), Form F.

⁷⁹ Emails from Aimal Safi, UNMAS, 12 April 2021; and Hatim Khamis Rahama, NMAC, 19 May and 5 August 2021.

⁸⁰ Emails from Hatim Khamis Rahama, NMAC, 31 March 2022; and Aimal Safi, UNMAS, 27 March 2022; and Article 7 Report (for 2021), Form F.

CLEARANCE IN 2021

In 2021, a total of 30,155m² was cleared by NUMAD, JASMAR, SLG, and Global Aid Hand in Blue Nile and South Kordofan with 17 anti-personnel mines found and destroyed.⁸¹ This is a 91% decrease in clearance output from the 353,799m² cleared in 2020 although the number of anti-personnel mines found and destroyed is just less than half, indicating better targeting of clearance in 2021.⁸²

Table 6: Mine clearance in 2021⁸³

State	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Blue Nile	JASMAR	4,431	0	50	709
	SLG	0	5	4	177
South Kordofan	NUMAD	6,000	0	0	0
	Global Aid Hand	0	0	0	732
	JASMAR	19,724	12	3	272
Spot tasks			5	4	
Totals		30,155	22	61	1,890

AP = Anti-personnel AV = Anti-vehicle UXO = Unexploded ordnance

A total of five anti-personnel mines were destroyed during EOD spot tasks in 2021 by JASMAR and four anti-vehicle mines were destroyed during EOD spot tasks by SLG.⁸⁴

There were two hazardous areas, both along roads, surveyed during the LIS in 2007 that were released in 2021 with a total size of 935,398m². Both were found to contain no anti-personnel mines.⁸⁵ There was a significant increase in the amount of mined area cancelled in 2021 from 2020, but a significant decrease in the amount of area cleared compared to 2020. The reason for this was improved application of land release methodology, so more targeted clearance and increased cancellation of areas without contamination, and also the opening up of high-priority ERW-contaminated areas in newly accessible territory within Blue Nile state.⁸⁶

ARTICLE 5 DEADLINE AND COMPLIANCE



81 Emails from Hatim Khamis Rahama, NMAC, 31 March 2022; and Aimal Safi, UNMAS, 27 March 2022.

82 Email from Hatim Khamis Rahama, NMAC, 5 August 2021; and Article 7 Report (covering 2020), Form F.

83 Emails from Hatim Khamis Rahama, NMAC, 31 March 2022; and Aimal Safi, UNMAS, 27 March 2022; and Article 7 Report (for 2021), Form F.

84 Emails from Hatim Khamis Rahama, NMAC, 31 March 2022; and Aimal Safi, UNMAS, 27 March 2022.

85 Ibid.

86 Email from Aimal Safi, UNMAS, 27 March 2022.

Table 7: Five-year summary of AP mine clearance

Year	Area cleared (km ²)
2021	0.03
2020	0.35
2019	0.87
2018	0.98
2017	0.71
Total	2.94

Under Article 5 of the APMBC (and in accordance with the four-year extension granted by States Parties in 2018), Sudan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 April 2023. It will not meet this deadline and submitted a request in April 2022 for a further extension of its Article 5 deadline, which it revised in August 2022, for a period of four years until 1 April 2027.

This will be Sudan's third Article 5 deadline extension since becoming a State Party to the APMBC in 2004. It continues to be hampered by poor security, with full access to most of the known impacted communities in Blue Nile and South Kordofan states not yet secured. While there have been some improvements in the past couple of years, which has allowed for access to conflict-affected communities in these areas, completion of clearance by the new deadline is reliant on achieving access to all known and suspected contaminated areas.

During 2020, following the signature of a preliminary peace deal between Sudan's transitional government and the head of one of the two factions of the SPLM-N rebel group,

NMAC in cooperation with UNMAS began to deploy teams to clear roads and other routes to facilitate the delivery of humanitarian assistance to the Blue Nile state.⁸⁷ Sudan also reported in 2020 that it was in talks with Chad to implement a joint initiative to clear the border areas between the two countries, though as at March 2022, this was on hold due to the political and security situation.⁸⁸ In June 2021, the UN reported that humanitarian agencies had been able to access conflict-affected communities in the five non-governmental areas controlled by the SPLM-N El Hilu in South Kordofan and Blue Niles states for the first time in ten years.⁸⁹

Sudan reported that other obstacles to completion include inadequate funding and lack of sufficient demining equipment, rising inflation in Sudan, newly discovered contamination being added to the database, and climatic factors and geographical conditions, including the impact of climate change on extended rainy seasons.⁹⁰ It is likely that these challenges will continue into the next extension request period and could prevent Sudan from reaching completion by the new deadline.

Sudan's land release output increased in 2021 as although the amount of area cleared decreased from 2020, the majority of Sudan's land release output in 2021 was from cancellation through non-technical survey (no survey took place in 2020). The number of mines cleared per square metre increased from one mine per 8,424m² in 2020 to one mine per 1,774m² in 2021, indicating an improvement in land release practices even though the overall amount of area cleared decreased. UNMAS has reported that it intends to focus on improving the land release process in Sudan, which may lead to further improvement in the targeting of clearance. Historically, the number of mines found during clearance in Sudan has been extremely low.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Sudan has a plan to deal with residual risk and liability post-completion.⁹¹ As at March 2022, NMAC has continued to deal with any residual contamination in the Eastern states through deploying teams with government funding. However, it is planned that in the long term Sudan will establish a sustainable national capacity within the military or police.⁹²

87 Statement of Sudan on Article 5, APMBC Eighteenth Meeting of States Parties, 16–20 November 2020.

88 Statement of Sudan on Cooperation and Assistance, APMBC Eighteenth Meeting of States Parties, 16–20 November 2020; and email from Hatim Khamis Rahama, NMAC, 31 March 2022.

89 Joint UN Press Release, "UN agencies in Sudan reach conflict-affected communities in non-government-controlled areas for first time in a decade", 13 June 2021, at: <https://bit.ly/3j7wMIP>.

90 Email from Hatim Khamis Rahama, NMAC, 19 May 2021; and 2022 Revised Article 5 deadline Extension Request, pp. 4–5.

91 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

92 Emails from Hatim Khamis Rahama, NMAC, 19 May 2021 and 31 March 2022.

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

**ANTI-PERSONNEL (AP)
MINE CONTAMINATION: MEDIUM**

NATIONAL AUTHORITY ESTIMATE

11.82 km²

AP MINE
CLEARANCE IN 2021

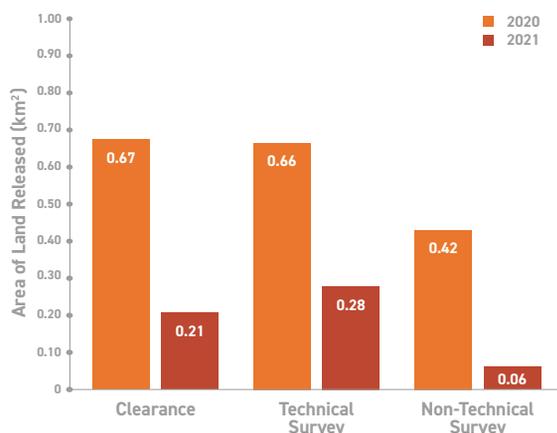
0.21 km²

AP MINES
DESTROYED IN 2021

1,526

(INCLUDING 50 DESTROYED
IN SPOT TASKS)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Tajikistan released 0.55km² through survey and clearance in 2021,¹ a significant decrease on the 1.72km² released the previous year.² This decrease was mainly due to insecurity along the Tajik-Afghan border, which meant that demining teams were temporarily re-deployed away from the area to focus on battle area clearance (BAC) in the Central region. Having previously only undertaken survey, the Union of Sappers Tajikistan (UST) were accredited to undertake clearance for the first time in 2021.³

RECOMMENDATIONS FOR ACTION

- Tajikistan should explore all possible avenues of increasing national capacity to the levels needed to fulfil its Article 5 extension request commitments, including training and deploying Border Guard forces on the Afghan border as deminers.
- The Tajikistan National Mine Action Centre (TNMAC) should continue efforts to expedite planning and prioritisation of accelerated survey to reach a clear national baseline estimate of contamination, as outlined in the information supporting Tajikistan's last Article 5 deadline extension request.
- Tajikistan should clarify its resource mobilisation strategy, continuing to work with key stakeholders to address a projected shortfall in funding in order to meet its 2025 Article 5 deadline.

1 Email from Muhabbat Ibrohimzoda, Director, TNMAC, 19 June 2022.

2 Article 7 Report (covering 2020), Form D.

3 UST was not accredited for clearance in 2020. The 22,715m² of clearance attributed to UST by Tajikistan in 2020 are thought by Mine Action Review to represent technical survey. 'Clearing the Mines 2021', Mine Action Review, p. 274.

- TNMAC should further develop plans for establishing sustainable demining capacity to tackle residual contamination identified after completion, including how existing national capacity will be strengthened to meet this need.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	Tajikistan lacks a clear baseline estimate of contamination, with 28 suspected hazardous areas (SHAs) yet to be surveyed, in addition to some re-survey planned to define the extent of other mined areas more accurately. Lack of access has also prevented an accurate determination of contamination on the disputed Tajik-Uzbek border.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	7	7	Tajikistan has strong national ownership of mine action, which is led by the Tajikistan National Mine Action Centre (TNMAC) and implemented primarily by Ministry of Defence (MoD) clearance teams. It has political will and provides an enabling environment for Article 5 implementation but is heavily reliant on increased funding from international donors. This may present challenges to achievement of its extension request targets.
GENDER AND DIVERSITY (10% of overall score)	7	7	Tajikistan's mine action programme has a gender strategy drawn up with support from the Geneva Mine Action Programme (GMAP), but few women are employed in mine action. TNMAC says the government is committed to increasing involvement of women in mine action but there is little evidence that the number of female staff is rising. Mine action data are disaggregated by sex and age, and women and children are said to be consulted during community liaison.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	6	6	TNMAC upgraded its information management by installing Information Management System for Mine Action (IMSMA) Core in 2019 and has continued efforts to streamline and improve the accuracy of data by modifying reporting forms. In 2020, TNMAC recruited an information management specialist to maintain and develop the database, filling a gap left by the closure of the United Nations Development Programme (UNDP) support programme in 2019.
PLANNING AND TASKING (10% of overall score)	6	6	Tajikistan's Article 5 deadline extension request sets out a framework for mine action, including annual targets, but these far exceed past results and require a doubling of capacity. This is dependent on availability of increased donor funding, which, so far, has not been forthcoming. TNMAC has still to draw up comprehensive plans for clearance of residual contamination found after completion, although it has recruited an adviser for residual risk management, who took up post in March 2022.
LAND RELEASE SYSTEM (20% of overall score)	6	6	Tajikistan has national mine action standards that were revised in 2017 and are compliant with the International Mine Action Standards (IMAS) and regularly updated. The National Mine Action Standards (NMAS) are available in Russian and English. TNMAC reports it has also issued guidelines on land release, including a manual on testing and evaluating mechanical assets. In 2021, Tajikistan updated various regulatory documents, including for accreditation of mine action operators.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	7	Land released in 2021 decreased significantly compared to 2020, mainly due to insecurity along the Tajik-Afghan border. This is a concern given that Tajikistan will need to accelerate clearance if it is to meet its 2025 completion deadline. Tajikistan increased the number of manual clearance teams in 2021 but maintained approximately the same number of deminers as in 2020. It also maintained four survey teams across all operators in 2021, the same as in 2020. To meet its 2025 deadline, Tajikistan estimates it will need to increase capacity by a further two survey teams and an additional six to eight manual demining teams.
Average Score	6.2	6.2	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Commission for the Implementation of International Humanitarian Law (CIIHL)
- Tajikistan National Mine Action Centre (TNMAC)

NATIONAL OPERATORS

- TNMAC
- Ministry of Defence (MoD), Humanitarian Demining Company (HDC)
- Union of Sappers Tajikistan (UST)
- Border Guard Forces of Tajikistan
- Committee of Emergency Situations and Civil Defence (CoES)
- National Guard

INTERNATIONAL OPERATORS

- Norwegian People's Aid (NPA)
- Swiss Foundation for Mine Action (FSD)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- Organization for Security and Co-operation in Europe (OSCE)

UNDERSTANDING OF AP MINE CONTAMINATION

Tajikistan had an estimated 11.8km² of anti-personnel mine contamination at the end of 2021 according to national authority figures. This consisted of 138 confirmed hazardous areas (CHAs) covering 7.3km² and 82 suspected hazardous areas (SHAs) affecting 4.5km² (see Table 1). Tajikistan reported releasing 0.55km² of mined area in 2021 but also added additional contamination to the database. As a result, the total is almost unchanged from a year earlier, when Tajikistan recorded contamination of just under 11.8km².⁴

Two thirds of the confirmed mined area is in the Khatlon region, which includes Shamsiddin Shohin, the most heavily mined district in the country. Survey and clearance in the region reduced the estimate of its contamination by 0.98km² in 2021, approximately the same rate of progress as in 2020.⁵

Tajikistan still lacks a clear baseline estimate of its mined areas. In addition, almost three quarters of Tajikistan's SHAs (82 SHAs totalling 3.25km²) are on the border with Uzbekistan, parts of which have still to be demarcated and have still to be surveyed for contamination.⁶ In June 2022, Tajikistan reported that, in accordance with its extension request, all required survey and re-survey of hazardous areas, should be completed by the end of 2023, including the remaining 28 SHAs with a total area of 1.23km² and resurvey of 31 CHAs with an area of 1.76km².⁷

In 2021 a total of 693,542m² of previously unrecorded anti-personnel mine contamination was added to Tajikistan's information management database in the following districts; 0.08km² in Shamsiddin Shohin district; 0.36km² in Darvoz district; and 0.25km² in Rasht district.⁸

Mine contamination in Tajikistan dates from conflicts in the 1990s. Tajikistan's border with Afghanistan was mined by Russian forces in 1992–98; the border with Uzbekistan was mined by Uzbek forces in 1999–2001; and the Central Region was contaminated during the 1992–97 civil war.⁹

A national survey in 2003–05 by the Swiss Foundation for Mine Action (FSD) estimated that mine and explosive remnants of war (ERW) contamination extended over 50km².¹⁰ Tajikistan later concluded the results were unreliable as a result of lack of experience among the initial survey teams as well as the absence of minefield records and poor equipment. As a result, the size of SHAs were miscalculated and their descriptions not clearly recorded.¹¹ Tajikistan said its minefield maps/records were mostly of good quality but did not accurately capture the location of some mined areas, for example in locations where mines were scattered from helicopters, and as a result needed to be verified and validated through new survey and data analysis.¹²

4 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 April and 17 August 2021; and Article 7 Report (covering 2020), Form D.

5 Estimated contamination in the Shamsiddin Shohin district stood at 3,221,110m² at the end of 2020.

6 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 April and 12 August 2021; and Article 7 Report (covering 2021), Form D.

7 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

8 Ibid.

9 Tajikistan Mine Action Centre (TMAC), "Scope of the Problem", accessed 29 July 2019 at: <http://bit.ly/2ZhiFpN>.

10 R. Roberts, "Evaluation of United Nations Development Programme Support to the Tajikistan Mine Action Programme", January 2012, at: <http://bit.ly/20qRe0B>, p. 11.

11 2009 Article 5 deadline Extension Request, p. 1.

12 Ibid., p. 34.

In Khatlon region, mines were laid in and around military positions on hilltops overlooking the Panj river valley, mostly delivered remotely by helicopter or laid by troops who were moved in and out by helicopter. There are no established roads or tracks to access the minefields for survey or clearance.¹³ Information about mined areas on the Tajik-Uzbek border is limited and based on the later non-technical survey conducted in 2011–15 by FSD and a needs assessment survey by the International Committee of the Red Cross (ICRC) in 2013–15. However, the FSD survey only covered one part of the border, Sughd province, and although survey teams recorded 82 accidents they did not have access to the border and relied mainly on incident forms. As a result, records lack detail on the exact location where mine incidents occurred.¹⁴

Tajikistan and Uzbekistan settled most of their 1,283km-long border dispute following the collapse of the Soviet Union but certain areas have not yet been delineated and the exact location of mined areas is still not known. Most mined areas are thought to be in disputed sections of the Tajik-Uzbek border which have not been accessible and assessed.¹⁵ Although most of the mines are believed to be on Uzbek territory,¹⁶ there is a possibility that some mines may have been displaced downhill into Tajikistan due to landslides or flooding.¹⁷ The 3.25km² of SHA on the border with Uzbekistan is a rough estimate and the actual extent of any anti-personnel mined area on Tajik territory along this border will only be more accurately established once both countries permit survey and have delimited the border. Tajikistan and Uzbekistan agreed in 2018 to set up a joint commission to investigate mined areas along the border.¹⁸ As at June 2022, Tajikistan had yet to report on any follow-up action regarding this proposed joint commission.

There are also mined areas on two islands in the Panj river on the Tajik-Afghan border, one of which is 538,500m² in size and the other 30,000m², which are said to be “non-executable” at the present time. The islands were

created by a change in the flow of the river, and it is possible that the river may again change its path and re-connect the islands with the Tajik river bank in the future.¹⁹

Tajikistan acknowledges the urgency and importance of establishing a clear baseline of anti-personnel mine contamination as soon as possible. In August 2019, the Tajikistan National Mine Action Centre (TNMAC) announced that a survey working group would be established with expert representatives from all key stakeholders and implementing partners to help plan and prioritise survey tasks.²⁰ In June 2022, however, TNMAC reported that matters had progressed and there is no longer a need for this group to be established. According to TNMAC, survey teams have competent specialists carrying out internal control and quality assurance (QA) and specialists from TNMAC’s Operations Department are supporting them with QA of all results and reports from operations. Any discrepancies are discussed at technical meetings and measures are taken to reduce any inconsistency.²¹ NPA concurs that “informal coordination between all stakeholders is working well, since the group and number of actors is limited”. NPA welcomes the monthly coordination meetings, hosted by TNMAC and attended by all stakeholders and implementing partners.²²

TNMAC has reported that Tajikistan has a Land Release Operations Plan and expects that, in accordance with Tajikistan’s extension request, all required survey and re-survey of hazardous areas will be completed by the end of 2023. The United Nations Development Programme (UNDP) Tajikistan Mine Action Programme (TMAP) plans to conduct survey on the remaining 28 SHAs with a total area of 1,227,493m² and conduct a resurvey of 31 CHAs with an area of 1,759,941m². These surveys will include the SHAs without minefield records that have been identified in Darvoz (VMKB/GBAO province), and Shamsiddin Shohin (Khatlon province). By the end of 2023, Tajikistan plans to complete registration of all possible SHA and CHAs.²³

13 Interview with Muhabbat Ibrohimzoda and Murtazo Gurezov, TNMAC, Dushanbe, 25 May 2018; and Statement of Tajikistan, APMBC 16th Meeting of States Parties (16MSP), Vienna, 20 December 2017.

14 Ibid.; and 2019 Article 5 deadline Extension Request, p. 33.

15 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018.

16 Statement of Tajikistan, 16MSP, Vienna, 20 December 2017.

17 “National Strategy of the Republic of Tajikistan on Humanitarian Mine Action for 2017–2020”, 25 February 2017.

18 2019 Article 5 deadline Extension Request, p. 16.

19 Interview with Muhabbat Ibrohimzoda and Murtazo Gurezov, TNMAC, Dushanbe, 25 May 2018.

20 2019 Article 5 deadline Extension Request, Additional Information received 3 August 2019.

21 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

22 Email from Melissa Andersson, Country Director, Norwegian People’s Aid (NPA), 1 July 2022.

23 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

Table 1: Anti-personnel mined area by province (at end 2021)²⁴

Province	District	CHA		SHA		Total area (m ²)
		Nos.	Area (m ²)	Nos.	Area (m ²)	
DRD (Central Region)	Rasht	2	345,163	0	0	345,163
	Sangvor	1	50,000	2	50,000	100,000
Subtotals		3	395,163	2	50,000	445,163
VMKB (GBAO)	Darvoz (CR)	9	749,590	2	637,493	1,387,083
	Darvoz (T-A Border)	3	358,800	2	20,000	378,800
	Vanj	6	908,119	0	0	908,119
	Shughnon	3	56,000	0	0	56,000
	Ishkoshim	0	0	1	5000	5000
Subtotals		21	2,072,509	5	662,493	2,735,002
Khatlon	Farkhor	6	96,800	1	8000	104,800
	Hamadoni	3	80,772	6	177,000	257,772
	Panj	21	1,400,072	3	23,000	1,423,072
	Jayhun	8	135,636	11	307,000	442,636
	Sh. Shohin	74	3,122,841	0	0	3,122,841
	Qabodiyon	1	5184	0	0	5184
	Shahritus	1	30,000	0	0	30,000
Subtotals		114	4,871,305	21	515,000	5,386,305
Sughd	Ayni	0	0	5	535,000	535,000
	Asht	0	0	11	610,000	610,000
	Isfara	0	0	20	1,105,000	1,105,000
	Konibodom	0	0	3	165,000	165,000
	Panjakent	0	0	13	715,000	715,000
	Shahriston	0	0	2	120,000	120,000
Subtotals		0	0	54	3,250,000	3,250,000
Totals	19	138	7,338,977	82	4,477,493	11,816,470

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Commission for the Implementation of International Humanitarian Law (CIIHL), chaired by the first deputy of the Prime Minister, and containing key representatives from relevant line ministries and TNMAC, oversees the humanitarian sector and acts as Tajikistan's national mine action authority, responsible for mainstreaming mine action in the government's socio-economic development policies.²⁵

TNMAC is the executive arm of CIIHL and the body coordinating mine action, responsible for issuing task orders, information management and QA/quality control (QC).²⁶ It was set up by government decree in January 2014, replacing the Tajikistan Mine Action Centre and taking over the process of managing transition to a fully nationally-owned programme.²⁷ In 2016, Tajikistan's Parliament adopted a Law on Humanitarian Mine Action, which covers all aspects of mine action, and in 2017 it approved a national mine action strategy for 2017–20.²⁸

²⁴ Ibid., and Article 7 Report (covering 2021), Form D.

²⁵ 2019 Article 5 deadline Extension Request, p. 20; and 2009 Article 5 deadline Extension Request, p. 1.

²⁶ 2019 Article 5 deadline Extension Request, pp. 20–21.

²⁷ 2009 Article 5 deadline Extension Request, p. 1; and TMAC, "About TMAC", 2012, accessed 10 March 2014 at: <http://bit.ly/2LvPub1>.

²⁸ Email from Aubrey Sutherland-Pillai, NPA, 18 October 2016; and 2019 Article 5 deadline Extension Request, pp. 20–21.

TNMAC has submitted an evidence-based, costed, and time-bound mine action strategy for 2021 to 2030 and an action plan for its implementation, both of which have been approved by the government.²⁹ Tajikistan has an updated work plan for 2021–25, and an annual detailed and costed work plan for 2021–22.³⁰

The Government of Tajikistan and TNMAC are reported as enabling of mine action activities in the country. This includes the granting of visas, concluding memoranda of understanding with operators, facilitating imports, and involving operators in decisions as and when needed.³¹ In 2021, the Tajik government provided modest funding for mine action, including US\$480,000 in “technical and non-technical assistance”, the same level of funding it provided in 2020. A further US\$46,096 was allocated to support operational mine action.³² The Ministry of Defence (MoD) plays a major role in Tajikistan’s mine action sector, in particular by providing personnel for Tajikistan’s main demining capacity,³³ the Humanitarian Demining Company (HDC), whose operations are funded by the United States.³⁴

Tajikistan conducts regular in-country dialogue among all mine action stakeholders, based on Tajikistan’s Law on Humanitarian Mine Action, the National Mine Action Standards (NMAS), the National Humanitarian Mine Action Strategy, the Charter of the CIHL, and Tajikistan’s other regulatory documents. To date, Tajikistan has not established an in-country national platform for dialogue (as per Action Point 44 of the Anti-Personnel Mine Ban Convention (APMBC) Oslo Action Plan), in order to discuss challenges and support for Article 5 implementation collectively. TNMAC confirms that Tajikistan will consider establishing such a platform in future, but no time frame for this has been given.³⁵ Prior to the COVID-19 pandemic, a multi-stakeholder mine action forum for Tajikistan met on a regular basis. These meetings ceased with the onset of the pandemic although Norwegian People’s Aid (NPA) has suggested that they be revived.³⁶ However, a monthly coordination meeting takes place attended by all implementing partners and TNMAC.³⁷

The Organization for Security and Co-operation in Europe Programme Office in Dushanbe (OSCE POiD) has supported the MoD to update its multiyear plan, entitled “Ministry of

Defence of the Republic of Tajikistan Co-operation Plan for Humanitarian Demining 2018–2023.”³⁸ In 2020, it provided funding of approximately €250,000 to the mine action sector to finance three MoD HDC demining teams and seven TNMAC support staff.³⁹ In 2021, the OSCE provided €330,000 to TNMAC to enable it to continue supporting the three MoD demining teams (54 field operators in total) under TNMAC’s supervision. Two vehicles (a pick-up truck and an ambulance) and other equipment provided for in the 2021 budget were expected to be donated to the teams in June 2022. The OSCE planned to continue supporting the three teams in 2022 with funding of approximately €250,000. However, the OSCE notes this amount may change to allow for local currency fluctuation.⁴⁰

The OSCE has supported the recruitment and appointment of an adviser for residual risk management, who took up post in March 2022, and is tasked with identifying improvements to the risk management of explosive hazards and to develop residual risk management guidelines to complement the NMAS.⁴¹

Under the Eastern Europe, Caucasus and Central Asia Regional Cooperation Programme (EECCA RCP), TNMAC participated in three regional training courses offered by the Geneva International Centre for Humanitarian Demining (GICHD) in 2021.⁴² Through GICHD sponsorship, TNMAC also participated in the 8th Technology Workshop in Geneva in 2021, providing the opportunity to witness and discuss the latest innovative solutions in Information Management, explosive ordnance risk education (EORE), and land release.⁴³

International operator NPA does not have a formal capacity development agreement with TNMAC but assists informally with capacity development as and when requested.

The Commonwealth of Independent States (CIS) has reported that, on 24 June 2022, following a meeting of the Council of Defence Ministers of the CIS countries, Russia’s Minister of Defence, Sergei Shoigu, said that a joint unit of humanitarian demining will be created in the CIS. No timeline for this was given.⁴⁴ Tajikistan have not shared any information on this with Mine Action Review and it is not known if Tajikistan have been involved in these discussions.

29 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021 and 7 July 2022.

30 Committee on Article 5 Implementation, Preliminary Observations on Tajikistan, Intersessional Meetings, Geneva, 20–22 June 2022.

31 Email from Melissa Andersson, NPA, 21 May 2022.

32 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021 and 19 June 2022.

33 MoD, “Strategic Plan on Humanitarian Demining 2013–2016”, Dushanbe, 17 July 2013; and response to Landmine Monitor questionnaire by Luka Buhin, Mine Action Office, OSCE Office in Tajikistan, 8 April 2014.

34 2019 APMBC Article 5 deadline Extension Request, p. 23.

35 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

36 Email from Melissa Andersson, NPA, 21 May 2022.

37 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

38 Email from Luka Buhin, OSCE Tajikistan, 9 October 2017.

39 Email from Johan Dahl, Head of Arms Control and Mine Action, OSCE Programme Office, Dushanbe, 9 April 2021; and interview with Saodat Asadova, Programme Assistant, OSCE, 24 June 2022.

40 Emails from Saodat Asadova, OSCE, 3 and 9 June 2022; and interview, in Geneva, 24 June 2022.

41 Emails from Saodat Asadova, OSCE, 3 June 2022; and Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

42 Email from Maria Gurova, Programme Officer, Co-operation Programmes, GICHD, 24 June 2022.

43 Email from Maria Gurova, GICHD, 1 July 2022.

44 ‘Russian Defense Minister Sergei Shoigu said that a joint unit of humanitarian demining will be created in the CIS’, *Commonwealth of Independent States*, 27 June 2022, at: <https://bit.ly/3b1ulgn>.

ENVIRONMENTAL POLICIES AND ACTION

Clearance activities are undertaken according to Tajikistan's national NMAS, which contains a chapter on the environment, health, and safety. This chapter covers issues such as safeguarding of the environment during the establishment and removal of worksites and accommodation, waste disposal, air quality, water supply, as well as the recording and reporting of environmental "incidents".⁴⁵

TNMAC further asserts that environmental issues are taken into consideration during survey and clearance to ensure that operations are conducted without negative environmental impact and that hazardous areas released and handed over to communities in a state suitable for intended use.⁴⁶

NPA has its own environmental management system in place, which includes a policy adapted to the local context from NPA's Head Office guidelines. NPA also has an environmental standing operating procedure (SOP) and an annual action plan linked to the environmental policy. NPA seeks to limit the environmental impacts of all survey and clearance activities. This includes waste management as well as the proper storage and disposal of fuel and lubricants.⁴⁷

GENDER AND DIVERSITY

TNMAC adopted a gender programme in October 2018 that was prepared by the Geneva Mine Action Programme (GMAP, now a programme of the GICHD), and is committed to improving the situation of women in the mine action sector.⁴⁸ With the assistance of the GICHD, gender and diversity issues were integrated into Tajikistan's national mine action strategy, updated to cover the period 2021 to 2030, with annual plans also addressing the issues.⁴⁹

Tajikistan reports that gender is mainstreamed in all aspects of its mine action programme based upon international and national guidelines and resolutions, covering the areas of management, mine risk education, victim assistance, and land release.⁵⁰

A UNDP evaluation in 2019 concluded TNMAC had made progress mainstreaming gender and diversity in mine action but the strategy had not yet been systematically implemented, a state of affairs that appears to continue. UNDP said areas for further action included ensuring that training of trainers for risk education was gender balanced, introducing female QA and QC officers, and developing a code of conduct and complaints mechanisms.⁵¹

TNMAC reports it always encourages women to apply for mine action positions and, all other factors being equal, gives preference to the female candidate. The number of women in mine action, though, remains small. In 2021, 30% of TNMAC's employees in managerial/supervisory positions were women.⁵² No women were employed by MoD's HDC in either operational or managerial/supervisory positions in 2021.⁵³

By comparison, TNMAC reported employing seven female staff in 2020. None of its female staff worked in operations.⁵⁴

Tajikistan did not address gender and diversity issues in its 2019 Article 5 deadline extension request but in response to APMBC Article 5 committee's requests for more information it acknowledged that it would be a challenge to achieve gender balance in operations in view of the predominance of men in the military, where service is compulsory for men and voluntary for women. At the same time, it noted NPA's successful employment of female deminers and said the government would address gender issues in Tajikistan's mine action programme.⁵⁵ TNMAC said if it is possible to identify key positions that can be filled by female candidates like paramedics and/or QA/QC officers this would be discussed and prioritised. In addition, TNMAC would seek to increase female civilian capacity in coordination with other implementing partners.⁵⁶

TNMAC confirms that survey teams collect information on hazardous areas on an annual basis as well as conducting risk education sessions, with both of these activities including inclusive consultation with women, girls, boys, and men.⁵⁷ Tajikistan also reports that monthly briefings take place with local communities on demining operations, with records of the briefing kept as part of documentation.⁵⁸ The Ministry of Defence's HDC multi-task teams reportedly consult with all groups, including women and children, during survey and community liaison.⁵⁹ Relevant mine action data are disaggregated by sex and age.⁶⁰

45 Emails from Saodat Asadova, OSCE, 3 and 9 June 2022; and Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

46 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

47 Email from Melissa Andersson, NPA, 21 May 2022.

48 Email from Muhabbat Ibrohimzoda, TNMAC, 14 June 2019.

49 Emails from Melissa Andersson, NPA, 21 May 2022; and Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

50 Committee on Article 5 Implementation, Preliminary Observations on Tajikistan, Intersessional Meetings, Geneva, 20–22 June 2022.

51 R. Roberts, "Final Evaluation of Support to the Tajikistan Mine Action Programme", UNDP, 30 December 2019, pp. 17–18.

52 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

53 Email from Saodat Asadova, OSCE, 3 June 2022.

54 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

55 Additional information provided for Tajikistan's Article 5 deadline Extension Request, 3 August 2019, p. 6.

56 Ibid.

57 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

58 Committee on Article 5 Implementation, Preliminary Observations on Tajikistan, Intersessional Meetings, Geneva, 20–22 June 2022.

59 Email from Johan Dahl, with information provided by Khurram Maksudzoda, Head of the MoD HDC, 27 August 2019.

60 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.

The OSCE seeks to promote gender awareness by collecting comprehensive relevant information during its work.⁶¹ The OSCE also insists that a module on gender and human rights be included in all pre-season basic training of demining teams, in accordance with International Mine Action Standards (IMAS). The OSCE will continue to emphasise the importance of gender mainstreaming and balance throughout project implementation and raise awareness in the mine action community across Central Asia through joint events and training.⁶²

NPA has a gender and diversity policy integrated into its Tajikistan programme. NPA's staff are diverse, employing staff from every region.⁶³ In 2021, 20% of NPA's staff in Tajikistan were women, with 29% of the managerial/supervisory positions, including task supervisors, team leaders, and organisational senior management being female. NPA have had no significant changes to the gender balance of personnel from 2020 to 2021 and have seen only a slight drop in operational positions occupied by women: from 17% (including 11 deminers) in 2020 to 14% in 2021. This was the result of some staff taking maternity leave.⁶⁴

NPA ensures women and children in communities affected by mines are consulted during community liaison activities, including impact assessment, which is conducted by both male and female staff. NPA highlights that consulting with women and children is more challenging in the border regions, where the military/border guard forces are mainly, if not exclusively, male. NPA also highlights that most incidents in Tajikistan involve young men or boys working as shepherds. However, the needs of all affected residents are taken into account, in particular through the prioritisation of locations closest to populated areas.⁶⁵

NPA and TNMAC revived meetings of a gender working group in early 2020. Its meetings were interrupted by measures to control the COVID-19 pandemic but resumed again in 2021 and the group met twice during the year. In addition, a consultant was hired to conduct gender sensitivity training with staff from both NPA and TNMAC.⁶⁶ Despite continuing cultural constraints that inhibit women from employment in mine action, particularly in field positions, NPA has found that greater knowledge about the activities of its female deminers has made it easier to recruit female staff.⁶⁷

INFORMATION MANAGEMENT AND REPORTING

TNMAC upgraded its national mine action database to IMSMA Core in 2019,⁶⁸ making it easier to input, edit, and retrieve data. TNMAC also introduced new data collection forms intended to simplify data entry and improve data quality⁶⁹ and, in collaboration with NPA, drew on the experience of using the system in 2020 to make small adjustments to reporting forms in 2021.⁷⁰

NPA maintains an accurate and up-to-date picture of activities through daily reporting into the IMSMA Core Portal, using the data collection forms introduced and then updated by TNMAC during 2020 and 2021. The portal also contains completion reports and details of outstanding contaminated areas that are scheduled for further survey and clearance work. In 2021, there were efforts to simplify and streamline the reporting system as well as to archive data from previous years. Further minor improvements are under discussion, including updates to some reporting forms as well converting

certain reporting forms (e.g. impact assessment, community liaison) to electronic format to make inputting into the database more efficient.⁷¹

In 2021, TNMAC launched a progress monitoring tool, intended to improve resource mobilisation and task activity planning, with the aim of improving the efficiency of land release. TNMAC also updated reporting forms for Hazardous Area Cancellation and Monitoring of Mine Action Training. These forms have been transferred into the IMSMA Core system.⁷²

Discussions between TNMAC and NPA are ongoing regarding the possibility of syncing their respective information portals to avoid duplication of effort in data entry. However, this presents practical challenges around access to and the format of each organisation's portals and, to date, there has been no progress on this issue.⁷³

61 Email from Johan Dahl, Acting Head, Political-Military Department, OSCE Programme Office, Dushanbe, 13 May 2020.

62 Email from Saodat Asadova, OSCE, 9 June 2022; and interview with Saodat Asadova, OSCE, 24 June 2022.

63 Email from Melissa Andersson, NPA, 21 April 2020.

64 Email from Melissa Andersson, NPA, 23 June 2022.

65 Email from Melissa Andersson, NPA, 21 May 2022.

66 Emails from Melissa Andersson, NPA, 21 April and 4 July 2021 and 21 May 2022; and Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

67 Emails from Melissa Andersson, NPA, 21 April and 4 July 2021.

68 Email from Muhabbat Ibrohimzoda, TNMAC, 28 May 2020; and Committee on Article 5 Implementation, Preliminary Observations on Tajikistan, Intersessional Meetings, Geneva, 20–22 June 2022.

69 Email from Muhabbat Ibrohimzoda, TNMAC, 28 May 2020.

70 Email from Melissa Andersson, NPA, 21 April 2020.

71 Emails from Melissa Andersson, NPA, 21 May 2022 and 27 July 2022.

72 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

73 Email from Melissa Andersson, NPA, 27 July 2022.

PLANNING AND TASKING

Tajikistan's Article 5 deadline extension request, submitted in March 2019, which sought a new deadline for mine clearance of the end of 2025, forms the basis of its operational planning. The extension request said land release efforts would focus mainly on the Central region and the border with Afghanistan, especially the Shamsiddin Shohin district as the area most contaminated with anti-personnel mines. It aimed to complete work on the Central region and complete survey of the Tajik-Afghan border by 2023.⁷⁴ A General Land Release Operational Plan for 2021–25 details areas targeted for clearance each year and the required funding.⁷⁵

Land release on the Tajik-Uzbek border, including completion of survey by Tajikistan's stated aim of the end of 2023, will be partly dependent on effective cooperation between each States' respective authorities. Tajikistan and Uzbekistan agreed in 2018 to set up a joint commission to arrange survey and clearance of border areas. In 2019 Tajikistan said it would keep States Parties to the APMBC informed of developments but, in 2021, had yet to report follow-up action.⁷⁶ In June 2022, TNMAC reiterated that Tajikistan "will continue to provide updates on the development of cooperation with regard to land release along the Tajik-Uzbek border in Article 7 reports and to the Meetings of the States Parties".⁷⁷

Tajikistan has revised its annual land release targets a number of times in recent years. Its extension request identified areas of agricultural and tourist importance as the main priorities and called for annual release of approximately 1.3km². These annual targets were revised in the "General Land Release Operation Plan 2021–2025" issued in January 2021 which provided for release a total of 8.55km²,⁷⁸ which, even if met, would not have addressed all of the existing contamination recorded. In June 2022, Tajikistan shared revised annual land release targets for 2022 to 2025, setting an average annual target of 2.14km² (see Table 2).

Table 2: Annual land release targets⁷⁹

Year	No. of areas	Total (m ²)
2022	36	1,990,739
2023	51	2,099,463
2024	57	2,114,777
2025	22	2,361,491
Totals	166	8,566,470

TNMAC tasks operators according to a set of priorities agreed with government that include humanitarian impact, the proximity of hazards to settlements, national development priorities and the seasonal constraints on access to mined areas in mountainous terrain. Input from local communities and local government is also taken into account.⁸⁰ While these priorities stand, tasking decisions are also influenced by the ongoing security situation on the Tajik-Afghan border, where access is regulated by the Border Guard Forces of Tajikistan.⁸¹

In August 2021, OSCE-supported demining teams were relocated from the Tajik-Afghan border-detached area to the central regions of the country, where they continued battle area clearance (BAC) in the Rasht region until November 2021. In 18 April 2022, three demining teams re-initiated clearance along the border, in the Khatlon region (two teams in Shamsiddin Shohin district and the other in Panj district).⁸²

NPA reports that dossiers are issued in a timely matter by TNMAC.⁸³

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Tajikistan's revised National Mine Action Standards (NMAS) were approved by decree on 1 April 2017 and are available in Russian and English.⁸⁴ The standards were developed as general guidelines allowing implementing partners scope to develop their own SOPs.⁸⁵

74 2019 Article 5 deadline Extension Request, pp. 34 and 42.

75 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

76 2019 Article 5 deadline Extension Request, p. 44.

77 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

78 Email from Muhabbat Ibrohimzoda, TNMAC, 12 August 2021.

79 Presentation by Muhabbat Ibrohimzoda, TNMAC, Intersessional Meetings, Geneva, 22 June 2022.

80 Emails from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018 and 22 April 2021; and Melissa Andersson, NPA, 5 April 2018 and 1 July 2022.

81 Email from Melissa Andersson, NPA, 1 July 2022.

82 Email from Saodat Asadova, OSCE, 3 June 2022; and interview in Geneva, 24 June 2022.

83 Email from Melissa Andersson, NPA, 21 May 2022.

84 Article 5 deadline Extension Request, 31 March 2019, p. 21.

85 Email from Melissa Andersson, NPA, 29 April 2020.

TNMAC reports that the NMAS are regularly updated and that all updates to NMAS and SOPs are made in consultation with clearance operators.⁸⁶ In general, demining operators are said to update their SOPs once every three years during the accreditation process.⁸⁷ NPA reports that Tajikistan's NMAS are adequate and that they enable efficient survey and clearance work.⁸⁸

TNMAC introduced a new approach to survey in 2017 known as "non-technical survey with technical intervention". In addition to standard non-technical survey, survey teams use technical assets to confirm the presence of mines and unexploded ordnance (UXO) and identify their location

avoiding poorly defined and inflated polygons.⁸⁹ This approach is particularly useful when dealing with minefield records that are incomplete or inconsistent due to incorrect coordinates and grid numbering or lack of landmarks/reference points, or when too few local people have remained who can be asked about evidence of mines or incidents. In addition, mines are sometimes displaced due to landslides, rock falls, or flooding.⁹⁰

In 2021, Tajikistan developed new regulatory documents including for the accreditation of mine action organisations' activities and a technical manual, "Clearing the Battlefields".⁹¹

OPERATORS AND OPERATIONAL TOOLS

Tajikistan's 2019 Article 5 deadline extension request set an ambitious target of doubling the number of deminers from 90 to 180⁹² and in 2020 it took initial steps in that direction while also raising survey and mechanical capacity. Overall, however, Tajikistan maintained approximately the same number of deminers in 2021 as in 2020; with NPA and HDC operating six manual demining teams each; UST operating four teams, capable of both survey and clearance; and FSD operating one WAD (Weapons and Ammunitions Disposal) team.⁹³

The MoD's HDC had 72 demining personnel across six manual clearance teams in 2021,⁹⁴ a decrease on the peak 2020 capacity of 107 personnel but an increase on the 5 multitask teams of 50 deminers deployed at the start of 2020.⁹⁵

NPA remains the only international operator undertaking mine clearance in Tajikistan, operating in 2021 with one multi-task team of nine personnel (deployed for both survey and clearance), and a further five manual clearance teams, totalling fifty deminers across these six teams. This is an increase on the five teams of forty-one deminers operational at the end of 2020, which was made possible by increased funding. However, it was necessary for NPA to reduce capacity from six back to five demining teams in the first half of 2022, when funding reduced. NPA's clearance teams are capable of conducting both mine and battle area clearance.⁹⁶

NPA continues to cooperate with the Border Guard Forces, working in 2020 and 2021 with 13 seconded guards and starting in 2022 with 12 seconded guards (included in the clearance team personnel counted above). The officers are part of NPA's multitask teams and most have been trained in conducting both mine clearance and BAC.⁹⁷ NPA, in cooperation with HDC, reactivated a mini MineWolf mechanical asset in 2020, which is being used to support clearance by both the MoD and NPA.⁹⁸

UST, a national not-for-profit organisation, is accredited for risk education, survey, and victim assistance, and was accredited to undertake clearance for the first time in 2021. UST added two survey teams in 2020, raising the total number of teams in 2021 to four with a total of 32 personnel, engaged in both non-technical and technical survey as well as clearance.⁹⁹ Tajikistan has acknowledged advantages in using civilian deminers, since they require less time overall in training and building up experience compared with military conscripts who rotate annually, necessitating training for each new intake.¹⁰⁰

FSD remained operational in 2021 with one WAD Team undertaking explosive ordnance disposal (EOD) spot tasks and stockpile destruction.¹⁰¹

86 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022; and Committee on Article 5 Implementation, Preliminary Observations on Tajikistan, Intersessional Meetings, Geneva, 20–22 June 2022.

87 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

88 Email from Melissa Andersson, NPA, 21 May 2022.

89 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 August 2016, 22 May 2017, and 27 April 2018; GICHD, Presentation on "NTS Field Studies: General Findings", 15 February 2018, Geneva; and Article 7 Report (covering 2017), Forms A and D.

90 "Non-technical survey/technical intervention", Presentation by Muhabbat Ibrohimzoda, TNMAC, at the 21st International Meeting of National Mine Action Programme Directors and UN Advisers, Geneva, 13–16 February 2018; and interview with Muhabbat Ibrohimzoda, TNMAC, Dushanbe, 25 May 2018.

91 "The Republic of Tajikistan. Updated information provided in accordance with paragraph 2, Article 7 of the Convention on the Prohibition of the Use, Stockpiling, Production and transfer of anti-personnel mines and their destruction, submitted April 30, 2022, for the period from January 1, 2021, to December 31, 2021".

92 2019 Article 5 deadline Extension Request, p. 8.

93 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 and 24 June and 25 August 2022; and Statement of Tajikistan on Article 5, 19MSP, 17 November 2021.

94 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022; and Andrej Hegedis, Countering Security Threats Officer, OSCE, 28 July 2022.

95 Emails from Muhabbat Ibrohimzoda, TNMAC, 12 August 2021 and John Dahl, OSCE, 9 April 2021.

96 Email from Melissa Andersson, NPA, 1 July 2022.

97 Emails from Melissa Andersson, NPA, 21 April 2021 and 21 May 2022.

98 Email from Melissa Andersson, NPA, 21 May 2022.

99 Emails from Muhabbat Ibrohimzoda, TNMAC, 24 June and 25 August 2022.

100 2019 Article 5 deadline Extension Request, p. 36.

101 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022; Statement of Tajikistan on Article 5, 19MSP, 17 November 2021; interview with Dr Nickwah Din Mohammad, Programme Manager & Country Director, Tajikistan and Afghanistan, Swiss Foundation for Mine Action (FSD), Geneva, 23 June 2022.

In June 2022, TNMAC stated that, in order to clear the remaining contamination in line with its extension request, Tajikistan will need to increase capacity with an additional two survey teams (raising the total to seven), and between six and eight manual demining teams (raising the total to between 22 and 24 teams).¹⁰²

Table 3: Operational clearance capacities deployed in 2021¹⁰³

Operator	Manual clearance teams	Total deminers*	Dog teams (dogs and handlers)	Mechanical assets/machines**	Comments
NPA	6	50	0	1	Includes one multi-task team deployed for survey and clearance. An increase on 5 teams of 41 deminers in 2020.
HDC MoD	6	72	0	0	A decrease on 6 teams of 107 personnel in 2020.
UST	4	32	0	0	4 survey teams of 32 personnel. An increase on 14 personnel in 2020.
FSD	N/A	N/A	N/A	N/A	One WAD (Weapons and Ammunitions Disposal) team undertaking EOD spot tasks and stockpile destruction.
Totals	16	154	0	1	

NPA commented that, apart from a reduction in international visitors, its Tajikistan programme was not significantly affected by the COVID-19 pandemic in 2021. NPA was able to adhere to its work plan, with COVID-19 related staff absences causing only limited disruption.¹⁰⁴ TNMAC also confirmed that the national mine action programme was able to continue to work according to its 2021 Land Release Plan despite the continued pandemic, through implementing protective measures and COVID-19 vaccination of all employees of demining operators.¹⁰⁵

Tajikistan did not expect any major changes to the number of mine survey or clearance personnel in 2022.¹⁰⁶ Given that it has stated that overall demining capacity needs to increase to meet its clearance deadline of 2025, this is of concern.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

TNMAC reported land release through survey and clearance totalling 549,295m² in 2021,¹⁰⁷ a significant reduction on the 1,722,688m² released in 2020.¹⁰⁸ TNMAC has attributed this decrease mainly to the need to suspend demining operations along the Tajik-Afghan border in July 2021, due to security concerns.¹⁰⁹ Despite this need to redeploy teams away from the border for part of the year, land release was still heavily concentrated in Shamsiddin Shohin, a district on the Tajik-Afghan border as well as in Darvoz in GBAO Province. Together these areas accounted for just over 75% of the total (see Tables 4, 5, and 6).

SURVEY IN 2021

Tajikistan's Article 5 deadline extension request noted that the progress of survey was slowing because survey teams have already tackled areas that are most accessible to the local population and were increasingly left with hazardous areas in remote and rugged terrain.¹¹⁰

¹⁰² Emails from Muhabbat Ibrohimzoda, TNMAC, 19 and 24 June and 25 August 2022; and Statement of Tajikistan on Article 5, 19MSP, 17 November 2021. In information supplied directly to Mine Action Review, TNMAC stated that a further eight manual demining teams would be required. However, in Tajikistan's Article 5 Statement, it specified a slightly lower required increase of six teams.

¹⁰³ Emails from Muhabbat Ibrohimzoda, TNMAC, 19 June and 25 August 2022 and Melissa Anderson, NPA, 1 July 2022; Statement of Tajikistan on Article 5, 19MSP, 17 November 2021; and FSD, "Tajikistan", accessed 7 September 2022 at: <https://bit.ly/30zn7hh>.

¹⁰⁴ Email from Melissa Andersson, NPA, 1 July 2022.

¹⁰⁵ Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

¹⁰⁶ Ibid.; and email from Saodat Asadova, OSCE, 3 June 2022.

¹⁰⁷ Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

¹⁰⁸ Article 7 Report (covering 2020), Form D.

¹⁰⁹ Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

¹¹⁰ 2019 Article 5 deadline Extension Request, p. 47.

59,427m² were cancelled through non-technical survey in 2021, by teams from UST and NPA (see Table 4). This was a significant reduction on the just over 0.4km² cancelled through non-technical survey in 2020,¹¹¹ partly due to the need to suspend operations along the Tajik-Afghan border.

Of the remaining tasks, survey teams have been prioritising the easiest to access, as the easier a task is to access, the more likely it is that local people will try and use the land. The effect of this is that, year-on-year, tasks get harder to access, which slows down progress towards completing non-technical survey in Tajikistan.¹¹²

Table 4: Cancellation through non-technical survey in 2021¹¹³

Province	District	Operator	Area cancelled (m ²)
Khatlon	Shamsiddin Shohin	UST	23,627
	Khovaling	NPA	35,800
Total			59,427

The 0.28km² reduced through technical survey in 2021 (see Table 5) was less than half the 2020 figure of 0.66km²,¹¹⁴ a significant slowdown after such release more than doubled between 2019 and 2020.¹¹⁵ Again, the potential for undertaking technical survey was severely impacted by the need to redeploy teams away from the Tajik-Afghan border.

Table 5: Reduction through technical survey in 2021¹¹⁶

Province	District	Operator	Area reduced (m ²)
GBAO	Darvoz	HDC MOD	36,400
	Darvoz	NPA	94,747
DRS	Sangvor	NPA	45,037
Khatlon	Khovaling	NPA	40,148
	Shamsiddin Shohin	HDC MOD	23,300
	Shamsiddin Shohin	NPA	22,793
	Shamsiddin Shohin	UST	21,355
Total			283,780

CLEARANCE IN 2021

Tajikistan cleared 0.21km² in 2021,¹¹⁷ a decrease on the 0.67km² cleared in 2020.¹¹⁸ Having previously only undertaken survey, UST was accredited to undertake clearance for the first time in 2021¹¹⁹ and cleared 4,645m² in Shamsiddin Shohin. TNMAC reported clearance operations resulted in destruction of 1,476 anti-personnel mines and 106 items of UXO. A further 50 anti-personnel mines were destroyed in EOD spot tasks: 46 by FSD and 4 by NPA. FSD also destroyed three anti-vehicle mines during EOD spot tasks.¹²⁰

The decrease in land cleared in 2021 compared to 2020 was due to the need to suspend demining operations along the Tajik-Afghan border on 17 July 2021. TNMAC explains that, following the change of government in Afghanistan and "due to the military-political situation" on the border, and in the interests of protecting the safety of personnel, demining teams were moved away from the Shamsiddin Shohin district of the Khatlon region and redeployed to the Central region from August to November 2021 to focus on BAC.¹²¹ Demining teams were able to return to working in the Khatlon region from April 2022.¹²² NPA resumed clearance operations at the border in May 2022.¹²³

111 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

112 2019 Article 5 deadline Extension Request, p. 47.

113 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022 and Melissa Anderson, NPA, 1 July 2022.

114 Email from Muhabbat Ibrohimzoda, TNMAC, 12 August 2021.

115 Ibid.; and email from Melissa Andersson, NPA, 21 April 2021.

116 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022; and Melissa Anderson, NPA, 1 July 2022.

117 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

118 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

119 UST was not accredited for clearance in 2020. The 22,715m² of clearance attributed to UST by Tajikistan in 2020 are thought by Mine Action Review to represent technical survey.

120 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022; and Melissa Anderson 1 July 2022.

121 Ibid.; and email from Saodat Asadova, OSCE, 3 June 2022.

122 Email from Saodat Asadova, OSCE, 3 June 2022.

123 Email from Melissa Anderson, NPA, 1 July 2022.

A total of 22,829m² was cleared in 2021 which proved to contain no anti-personnel mines; this was in the Shamsiddin Shohin and Khovaling districts of the Khatlon province and the Sangvor district in DRS province.¹²⁴

Table 6: Mine clearance in 2021 by operator¹²⁵

Operator	Province	District	Area cleared (m ²)	AP mines destroyed	UXO destroyed
HDC MoD	GBAO	Darvoz	22,686	10	6
	Khatlon	Shamsiddin Shohin	*46,553	639	9
NPA	GBAO	Darvoz	59,253	11	60
	Khatlon	Khovaling	7,250	0	0
	DRS	Sangvor	6,345	0	0
	Khatlon	Shamsiddin Shohin	59,356	816	31
UST	Khatlon	Shamsiddin Shohin	4,645	0	0
Totals			206,088	1,476	106

* This figure includes an area of 4,589m² where no AP mines were detected.

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBBC (and in accordance with the latest extension granted by States Parties in 2019), Tajikistan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025.

An immediate challenge to achieving Tajikistan's extension request targets is lack of capacity. The request called for the mine action programme to double the number of deminers from 90 in 2019 to 180. By the end of 2021, MoD HDC, UST, and NPA together mustered 154 deminers. TNMAC has expanded the role of the Border Guard Forces, which used to support demining teams by providing security to operators working on the Tajik-Afghan border, and since 2019 it has involved them in survey and clearance. It also mobilised one demining team from the Committee of Emergency Situations and Civil Defence (CoES). However Tajikistan was looking to international donors to cover the non-salary costs and it remains unclear what additional capacity could be mobilised for clearance and in what period of time.¹²⁶ In 2021, UST's scope extended from survey to include clearance, following accreditation; a further step towards expanding national capacity.

In 2019, Tajikistan said it needed \$3 million a year to maintain the capacity it had at the start of the extension period but estimated it needed US\$33 million for costs of manual clearance alone to meet its extended Article 5 deadline.¹²⁷ TNMAC has received support from Norway and the OSCE¹²⁸ but overall funding has been heavily dependent on the US Department of State and TNMAC has acknowledged it needs to attract other donors.¹²⁹ Tajikistan conducted a workshop with other major

¹²⁴ Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

¹²⁵ Emails from Muhabbat Ibrohimzoda, TNMAC, 19 June and 25 August 2022; and Melissa Anderson, NPA, 1 July 2022.

¹²⁶ 2019 Article 5 deadline Extension Request, p. 22; and emails from Muhabbat Ibrohimzoda, TNMAC, 22 April and 12 August 2021.

¹²⁷ 2019 Article 5 deadline Extension Request, p. 52; Article 7 Report (covering 2019), Form D.

¹²⁸ In addition to funding provided to TNMAC to support three MoD HDC teams, the OSCE expected to provide €300,000 a year in bilateral funds for training until 2023. Email from Johan Dahl, OSCE Programme Office in Dushanbe, 9 April 2021.

¹²⁹ Additional information provided for Tajikistan's Article 5 deadline Extension Request, 3 August 2019, p. 7.

international donors in June 2019 in an effort to diversify its sources of support but by the end of the year had not received any additional funding.¹³⁰ As at June 2022, Tajikistan estimated that up to an additional US\$13.9 million of funding was required between 2022 and 2025, over and above resources currently available, to be able to meet the completion date.¹³¹

Tajikistan also does not yet know the full extent of the contamination it needs to address, though it has stated that, in accordance with its extension request, it aims to complete all required survey and re-survey of hazardous areas by the end of 2023.¹³² This seems overly ambitious given the significant decrease in survey between 2020 and 2021. Some of the minefields due to be surveyed by 2023 are located in remote, mountainous areas where conditions only permit 40 operational days a year. Furthermore, the existing estimate of SHAs along the Tajik-Uzbek border, covering 3.25km², is based on only partial access. Further survey and clearance are subject to agreement with Uzbekistan.¹³³

Online sources from 2021 indicate that a "joint Tajik-Uzbek commission for delimitation and demarcation of the mutual border" is active and that working groups met in August 2021 in Dushanbe and in the Uzbek city of Namangan in November 2021,¹³⁴ following discussions in May of the same year.¹³⁵ Mine Action Review has not been able to source further information about any progress made by the joint commission.

Tajikistan identifies several ongoing challenges for mine action across the country, including difficult terrain, harsh weather conditions, natural disasters such as rockfalls, avalanches and landslides, as well as dense vegetation. Tajikistan identifies a need for increased equipment and cross-country vehicles in order to fulfil the country's commitments under Tajikistan's APMBC Article 5 deadline extension by 2025.¹³⁶

TNMAC also highlights ongoing security challenges along the Tajik-Afghan border as a significant challenge to mine action, which continue to impede access to some of Tajikistan's most heavily mined districts and add a further element of uncertainty to the outlook for implementation.¹³⁷ This challenge was exemplified in 2021, when the need to deploy personnel away from the border led to a significant reduction in land release compared to 2020.

Table 7: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	0.21
2020	0.67
2019	0.54
2018	0.59
2017	0.62
Total	2.63

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Tajikistan has yet to develop comprehensive plans for tackling residual contamination. Tajikistan said in 2019 that it recognised the importance of the issue and had held preliminary discussions with the GICHD. In 2019, and again in June 2022, Tajikistan reported that it planned to hold a workshop with the GICHD to develop detailed plans and said it would incorporate them into its mine action strategy for 2021–25.¹³⁸ However, no further details have been made available on when this workshop may take place. The OSCE has supported the recruitment and appointment of an adviser for residual risk management, who took up post in March 2022, and is tasked with identifying improvements to the risk management of explosive hazards and to develop residual risk management guidelines to complement the NMAS.¹³⁹

In 2021, under the coordination of TNMAC, the activities of the four survey teams of UST were expanded to include manual clearance, after training, SOP updates, and accreditation. TNMAC plans to further expand UST's demining operations and to use their capacity to deal with any residual contamination after completion.¹⁴⁰

130 Roberts, "Final Evaluation of Support to the Tajikistan Mine Action Programme", p. 19.

131 Presentation by Muhabbat Ibrohimzoda, TNMAC, to the Intersessional Meetings, Geneva, 22 June 2022. In the presentation, TNMAC specified that an additional US\$13.9 million was required. However, a figure of US\$10.06 million was contained in Tajikistan's Statement on Article 5 Implementation to the 19MSP on 17 November 2021.

132 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

133 Presentation by Tajikistan on Article 5 deadline Extension Request, Geneva, 23 May 2019; and Article 7 Report (covering 2021).

134 Tajik-Uzbek border delimitation and demarcation commission meets in Uzbekistan", *Asia Plus*, 30 November 2021, at: <https://bit.ly/3zDDNzJ>.

135 "Uzbekistan and Tajikistan discuss demarcation of state border", *KUN.UZ News*, 22 May 2021, at: <https://bit.ly/3iSbky7>.

136 Presentation by Muhabbat Ibrohimzoda, TNMAC, Intersessional Meetings, Geneva, 22 June 2022.

137 Presentation by Tajikistan on Article 5 deadline Extension Request, Geneva, 23 May 2019; and email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

138 Additional information provided for Tajikistan's Article 5 deadline Extension Request, 3 August 2019, p. 8.

139 Emails from Saodat Asadova, OSCE, 3 June 2022; and Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

140 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.

ARTICLE 5 DEADLINE: 31 OCTOBER 2023

THIRTY-EIGHT MONTH EXTENSION REQUESTED TO 31 DECEMBER 2026

KEY DATA

**ANTI-PERSONNEL (AP)
MINE CONTAMINATION: HEAVY**

MINE ACTION REVIEW ESTIMATE

OVER 20 KM²

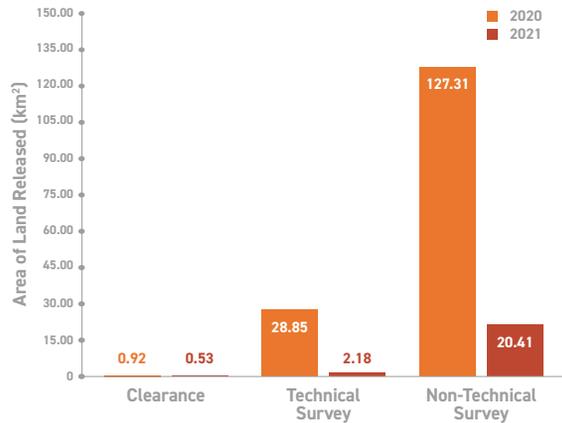
AP MINE
CLEARANCE IN 2021

0.53 KM²

AP MINES
DESTROYED IN 2021

19,002

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

Thailand acknowledged it would not be able to complete mine clearance within its Article 5 deadline and in March 2022 submitted a third extension request that would push its deadline back from the end of October 2023 to the end of December 2026. Land release results fell sharply as mine action operators switched their focus from non-technical to technical survey and clearance tackling densely contaminated areas in difficult terrain but it also more than doubled the number of mines cleared. COVID-19 pandemic pressures on the national budget and lower donor support led to a cut in the Thailand Mine Action Centre (TMAC) budget and the number of personnel deployed in the field in 2022. TMAC proposed to the Cambodian Mine Action Centre that they should follow up the 2020 pilot project for survey and clearance in disputed areas of their common border, and after receiving a favourable response suggested a number of areas for the operation.

RECOMMENDATIONS FOR ACTION

- Thailand should engage vigorously with Cambodia to reach agreement on resuming survey and clearance of hazardous areas in un-demarcated areas of their common border and creating a mechanism for sustained release of land to productive use.
- Thailand should conclude its review of revised national mine action standards and expedite their implementation by demining operators.
- Thailand should develop a policy on gender and a plan to implement it.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	8	High rates of cancellation of suspected contamination through non-technical survey in the last three years have successfully focused attention on the core contamination, slashing estimates of Thailand's outstanding mine problem from 360m ² at the end of 2018 to 40km ² three years later. The main unknowns now are some 340 areas in un-demarcated parts of the border with Cambodia where access has yet to be agreed.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	There is strong national ownership of Thailand's mine action programme which, since it started, has been largely funded from the budget of the armed forces. TMAC's military personnel conduct survey and clearance operations, supported by, and in good collaboration with, NGO clearance organisations. Regular meetings are convened between TMAC, relevant ministries, and all Humanitarian Mine Action Units (HMAUs) and clearance operators to discuss progress, challenges, and planning.
GENDER AND DIVERSITY (10% of overall score)	5	5	Women make up around 40% of TMAC's workforce, but it has no policy on gender and there were no women in the HMAU demining teams although there were female technical survey personnel working for civilian operators. Thailand's baseline survey, completed at the end of 2020 with the exception of some areas on the border with Cambodia, was based on inclusive community interviews in all areas where the survey was conducted. In areas where minority groups reside, they were also consulted.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	8	8	TMAC used the Arc Geographic Information System (GIS) to manage data which allows demining units to submit information online, enabling TMAC to verify data and make corrections. Norwegian People's Aid (NPA) and the Thai Civilian Deminer Association (TDA) deem data in Thailand to be accurate and reliable, with data in the national information management system accessible to clearance organisations. Thailand submits timely, comprehensive, and accurate Article 7 reports and has regularly updated APMB states parties on progress.
PLANNING AND TASKING (10% of overall score)	8	8	Thailand has a five-year strategic mine action plan through to the end of October 2023 that contains annual targets and details prioritisation for the release of mined areas. In March 2022, it submitted a request for an extension to its October 2023 Article 5 deadline setting out revised land release targets. These appear challenging for TMAC's current capacity and its ability to achieve them will depend on reaching agreement with Cambodia on access to disputed areas of their common border.
LAND RELEASE SYSTEM (20% of overall score)	8	8	TMAC is applying an efficient land release methodology. After cancelling a significant amount of the inflated SHA in its database through non-technical survey it is focusing on technical survey to identify actual contamination and on clearance. TMAC has worked since 2020 on revising its NMAS to bring them in line with IMAS, introduce standards for the use of mine detection dogs (MDD)/animal detection systems (ADS) and mechanical assets, and support more efficient operations, but as of August 2022 had still not finalised the updated standards.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	8	Thailand's land release in 2021 fell well short of the previous year which was expected as it progressed from Phase 1 of its five-year strategic plan focused on non-technical survey to Phase 2 focused on technical survey and clearance. But it also fell well short of the annual target, partly as a result of the constraints of COVID-19 restrictions on operations. This underscores the challenges facing TMAC tackling dense contamination in difficult terrain. Recognising it would be unable to complete clearance within its Article 5 deadline of October 2023, Thailand requested a 38-month extension in March 2022, but it will need Cambodia's cooperation for access to un-demarcated areas of the border if it is to meet the new deadline.
Average Score	7.7	7.7	Overall Programme Performance: GOOD

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- National Committee for Humanitarian Mine Action (NMAC)
- Thailand Mine Action Centre (TMAC)

NATIONAL OPERATORS

- Humanitarian Mine Action Units (HMAU 1–4) and HMAU TMAC
- Thai Civilian Deminer Association (TDA)

INTERNATIONAL OPERATORS

- Norwegian People's Aid (NPA)

OTHER ACTORS

- Golden West Humanitarian Foundation (Golden West)

UNDERSTANDING OF AP MINE CONTAMINATION

Thailand assessed it had anti-personnel mine contamination totalling 40km² at the end of 2021,¹ continuing the rapid reduction in affected areas of recent years. The end-2021 estimate was one third less than the estimate of 63km² a year earlier and compares with 218km² two years earlier. Confirmed and suspected hazardous areas (CHAs and SHAs) affected 18

districts in seven provinces, but one district, Buri Ram, had less than half a square kilometre of mined area (see Table 1). By the time Thailand submitted its request for an extension of its Article 5 deadline in March 2022, total remaining contamination had dipped further to just under 37km².²

Table 1: Anti-personnel mined area by province (at end 2021)³

Region	Province	CHAs	Area (m ²)	SHAs	Area (m ²)	Total CHAs/SHAs	Total area (m ²)
North	Phitsanulok	0	0	1	4,201,455	1	4,201,455
North-east	Ubon Ratchathani	48	6,357,856	1	331,104	49	6,688,960
	Si Sa Ket	51	4,090,448	4	2,297,434	55	6,387,882
	Surin	26	2,971,855	5	2,456,417	31	5,428,272
	Buri Ram	1	98,154	4	250,810	5	348,964
	Sa Kaeo	0	0	10	5,878,244	10	5,878,244
East	Trat	34	8,265,265	7	2,827,378	41	11,092,643
Totals		160	21,783,578	32	18,242,842	192	40,026,420

As further evidence of Thailand's progress, continuing survey has identified only small amounts of previously unrecorded hazardous areas. In 2020, Thailand added 1.8km² across seven provinces to the database. In 2021, the area added was less than 0.2km² found across three provinces (see Table 2).⁴

Table 2: Previously unrecorded CHAs identified in 2021⁵

Region	Province	Area (m ²)
North East	Sa Kaeo	12,578
	Buri Ram	9,791
East	Trat	165,204
Total		187,573

The rapid fall has been achieved mainly by cancelling large areas of the previously inflated estimate of contamination under the five-year, 2018–23 Humanitarian Mine Action

Plan. Phase 1 of the plan covering 2018–20 concentrated on cancelling SHAs through non-technical survey – in 2019 and 2020 TMAC cancelled a combined total of 256km². That leaves Thailand having to focus increasingly on technical survey and clearance in Phase 2 and in the three-year, two-month extension sought to its Article 5 deadline.

Of the 36.97km² contamination reported as of 1 March 2022, 19.67km² is CHA, 2.99km² is SHA, and 14.3km² is classified as "areas to be demarcated" on the Thai-Cambodian border. As a result, more than one third of Thailand's outstanding contamination (almost 39%) lies in areas where clearance can only occur with Cambodia's consent.⁶ Thailand reports 30 areas requiring demarcation spread across six provinces: Buri Ram, Sa Kaeo, Si Sa Ket, Surin, Trat, and Ubon Ratchathani.⁷

Thailand is also affected by explosive remnants of war (ERW), the result of conflicts on its borders with Cambodia, the Lao People's Democratic Republic (Lao PDR), Malaysia, and Myanmar.

¹ Article 7 Report (covering 2021), Form 4, Table 4-2.

² Article 5 deadline extension request, 31 March 2022, p. 4.

³ Article 7 Report (covering 2021), Form 4, Table 4-2.

⁴ Article 7 Report (covering 2021), Form 4.

⁵ Ibid.

⁶ Article 5 deadline Extension Request, 31 March 2022, p. 8. The area to be demarcated was bigger on 1 March 2022 than at the end of 2021 when TMAC recorded it as 14.04km². Email from Fit. Lt. Chotiboon Anukulvanich, Interpreter, (on behalf of the Director General), TMAC, 27 May 2022.

⁷ Article 7 Report (covering 2021), Form 4.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Thailand created the National Committee for Humanitarian Mine Action (NMAC) in 2000, chaired by the prime minister and with responsibility for overseeing the national mine action programme. The NMAC was reconstituted in May 2017, again with the prime minister as chairman, but had not been convened since 2017.⁸ The engagement of national leadership in the Committee was seen as important in facilitating policy direction and progress on issues affecting national security, notably regarding cooperation with neighbouring countries on clearing border areas.⁹ NMAC is tasked with developing policy guidance and mobilising resources from all sectors to support mine action to be able to complete clearance in the allotted timeframe.¹⁰ In reality, however, the Committee has no operational or strategic power and is purely procedural.¹¹

TMAC was established in 1999 under the Royal Thai Armed Forces Headquarters to coordinate, monitor, and conduct mine/ERW survey and clearance, risk education, and victim assistance coordination throughout Thailand.¹² While the roles and responsibilities within the sector are clear and coherent, TMAC has had to contend with limited funding and, as a military organisation, with regular rotation of personnel at all levels.¹³ A new Director of TMAC took office on 1 March 2021, the twelfth director since TMAC was established, although the new incumbent had previously served as Deputy Director of TMAC for two years, ensuring continuity of leadership and institutional expertise.

TMAC has also requested the Royal Thai Armed Forces Headquarters to allow personnel working within TMAC to remain in post for at least two years rather than be rotated out annually. To strengthen the capacity and experience of the Humanitarian Mine Action Units (HMAUs), it requested either to have the required training and qualifications before they assume the role or that personnel remain in post for at least two years. TMAC aims to have a 60:40 ratio of old personnel to new for the purposes of continuity and to retain knowledge.¹⁴ Training courses delivered by US Marine Corps Forces Pacific (MARFORPAC) under the US Department of Defense Humanitarian Mine Action Program have evolved to meet TMAC's operational requirements and currently include EOD Levels 1 to 3, technical survey, and mentorship to operational personnel from Golden West.¹⁵

TMAC has faced some challenges with the command structure of the HMAUs. With the exception of one of the HMAUs, HTMAC, personnel come from the Division-Level Force of the Royal Thai Army and the Royal Thai Navy, which means they must report both to TMAC and to their respective divisional command.¹⁶ TMAC has worked to inform the HMAUs, high-ranking generals, and the Chief of Defence Forces on the importance of mine action.¹⁷

The cost of TMAC (including personnel, equipment, operational costs, meetings, workshops, and trainings), is covered by the Thai government, through the Royal Thai Armed Forces Headquarters. Survey and clearance costs of the HMAUs are also nationally funded.¹⁸ TMAC's budget in 2021 amounted to THB262.6 million (approximately US\$7.73 million) but as a result of the impact of the COVID-19 pandemic on national finances, TMAC's budget for 2022 was subject to a 10% cut.¹⁹ This included approximately US\$5.4 million for personnel and US\$2.1 million for operations. Thailand also spent \$83,760 on equipment for operations, including drones for survey, handheld radios and high-performance mountain bikes.²⁰ Thailand has indicated that it would welcome international assistance for equipment, as well as additional survey teams.²¹

TMAC is reported to be very supportive of Norwegian People's Aid (NPA), the only international demining operator engaged in survey in the country. Staff from HMAU-2 and HMAU-3 are seconded to NPA, and the regional military command in HMAU-3 provided support to NPA to ensure quick and efficient introduction of mine detection dogs (MDDs) and their handlers from Cambodia to Thailand, as well as providing free and secure training areas for the MDDs and access to explosives/landmines for training purposes. TMAC also provides NPA with space at its office free of charge.²²

That said, strict regulations on who can handle explosives in Thailand mean that civilian entities are not permitted to conduct explosive ordnance disposal (EOD) during clearance.²³ However, non-governmental organisation (NGO) operators work with the full support from HMAUs and are permitted to partially uncover buried landmines, which HMAU support staff then excavate and destroy. Military EOD staff are embedded in technical survey teams and, for spot tasks, to conduct any required EOD.²⁴

8 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 18 August 2021.

9 Interview with Lt.-Gen. Prasopchai Kongburan, Director General, TMAC, in Geneva, 8 June 2017.

10 Five-Year Humanitarian Mine Action Plan, 1 November 2018–31 October 2023, p. 49.

11 Interview with Shushira Chonhenchob, NPA, Bangkok, 9 April 2019.

12 2017 Article 5 deadline Extension Request, p. 1.

13 Interview with Col. Terdsak Trirattanagool, Assistant Director General, TMAC, Bangkok, 15 May 2017.

14 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 15 August 2019.

15 Emails from John Ketsch, Thailand Country Director/Technical Advisor, Golden West, 1 June 2020 and 15 September 2022.

16 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 15 August 2019.

17 Interviews with Shushira Chonhenchob, NPA; and with Lt.-Gen. Sittipol Nimnuan, TMAC, in Bangkok, 9 April 2019.

18 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 February 2020.

19 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 May 2022.

20 Article 7 Report (covering 2021), Form 4.

21 Article 7 Report (covering 2020), Form 8.

22 Emails from Aksel Steen-Nilsen, NPA, 30 March 2020 and 31 March 2021.

23 Ibid.

24 Email from Aksel Steen-Nilsen, NPA, 6 August 2021.

While Thailand has not yet created a formal in-country platform, such as a National Mine Action Platform (NMAP), regular monthly meetings between TMAC, relevant ministries, and all HMAUs and clearance operators are convened to discuss progress and challenges.²⁵ TMAC conducts quality assurance (QA) every three months to see what challenges are faced by operators. Mid-year planning workshops are also organised, and an end-of-year seminar took place in September 2020, to evaluate and review humanitarian mine action in Thailand for the 2020 fiscal year and plan for the next fiscal year. As in previous years, deminer orientation took place in October, at the start of the new fiscal year, during which new TMAC personnel were brought up to date and HMAUs were given the opportunity to make suggestions or raise concerns.²⁶

ENVIRONMENTAL POLICIES AND ACTION

Thailand does not have a national mine action standard on the environment but the issue is on the sector's agenda. The annual NPA-TMAC-HMAU meeting in December 2021 included sessions dedicated to environmental issues and had a workshop on the subject of working on Environmental Assessment and Management (EMA) and environment training. Environment is not taken into consideration in planning and tasking unless tasks are in protected areas, in which case there are specific rules to be followed in terms of what can be cut or not.

NPA introduced an environmental policy and management system in its Thailand operation in 2022.²⁷ Thai Civilian Deminer Association (TDA) includes environmental protection in its operating practices, minimising damage to trees, plants and wild life.²⁸

GENDER AND DIVERSITY

TMAC does not have a policy or guidelines on gender and diversity. While TMAC attempts to diversify gender where applicable, challenges are posed by virtue of it being a military organisation. In 2021, approximately 40% of staff at TMAC headquarters were women,²⁹ unchanged from the previous two years. This is, however, an increase on the 27.5% of female staff reported in 2018.³⁰ Women held 30% of TMAC's managerial/supervisory level positions in 2020.³¹ In 2021, three of the nine TMAC staff in managerial positions were women, including a Rear Admiral serving as an advisor.³² However, there continued to be no women working within the HMAUs, as personnel are allocated from local forces/garrison which are considered combat force. Currently, the combat force of the Thai military does not have female combatants in such units.³³

Thailand's ongoing baseline survey of mine contamination is based on inclusive community interviews in all areas where the survey is conducted, during which women, girls, boys and men are consulted. In areas where they reside, minority groups are also consulted.³⁴ All these stakeholders are also present and consulted at the end of the survey, when the results are presented.³⁵

NPA has an organisational gender and diversity policy and all NPA survey teams are gender balanced. NPA encourages TMAC and the HMAUs to become more gender balanced. When NPA conducts non-technical survey or community liaison activities, all local people are invited to participate, including women and children, and where they reside, members of minority groups. Of NPA's 22 employees in Thailand, nine (41%) are women, including five (56%) women of nine in managerial and supervisory positions; and five women (29%) of the seventeen in operations positions.³⁶

During non-technical survey, TDA speaks to both men and women and employs both male and female local informants as part of its teams. There is equal access to employment for qualified women and men in TDA survey and clearance teams, including for managerial level/supervisory positions. As at March 2021, women held two (40%) of the five managerial level/supervisory positions at TDA, but there was only one woman (5%) in TDA's 19 operational positions.³⁷ TDA said that the low proportion of women in its field staff was due to field personnel often having to camp for several nights in remote areas.³⁸

25 Emails from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021; and Aksel Steen-Nilsen, NPA, 31 March 2021.

26 Emails from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 February 2020 and 1 July 2021.

27 Email from Aksel Steen-Nilsen, NPA, 25 April 2022.

28 Email from Amornchai Sirisai, Director, TDA, 19 April 2022.

29 Emails from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021 and 27 May 2022.

30 Email from Shushira Chonhenchob, NPA (on behalf of the TMAC Director General), 8 April 2019.

31 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

32 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 May 2022.

33 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 18 August 2021.

34 Emails from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 February 2020; and Aksel Steen-Nilsen, NPA, 30 March 2020.

35 Email from Aksel Steen-Nilsen, NPA, 30 March 2020.

36 Emails from Aksel Steen-Nilsen, NPA, 31 March and 4 July 2021.

37 Email from Amornchai Sirisai, TDA, 9 March 2021.

38 Ibid.

INFORMATION MANAGEMENT AND REPORTING

TMAC established a data centre to process land release, risk education, and quality management data. It manages the central database using Excel and Arc Geographic Information System (GIS) mapping.³⁹ ArcGIS Online is being used as part of a support package provided by the Department of Survey of the Royal Thai Armed Forces. ArcGIS assists TMAC and the HMAUs in data collection and dissemination, and mapping of SHAs and CHAs; and supports TMAC senior management in decision-making and operational planning.⁴⁰ The online system started in 2018 and became fully operational in 2019. HMAUs submit information to TMAC via the online system every 15 days, which allows for the verification of progress in the field and rectification of any issues.⁴¹

NPA and TDA deem data in Thailand to be accurate and reliable, with data in the national information management system accessible to clearance organisations.⁴² Thailand submits timely and accurate Article 7 transparency reports. Thailand was requested by the Sixteenth Meeting of States Parties to the APMBC to provide an updated work plan to the Committee on Article 5 Implementation by 30 April 2019,⁴³ which it duly submitted. The Five-Year Plan provides details on remaining challenges, outstanding mine contamination, the prioritisation system, and land release outputs.⁴⁴

PLANNING AND TASKING

Thailand's Five-Year Plan for 2018–23, published in April 2019, is divided into two phases. During the first phase, in 2019–20, the focus was on non-technical survey of outstanding SHAs, with the expected cancellation of more than 269km². During this stage, TMAC planned to release non-contaminated areas in the north-eastern region and parts of the eastern region, and gain a more precise information on the mined areas, including those along its border with Cambodia.⁴⁵ The 2021–23 Phase 2 focuses on technical survey and clearance of CHAs, based on the results of the national non-technical survey.⁴⁶

Thailand completed the first phase at the end of 2020, with the exception of survey of border areas where demarcation has yet to be agreed with Cambodia. In this phase, four provinces were declared mine-free: Chanthaburi, Chiang Mai, Chumphon, and Mae Hong Son.⁴⁷ During the second phase, TMAC expects to release a total of more than 90km² of land through technical survey and clearance. Thailand prepared the plan on the assumption that it would be able to resolve border demarcation issues with Cambodia allowing the HMAUs to access these areas.⁴⁸ TMAC and the Cambodian Mine Action Centre (CMAC) conducted a pilot project on the

border in March–April 2020. Thailand reported that in August 2021 it submitted a proposal for a new project to which CMA had responded favourably, and that it had then proposed areas for operations,⁴⁹ but as at August 2022 the two sides had not agreed on further projects.

Thailand cited delays in accessing the un-demarcated areas as a primary factor in its inability to complete clearance within its 31 October 2023 Article 5 deadline and in its decision to seek a third extension. The extension request submitted in March 2022 sets revised and highly ambitious annual land release targets. It proposed to complete release of all CHAs and SHAs except the areas for demarcation within the second extension request deadline. In 2022, it proposed to release 17.39km² through technical survey and clearance, and in the period 1 January–31 October 2023 to release a further 8.6km². It hoped to tackle the remaining 14.31km² of areas for demarcation in the course of the requested 38-month extension setting annual targets. These included almost 5.33km² of the most accessible areas in the first year, just under 5.15km² in the second, and more than 3.56km² of the more “complicated” areas in the remaining 14 months.⁵⁰

39 Emails from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019; and Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 February 2020.

40 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.

41 Ibid; and email from Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 February 2020.

42 Emails from Aksel Steen-Nilsen, NPA, 30 March 2020 and 31 March 2021; and Amornchai Sirisai, TDA, 21 March 2019.

43 Decisions on the request submitted by Thailand for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the APMBC, 16MSP, para. iii.

44 Five-Year Humanitarian Mine Action Plan, 1 November 2018–31 October 2023, p. 5.

45 Email from Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 February 2020; and Article 7 Report (covering 2018), Section 4.

46 Five-Year Plan, p. 13; and Statement of Thailand, Fourth APMBC Review Conference, Oslo, 27 November 2019 and APMBC 18th Meeting of States Parties, virtual meeting, 16–20 November 2020.

47 Statement of Thailand, APMBC 18th Meeting of States Parties, virtual meeting, 16–20 November 2020; and Article 7 Report (covering 2020), Form 4.

48 Five-Year Plan, p. 13.

49 2022 Article 5 deadline Extension Request, p. 9.

50 Ibid.; p. 43.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

TMAC drafted its first national mine action standards (NMAS) with NPA's support in 2010, formally adopting the 32 chapters in June 2012, the year Thailand initiated a land release process.⁵¹ Since then, the NMAS underwent modest revisions in 2015 and 2018 in support of Thailand's shift towards using the full toolbox of land release methodologies rather than solely relying on technical survey and full clearance.⁵² TMAC revised the NMAS on worksite planning in 2018 but the main change was the release of a new NMAS on the "Cancellation of SHAs by Evidence Based Survey", which has made it easier to cancel previously inflated, largely uncontaminated SHAs.⁵³ TMAC personnel have also been undergoing training on non-technical survey to improve speed and efficiency.⁵⁴

In 2020, TMAC, with the assistance of Golden West, began to revise both the NMAS and standing operating procedures (SOPs), in accordance with the latest international mine action standards (IMAS), to help ensure efficient operations and reflect changes to the operational environment,

technologies, and best practices. TMAC regularly consulted stakeholders and operators during the process⁵⁵ but its Director General's objective was to have NMAS that provided concise guidance particularly applicable to the national operating environment and which it expected to run to about 12 chapters. One key change is the addition of a chapter on residual risk. Many other amendments involved clarifying national requirements and removing operational practice details which are to be moved instead into national SOPs.

The revised NMAS and SOPs underwent field testing in 2021. The SOP revisions were adopted with the intention to review and revise them biannually. NMAS revisions have taken longer than expected. The draft was expected to be finalised by November 2022 and followed by a review by TMAC executive staff, HMAU commanders, and other stakeholders. This latter process was expected to last about three months.⁵⁶

OPERATORS AND OPERATIONAL TOOLS

All clearance in Thailand is conducted by the military due to national regulations on who can handle explosives and operate demining equipment. There are five HMAUs, supervised by TMAC with personnel from the Royal Thai Army and Royal Thai Navy, which carry out survey and clearance operations. In addition, there is one national operator, TDA, and an international operator, NPA, which carries out survey in support of the HMAUs.⁵⁷

TMAC's operational capacity increased significantly in 2021. The number of non-technical survey teams rose from seven in 2020 to eleven, technical survey teams rose from nine to fourteen, and the number of manual clearance teams rose from five (with 36 deminers) to 10 (with a total of 61). Pandemic pressures on Thailand's budget resulted in a 10% budget cut for TMAC in 2022 and it reported it was reducing the number of personnel deployed in the field by a similar proportion.⁵⁸

Table 3: TMAC Operational Capacity 2021⁵⁹

Operator	NTS		TS		Clearance		Dogs/handlers
	Teams	Personnel	Teams	Personnel	Teams	Personnel	
HMAU 1	1	6	4	16	1	4	1/2
HMAU 2	2	10	2	12	4	17	1/2
HMAU 3	3	21	3	27	2	28	1/2
HMAU 4	2	10	2	10	2	8	1/2
HTMAC	3	3	3	18	1	4	1/6
Totals	11	50	14	83	10	61	5/14

51 Thai National Mine Action Standards, 1 April 2015.

52 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.

53 Emails from Aksel Steen-Nilsen, NPA, 28 March 2019; and Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 15 August 2019.

54 Statement of Thailand, 17MSP, Geneva, 29 November 2018.

55 Article 7 Report (covering 2020), Form 4; and emails from Aksel Steen-Nilsen, NPA, 31 March 2021; and Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 1 July 2021.

56 Emails from John Kelsch, Golden West, 17 August and 15 September 2022.

57 Five-Year Mine Action Plan, p. 11; and email from Ft. Lt. Chotiboon Anukulvanich (on behalf of Lt.-Gen. Sittipol Nimnuan), TMAC, 27 February 2020.

58 Emails from Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 1 July 2021 and 27 May 2022.

59 Email from Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 May 2022.

Since the start of 2021, Thailand has been implementing Phase 2 of the five-year work plan, shifting TMAC's operational focus towards technical survey and clearance, although some non-technical survey will still be conducted. TMAC reported that it had initially planned to restructure its HMAU teams for Phase 2 but instead decided to train all existing personnel for non-technical and technical survey and EOD.⁶⁰ Training on these activities in 2021, as in previous years, was conducted jointly by US MARFORPAC and the TMAC in-house demining course, with support from Golden West, which also provided technical support for the training and mentoring for TMAC's EOD Level 3 technicians.⁶¹

NPA has supported TMAC operations since 2011, conducting land release through non-technical and technical survey.

NPA operated in 2021 with three non-technical survey teams (totalling six personnel) and three technical survey team (nine personnel), working jointly with personnel attached from HMAUs 2 and 3. NPA was assigned by TMAC to conduct technical survey in Surin province in 2022, planning to work with two MDDs which had already participated in a pilot project in 2021 and to deploy mechanical assets.⁶²

TDA, which has supported TMAC operations since 2014, had two teams and 20 staff available in 2021 who were trained to conduct non-technical survey, technical survey, and clearance of EOD spot tasks, as part of its "SIMA" (survey to identify mined areas) approach. However, TDA only had funding for operations in the first two months of 2021.⁶³

DEMINER SAFETY

TMAC reported that four personnel sustained injuries in 2021, including one from HMAU 2 and three from HMAU 3 but gave no further details. TMAC said accidents are subjected to two investigations: by the HMAU concerned and by TMAC headquarters.⁶⁴

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Thailand reported releasing a total of 23.11km² in 2021, close to 90% of it (20.41km²) cancelled through non-technical survey, along with 2.18km² released through technical survey and 0.53km² released through full clearance.⁶⁵ The total was well short of the 30.85km² Thailand had planned to release and the 127km² released in 2020, reflecting the evolution of Thailand's mine action programme into a new phase focused on technical survey and clearance and dealing with areas of dense contamination and difficult terrain. TMAC clearance operations destroyed 19,002 anti-personnel mines in 2021, more than double the number destroyed the previous year.⁶⁶

SURVEY IN 2021

Thailand tackled most of the suspected contamination most eligible for cancellation in the last two years which saw large areas released after non-technical survey (128km² in 2019 and 127km² in 2020). The lower level of cancellation in 2021, when operators cancelled 20.4km² (see Table 4), was expected going forward into Phase 2 of TMAC's five-year plan. Operations in 2021 were also affected by Covid-19 restrictions, including mandatory 14-day quarantine for anyone testing positive,⁶⁷ and by funding constraints which limited TDA operations to the first two months of the year.⁶⁸

Table 4: Cancellation through non-technical survey in 2021⁶⁹

Province	Area (m ²)
Phitsanulok	8,498,368
Surin	2,968,516
Sa Kaeo	126,188
Trat	8,816,420
Total	20,409,492

60 Article 7 Report (covering 2021), Form 4.

61 Ibid.; and email from John Kelsch, Golden West, 6 July 2022.

62 Email from Aksel Steen-Nilsen, NPA, 25 April 2022.

63 Email from Amornchai Sirisai, TDA, 19 April 2022.

64 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 May 2022.

65 Article 7 Report (covering 2021), Form 4, Table 4-1.

66 Ibid.; email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 May 2022.

67 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 May 2022.

68 Email from Amornchai Sirisai, TDA, 19 April 2022.

69 Article 7 Report (covering 2021), Form 4, Table 4-1.

Areas still requiring resurvey are located in contested border areas where TMAC has not had access. In 2021, survey operations added 0.2km² of previously unrecorded hazards to the database compared with 1.8km² the previous year.⁷⁰ However, TDA believes a risk remains that mined areas might go unrecorded in instances where non-technical survey is conducted by personnel without knowledge of mine-laying patterns and where no technical survey is conducted.⁷¹

The narrower focus of Thailand's mine action programme also saw a sharp decline in the area reduced by technical survey. In 2021, this amounted to 2.18km² in five provinces (see Table 5),⁷² down from 28.85km² in seven provinces in 2020, of which almost 25km² was reduced in a single province (Ubon Ratchathani), which did not feature in 2021 operations.⁷³

NPA, which had previously focused on non-technical survey concentrated in 2021 on technical survey. It conducted

two non-technical survey tasks, cancelling 1.5km² in Trad province, but invested most effort into technical survey in Surin and Buri Ram provinces where it reduced a total of 83,721m² in 2021 which led to destruction of 614 anti-personnel mines and three items of unexploded ordnance (UXO).⁷⁴

Table 5: Reduction through technical survey in 2021⁷⁵

Province	Area (m ²)
Phitsanulok	562,434
Buri Ram	689,573
Surin	50,656
Sa Kaeo	234,854
Trat	641,807
Total	2,179,324

CLEARANCE IN 2021

TMAC's clearance operations released less area than in 2020 but 19,002 anti-personnel mines compared with 9,335 the previous year, reflecting density of contamination in areas remaining to be cleared on the Cambodian border. TMAC is also operating in more remote locations that require more time for access and in difficult conditions.⁷⁶

Table 6: Mine clearance in 2021⁷⁷

Province	Area cleared (m ²)	AP mines destroyed*	ERW destroyed
Phitsanulok	170	9	4
Buri Ram	416,942	16,304	96
Surin	19,275	40	242
Sa Kaeo	12,578	642	5
Trat	76,882	2,007	534
Totals	525,847	19,002	881

* Includes mines destroyed in EOD spot tasks

ARTICLE 5 DEADLINE AND COMPLIANCE



70 Ibid., Form 4.

71 Email from Amornchai Sirisai, TDA, 9 March 2021.

72 Article 7 Report (covering 2021), Form 4.

73 Article 7 Report (covering 2020), Form 4 and Annex 1; and email from Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 1 July 2021.

74 Email from Aksel Steen-Nilsen, NPA, 25 April 2022.

75 Article 7 Report (covering 2021), Form 4, Table 4-1.

76 Email from Ft. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 May 2022.

77 Article 7 Report (covering 2021), Form 4, Table 4-1.

Under Article 5 of the APMBC (and in accordance with the second extension—for five years less one day—granted by States Parties in 2017), Thailand is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 October 2023. Until the start of 2021, Thailand was still committed to completing clearance by this deadline.⁷⁸ By the end of that year, however, it acknowledged it would need to extend its Article 5 deadline again⁷⁹ and in March 2022, it submitted a request for an extension of three years and two months until 31 December 2026.

Thailand has made significant progress in the period of its second extension. The total area released by full clearance in the last three years is a modest 2.5km² (see Table 7), but by 2022, as a result of accelerating cancellation through non-technical survey, it had released more than 320km² of mined areas; declared four provinces (Chanthaburi, Chiang Mai, Chumphon, and Mae Hon Son) as clear; and destroyed more than 40,000 anti-personnel mines.⁸⁰ Progress in the coming years promises to be much slower as TMAC works on areas of dense contamination, tackles remote locations and often rugged terrain, and comes up against political barriers to accessing un-demarcated border areas. Achieving the goals of the third extension request may therefore prove challenging.

Land release results in 2021 underscore the challenge. Thailand had planned to release 31km² but in the event achieved 23km², held back partly by the limitations imposed on operations by COVID-19 measures, but also the much denser levels of contamination to be tackled. Thailand planned to release almost 17.39km² in 2022 through technical survey and clearance, and almost 8.60km² in the first 10 months of 2023, accounting for all outstanding CHA and SHAs on undisputed territory by the end of October 2023.⁸¹ Those targets looked ambitious even if TMAC had the same capacity at its disposal in 2022–23 as in 2021, but cuts in Thailand's budget meant TMAC expected to deploy fewer people in the field in 2022,⁸² putting a question mark against its prospects of meeting those targets.

Thailand's request for a 38-month extension to its Article 5 deadline was designed to allow it complete survey and clearance of 14.31km² located in un-demarcated areas of its

border with Cambodia but the outlook for access to those areas is a key uncertainty. The Thailand-Cambodia General Border Committee (GBC) set up to resolve demarcation issues has previously agreed that "All de-mining operations along the border areas between Thailand and Cambodia shall be without prejudice to the rights of Thailand and Cambodia with regard to the land boundary under international law."⁸³ Progress, however, has been slow. The GBC was due to convene virtually in February 2022 but the meeting was postponed at the request of Cambodia, which preferred an in-person meeting.⁸⁴

TMAC and CMAC first agreed to conduct a pilot project for border mine clearance in September 2018.⁸⁵ Since then, they have carried out one project in March–April 2020 that resulted in release of 95,000m² by Thailand and destruction of two items of UXO but no mines. Any possibility of an immediate follow-up was blocked by the COVID-19 pandemic. However, Thailand reported in its Article 5 deadline extension request that as of March 2022 Cambodia had requested it to stop work in 34 operational areas covering 14.31km² in six provinces.⁸⁶

TMAC reported that it had contacted CMAC at the end of August 2021 to propose a new joint project and that CMAC responded at the end of September that it "strongly welcomes and supports" the initiative. Thailand said it had subsequently proposed border areas for cooperative action at an unspecified date and was awaiting a response.⁸⁷ Any prospect of Thailand completing clearance of what it identifies as its remaining mined areas now depends on reaching agreement with Cambodia on border access.

Table 7: five-year summary of AP mine clearance

Year	Area cleared (m ²)
2021	525,847
2020	917,924
2019	95,278
2018	528,902
2017	427,983
Total	2,495,934

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

TMAC's mandate covers only formal SHAs and CHAs. Any explosive ordnance (including landmines) found outside of SHAs and CHAs comes under the responsibility of the police. Once Thailand fulfils its Article 5 obligations, TMAC will act as the information and knowledge centre for mines and UXO. If previously unknown mine contamination (i.e. residual contamination) is discovered following completion, the local mine risk education network will inform the local authorities, community leaders, and relevant government agencies. If the area in question is under the jurisdiction of the military, combat engineers will address the contamination. If located in other areas, police EOD teams will take the lead in addressing the contamination.⁸⁸

78 Statement of Thailand, 18th Meeting of States Parties, virtual meeting, 16–20 November 2020.

79 Statement of Thailand, 19th Meeting of States Parties, virtual meeting, 17 November 2021.

80 Statement of Thailand, Intersessional Meetings, Geneva, 20 June 2022.

81 2022 Article 5 deadline Extension Request, p. 8.

82 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, 27 May 2022.

83 Article 7 Report (covering 2021), Form 4, p. 10.

84 Ibid., Form 4, p. 13.

85 Article 7 Report (covering 2018), Section 8.

86 2022 Article 5 deadline Extension Request, pp. 8 and 36.

87 Article 7 Report (covering 2021), Form 4, p. 13.

88 Email from Flt. Lt. Chotiboon Anukulvanich (on behalf of the Director General), TMAC, on 27 February 2020.

ARTICLE 5 DEADLINE: 31 DECEMBER 2025

INTERIM EXTENSION: NOT ON TRACK TO COMPLETE CLEARANCE

KEY DATA

**ANTI-PERSONNEL (AP)
MINE CONTAMINATION: HEAVY**

NATIONAL AUTHORITY ESTIMATE

140.6 km²

AP MINE
CLEARANCE IN 2021

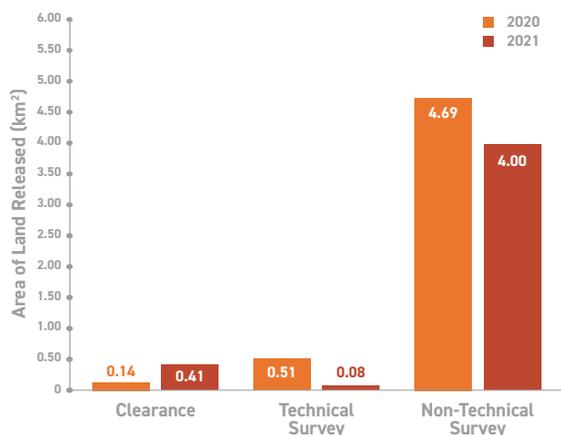
0.41 km²

AP MINES
DESTROYED IN 2021

14,176

(INCLUDING 103 IMPROVISED
ANTI-PERSONNEL MINES)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): **LOW**

KEY DEVELOPMENTS

Türkiye (formerly known as Turkey) published a strategic plan for 2020–25 setting out five broad goals, including clearance of all mined areas, but this was superseded in February 2021 by its request for a three-year and nine-month extension of its Article 5 deadline until the end of 2025, which was granted at the Anti-Personnel Mine Ban Convention (APBMC) 19th Meeting of States Parties (MSP) in November 2021. This extension provides for non-technical survey of all mined areas, which Türkiye expects to result in cancellation of up to a quarter of contamination estimates, as at the date of the request. It also provides the basis for another extension request preparing for completion of Türkiye's Article 5 obligations. The Turkish Mine Action Centre (TURMAC) has issued contracts for Phase 3 survey and clearance along the Eastern Border and work began in June 2021.

RECOMMENDATIONS FOR ACTION

- Alongside plans for non-technical survey and expectations of substantial cancellation of hazardous areas, Türkiye should accelerate clearance, which is unacceptably low.
- Türkiye should provide details of plans to address the small amount of contamination reported in non-border areas.
- Türkiye should plan, implement, and report on mine clearance in territories it controls in northern Cyprus and northern Syria.
- Türkiye should set out plans to promote gender and inclusion in mine action.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	Türkiye has good knowledge of the extent of its mine contamination and has, in theory, confirmed all hazardous areas but now plans to refine that understanding by non-technical survey of all mined areas. It expects that this will reduce the area that actually needs clearance by up to 40%.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	6	Since 2015, Türkiye has developed an institutional framework for mine action under the control of the military and since 2018 has embarked on significant expansion of its operational capacity, although management has suffered from high staff turnover.
GENDER AND DIVERSITY (10% of overall score)	4	4	Türkiye makes no reference to gender and diversity in its 2020–25 strategic plan or the Article 5 deadline extension request submitted in early 2021. Military regulations prevent employment of women in military demining teams but TURMAC says women are included in survey and community liaison teams and in non-operational roles. It claims that it takes gender into account in planning new projects and has received training in gender mainstreaming from a United Nations Development Programme (UNDP) gender specialist during 2020 and 2021, with plans for training of more personnel in 2022.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	7	TURMAC operates an Information Management System for Mine Action (IMSMA) database which became operational in 2018. It supported a desktop review of contamination data in 2019 that led to a significant adjustment in estimates of hazardous areas. Türkiye submits comprehensive and timely Article 7 reports.
PLANNING AND TASKING (10% of overall score)	7	7	In 2020, Türkiye published a long-awaited strategic plan for 2020–25 that set out five main goals, including becoming mine free by 2025. This was superseded in February 2021 by Türkiye's request for a three-year and nine-month extension to its Article 5 deadline in order to conduct non-technical survey of all hazardous areas with a view to establishing a clear baseline from which to plan how to complete clearance.
LAND RELEASE SYSTEM (20% of overall score)	7	7	Türkiye published 44 chapters of mine action standards in 2019 which it prepared in consultation with UNDP and the Geneva International Centre for Humanitarian Demining (GICHD). Türkiye updated five areas of the National Mine Action Standards (NMAS) in 2021 including chapters on accreditation, non-technical survey, and mechanical demining.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	4	Türkiye has expanded its military demining capacity since 2018 but land release had continued to decline in 2019 and 2020. While clearance in 2021 saw a significant increase compared to 2020, it was still the second lowest amount in the last five years.
Average Score	6.0	6.0	Overall Programme Performance: AVERAGE

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- Ministry of National Defence (MoND)
- Turkish Mine Action Centre (TURMAC)

NATIONAL OPERATORS

- Altay (national sub-contractor under Denel MECHEM and The Development Initiative (TDI))
- Turkish Armed Forces including: Land Forces Military Demining Units (ÖMAT), Gendarmerie Forces Military Demining Units (JÖMAT) and Military Counter-Improvised Explosive Device (IED)/Mine teams.

INTERNATIONAL OPERATORS

- Denel MECHEM (up to 2020)
- The Development Initiative (TDI) (from 2021)
- RPS Explosive Engineering Services (Quality Assurance (QA) and Quality Control (QC) of the European Union (EU) project)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

Türkiye reported it has 3,804 mined areas covering more than 140km² at the end of 2021,¹ down from 145km² a year earlier (see Table 1). Most contamination (85%) is along Türkiye's 909km-long border with Syria where land release accounted for 95% of the reduction in contamination in 2021. Estimated mined area on its borders with Armenia and Iraq remained the same as a year earlier.² A total of

198,146m² was released along the border with Iran, while in non-border areas, the estimate of confirmed hazardous areas (CHAs) went up by 320,416m².³ Aside from this increase, no new areas of previously unrecorded anti-personnel mine contamination were added to Türkiye's information management database in 2021.⁴

Table 1: Anti-personnel mined area by region (at end 2021)⁵

Region	CHAs	Area (m ²)	AP mines	AV mines
Syrian border	1,519	119,202,073	409,884	193,186
Iraqi border	874	2,842,935	78,917	0
Iranian border	449	14,899,893	104,270	0
Armenian border	43	1,097,077	20,275	0
Non-border areas	919	2,544,911	33,798	0
Total	3,804	140,586,889	647,144	193,186

AP = Anti-personnel AV = Anti-vehicle

Türkiye reports mines were first laid along the Syrian border in the 1950s to prevent smuggling and later in south-eastern regions for military security.⁶ Mines inside the country were laid around military installations during the 1984–99 conflict with the Kurdistan Workers' Party (Partiya Karkerên Kurdistan, PKK) in the south-east of the country. These are mostly in Ardahan, Batman, Bingöl, Bitlis, Diyarbakir, Hakkari, Mardin, Şırnak, Siirt, and Tunceli.⁷ According to Türkiye, these mines, which were marked and fenced, have been progressively cleared since 1998.⁸ The mines on Türkiye's other borders were mostly laid in 1955–59 and on some sections of the border with Armenia, Iran, and Iraq in 1992–95.⁹ Türkiye reports that its western borders with Bulgaria and Greece, as well as the border with Georgia, are mine-free.¹⁰

In addition to mines laid by its security forces, Türkiye also reports the presence of mines of an improvised nature that it says were emplaced by non-State armed groups, rendering clearance more challenging.¹¹ Improvised explosive devices (IEDs) are mostly remote controlled or victim-activated pressure plate (in which case they fall within the definition of an anti-personnel mine under the APMBC). Explosive charges are mostly ammonium nitrate supported with plastic explosives.¹²

The number of mined areas along the Iraqi border, as well as part of the Iranian border, is an estimate, as, according to Türkiye, precise calculation is hampered by armed group activities and the presence of unconfirmed mined areas. In addition, fewer mines are expected along the Syrian border than indicated because of detonations by smugglers and as a result of wildfires.¹³

In its most recent Article 5 deadline extension request, Türkiye reports that, prior to TURMAC's establishment in 2015, some demining activities conducted solely by military demining units were cleared with a 90% to 95% mine detection/destroy rate and there was no quality assurance (QA)/quality control (QC) process in place before handover of the cleared area.¹⁴ In these mined areas cleared solely by the military, and where there was an unacceptably low detection rate and no QA/QC, TURMAC must ensure that re-clearance/QC is conducted, to ensure that any anti-personnel mines missed previously are discovered and destroyed. In 2021, the APMBC Committee on Article 5 Implementation observed that Türkiye was still in the process of identifying the precise perimeter of mined areas and noted that the Committee "welcomed" updates from Türkiye on this issue.¹⁵

1 Article 7 Report (covering 2021), Form D.

2 Email from Maj. Zamil Koptekin, Deputy Director, Quality Management Department, TURMAC, 4 May 2021; and Article 7 Report (covering 2021), Form D.

3 Article 7 Report (covering 2021), Form D.

4 Email from Ömer Burga Gönen, Planning Expert, TURMAC, 8 August 2022.

5 Article 7 Report (covering 2021), Form D.

6 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 1.

7 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

8 Response to Landmine Monitor questionnaire by Elif Comoglu Ulgen, Head, Disarmament and Arms Control Department, Ministry of Foreign Affairs, 14 July 2008; and email from Maj. Can Ceylan, TURMAC, 11 July 2019.

9 Article 7 Report (covering 2019), Form D; 2013 Article 5 deadline Extension Request, pp. A-1 and A-5.

10 2021 Article 5 deadline Extension Request, p. 7.

11 2013 Article 5 deadline Extension Request, p. A-5.

12 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

13 Article 7 Report (covering 2015), Form C.

14 2021 Article 5 deadline Extension Request, p. 11.

15 'Preliminary Observations on the Implementation of Article 5 by Türkiye', Committee on Article 5 Implementation, Anti-Personnel Mine Ban Convention (APMBC) Intersessional Meetings, Geneva, 20–22 June 2022.

NORTHERN CYPRUS

Türkiye's original Article 5 clearance deadline was 1 March 2014. In 2013, States Parties granted Türkiye an eight-year extension until 1 March 2022, for clearance of mines in Türkiye, but Türkiye did not request additional time for clearance of the areas it controls in northern Cyprus¹⁶ (see the report on Cyprus for further information). This puts into question its compliance with Article 5 of the APMB. Türkiye's extension request, submitted in February 2021, makes no reference to Northern Cyprus.¹⁷

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Türkiye adopted Law No. 6586 establishing a national mine action centre under the Ministry of National Defence (MoND) in February 2015.¹⁸ Its director reports directly to the Undersecretary of the MoND.¹⁹ The law gave the centre, now known as TURMAC, responsibility for the clearance to humanitarian standards of mines and/or unexploded ordnance (UXO).²⁰ It also has responsibility to elaborate policies for clearance; to plan and steer related activities and to monitor their implementation; and to carry out the necessary coordination and cooperation with domestic and foreign institutions.²¹ To strengthen project management, TURMAC planned to establish project offices in the regions where it is operational.²² In 2021, a Project Office was established by the United Nations Development Programme (UNDP) for the Eastern Borders Mine Clearance Project (EBMCP) Phase 3. TURMAC asserts that, additionally, further project offices can be established by TURMAC if needed to support clearance operations in Mardin province, bordering Syria.²³

Türkiye reports that the formation of TURMAC has led to significantly increased mine action activities and clearance,²⁴ but a high turnover of senior staff, including the director, has also had a negative effect on the national mine action programme. In September 2020, the government appointed Colonel Hasan Soydaş as acting director. He became the fourth person to lead TURMAC in five years.²⁵ Brigadier-General Mehmet Zeki Eren²⁶ was appointed Director of TURMAC on 24th August 2021; the first TURMAC Director to hold the rank of General.²⁷

In 2021, the Committee on Article 5 Implementation observed that Türkiye's request submitted to the 19MSP contained an evidence-based and costed plan for clearance and survey for 2020 to 2025 and that Türkiye had further reported having a National Mine Action Strategy in place for those years. By 30 April 2023, Türkiye is expected to produce an updated detailed work plan for the remaining period covered by its extension.²⁸

Mine action in Türkiye is mostly financed by the state. TURMAC and the Turkish Armed Forces demining units are financed entirely by the government.²⁹ In 2021, Türkiye reported that the MoND had approved allocating approximately TRY85 million from the national budget for humanitarian mine action between 2022 and 2026. TRY35 million of this budget will be used for capacity development of military units and the rest for demining.³⁰ In its Article 7 report covering 2020, Türkiye stated that it would allocate an annual budget of TRY53.2 million (approximately US\$6 million) for mine action in 2020–25.³¹ As such, this TRY85 million to cover four years of mine action until 2026 would appear to represent a decrease in allocation of government funding. That said, Türkiye will also allocate €2.12 million to fund the fourth component of the Eastern Borders Mine Clearance Project, while the European Union (EU) is expected to contribute €18.5 million.³² The MoND has pledged an additional TRY25 million for 2022 to 2023 to conduct mine clearance in Mardin province, bordering Syria.³³

16 2013 Article 5 deadline Extension Request.

17 2021 Article 5 deadline Extension Request.

18 Article 7 Report (covering 2014), "Workplan for mine clearance activities", Annex 1; and Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report, Form A, 2015.

19 Presidency Decree No. 1 of 10 July 2018; Article 7 Report (for 2018), Form A; and Statement of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018.

20 Article 7 Report (covering 2014), "Workplan for mine clearance activities", Annex 1; and CCW Amended Protocol II Article 13 Report, Form A, 2015.

21 Ibid.

22 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 8.

23 Email from Ömer Burga Gönen, TURMAC, 5 September 2022.

24 Article 7 Report (covering 2020), Form A.

25 Ibid.

26 'Demining improves security along Turkey's eastern border', *ReliefWeb*, 2 October 2021, at: <https://bit.ly/3S3FY6W>.

27 Article 7 Report (covering 2021), Form D.

28 "Preliminary Observations on the Implementation of Article 5 by Türkiye", Committee on Article 5 Implementation, Intersessional Meetings, Geneva, 20–22 June 2022.

29 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.

30 Article 7 Report (covering 2021), Form D.

31 Article 7 Reports (covering 2019 and 2020), Form A.

32 Article 7 Report (covering 2021), Form D.

33 Article 7 Report (covering 2020), Form A.

The Mardin project is the first mine clearance project to be tendered by the Turkish Government since the establishment of TURMAC in 2015. It encompasses 45 minefields containing 27,614 mines across 1.7km².³⁴ It will be managed by TURMAC and implemented by a private contractor.³⁵ Private contractors will also be instrumental in Türkiye's plans to conduct non-technical survey of all known (3,692) minefields across fourteen provinces during the new extension period until the end of 2025. This project will be managed by UNDP and implemented by TURMAC and private contractors.³⁶

Türkiye highlights various capacity building efforts in recent years. As part of the first two phases of the EBMCP between 2016 and 2019,³⁷ Türkiye describes how "TURMAC capacity development and continuity efforts" were implemented "in partnership with the UNDP and GICHD (the Geneva International Centre for Humanitarian Demining), as well as other national partners."³⁸ UNDP outlines how Phase 3 of the project will also provide training for TURMAC personnel in areas such as quality management (QM), use of mine detection dogs (MDDs), and technical survey operations including data management and analysis. This follows training provided to more than 500 personnel from TURMAC,

the Land Forces, and the Ministry of Interior under the previous two phases.³⁹

Personnel from TURMAC undertook various training courses in 2021. In collaboration with UNDP, eight TURMAC personnel (one female, seven male), attended International Organisation for Standardisation (ISO) 9001 Lead Auditor training. One female TURMAC member of staff attended Information Management System for Mine Action (IMSMA) training, and 23 TURMAC personnel (8 women, 15 men), attended training on Gender Mainstreaming Awareness Raising, with further training on gender planned for 2022.⁴⁰ TURMAC reports that, to date in 2022, within the scope of EBMCP Phase 3 project in collaboration with UNDP and GICHD, a total of 20 personnel (4 female and 16 male) from TURMAC and Military Demining Units have attended technical survey training and 23 personnel (1 female and 22 male) from TURMAC and Military Demining Units have attended QM training. Additionally, 5 TURMAC personnel (3 female and 2 male) attended a Geographic Information System (GIS) course and 3 TURMAC personnel (all male) attended MDD accreditation methodology training.⁴¹

ENVIRONMENTAL POLICIES AND ACTION

TURMAC outlines how, in order to minimise potential environmental harm from clearance, mines found during clearance activities are transported to a central area for destruction. This central destruction area is determined according to international standards, including considerations such as proximity to water resources and agricultural land.⁴²

It is not known whether Türkiye has a national mine action standard on environmental management and/or a policy on environmental management.

GENDER AND DIVERSITY

Türkiye did not address gender and diversity in its 2021–25 strategy or in the Article 5 deadline extension request submitted in February 2021. The APMBC Committee on Article 5 Implementation noted this omission in its preliminary observations on Türkiye's extension request and said it would welcome additional information on efforts to establish a baseline of contamination through inclusive consultations with women, girls, boys and men.⁴³ This was reiterated in 2021, when the Committee observed that Türkiye had not reported updated information on any such efforts. The Committee also noted that Türkiye had not reported on its efforts to ensure consideration of gender, age, or disability in mine action nor how it takes the diverse needs and experiences of people in affected communities into account in implementation of Article 5.⁴⁴

In a statement to the 2021 Intersessional meetings, Türkiye said gender balance is taken into consideration in all mine action activities. It noted that although military demining units do not employ any women, civilian contractors are advised to hire female personnel and that 45% of TURMAC's personnel are women.⁴⁵ A UNDP gender specialist also provided training on

34 Article 7 Report (covering 2021), Form D.

35 Presentation by Capt. Mustafa Torun, Senior Planning Officer, TURMAC, Intersessional Meetings, Geneva, 22 June 2022.

36 Ibid.

37 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, in Vienna, 20 December 2018; Article 7 Report (covering 2017), Form A; Statement of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018; and Article 7 Report (covering 2019), Form A.

38 Article 7 Report (covering 2021), Form I.

39 UNDP, "Demining improves security along Turkey's eastern border", Press release, 28 September 2021, at: <https://bit.ly/3BnxD8k>.

40 Article 7 Report (covering 2021), Form D.

41 Email from Ömer Burga Gönen, TURMAC, 5 September 2022.

42 Ibid.

43 Preliminary Observations, Committee on Article 5 Implementation, Intersessional Meetings, Geneva 22–24 June 2021.

44 Committee on Article 5 Implementation, Preliminary Observations on the Implementation of Article 5 by Türkiye, Intersessional Meetings, Geneva, 20–22 June 2022.

45 Turkey statement to the APMBC Intersessionals, 22–24 June 2021.

gender mainstreaming for 24 TURMAC staff in 2020,⁴⁶ and a further 23 TURMAC staff (8 women, 15 men) in 2021. TURMAC has planned to make this training available again in 2022.⁴⁷ Türkiye also reports it is strengthening efforts to disaggregate data by age and gender and that demining projects are designed to promote equality and combat discrimination.⁴⁸

TURMAC says national standards closely follow International Mine Action Standards (IMAS) on gender and that the issue is considered in the preparation of new project documents. Survey and community liaison teams include women to facilitate access and participation by all groups.⁴⁹

INFORMATION MANAGEMENT AND REPORTING

TURMAC installed IMSMA with support from the GICHD in 2017, and personnel from TURMAC and the armed forces have been trained in its use.⁵⁰ Türkiye reported the system contains all minefield and mine victim data and is used for all reporting and documentation.⁵¹ TURMAC conducted information management training for new personnel and for military demining units.⁵²

Türkiye has submitted Article 7 transparency reports annually that are both timely and which provide a comprehensive review of plans and performance.

PLANNING AND TASKING

Türkiye states that its mine action programme is intended to achieve humanitarian goals and boost security by developing modern integrated border management on its eastern and southern borders.⁵³ In 2020, TURMAC released a 12-page Strategic Mine Action Plan through to the end of 2025 setting out a vision of Türkiye becoming mine-free by 2025. It estimated the cost of completion at about US\$332 million, to be financed by the national budget and international sources. The plan identified five goals:⁵⁴

- to clear all of the emplaced anti-personnel mines in Türkiye
- to strengthen national capacity and ensure its sustainability
- to reduce the number of mines held in depots for training
- to provide Mine Risk Education and support mine victims; and
- to develop coordination and cooperation with national and international organisations related to mine action.

With respect to the third goal of reducing the number of mines held in depots for training, Türkiye revised this goal in 2021 and stated that it will, instead, maintain its number of retained mines to implement testing, development, and training, including of MDDs.⁵⁵ In June 2021, the Gendarmerie General Command started to provide clearance training, doubling the number of training centres where Türkiye will allocate anti-personnel mines for training purposes.⁵⁶

TURMAC has prioritised its mine clearance activities according to four levels as follows:

Level 1: Lands with minefields along the southern and eastern borders of Türkiye, which prevent the establishment of new border surveillance technology and infrastructure (e.g. watchtowers, patrol roads).

Level 2: Interior lands with minefields, posing a danger to inhabitants.

Level 3: Lands requested to be cleared by governmental organisations.

Level 4: Disputed lands along the borders and interior parts of Türkiye, belonging to private owners.⁵⁷

46 Email from Mark Frankish, Chief Technical Adviser, Demining and Increasing Border Surveillance Capacity at the Eastern Border, UNDP, 24 May 2021.

47 Article 7 Report (covering 2021), Form D.

48 Preliminary Mid-term Assessment, Türkiye, Status of Implementation – Victim Assistance, Committee on Victim Assistance, Intersessional Meetings, 20–22 June 2022.

49 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

50 Statements of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019; and on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018; email from Maj. Can Ceylan, TURMAC, 11 July 2019; and Article 7 Report (covering 2018), Form A.

51 Article 7 Report (covering 2019), Form A.

52 Ibid.

53 Article 7 Report (covering 2020), Form A.

54 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, pp. 7–8, 10.

55 Article 7 Report (covering 2021), Form C.

56 Ibid.

57 Article 7 Report (covering 2021), Form D.

In February 2021, Türkiye requested an extension of its Article 5 deadline for three years and nine months until the end of December 2025, setting out specific aims and timelines. Türkiye aims in particular to use the time to complete non-technical survey of all 3,483 CHAs with a view to producing baseline data from which to prepare plans for completing mine clearance. TURMAC is expected to conduct non-technical survey on 332 CHAs and to issue commercial contracts for survey of the remaining 3,502 CHAs. Each hazardous area is due to undergo a desk assessment followed by a field visit in accordance with standard non-technical survey methodology. Türkiye expects non-technical survey will result in cancellation of around 40km² of mined area.⁵⁸

Türkiye has indicated that, during the latest extension period, it will address 183 mined areas measuring 10.7km² through mine clearance, including 27 mined areas measuring just over 1km² to be addressed as part of the Mardin Province Clearance Project in the period 2022 to 2023, 96 minefields measuring 4.2km² located in four Eastern border provinces as part of Phase 3 of the EBMCP project in 2022–25, and 60 mined areas measuring 5.4km² in areas located on the Iraqi and Syrian borders.⁵⁹

BORDERS WITH IRAQ AND SYRIA

Türkiye's 2013 Article 5 deadline extension request had projected completing clearance of the Syria border by the end of 2019.⁶⁰ Turkish officials have described the Syria border as Türkiye's easiest clearance task because the terrain is flat and has experienced minimal mine displacement due to environmental factors. Furthermore, the minefields are mostly marked and fenced and well-known to local populations. Türkiye, however, was held back by the Syria conflict⁶¹ and has made little progress clearing the border.

Clearance operations underway since 2018 have focused on Hatay and Kilis provinces.⁶² The Strategic Plan for 2020–25 said Turkish demining assets would clear a total of around 3.4km² in Gaziantep, Hatay, Kilis, Mardin, Şanlıurfa, and

Şırnak provinces on the Syrian border at a cost of TRY55 million (US\$8 million) funded from the national budget.⁶³ In Mardin province, the MoND plans to clear 27 areas covering nearly 1.06km² between 2021 and 2023.⁶⁴

EASTERN BORDERS

Türkiye's Eastern Border Mine Clearance project (EBMCP), which started on the Armenian border, is continuing southwards to the borders with Azerbaijan, Iran, and Iraq.⁶⁵ The project is supervised by Turkish authorities and implemented in a joint project with UNDP,⁶⁶ which is managing and quality assuring the demining.⁶⁷ Denel MECHEM (MECHEM) was awarded a contract to conduct demining as part of a consortium in which national operators would be subcontracted by the company.⁶⁸

Phase 1 of the project, implemented between June 2016 and the end of 2017,⁶⁹ released a total of almost 3.3km² of mined area (much less than the 13.5km² envisaged in the Article 5 deadline extension request), destroying in the process 25,667 anti-personnel mines.⁷⁰ Phase 2, which started behind schedule in June 2018 and was completed in December 2019,⁷¹ resulted in release of close to 1.7km² of land, bringing the total area released in the first two phases to 4.8km².⁷²

Phase 3 has four components: clearing 4.24 km², building TURMAC capacity, mine risk education to build public awareness, and non-technical survey of 3,502 minefields. Clearance is to be conducted by a joint venture between TDI and the national operator Altay, which are expected to deploy up to 15 manual clearance teams supported by MDDs. The first three components will be funded by the EU. Türkiye will allocate €2.12 million to fund the fourth component involving non-technical survey.⁷³ After tendering for the third phase during 2020, Türkiye issued contracts for the project in December 2020 and started work in June 2021. The request also stipulates that manual clearance is followed by two levels of verification, including an extended search for missing mines and sampling checks conducted using MDDs.⁷⁴

58 2021 Article 5 deadline Extension Request, p. 19; and email from Mark Frankish, UNDP, 24 May 2021.

59 Committee on Article 5 Implementation, Preliminary Observations on the Implementation of Article 5 by Türkiye, Intersessional Meetings, Geneva, 20–22 June 2022.

60 2013 Article 5 deadline Extension Request, pp. A-2, A-13, and A-14.

61 Article 7 Report (covering 2014), "Workplan for mine clearance activities", pp. 3 and 8; and Statement of Turkey, 15th Meeting of States Parties, Santiago, 29 November 2016.

62 Email from Maj. Can Ceylan, TURMAC, 11 July 2019; Article 7 Report (covering 2019), Form A.

63 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 8.

64 2021 Article 5 deadline Extension Request, p. 6.

65 2013 Article 5 deadline Extension Request, p. A-14.

66 Article 7 Report (for 2014), "Workplan for mine clearance activities", p. 6.

67 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016.

68 Interview with Gen. Celalettin Coban and Col. Ali Güngör, TURMAC, in Geneva, 18 February 2016.

69 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, in Vienna, 20 December 2018; and Article 7 Report (covering 2017), Form A.

70 Statements of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018; and Intersessional Meetings, Geneva, 22 May 2019.

71 Statements of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018; Article 7 Report (covering 2019), Form A.

72 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

73 Email from Maj. Şamil Koptekin, TURMAC, 4 May 2021.

74 2021 Article 5 deadline Extension Request, p. 20; email from Mark Frankish, UNDP, 24 May 2021.

In 2021, TURMAC was preparing a project document for EBMCP Phase 4, which is to include Van province, in order to secure funding of €18.5 million from the EU.⁷⁵ At the time of writing, Mine Action Review had not been able to ascertain whether this proposal had yet been submitted or whether this funding had been secured.

Türkiye reports that, as a result of the EBMCP in 2021, an area of just over 0.35km² was cleared, with 18,444 mines found and destroyed. However, at the time of Türkiye's submission of its Article 7 reporting for 2021, the QM process had not been completed and the data had not been uploaded to the IMSMA database, hence the clearance was not included in Türkiye's land release figures for 2021.⁷⁶

TURMAC's non-technical survey teams are supporting operations in the EBMCP with QC and in an advisory capacity. Türkiye expects that one of the outcomes of the project will be an accurate picture of hazardous areas, which will facilitate "more reliable and precise schedule planning of mine clearance activities for the upcoming years."⁷⁷

NON-BORDER AREAS

Türkiye had planned to clear all 873 identified mined areas inside the country by 2021, involving release of 3.1km² and destruction of 34,410 mines. However, little progress has been made in recent years, with clearance of only 0.3km² at a former military range in 2018⁷⁸ and a further 9,584m² cleared in 2021. Türkiye estimated at the end of 2021 that 2.5km² remained.⁷⁹ The mined areas are scattered and TURMAC considers it practical for clearance to be conducted by military units even though their capacity to do so has so far been limited.⁸⁰

Türkiye's Article 5 deadline extension request does not set out a timeline for tackling non-border areas. TURMAC reported that in 2021 a gendarmerie demining company would be assigned to clearance of non-border tasks in the south-eastern provinces of Diyarbakir and Siirt and the north-eastern province of Ardahan.⁸¹ At the time of writing, Mine Action Review had not been able to ascertain if this planned activity had proceeded, although, as noted above, some clearance in unspecified non-border areas in 2021 had been reported.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Türkiye issued 44 national mine action standards, including on land release, in February 2019. The standards were prepared with support from UNDP and the GICHD.⁸² A separate set of standards specific to the EBMCP were also reviewed in 2019, including regulations and medical standards for private companies.⁸³

In 2021, Türkiye updated the following National Mine Action Standards:

- NMAS 4.10: Glossary of Mine Action Terms, Definitions and Abbreviations
- NMAS 7.30: Accreditation of Mine Action Organisations
- NMAS 8.10: Non-Technical Survey
- NMAS 9.50: Mechanical Demining
- NMAS 10.30: Occupational Health and Safety-Personal Protective Equipment.⁸⁴

OPERATORS AND OPERATIONAL TOOLS

Türkiye's main demining capacity is provided by the military. By 2020, after two years of rapid expansion, total military capacity amounted to 32 teams: 26 Land Forces demining teams with 420 personnel and 6 *Gendarmerie* teams with 120 personnel. To date, in 2022, the number of Gendarmerie demining teams has been increased from 6 to 18.⁸⁵ In its latest Article 7 Report (covering 2021), Türkiye noted plans to increase capacity further, up to a total of 50 military manual demining teams (32 Land Forces and 18 Gendarmerie).⁸⁶ While Türkiye has reached this target for the Gendarmerie, it remains six Land Forces teams below target. No time frame was given for this eventual planned increase.

75 Article 7 Report (covering 2021), Form D and CCW Protocol II 10 Report (covering 2021), Form E; and email from Maj. Şamil Koptekin, TURMAC, 4 May 2021.

76 Article 7 Report (covering 2021), Form D.

77 Ibid.

78 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; Article 7 Report (for 2017), Form A; Article 7 Report (for 2018), Form D; Article 7 Report (covering 2019), Form A.

79 Article 7 Report (covering 2021), Form D.

80 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

81 Email from Şamil Koptekin, TURMAC, 4 May 2021.

82 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016; and Article 7 Report (covering 2015), Form F; Article 7 Report (covering 2019), Form A.

83 Article 7 Report (covering 2019), Form A; email from Maj. Can Ceylan, TURMAC, 24 June 2020.

84 Article 7 Report (covering 2021), Form D.

85 Email from Ömer Burga Gönen, TURMAC, 5 September 2022.

86 Article 7 Report (covering 2021), Form D.

Table 2: Turkish military operational clearance capacities deployed in 2021⁸⁷

Operator	Manual clearance teams	Total deminers	MDD teams	Mechanical assets	Comments
Gendarmerie	18	*120	0	0	Increase from 6 teams in 2020. 3 Mine Detection Dogs
Land Forces	26	420	0	0	Machines planned for use in 2021
Totals	44	540	0	0	

* At the time of writing, TURMAC had confirmed to Mine Action review that the number of Gendarmerie manual clearance teams increased from 6 to 18 in 2021 but did not state an updated number of deminers. As such, the actual number of deminers is believed to be higher than the 120 stated here, which is the number reported for 2020.

In 2021 Türkiye reported that Turkish Land Forces (TLF) and Gendarmerie Command were in the process of forming one new humanitarian demining company each, with equipment in place and personnel assignment and training expected to be completed in 2022.⁸⁸

MECHEM, a South African company, was contracted for mine clearance under the EBMCP.⁸⁹ In 2019, MECHEM deployed 15 MDD teams, 6 manual clearance teams (approximately 60 deminers), and 1 MineWolf machine.⁹⁰ Before 2019, MECHEM had subcontracted its demining to a national company, Altay, but in 2019 it recruited Turkish nationals directly.⁹¹ RPS-Explosive Engineering Services, part of the United Kingdom (UK)-based RPS Group of companies, was contracted for QA and QC.⁹² TURMAC also had oversight of operations on site.⁹³

A joint venture between TDI and national organisation Altay won the contract for Phase 3 of the EBMCP, including non-technical survey and clearance in the provinces of Ağrı, Ardahan, Kars, and Iğdır. RPS Energy, also part of the UK-based RPS Group, won the contract for quality management.⁹⁴

Accreditation and quality management of Turkish Land Forces and the Gendarmerie units is carried out by TURMAC.⁹⁵

Türkiye's defence industries developed the Mechanical Mine Clearing Equipment (*MEMATT*), a light-medium, unmanned

demining machine with a tiller attachment, particularly suitable for demining on the flat terrain along the Syrian border. The MoND had planned to take delivery of two machines in 2020 and four in 2021, but cautioned that plans could be set back by the COVID-19 pandemic and later reported that it aimed to deploy all six machines in 2021.⁹⁶ However, in 2021, Türkiye sent six demining machines (MEMATT-I), to Azerbaijan to support mine clearance⁹⁷ and reported that it planned to complete the deployment of 20 MEMATT-II machines to Turkish military demining units "in the upcoming years".⁹⁸ No specific time frame was given and, at the time of writing it was not clear how many machines had been deployed inside Türkiye in 2021.

Following mechanical mine clearance equipment certification tests in 2020, Türkiye began a new certification process in April 2022 and plans to implement mechanical mine clearance equipment production with various companies.⁹⁹ Again, no specific time frame for this has been given.

Following MDD training and accreditation in 2020,¹⁰⁰ Turkish Land Forces planned to deploy MDDs for verification following clearance and technical survey with mechanical assets.¹⁰¹ In 2021, three MDDs were introduced into Gendarmerie demining units and used for verification, with plans to introduce more MDDs in 2022.¹⁰² At the time of writing, the total number of MDDs deployed by military demining units had increased to ten.¹⁰³

87 Emails from Şamil Koptekin, TURMAC, 4 May 2021; and Ömer Burga Gönen, TURMAC, 5 September 2022.

88 CCW Protocol II 10 Report (covering 2021), Form A.

89 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.

90 Emails from Maj. Can Ceylan, TURMAC, 11 July 2019 and 24 June 2020.

91 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.

92 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.

93 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.

94 Email from Mark Frankish, UNDP, 2 July 2021.

95 CCW Protocol II 10 Report (covering 2021), Form B.

96 MoND Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 7; Article 7 Reports (covering 2019 and 2020), Form A.

97 Article 7 Report (covering 2021), Form I; and "Azerbaijan receives new MEMATT mine clearing robots from Turkey", *Global Defense and Security News*, 8 February 2021.

98 Article 7 Report (covering 2021), Form D.

99 Article 7 Report (covering 2021), Form C.

100 Ibid.

101 Email from Şamil Koptekin, TURMAC, 4 May 2021.

102 Article 7 Report (covering 2021), Form D and CCW Protocol II 10 Report (covering 2021), Form G.

103 Email from Ömer Burga Gönen, TURMAC, 5 September 2022.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Türkiye released 30 hazardous areas¹⁰⁴ encompassing almost 4.5km² in 2021, 0.8km² less than the previous year. Türkiye destroyed 14,176 anti-personnel mines (including 103 improvised anti-personnel mines), as well as 1,429 anti-vehicle mines, 237 IEDs, and one item of UXO.¹⁰⁵

As in previous years, the overwhelming majority of the area released (91% in 2021), was through survey. In its Article 7 Report covering 2021, Türkiye reported that eight military demining teams of the Gendarmerie “addressed” 207,730m² land, destroying 11,916 mines across 23 areas in Van and Siirt provinces at the Eastern Borders and interior parts of Türkiye. It also stated that sixteen military demining teams of the Turkish Land Forces conducted demining operations in Hatay, Kilis, and Şırnak provinces at the Syrian Borders, “addressing” approximately 287,419m² of land and destroying 3,535 mines across 7 areas. These operations account for all of the 495,149m² reported by Türkiye as released in 2021. Of this total only 413,851m² is accounted for by clearance, which took place at the borders with Syria and Iran and non-border areas (see Table 5).¹⁰⁶

SURVEY IN 2021

Türkiye released a total of 4.08km² through survey in 2021,¹⁰⁷ a decrease from the almost 5.2km² released through survey in 2020.¹⁰⁸ As in 2020, almost all land released by survey (4km² cancelled through non-technical survey), was at the borders with Syria (see Table 3). A further 81,298m², located along the border with Iran, was reduced through technical survey (see Table 4).¹⁰⁹

Table 3: Cancellation through non-technical survey in 2021¹¹⁰

Operator	Region	Area cancelled through NTS (m ²)
TURMAC NTS Teams	Syria border	4,000,000
Total		4,000,000

Table 4: Reduction through technical survey in 2021

Operator	Region	Area reduced (m ²)
Land Forces Military Demining Units (ÖMAT)	Iran border	81,298
Total		81,298

CLEARANCE IN 2021

Türkiye’s military demining capacity increased significantly in 2018 but the amount of land released through clearance then fell steadily until 2020 (see Table 6). In 2021, Türkiye reported clearance of 413,851m² and with 14,176 anti-personnel mines destroyed (see Table 5),¹¹¹ a significant increase on the 142,073m² cleared in 2020 and a reversal of the downward trend in the two years previously. It is still, however, the second lowest amount of land released by clearance in the last five years.¹¹²

In 2021, Military C-IED/Mine teams found and neutralised 1,157 IEDs, including 103 improvised anti-personnel mines, during security operations.¹¹³ During border security operations along the borders with Syria, 51 anti-personnel mines, 237 IEDs, and 383 other explosive items were destroyed (see Table 5).¹¹⁴

As noted previously, 347,000m² of clearance undertaken in 2021 by commercial operators at the Eastern Borders as part of the EBMCP had not been uploaded to the IMSMA database or included in the reported land release figures in Türkiye’s Article 7 Report covering 2021, as it was pending completion of quality management.

104 Committee on Article 5 Implementation, Preliminary Observations on the Implementation of Article 5 by Türkiye, Intersessional Meetings, Geneva, 20–22 June 2022.

105 Article 7 Report (covering 2021), Form D.

106 Ibid; and CCW Protocol II 10 Report (covering 2021), Form B.

107 Article 7 Report (covering 2021), Form D.

108 Article 7 Report (covering 2020), Form D.

109 Article 7 Report (covering 2021), Form D.

110 Email from Ömer Burga Gönen, Planning Expert, TURMAC, 8 August 2022.

111 Ibid.

112 Article 7 Report (covering 2020), Form D.

113 Article 7 Report (covering 2021), Form D.

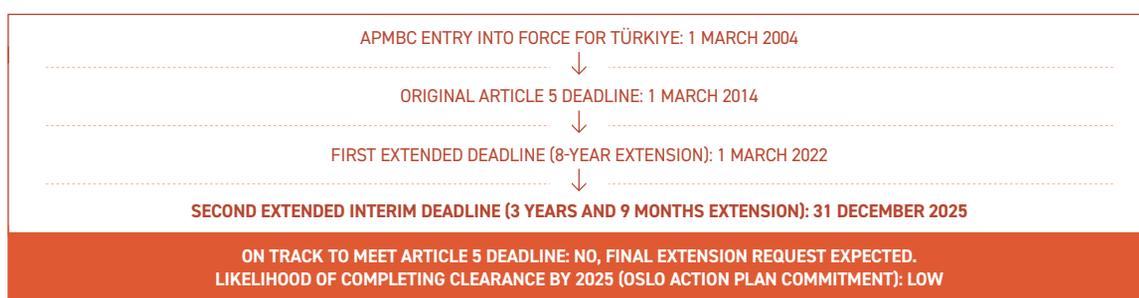
114 Article 7 Report (covering 2021), Form I.

Table 5: Mine clearance in 2021¹¹⁵

Region	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Iran border	Land Forces Military Demining Units (ÖMAT)	116,848	11,845	0	1
Syria border	Gendarmerie Forces Military Demining Units (JÖMAT)	287,419	2,106	1,429	0
Syria border	N/K (Border security operations)	0	51	0	0
Non-border areas	Gendarmerie Forces Military Demining Units (JÖMAT)	9,584	71	0	0
N/K	Military C-IED/Mine teams*	0	**103	0	0
Totals		413,851	14,176	1,429	1

* Military Counter-Improvised Explosive Device/Mine teams. ** Improvised anti-personnel mines.

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the eight-year extension granted by states parties in 2013), Türkiye was required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2022. Türkiye did not meet this deadline and in 2021 it was granted an interim extension until the end of 2025.

The 2021 request represented "only the period of time necessary to gather and assess data on landmine contamination and other relevant information with a view to develop a meaningful forward-looking plan based on this information". During the period until the end of 2025, Türkiye has specified that it will carry out non-technical survey of anti-personnel mined areas; continue clearance; and prepare a final extension request for Article 5 implementation.¹¹⁶

Türkiye projects mine action costs in this extension period at €105 million, all funded by national sources except for €18.5 million, anticipated to be provided by the EU for the EB MCP project.¹¹⁷

In its latest Article 7 report covering 2021, Türkiye, notes that, since its first extension request, approximately 32km² of mined area has been addressed and almost 135,000 anti-personnel mines destroyed, with the total mined area remaining reduced from 172km² to 140km² between 2014 and 2021.¹¹⁸

Türkiye plans to clear 10km² by the new deadline of 31 December 2025 but the main focus of the request is on completing non-technical survey of all 3,843 mined areas. It expects the survey will result in cancellation of up to 40km² or more than a quarter of Türkiye's estimated 140km² of anti-personnel mined area. Türkiye plans to use the resulting estimate of contamination as the basis for another extension request setting out plans to complete clearance.¹¹⁹

¹¹⁵ Article 7 Report (covering 2021), Form D; and emails from Ömer Burga Gönen, TURMAC, 8 August and 5 September 2022.

¹¹⁶ Request For an Extension of the Deadline for Completing the Destruction of Anti-Personnel Mines in Accordance with Article 5 of the Convention, Executive Summary, 16 September 2021.

¹¹⁷ 2021 Article 5 deadline Extension Request, p. 16.

¹¹⁸ Article 7 Report (covering 2021), Form D.

¹¹⁹ 2021 Article 5 deadline Extension Request, pp. 5 and 19.

The request has a number of gaps. It does not address Türkiye's Article 5 obligations in areas under its control in northern Cyprus and Syria. TURMAC said Turkish Armed Forces units conducting cross-border operations in Syria had not encountered any minefields but were clearing IEDs, some of which were mines along with items of UXO.¹²⁰ The request also provides no details of plans for clearance of the 90 identified mined areas remaining in non-border areas. TURMAC said it gives higher priority to clearing border minefields and installing border management facilities such as watch towers and patrol roads¹²¹ with the aim of providing "a more secure and technologically advanced humanitarian border management system."¹²²

In its extension request, Türkiye noted only two risk factors that could hold back implementation. It said measures to mitigate the spread of COVID-19 could interfere with mobilising and deploying survey and clearance teams. It also

noted that, although Türkiye's borders with Iraq and Syria were stable, any outbreak of conflict could interfere with humanitarian activities.¹²³

Table 6: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	0.41
2020	0.14
2019	0.67
2018	2.08
2017	*0.82
Total	4.12

* Also included previously unreported clearance output relating to 2016.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Türkiye has not provided information on whether it has a plan in place for dealing with any residual contamination following completion.

120 Email from Capt. Mustafa Torun, TURMAC, 12 August 2021.

121 Email from Capt. Mustafa Torun, TURMAC, 12 August 2021; and Article 7 Report (covering 2021), Form D.

122 Article 7 Report (covering 2021), Form D.

123 2021 Article 5 deadline Extension Request, p. 36.

ARTICLE 5 DEADLINE: 1 DECEMBER 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021

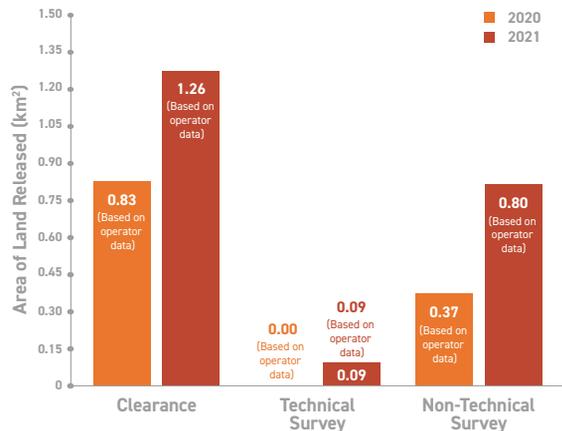
1.26 km²

AP MINES DESTROYED IN 2021

11

(BASED ON OPERATOR DATA)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

In February 2022, Russia launched a military assault and invaded large parts of Ukraine. Heavy combat continues in the east and south of the country, involving large-scale use of mines. Russia have used anti-personnel mines since the beginning of its attack including a recently developed variant that is very difficult to clear safely. Russian forces have also emplaced mines of an improvised nature as they have retreated from their early positions in the war.¹ The Ukrainian authorities have been clearing some contamination swiftly after use,² and by May 2022, the authorities reported disposal of tens of thousands of mines and other explosive ordnance.³

Ukraine appears to have respected its obligations to the Anti-personnel Mines Ban Convention (APMBC) and there was no reliable evidence of it having used anti-personnel mines in the course of the recent conflict. Both Ukraine and Russia have used anti-vehicle mines extensively.⁴ In November 2021, the Ukrainian Cabinet of Ministers issued a long-awaited resolution on the establishment of the national mine action authority (NMAA), which was hoped to progress into a stronger and more coordinated mine action sector in Ukraine. This is the first step in what will be a long process. Ukraine was not on track to meet its extended APMBC Article 5 deadline of 1 December 2023 even before the renewed use of anti-personnel mines. The new contamination and ongoing hostilities mean that Ukraine will face many years of clearance in order to fulfil its treaty obligations.

1 Human Rights Watch, "Landmine Use in Ukraine", Report, 15 June 2022, at: <https://bit.ly/3P03Yss>, p. 1; Amnesty International, "Anyone can die at any time", Report, 13 June 2022; at: <https://bit.ly/3B139Zn>; and "Land Mines on a Timer, Scattered Over a Ukrainian Town", *New York Times*, 8 April 2022, at: <https://nyti.ms/3KwWV6A>.

2 Ukraine's State Emergency Service Facebook page, 8 May 2022, at: <https://bit.ly/3G04DDJ>; and Online presentation by Hannah Rose Holloway, Danish Refugee Council (DRC), to the Convention on Cluster Munitions (CCM) Intersessional Meetings, Geneva, 16 May 2022.

3 Geneva International Centre for Humanitarian Demining (GICHD), Press release, 13 May 2022, at: <https://bit.ly/3ArDfwb>.

4 Human Rights Watch, "Landmine Use in Ukraine", Report, 15 June 2022, p. 1.

RECOMMENDATIONS FOR ACTION

- As soon as conditions allow, Ukraine should undertake a baseline survey to understand the extent and nature of anti-personnel mine contamination in areas to which it has effective access.
- Ukraine should clear anti-personnel mines on territory under its jurisdiction or control as soon as possible.
- Ukraine should revise its national mine action standards (NMAA), taking into careful consideration the recommendations of the technical working group.
- Ukraine should expedite the implementation of its new mine action legislation and finalise the creation of the necessary structures and procedures to facilitate systematic mine clearance.
- Ukraine should elaborate a national strategic plan for mine action.
- Ukraine should report on contamination, survey, and clearance in a manner consistent with the International Mine Action Standards (IMAS).

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	3	The extent of anti-personnel mine contamination in Ukraine is not known but has certainly increased during the 2022 conflict. Surveys were conducted in 2021, but Ukraine did not report on their results.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	5	In November 2021, Ukraine passed a resolution that sees for the creation of the long-awaited NMAA, which was in the early stages of development when the conflict erupted. In December 2020, Ukraine created two mine action centres: a national mine action centre (NMAC) technically falling under the NMAA but chaired by the Ministry of Defence (MoD), and a humanitarian demining centre (HDC) sitting under the Ministry of Interior (MoI). The two mine action centres were in different stages of development. On 29 September 2022, the MoD MAC received its official certification.
GENDER AND DIVERSITY (10% of overall score)	2	2	Ukraine does not have a gender policy for mine action and does not report on whether gender and diversity is mainstreamed within its programmes. No reference was made to gender or diversity in its 2020 Article 5 deadline extension request or in its Article 7 report covering 2020 (the latest submitted as of writing).
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	4	Ukraine uses the International Management Systems for Mine Action (IMSMA) Core database. In 2021, the database was housed in two separate servers, one owned by the State Emergency Service of Ukraine (SESU) and the other by the MoD. Both entities collect and analyse contamination and land release data using the harmonised forms and reporting systems. Since April 2022, the IMSMA database has been backed up on a single secure cloud-based system, but both MoD and SESU had access to and control over their own data systems. In response to the 2022 conflict, the Geneva International Centre of Humanitarian Demining (GICHD)-supported IMSMA database was incorporated into the emergency coordination platform allowing real-time access and exchange of data. Ukraine's Article 7 reports are often delayed and do not present data in accordance with the best practices of international mine action standards (IMAS). As at September 2022, Ukraine had yet to submit its Article 7 report covering 2021.
PLANNING AND TASKING (10% of overall score)	3	3	Ukraine does not have a national mine action strategy, nor are there standardised criteria at national level for task prioritisation. As at June 2022, the NMAA secretariat had set as a priority the creation of a "national programme".
LAND RELEASE SYSTEM (20% of overall score)	5	5	National mine action standards (NMAA) were published in April 2019 but were not fully applied in practice. In July 2021, the technical working groups submitted recommendations of NMAA improvements to the MoD for its consideration. International operators do not consider that the current NMAA in Ukraine are fit for purpose for the mine action sector.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	5	Ukraine is not on track to meet its Article 5 deadline of 1 December 2023 and needs to submit a request for extension. It is not known how much anti-personnel mined area is being cleared across the whole country as Ukraine does not exercise effective control over all the territory. The scale of anti-personnel mine contamination and extent of areas no longer under control of the Ukrainian government have increased significantly since February 2022. Based on operator data, only 11 anti-personnel mines were found and destroyed in the area reported as cleared during 2021.
Average Score	4.4	4.0	Overall Programme Performance: POOR

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- The National Mine Action Authority (NMAA)
- The Secretariat of the NMAA (under the Ministry of Defence, MoD)
- The Mine Action Centre (under the MoD and managed by the State Special Transport Services (SSTS))
- The Humanitarian Demining Centre (HDC, under SESU)
- Social-Humanitarian Response Centre (under the Ministry for Reintegration of the Temporarily Occupied Territories) – not yet created as of September 2022.

NATIONAL OPERATORS

- State Emergency Services of Ukraine (SESU)
- Armed Forces of Ukraine
- National Guard
- Security Service
- State Special Transport Service (SSTS)
- State Border Service
- Demining Solutions
- The Demining Team of Ukraine
- The Ukrainian Deminers Association (UDA)

INTERNATIONAL OPERATORS

- Danish Refugee Council's (DRC's) Humanitarian Disarmament and Peacebuilding sector (formally known as Danish Demining Group (DDG) and hereafter referred to as DRC)
- Swiss Foundation for Mine Action (FSD) – operations resumed in 2020 following suspension in 2019
- The HALO Trust
- Humanity and Inclusion (HI)
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- Organisation for Security and Co-operation in Europe (OSCE)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Mine Action Sub-cluster chaired by United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

The extent of anti-personnel mined area in Ukraine is not known, but has certainly increased due to the use of anti-personnel mines in the course of the Russian military assault on Ukraine. In April 2022, Ukraine's government said that its teams were removing almost 6,000 explosive devices a day across the country, including from homes and businesses, and especially in the countryside.⁵ Humanitarian organisations and media outlets indicate that Russian forces have scattered mines in a haphazard and disorganized fashion across civilian areas.⁶

Human Rights Watch (HRW) has documented use of at least seven types of anti-personnel mines (MON-50, MON-100, OZM-72, PMN-4, POM-2/POM-2R, and POM-3), in at least four of Ukraine's 24 regions (oblasts): Donetsk, Kharkiv, Kyiv, and Sumy. All manner of delivery methods have been documented: hand-emplaced, mechanically-laid, and remotely delivered. Several new landmines have made their combat debut in this armed conflict. This includes the remotely delivered POM-3 anti-personnel mine, also known as the "medallion". The mine is typically aerially launched from a rocket, falling back to earth by parachute. It is equipped with a seismic proximity sensor that picks up on approaching footsteps, and is said to be able to distinguish between humans and animals, making efforts to locate and destroy it far deadlier and more complicated. The POM-3 has

self-destruct features that set the mine to explode after a certain period.⁷

Amnesty International has reported that, between March and April 2022, Russian forces fired rockets to disperse PTM-1S scatterable mines on residential neighbourhoods in Kharkiv killing at least three civilians. This type of attack combines the attributes of cluster munitions and anti-personnel mines.

Russian forces have also emplaced many victim-activated booby traps as they retreated from positions taken during the initial phase of the invasion, a considerable portion of which are anti-personnel mines under the APMBC. In mid-April 2022, Ukrainian police and emergency services distributed numerous images of victim-activated booby-traps, including hand grenades with an attached trip wire, and booby-traps placed on dead bodies.⁸

In 2017, Ukraine estimated, highly improbably, that total contamination by mines and explosive remnants of war (ERW) could extend over 7,000km².⁹ In fact, Ukraine cannot reliably estimate the overall extent of mine contamination until it has regained control over all its territory and relevant surveys have been completed.¹⁰ Before the 2022 conflict, surveys had taken place in the government-controlled areas and on the Ukrainian side of the buffer zone: the 15km-wide

5 "Ukraine's efforts to remove booby traps left behind by Russian troops", *CBC News*, 21 April 2022, at: <https://bit.ly/3ckM1nS>.

6 "Land mines create a deadly legacy for Ukraine and possibly beyond", *The Washington Post*, 12 April 2022, at: <https://wapo.st/3e2X9WP>.

7 Human Rights Watch, "Landmine Use in Ukraine", Report, 15 June 2022, at: <https://bit.ly/3P03Yss>, pp. 4, 7, and 8; and "New Russian Land Mine Poses Special Risk in Ukraine", *The New York Times*, 6 April 2022, at: <https://nyti.ms/3TgF9bL>.

8 Human Rights Watch, "Landmine Use in Ukraine", Report, 15 June 2022, p. 16.

9 "Measures to ensure compliance", Presentation by Col. Viktor Kuzmin, Deputy Chief, Engineer Troops, Armed Forces of Ukraine, at the APMBC Intersessional Meetings, Geneva, 9 June 2017, at: <http://bit.ly/2Zk2MUj>.

10 "Mine Action in Ukraine", Side-event presentation by Lt.-Col. Yevhenii Zubarevskyi, MoD, at the 19th International Meeting of National Directors, Geneva, 17 February 2016; and Statement of Ukraine, Intersessional Meetings, Geneva, 19 May 2016.

non-delineated areas on either side of the line of contact (i.e. 30km in total). Due to insecurity, survey was not possible inside the grey zone: the sliver of territory separating the positions of the two sides, which varies in width from several hundred metres to two kilometres. Additionally, the territory stretching 2–3km from the line of contact was off-limits due to insecurity.¹¹ Prior to the 2022 conflict, the heaviest mine and ERW contamination was believed to be inside the buffer zone.¹² Ukraine has indicated that nationwide non-technical and technical survey could only be possible once its sovereignty has been fully restored over all territory under

its jurisdiction.¹³

As at September 2022, Ukraine had yet to submit its Article 7 report to the APMBC, but stated in its latest transparency report (covering 2020) that non-technical survey was conducted between 2016 and 2018 by The HALO Trust and the Danish Refugee Council (DRC), with suspected hazardous areas (SHAs) identified in four districts (see Table 1). Ukraine did not provide information on the number or estimated area of these SHAs.

Table 1: Anti-personnel mined area region (at end 2020)¹⁴

Region	District	Location
Donetsk	Sloviansk	Semenovka-1, and Rai-Oleskandrivka
	Lyman	Ozerne-2
	Bakhmut	Novoluhansk-5, and Novoluhansk-13
Luhansk	Stanichno-Luhansk	Chervona Talokva-7, and Chervona Talokva-6

Both DRC's and HALO Trust's non-technical survey teams continued survey throughout 2021 to determine the actual extent of contamination more accurately. DRC's teams identified 24 new polygons of a total size of 22km² of anti-personnel mine contamination. DRC also resurveyed some areas due to the extended period of time since the initial survey and as these areas were being cultivated by farmers.¹⁵ Survey and clearance by The HALO Trust on the Ukrainian-controlled side of the buffer zone in 2021 confirmed the presence of a combination of anti-personnel mines, cluster munition remnants (CMR), and other ERW.¹⁶

A total area of 3.7km² across 34 confirmed hazardous areas (CHA) and 1 SHA of previously unrecorded anti-personnel mined area was discovered by HALO Trust and added to the database in 2021. Of these areas, 34 contained a mix of explosive ordnance while the remaining area contained only anti-personnel mines. According to information collected during the survey, the mines were laid during the peak of the 2014–15 conflict, when the two opposing sides were moving positions across Donetsk and Luhansk regions.¹⁷

Most anti-personnel mines found in Ukraine are bounding mines, such as the OZM series; directional fragmentation mines, such as the MON-50; and fragmentation stake mines, such as the POMZ. There has been little evidence of blast mines, although some have reportedly been removed by the military. Grenades laid on tripwires, meeting the definition of anti-personnel mines, are also common, and account for a lot of the casualties reported in Ukraine. These are generally located in woods or areas of dense vegetation. The HALO Trust has also reported having encountered improvised

explosive devices (IEDs), some of which are victim-activated, during clearance or explosive ordnance disposal (EOD) call-outs in 2020 and 2021.¹⁸

Ukraine is contaminated by anti-personnel mines as a result of the conflict which broke out in 2014 with the Russian-backed self-proclaimed Donetsk and Luhansk republics, and more recently, the Russian military assault in February 2022. Both conflicts saw repeated use of anti-personnel mines. The full nature and extent of contamination will remain unclear until an effective cessation of hostilities and a comprehensive survey has been completed. Prior to these conflicts, Ukraine was affected by residual contamination of mines and other ordnance, mostly as a result of heavy fighting between German and Soviet forces in the Second World War, but also from combat in the First World War. Ministry of Defence (MoD) engineering units partially cleared affected areas in the mid-1970s, suggesting that a problem may remain, but the location and extent of any mine threat is not known.

Over the last few years, the Organisation for Security and Co-operation in Europe (OSCE)'s Special Monitoring Mission (SMM) in Ukraine has frequently reported on the use of both anti-personnel and anti-vehicle mines.¹⁹ A December 2017 report from the Office of the United Nations High Commissioner for Human Rights (OHCHR), stated that: "The parties to the conflict continued the practice of placement of IEDs and anti-personnel mines in populated areas and near objects of civilian infrastructure."²⁰ In 2018, the OHCHR called on all parties involved in hostilities to "cease the use of victim-activated devices".²¹

11 Email from Imogen Churchill, Senior Programme Officer, HALO Trust, 21 September 2022.

12 Email from Yuri Shahrmanyan, Programme Manager, HALO Trust Ukraine, 5 July 2018.

13 2020 Article 5 deadline Extension Request, Additional Information received on 27 August 2020, p. 98 (numbered page 3 in the document).

14 Article 7 Report (covering 2020), Form C.

15 Email from Almedina Musić, Head of Humanitarian Disarmament and Peacebuilding, DRC, 7 February 2022.

16 Emails from Imogen Churchill, HALO Trust, 23 March 2022; and Almedina Musić, DRC, 7 February 2022.

17 Email from Imogen Churchill, HALO Trust, 23 March 2022.

18 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March and 21 September 2022.

19 See: "Daily and spot reports from the Special Monitoring Mission to Ukraine", at: <http://bit.ly/2K4IFms>.

20 OHCHR, "Report on the human rights situation in Ukraine 16 August to 15 September 2017", December 2017, p. 5.

21 OHCHR, "Report on the human rights situation in Ukraine 16 February to 15 May 2018", June 2018, p. 29.

At the APMBBC Intersessional Meetings in May 2019, Ukraine claimed that it had not used anti-personnel mines since it acceded to the Convention in June 2006, but accused Russia of having used anti-personnel mines in its territory since 2014. According to Ukraine, these mines have been emplaced by Russia-backed illegal armed groups in the Donetsk and Luhansk regions and it said that Russia has also put mines on the administrative border between Crimea and the rest of Ukraine.²² The mines allegedly used by separatist groups include PMN-1, PMN-2, PMN-4, POM-2R, OZM-72, MES type mines, and MON-50 mines with tripwire.²³ In the past, Ukraine has reiterated that its armed forces are authorised to use

MON-series and OZM-72 mines only in command-detonated mode (through electrical initiation), which is not prohibited under the APMBBC. According to Ukraine, all mines planted in command-detonated mode are recorded and secured, and access to the area is restricted.²⁴

Ukraine is also contaminated with CMR, the extent of which is not known but has also seen renewed use, as well as with considerable quantities of other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Ukraine for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

National bodies involved in mine action in Ukraine include the MoD, under which sits the State Special Transport Services (SSTS); the Ministry of Interior (MoI), under which sits the State Emergency Service of Ukraine (SESU); the Ministry for Reintegration of the Temporarily Occupied Territories; the National Police; and the State Border Service.

Ukraine's national mine action legislation (Law No. 2642), was originally adopted by parliament on 6 December 2018 and signed into law by the President on 22 January 2019.²⁵ However, the government did not proceed to implement the Law on the grounds that it was inconsistent with a number of other legal acts. None of the institutions was created and the national mine action response in Ukraine has remained uncoordinated as a consequence. In addition to the lack of implementation, the Law also had gaps and weaknesses in its regulation of the safety and efficiency of mine action operators.²⁶

In June 2020, the "Law on the Amendments to the Law on Mine Action in Ukraine" passed its first reading. Following this, the UN Development Programme (UNDP), the OSCE Project Coordinator in Ukraine (PCU), The HALO Trust, and DRC came together to prepare an explanatory note suggesting further amendments.²⁷ The amendments to the Law on Mine Action in Ukraine was finally signed off by the president in December 2020 and the recommendations of the working group were broadly taken into account. Yet, the new law fell short of addressing two major concerns of the mine action community, namely: operators' licence to carry out disposal, destruction, and transportation of explosive

items for EOD procedures, and operators' permits for the importation and use of so-called dual-use items. Additional legislative amendments are required to resolve these two concerns,²⁸ which as of writing, remained unresolved.²⁹

The approved law established a framework for humanitarian demining, dividing responsibilities among State institutions, and foresaw the creation of an NMAA. However, it had a peculiarity in that it envisaged the creation of two mine action centres: one National Mine Action Centre (NMAC) under the MoD and a Humanitarian Demining Centre (HDC) under SESU (which sits under the MoI).³⁰ The two centres share the remits of information management, quality assurance (QA), monitoring, planning, and certification of the operators and their responsibility is divided territorially.³⁰ The decision to create two mine action centres as opposed to one comes as a compromise after competition between the MoD and MoI on who takes the lead on mine action.³¹ But it does not augur well for either efficient or effective mine action.

The authorities reported during an online subcluster meeting that, by the end of 2021, the HDC had been created in Merefa (in eastern Ukraine) and the MoD MAC was in an advanced stage of development in Chernihiv (in northern Ukraine) with 100% of senior management fully recruited and 70% of overall personnel recruitment completed.³² Both Centres have been established within already existing structures belonging to SESU and SSTS, respectively. The MoD MAC received its accreditation in September 2022, while the HDC already had a pre-existing certification.³³ The Ministry for Reintegration of the Temporarily Occupied Territories was

22 Statement of Ukraine, Committee on Article 5 implementation, Geneva, 22 May 2019.

23 Government of Ukraine, "Measures to ensure compliance", Geneva, 9 June 2017; Statement of Ukraine on Article 5, APMBBC 15th Meeting of States Parties, Santiago, 29 November 2016; and Preliminary observations of the committee on cooperative compliance, "Ukraine", Intersessional Meetings, Geneva, 8-9 June 2017.

24 Preliminary observations of the committee on cooperative compliance, "Ukraine", Intersessional Meetings, Geneva, 8-9 June 2017.

25 OSCE, "Ukrainian parliament adopts legal framework for mine action, with OSCE advice provided", 10 December 2018, at: <http://bit.ly/2QdTa9q>; interview with Miljenko Vahtarić, OSCE PCU, 7 February 2019; and email, 13 June 2019.

26 DRC-DDG Legal Alert Special, "Mine Action Law Amendment", Issue 56, September 2020.

27 Email from Almedina Musić, DRC, 20 April 2021.

28 Email from Ronan Shenhav, HALO Trust, 20 April 2021.

29 Emails from Imogen Churchill, HALO Trust, 23 March 2022; and Almedina Musić, DRC, 7 February 2022.

30 DRC-DDG Legal Alert Special, "Mine Action Law Amendment", Issue 56, September 2020; and interview with Miljenko Vahtarić, OSCE PCU, 13 February 2020.

31 Interview with Miljenko Vahtarić, OSCE PCU, 10 May 2021.

32 Email from Almedina Musić, DRC, 7 February 2022.

33 Email from GICHD, 20 October 2022.

planning to set up a Social-Humanitarian Response Centre, which will coordinate victim assistance and explosive ordnance risk education (EORE). As at September 2022, however, this centre was not yet created and was unlikely to be operational in the foreseeable future.³⁴

In November 2021, the Cabinet of Ministers issued Resolution No. 1207 "On Establishment of National Mine Action Authority", providing the framework for the future NMAA. It was defined as an interagency State body acting on an advisory and collegial basis under the chairmanship of the Minister of Defence. The chairmanship of the NMAA will be transferred to the head of the ministry responsible for formulating and implementing State policy in civil protection and emergency response (which is currently a remit of the MoI), once Ukraine restores territorial integrity over its internationally recognised borders by decision of the Cabinet of Ministers.³⁵ Under the new Resolution, NMAA coordinates the ministries, local self-government, central and local state bodies, and other organisations (including mine action operators). It forms and ensures national mine action State policy; monitors and reports on the State's progress in fulfilling its obligations in mine action taken under international treaties; and coordinates the development and execution of mine action strategy, national mine action programme, and action plan.³⁶ While the NMAA sits at a ministerial level, it is serviced by a secretariat that also "has some managerial functions".³⁷

Operators participate in monthly mine action sub-cluster meetings, which are attended by representatives of the MoD, SESU, the Ministry of Reintegration of the Temporarily Occupied Territories, and which are chaired by UNDP. There are also regular roundtable meetings organised by the OSCE PCU on specific mine action topics and other sectoral relevant discussions.³⁸ The Geneva International Centre for Humanitarian Demining (GICHD) convened an NMAS working group and an International Management Systems for Mine Action (IMSMA) working group,³⁹ to add to the information management working group established in 2020 and which has remained active during the 2022 conflict.⁴⁰

There is an overall positive environment and facilitation of the operators' work by the Ukrainian government (e.g., granting of visas, collaboration on security matters).⁴¹

But operators continue to face difficulties importing armoured equipment and dual-use items.⁴²

Since the 2022 conflict, all operators, including those yet to be certified, have supported Ukraine in demining, EORE, and support for the enhancement of national capacities.⁴³ DRC has supported the SESU while also conducting technical and non-technical survey and clearance in Chernihiv district with 50 deminers, and plans to deploy 30 more in Kyiv district in October 2022. DRC has also been providing risk education and training in EOD.⁴⁴ In 2021, DRC supported or equipped 13 SESU demining teams, 2 non-technical survey teams, and 1 EOD team; trained 60 information management personnel from 25 regional centres; trained 35 deminers on mechanical mine clearance, battle area clearance (BAC), and technical survey; revised and adapted standard operational procedures (SOPs) to be compliant with the international mine action standards (IMAS); equipped the SESU training centre in Merefa and the regional coordination cell in Rubizne; procured metal detectors and protective personal equipment (PPE); and provided 10 new vehicles, including an armoured vehicle for the EOD team.⁴⁵

In 2021, the GICHD led or co-led various capacity building efforts for the Ukrainian authorities: a non-technical survey training course delivered in two parts, an operational efficiency roundtable discussion led by the GICHD-OSCE in September, and a training on IMAS and land release in October 2021.⁴⁶ The HALO Trust provided further training and workshops to national mine action stakeholders.⁴⁷

Norwegian People's Aid (NPA) has provided SESU with EOD clearance equipment, PPE, medical supplies, and communication equipment. NPA has also been engaging directly with SESU with a view to future cooperation in the fields of EORE and mine detection dogs (MDD).⁴⁸

The OSCE PCU organised two regional roundtables on strategic planning and land release. In addition, together with the GICHD and the Swiss Foundation of Mine Action (FSD), OSCE organised a series of trainings on non-technical survey, and several workshops on topics including NMAS, IMAS, risk education, and geographic information systems (GIS). In addition, the OSCE sponsored the participation of the Ukrainian delegation in the 25th meeting of mine action

34 Emails from Imogen Churchill, HALO Trust, 23 March and 21 September 2022; and Almedina Musić, DRC, 7 February 2022.

35 DRC Special Legal Alert – "NMAA Framework 2022", Issue 73, January 2022; and email from Miljenko Vahtarić, OSCE PCU, 1 July 2022.

36 DRC Special Legal Alert – "NMAA Framework 2022", Issue 73, January 2022.

37 Email from GICHD, 17 June 2022.

38 Emails from Toby Robinson, HALO Trust, 27 April 2020; Almedina Musić, DDG, 23 April 2020; and GICHD, 13 May 2020.

39 Email from Imogen Churchill, HALO Trust, 23 March 2022.

40 Email from GICHD, 18 May 2022.

41 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

42 Emails from GICHD, 13 May 2020; Almedina Musić, DRC, 20 April 2021; and Tony Connell, Country Director, Swiss Foundation for Mine Action (FSD), 24 March 2021.

43 Email from Miljenko Vahtarić, OSCE PCU, 1 July 2022.

44 Online presentation by Hannah Rose Holloway, DRC, to the CCM Intersessional Meetings, Geneva, 16 May 2022; and email from Almedina Musić, DRC, 14 September 2022.

45 Email from Almedina Musić, DRC, 7 February 2022.

46 Email from GICHD, 18 May 2022

47 Email from Imogen Churchill, HALO Trust, 23 March 2022.

48 Email from Alberto Serra, Programme Manager, NPA, 5 July 2022.

national directors (NDM) in June 2022, and donated four vehicles and 20 electronic tablets for non-technical survey and quality control teams of the NMAC, in addition to personal medical kits, metal detectors, hand-held UXO detectors, and large-loop detectors, along with analytical units, equipment for underwater demining, and protection equipment.⁴⁹

According to media reports, a senior United States (US) Department of State official said that the Biden administration will provide US\$89 million to help Ukraine clear land mines that now "litter huge swathes of Ukraine" since Russia's invasion.⁵⁰

ENVIRONMENTAL POLICIES AND ACTION

The current Ukrainian NMAS include a chapter (11.2.9) on "Environmental regulations", and a section (12.6) on "Environment, occupational health and safety".⁵¹

DRC has an environmental management system in place, which is stipulated in its SOP (1.13) on health, safety and environmental management. The SOPs were approved by Ukraine's military unit acting in accordance with the regulations of the certification body.⁵² FSD has detailed SOPs on environmental management (SOP 17.0) and work safe practices (SOP 02). These SOPs are in accordance with IMAS and comply with Ukrainian legal requirements.⁵³

The HALO Trust works in line with the IMAS and is accredited to the ISO 14001:2015 environmental standards, aiming to adhere to or exceed their requirements. HALO's SOPs aim to leave the environment in a state equivalent to or better than prior to the completion of demining operations. The HALO Trust aligns its environmental management policy with NMAS as well as national laws on environmental protection and any other relevant regulations or guidelines in the country of operation. HALO's SOPs contain recommendations on the environmental protection measures that should be taken to ensure that environments affected by survey and clearance operations are not degraded by the work, and, once demining is completed, are fit for their intended use.⁵⁴

GENDER AND DIVERSITY

As at May 2021, no information had been provided on whether there is a gender policy and associated implementation plan for mine action in Ukraine. No reference was made to gender or diversity in Ukraine's Article 5 deadline extension request submitted in 2020 or in Ukraine's latest Article 7 report covering 2020.

DRC has a global gender and diversity policy, and a country-specific implementation plan. Following an assessment conducted by the GICHD of DRC's Ukraine's mission in 2021, the programme was evaluated as very strong in all age, gender, and diversity mainstreaming aspects. Some of the strengths assessed were: integrated and inclusive community liaison and needs assessments, deployment of mixed gender humanitarian demining teams, gender-sensitive human resources practices, a positive and encouraging work culture, and an excellent awareness of the safeguarding system. All DRC's mine action data are disaggregated by age, gender, and disability. In 2021, of the total 114 staff members, 20 women were employed in operations positions and 8 in managerial/supervisory positions, making a total of 25% of the workforce of DRC's Humanitarian Disarmament and Peacebuilding Sector in Ukraine.

The FSD uses mixed gender non-technical survey and manual clearance teams and employs women in management roles within its country office. In 2021, the Deputy Country Director, Senior Finance Officer, Operations Coordinator,

two risk education team leaders, one non-technical survey team leader, and one Support to Education team leader were women. FSD states that it is a strong advocate of promoting talent and recognising skills regardless of gender. At the end of 2021, 29% of FSD's national staff were female, of whom 24% were in operational roles.

The HALO Trust uses mixed gender non-technical survey and community liaison teams. HALO seeks to increase the number of women employed in operational roles and improve gender balance in these roles. It has an equality and diversity policy and is working globally on a gender and diversity implementation plan. In September 2021, HALO introduced a new benefit for female employees and single fathers to reimburse childcare costs for children aged three to six. HALO continues to tailor job adverts towards women, and ensures that voices of women are heard in case they have differing accounts of contamination and its effects during non-technical surveys. As at December 2021, 25% of HALO's national staff and 22% of its operational staff were women. In addition, 18% of international and cross-posted staff were women.

The OSCE PCU translated into Ukrainian two GICHD brochures: "Recruitment and Training Guidelines" and "Gender and Priority Setting". It subsequently distributed the translated brochures to partners and government officials.

49 Emails from Miljenko Vahtarić, OSCE PCU, 1 July and 15 September 2022.

50 "U.S. announces \$89 million to help Ukraine clear land mines", *Politico*, 9 August 2022, at: <https://politi.co/3AVo5R6>; and "US Unveils \$89 Million Package to Help Ukraine Clear Russian Mines", *VOA News*, 9 August 2022, at: <https://bit.ly/3pP4Dzi>.

51 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

52 Emails from Almedina Musić, DRC, 7 February and 13 June 2022.

53 Email from Tony Connell, FSD, 10 June 2022.

54 Email from Imogen Churchill, HALO Trust, 23 March 2022.

INFORMATION MANAGEMENT AND REPORTING

Ukraine uses the IMSMA Core database. In 2021, the IMSMA database was housed on two separate servers, one owned by SESU and the other by the MoD.⁵⁵ The main server at SESU was subject to cyberattacks shortly before the Russian military offensive on 24 February, which meant that the GICHD and the information management working group subsequently needed to re-establish large amounts of data. The IMSMA database became “cloud”-based and data were stored in a single secure location. According to the GICHD, since April 2022, the IMSMA system, which meets the IMAS minimum data requirements, has been restored and is functional. Incident reports have been captured since April 2022, and data related to non-technical surveys and other field activities inputted. As at October 2022, IMSMA was being used to collect data from a variety of sources, including reports submitted by accredited international operators.⁵⁶

The GICHD has continued supporting SESU and the MOD to establish their respective IMSMA databases, which is a key pillar of its work in Ukraine.⁵⁷ In the course of 2022, IMSMA has been incorporated into the emergency coordination platform, allowing the information management cell to aggregate, interpret, and share the data across partners and sources, in order to map areas where threats exist and define possible actions. During the emergency phase, the coordinated access to up-to-date data was helping the Ukrainian national authorities target resources and take actions strategically. Over the longer term, the GICHD hopes that this data-driven mapping of contaminated areas will build the foundation for effective and efficient demining operations and speed the recovery process.⁵⁸ In collaboration with the OSCE, the GICHD also provided training on IMAS and land release in October 2021, which was attended by representatives of SESU, the HDC, the MAC, the SSTS, and the Ministry for Reintegration of the Temporarily Occupied Territories. Since the end of 2020, the GICHD has dedicated an Information Management (IM) advisor for Ukraine, and maintained a pool of consultants who can provide additional ad-hoc support on information management.⁵⁹

According to DRC, all data collection forms both in hard copy and online format cover the key qualitative and quantitative

indicators of mine action activities and meet minimum data requirements in accordance with IMAS 05.10.⁶⁰

DRC delivered an IM workshop for 60 key IM SESU personnel from 25 regional departments and five central SESU offices. The trainees also received courses on MS Excel, MS Access with data management, data analysis, GIS, and aeronautical reconnaissance coverage geographic information system (ArcGIS).⁶¹ During further workshops, all SESU staff installed the application ArcGIS Survey123 on their mobile devices and computers; received access to IMSMA Core mobile data collection forms; and tested IMSMA Core. DRC also supported SESU to information management SOPs for the first time. The SOPs are based on the ones of DRC which are IMAS compliant.⁶²

FSD conducted initial trials of Survey123 in conjunction with the GICHD during 2021, before the system was subject to further development.⁶³

The GICHD continued to chair the information management working group, which met on a regular basis in 2021. The group was attended by information management personnel from DRC, FSD, HALO Trust, NPA, MoD, the Ministry for Reintegration of the Temporarily Occupied Territories, and SESU as well as the GICHD.⁶⁴ The group discussed substantive data that should be recorded in the national database, and minimum reporting requirements for data collection forms. The following reports were agreed and started being used: the risk education data collection form, cancellation report, completion report, and non-technical survey forms.⁶⁵

While the quality of official reporting was expected to improve markedly in light of all the capacity development support that Ukraine has received on information management, the new large-scale contamination and the need to focus on emergency clearance means that Ukraine will now require more time to translate this capacity building support into quality information management and reporting.

PLANNING AND TASKING

Ukraine does not have a national mine action strategy, but as of June 2022, the NMAA secretariat has set as a priority the creation of a “national programme”, and asked the GICHD and the OSCE to support its drafting.⁶⁶

55 Email from GICHD, 17 June 2022.

56 Emails from GICHD, 17 June and 20 October 2022.

57 Emails from GICHD, 18 May 2022; and Imogen Churchill, HALO Trust, 23 March.

58 GICHD press release, 13 May 2022, at: <https://bit.ly/3ArDfwb>.

59 Email from GICHD, 18 May 2022.

60 Email from Almedina Musić, DRC, 7 February 2022.

61 Ibid.

62 Ibid.

63 Email from Tony Connell, FSD, 10 June 2022.

64 Emails from Imogen Churchill, HALO Trust, 23 March 2022; and Almedina Musić, DRC, 7 February 2022.

65 Ibid.

66 Email from GICHD, 17 June 2022.

There are currently no standardised criteria at national level for task prioritisation.⁶⁷ The MoD does not issue task dossiers but approves an annual plan with the list of all known locations planned by an operator for either clearance or survey.⁶⁸ Local government have been helping the MoD to prioritise tasks based on humanitarian criteria.⁶⁹ Operators prioritise clearance according to humanitarian impact and in discussion with the local community.⁷⁰

DRC continues to prioritise areas for survey and clearance according to its integrated mine action and development programming, and as defined by communities or local officials during non-technical survey.⁷¹ DRC began in 2021 an in-depth consultation process with conflict-affected communities in order to prioritise and plan its mine activities, and to advocate for tasking with the NMAA. DRC's area-based development approach begins with a stakeholder mapping exercise, following which, field visits are conducted to consult

with all major local-level stakeholders, with gender, age, disability, and displacement representation considerations, using integrated needs assessment forms to collect data on the socio-economic interactions with explosive ordnance contamination. Further community consultation feeds back into decision-making on the targeting of clearance, survey, and risk education.⁷²

HALO uses its "internal prioritisation matrix", which takes into account different humanitarian factors such as number of people who use the area of the task, proximity to settlements, proximity of schools and hospitals, number of accidents recorded, as well as threat type, balancing these considerations with security and access considerations.⁷³

Mines Advisory Group (MAG), which set up a programme in Ukraine in March 2022, prioritised areas of work on the basis of access, security, and coverage by other actors.⁷⁴

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

NMAS were finalised by the MoD in September 2018 after multi-year input and review from key stakeholders.⁷⁵ However, the NMAS did not consider all the inputs from the mine action stakeholders and they have not been updated regularly to address new challenges and ensure employment of best practices.⁷⁶ In May 2020, representatives from the GICHD, the OSCE PCU, DRC, and The HALO Trust formed a working group with the objective of revising NMAS to better align it with the IMAS. The working group submitted its recommendations to the MoD, the acting NMAA at that time.⁷⁷ According to DRC, the Ukrainian government had set a deadline to finalise the NMAS by August 2021,⁷⁸ which was then postponed to April 2023 due to delays in establishing the NMAA.⁷⁹ In January 2022, HALO received information from the MoD saying that, while in waiting for professional support from the GICHD to develop national standards, amendments to the national standards were not to be expected before April 2023.⁸⁰

DRC, FSD, and HALO consider that the current NMAS are yet to be fully developed to meet the needs of the mine action sector in Ukraine.⁸¹ On 19 July 2021, the GICHD submitted the recommendations on behalf of the technical working group to the MoD for its consideration.⁸² The recommendations suggested improvements on the liability clause, monitoring of land release operations, and considerations on all reasonable efforts. According to the GICHD, Ukraine has developed NMAS that are in line with IMAS with GICHD support in the past. Now with the conflict unfolding, review and application of standards have become important topics in need of further support. The GICHD intends to continue its work supporting the national authorities in developing NMAS once the conditions are right.⁸³

In April 2019, the Cabinet of Ministers approved Resolution 372 on "Regulations on marking mine and ERW hazards", which are said to follow the provisions in the IMAS.⁸⁴

67 Emails from Henry Leach, DRC Ukraine, 2 May 2019; Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019; and Almedina Musić, DRC, 7 February 2022.

68 Email from Almedina Musić, DRC, 7 February 2022.

69 Interviews with Lt.-Col. Yevhenii Zubarevskiy, MoD, in Geneva, 20 May 2016; and Maksym Komisarov, MoD, in Geneva, 8 June 2018.

70 Emails from Almedina Musić, DRC, 23 April 2020; and Toby Robinson, HALO Trust, 27 April 2020.

71 Email from Almedina Musić, DRC, 7 February 2022.

72 Ibid.

73 Email from Imogen Churchill, HALO Trust, 23 March 2022.

74 Email from Helena Derwash, Country Director, Mines Advisory Group (MAG), 27 September 2022.

75 Email from Gianluca Maspoli, GICHD, 25 September 2018; and Miljenko Vahtarić, OSCE PCU, 25 September 2018; and interview with Miljenko Vahtarić, OSCE PCU, 7 February 2019.

76 Email from GICHD, 30 April 2021.

77 Emails from Almedina Musić, DRC, 20 April 2021; and Ronan Shenhav, HALO Trust, 20 April 2021.

78 Email from Almedina Musić, DRC, 26 July 2021.

79 Email from Almedina Musić, DRC, 7 February 2022.

80 Email from Imogen Churchill, HALO Trust, 23 March 2022.

81 Emails from Almedina Musić, DRC, 7 February 2022; Imogen Churchill, HALO Trust, 23 March 2022; and Tony Connell, FSD, 10 June 2022.

82 Email from Almedina Musić, DRC, 7 February 2022.

83 Email from GICHD, 18 May 2022.

84 Email from Miljenko Vahtarić, OSCE PCU, 13 June 2019; and Ministry for Temporarily Occupied Territories and Internally Displaced Persons, "Danger! Mines! Cabinet of Ministers of Ukraine Approved Regulations of Marking Mine and ERW Hazards, Developed By MTOT", 4 May 2019, at: <http://bit.ly/2l06vCA>.

DRC has been working with the military unit "A2641" acting in accordance with the regulations of the certification body, and was officially requested to submit its application for accreditation in February 2021. The process was completed at the end of 2021 with a physical inspection, and DRC received its certificates of conformity for manual mine clearance, battle area clearance (BAC), risk education, and technical and non-technical survey. According to DRC, the establishment of the NMAA in November 2021 will help to tackle delayed accreditations that resulted from the lack of fully functioning mine action structures.⁸⁵

OPERATORS AND OPERATIONAL TOOLS

The MoD and several other ministries continue to deploy units that undertake clearance and destruction of mines and ERW. This includes the military engineering school, which has a licence to accredit operators; the National Guard of Ukraine; the MoI, which conducts clearance through SESU and also has an engineering department that conducts EOD; the Security Service; the SSTS, which is responsible for demining national infrastructure; and the State Border Service, which conducts demining in areas under its control on land and in the sea.⁸⁶

Three international demining organisations—DRC, FSD, and The HALO Trust—were operating in Ukraine in 2021.⁸⁷ Since the February 2022 conflict, both NPA and MAG have also set up programmes in Ukraine.⁸⁸

In 2019, the Ukrainian organisations Demining Team of Ukraine and Demining Solutions were active in demining in the east of the country.⁸⁹ It not known whether they remained operational in 2021. The national operator, Ukrainian Deminers Association (UDA), has been active in Ukraine since 2018 conducting survey and clearance with a team of 61 deminers.⁹⁰ In 2022, UDA partnered with MAG on conducting EORE.⁹¹ Its 2020 Article 5 deadline extension request, Ukraine reported that 41 demining "groups" with a total of more than 500 people were involved in mine action from these organisations.⁹² Since the beginning of the conflict in 2022, SESU reportedly deployed more than 600 deminers across the country, and was rushing to hire more. One SESU unit cleared approximately 30 items of unexploded ordnance (UXO) per day.⁹³

Table 2: Operational clearance capacities deployed in 2021⁹⁴

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
DRC	8	60	0	0	Five teams (41 deminers) between January and May 2021, then increased to eight teams (60 deminers) for the remaining of 2021.
HALO	23	299	0	3	1x JCB excavator 1x Case frontloader 1x Volvo frontloader Initial trials of a tractor with harrow magnet attachment started. ⁹⁵
FSD***	3	20	0	0	One clearance team operated with only six deminers. Medics and drivers are cross-trained as deminers, and have therefore been included.
Demining Solutions***	1	7	0	0	
UDA ⁹⁶		61			
Totals	35	447	0	3	

* Excluding team leaders, medics, and drivers unless otherwise stated. ** Excluding vegetation cutters and sifters. *** Data correct at end 2020.

85 Email from Almedina Musić, DRC, 13 July 2022.

86 Interview with Col. Oleksandr Shchebetiuk, Ukrainian Armed Forces, in Geneva, 26 June 2015; emails from Anton Shevchenko, OSCE, 23 June 2015; and GICHD, 17 June 2022; "Mine Action in Ukraine", Side-event presentation by Lt.-Col. Yevhenii Zubarevskiyi, MoD, Geneva, 17 February 2016; Article 7 Report (covering 2018), Form F.

87 2020 Article 5 deadline Extension Request; and Article 7 Report (covering 2018), Form F.

88 Emails from Roxana Bobolicu, International Policy Manager, MAG, 21 September 2022; and Alberto Serra, Programme Manager, NPA, 5 July 2022.

89 Email from Gianluca Maspoli, GICHD, 20 June 2017; "Tightening with the process of mine clearance in the East of Ukraine can lead to a new crisis", *Military Informant*, 25 July 2016, at: <http://bit.ly/2Qf1jeg>; and "Presentation of the Demining team of Ukraine", *SD Crisis*, 26 April 2017, at: <http://bit.ly/2wb6DG7>.

90 Ukrainian Deminers Association (UDA) website, accessed on 28 September 2022, at: <https://bit.ly/3fsdPb0>.

91 Email from Helena Derwash, MAG, 27 September 2022.

92 2020 Article 5 deadline Extension Request.

93 "Clearing the deadly litter of unexploded Russian bombs in Ukraine", *The Washington Post*, 15 April 2022, at: <https://wapo.st/37XmuPc>.

94 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

95 The harrow magnet system combines a power harrow with a large, fixed magnet pulled by an armoured tractor. The system is designed to improve productivity on heavily metal-contaminated hazardous areas that do not contain landmines (battle areas or unplanned explosions at munitions sites). The harrow breaks up the soil and the magnet collects metal which can then be inspected for any hazardous items. A metal detector can then rapidly clear the land for any remaining EO once the majority of metal has been removed. This is a technique pioneered by HALO in Afghanistan, which has been shown to speed up clearance significantly. Emails from Imogen Churchill, HALO Trust, 23 March and 17 June 2022.

96 Ukrainian Deminers Association (UDA) website, accessed on 28 September 2022, at: <https://bit.ly/3fsdPb0>.

In 2021, DRC deployed two non-technical survey personnel in one team, then, in July 2021, increased this to four non-technical survey personnel in two teams. All of DRC's technical survey teams are trained and equipped to conduct manual mine clearance and BAC. This is double the technical and demining capacity deployed in 2020. The number of DRC's clearance teams (including technical survey) increased by three in 2021 compared to the previous year, reaching eight at the end of 2021, thanks to renewed donor funding. DRC considered creating a further clearance and non-technical survey team in 2022, contingent upon funding, but as at June 2022, the Russian military offensive meant that DRC was reassessing the need to step up its capacity.⁹⁷

FSD suspended demining operations in 2019 due to lack of funding but later secured additional funds and restarted its programme in 2020.⁹⁸ As at June 2022, FSD had started both non-technical survey and risk education activities in Chernihiv, and was recruiting additional staff from Chernihiv and Kyiv regions in preparation for a rapid response and BAC tasking by August 2022. FSD plans to deploy seven clearance teams, three non-technical survey, and three risk education teams, and was waiting for an import clearance from the Ukrainian authorities to deploy an MV4, armoured front-end loaders, armoured excavators, and tipper trucks. FSD also plans to increase its international staff from one to nine, and its national staff from 53 to 105.⁹⁹

The HALO Trust deployed 12 non-technical survey personnel across three teams until October 2021, then increased by one additional four-strong non-technical survey team until the end of the same year thanks to additional secured funding. Similar to the previous year, HALO deployed three technical survey teams with a total of 18 personnel. Apart from an increase of one-technical survey team, HALO has maintained the same survey and clearance capacity in 2021 compared to the previous year. In early 2022, The HALO Trust planned to increase its non-technical survey capacity by one more team, and to increase its clearance teams by reducing their size but augmenting their number, in line with HALO's global practices.¹⁰⁰ Later in 2022, HALO reported that these plans have substantially changed due to the new operating environment, and the need to further expand and respond to the increasing needs. For example, as at September 2022, HALO deployed 16 non-technical survey teams in Ukraine.¹⁰¹

The HALO Trust used Minehound detectors in combination with rapid excavation drills on appropriate tasks in the first half of 2021. It also changed its approach to the use of remote vegetation-cutting devices, which enabled more efficient manual clearance. HALO also started increasing the scope

of the types of tasks (threat types) where these machines can be deployed. Initial trials started on the use of a harrow magnet, but conclusions were yet to be drawn.¹⁰²

The COVID-19 pandemic had a direct impact on DRC's Ukraine operations mainly due to the three-month lockdown and procurement challenges. DRC had to postpone some compulsory pre-deployment training courses. Local restrictions in place also lead to a reduction of training attendees and demining operations.¹⁰³ HALO reported that COVID-19 reduced efficiency due to mitigation measures such as limits on the number of people in a vehicle and deployment of staff from home. In addition, working time was lost because precautionary isolation of staff who were on contact with positive cases.¹⁰⁴

On 19 May 2022, the GICHD issued a first edition of an explosive ordnance guidance for Ukraine. The guidance aimed to assist qualified personnel conducting survey and EO reconnaissance work to correctly identify explosive ordnance and understand some of the associated hazards.¹⁰⁵ In June 2022, the GICHD was preparing for a second edition of the guide and intended to collaborate with SESU on reviewing the technical terminology of the Ukrainian version.¹⁰⁶

MAG deployed to Ukraine in March 2022 and was establishing a coordination and operational hub in Kyiv with a view to expanding its operations to other areas of the country. MAG signed MoUs with the SESU and the Ministry of Reintegration for Temporarily Occupied Territories. MAG also partnered with UDA in the areas of capacity building and EORE, and expected to start survey and clearance in the last quarter of 2022 once it has completed all the certification procedures.¹⁰⁷

Following the decision by NPA's management board to initiate a humanitarian response in Ukraine, NPA has been working to establish a mine action programme based out of Kyiv with funding from the Norwegian Ministry of Foreign Affairs (MoFA). Since 15 May 2022, NPA has a country office with three international staff, and has been seeking registration and accreditation. NPA has also had discussions with the national operator, Ukrainian Deminer's Association (UDA), on the possibility of partnership in EORE, and conflict preparedness and protection (CPP).¹⁰⁸ NPA's plans for the immediate future focused on reducing the humanitarian impact of explosive ordnance and weapons through a combination of survey, clearance, and risk education. NPA planned to recruit, train, equip, and deploy four non-technical teams and two multi-task teams conducting EOD, clearance, and BAC by the end of 2022. UDA is operating in several regions conducting non-technical survey, risk education, EOD, and area clearance.¹⁰⁹

97 Emails from Almedina Musić, DRC, 7 February and 13 June 2022.

98 Email from Tony Connell, FSD, 24 March 2021.

99 Email from Tony Connell, FSD, 10 June 2022.

100 Emails from Ronan Shenhav, HALO Trust, 20 April 2021; and Imogen Churchill, HALO Trust, 23 March 2022.

101 Email from Imogen Churchill, HALO Trust, 25 September 2022.

102 Ibid.

103 Email from Almedina Musić, DRC, 7 February 2022.

104 Email from Imogen Churchill, HALO Trust, 23 March 2022.

105 GICHD publication, "Explosive Ordnance Guide for Ukraine", 9 May 2022, at: <https://bit.ly/3a4d70j>.

106 Email from GICHD, 17 June 2022.

107 Email from Helena Derwash, MAG, 27 September 2022.

108 Email from Alberto Serra, NPA, 5 July 2022.

109 Ibid.

DEMINER SAFETY

The SESU reported to the media that, as at 15 April 2022, 29 deminers had been killed while on duty, and 73 had been injured. Demining teams have had to work under the assumption that any object could have a mine attached.¹¹⁰

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

As at September 2022, Ukraine had yet to submit its Article 7 report covering 2021 and had not reported on survey and clearance of mined areas in 2021. According to data provided by DRC and HALO Trust, a total of 2.1km² of mined area was released in 2021, of which, 1.26km² was cleared, 0.09km² was reduced through technical survey, and 0.8km² cancelled through non-technical survey.¹¹¹ A total of 11 anti-personnel mines were destroyed by The HALO Trust.¹¹²

In addition, 3.7km² of previously unrecorded anti-personnel mine contamination was discovered and added to the database by HALO.¹¹³

SURVEY IN 2021

According to operator data only, in 2021, DRC cancelled 798,207m² of land through non-technical survey (see Table 3). A total of 86,819m² of mined land was reduced through technical survey in 2021, of which DRC reduced 60,612m² and the HALO Trust 26,207m² (see Table 4).¹¹⁴

Table 3: Cancellation through non-technical survey in 2021 (operator data)¹¹⁵

Region	District	Village	Operator	Area cancelled (m ²)
Luhansk	Sievierodonetskyi	Myrna Dolyna	DRC	798,207
Total				798,207

Table 4: Reduction through technical survey in 2021 (operator data)¹¹⁶

Region	District	Village	Operator	Area reduced (m ²)
Luhansk	Sievierodonetskyi	Myrna Dolyna	DRC	60,612
Donetsk	Pokrovskyi	Novomykhailivka	HALO	109
Donetsk	Kramatorskyi	Ozerne	HALO	14,132
Luhansk	Shchastynskyi	Shyrokivska	HALO	82
Donetsk	Bakhmutskyi	Siverska	HALO	11,884
Total				86,819

110 "Clearing the deadly litter of unexploded Russian bombs in Ukraine", *The Washington Post*, 15 April 2022.

111 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

112 Email from Imogen Churchill, HALO Trust, 23 March 2022.

113 Ibid.

114 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

115 Email from Almedina Musić, DRC, 7 February 2022.

116 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

In 2021, the HALO Trust did not cancel land through non-technical survey, but reduced 354m² of anti-personnel mined area through technical survey.¹¹⁷ This marked a significant increase in the area reduced by the HALO Trust in 2021 compared to 2020. According to HALO, this increase may have been a result of slightly more teams or more efficient clearance as HALO adjusted its use of remote vegetation-cutting devices to increase efficiency gains in manual clearance during technical survey work.

In 2021, DRC did not reduce land through technical survey, but cancelled 365,061m² of anti-personnel mined area through non-technical survey.¹¹⁸ DRC survey operations saw a significant increase in 2021 compared to the previous year thanks to secured funding in 2020, which allowed DRC to import all necessary demining equipment and tools, and to train three additional demining teams.¹¹⁹

As noted above, a total of 3.7km² of previously unrecorded anti-personnel mine contamination was discovered by HALO Trust and added to the database. Of this total area, 34 areas were CHAs and one was a SHA. All but one of these areas contained mixed threats with the other containing only anti-personnel mines.¹²⁰ The information collected during survey reveals that the mines were laid during the peak of the conflict in 2014–15 when the warring parties were moving positions across Donetsk and Luhansk regions.¹²¹

CLEARANCE IN 2021

According to operator data only, a total of 1,259,000m² of mined land was cleared in Ukraine in 2021 (see Table 5). In addition to what is being cleared by international operators, substantial clearance is being undertaken by the MoD and the SESU, some of which is conducted immediately after contamination has occurred. However, as at September 2022, clearance conducted by Ukrainian national bodies in 2021 had not yet been reported.

DRC cleared 85,227m² of land in 2021. DRC did not encounter any anti-personnel mines during the clearance but destroyed in the process 12 items of UXO.¹²² In 2020, DRC cleared 58,298m² of anti-personnel mined area and destroyed two items of UXO.¹²³ DRC attributes the increase of its clearance outputs to funding secured in 2020, which allowed DRC to import all necessary demining equipment and tools, and to train three additional demining teams.¹²⁴

The HALO Trust cleared 1,173,773m², destroying in the process 11 anti-personnel mines, four anti-vehicle mines,

and 78 items of UXO. Of the anti-personnel mines destroyed, six were of an improvised nature (i.e. grenades laid with tripwires). In 2019, HALO cleared 772,179m², destroying four anti-personnel mines and 35 items of other UXO. The increase in clearance output in 2021 is possibly a result of more teams or more efficient clearance as HALO adjusted its use of remote vegetation-cutting devices to increase efficiency gains in manual clearance.¹²⁵ The eleven anti-personnel mines found by HALO were reported to the Ukrainian authorities for removal and destruction in situ. Operators are not authorised to conduct EOD in Ukraine.¹²⁶

The number of anti-personnel mines found during clearance continues to be very low and, in 2021, the HALO Trust cleared a total of 901,113m² in 47 areas that proved to contain no anti-personnel mines. However, it should be noted that anti-personnel mines were found on seven of these 47 areas in previous years' clearance and clearance was not completed on all tasks worked on in 2021. DRC cleared two mined areas that proved to have no anti-personnel mines.¹²⁷

117 Email from Ronan Shenhav, HALO Trust, 20 April 2021.

118 Email from Almedina Musić, DRC, 20 April 2021.

119 Email from Almedina Musić, DRC, 7 February 2022.

120 Email from Imogen Churchill, HALO Trust, 23 March 2022.

121 Emails from Ronan Shenhav, HALO Trust, 20 April 2021; and Imogen Churchill, HALO Trust, 23 March 2022.

122 Email from Almedina Musić, DRC, 7 February 2022.

123 Email from Almedina Musić, DRC, 20 April 2021.

124 Ibid.

125 Email from Imogen Churchill, HALO Trust, 23 March 2022.

126 Emails from Toby Robinson, HALO Trust, 27 April 2020; Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

127 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

Table 5: Mine clearance in 2021 (operator data)¹²⁸

Region	District	Village	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Luhansk	Sievierodonetskyi	Myrna Dolyna	DRC	26,394	0	0	11
Luhansk	Sievierodonetskyi	Viktorivka	DRC	40,174	0	0	0
Luhansk	Sievierodonetskyi	Orikhove	DRC	14,975	0	0	1
Luhansk	Sievierodonetskyi	Zolote	DRC	3,684	0	0	0
Donetsk	Bakhmutskyi	Kodema	HALO	165,145	2	0	2
Donetsk	Bakhmutskyi	Novoluhanske	HALO	274,628	4	4	3
Donetsk	Bakhmutskyi	Spirne	HALO	11,485	1	0	0
Donetsk	Bakhmutskyi	Riznykivka	HALO	19,237	0	0	0
Donetsk	Kramatorskyi	Ozerne	HALO	15,816	0	0	0
Donetsk	Kramatorskyi	Andriivka	HALO	2,306	0	0	0
Donetsk	Kramatorskyi	Rai-Oleksandrivka	HALO	384	0	0	1
Donetsk	Kramatorskyi	Sloviansk	HALO	1,250	0	0	0
Donetsk	Kramatorskyi	Yampil	HALO	37,753	0	0	2
Donetsk	Mariupolskyi	Hnutove	HALO	6,744	0	0	0
Donetsk	Pokrovskyi	Slavne	HALO	2,931	0	0	1
Donetsk	Pokrovskyi	Novomykhailivka	HALO	23,702	0	0	0
Luhansk	Shchastynskyi	Dmytrivka	HALO	287,272	0	0	57
Luhansk	Shchastynskyi	Kolesnykivka	HALO	21,884	3	0	4
Luhansk	Shchastynskyi	Komyshne	HALO	97,686	1	0	2
Luhansk	Shchastynskyi	Krasna Talivka	HALO	80,068	0	0	2
Luhansk	Shchastynskyi	Krasnyi Derkul	HALO	2,084	0	0	0
Luhansk	Shchastynskyi	Shyrokyi	HALO	6,900	0	0	0
Luhansk	Starobilskyi	Pervomaisk	HALO	99,118	0	0	1
Luhansk	Shchastynskyi	Stepove	HALO	17,380	0	0	3
Totals				1,259,000	11	4	90

AP = Anti-personnel AV = Anti-vehicle

ARTICLE 5 DEADLINE AND COMPLIANCE



128 Ibid.

Table 6: Five-year summary of anti-personnel mine clearance

Year	Area cleared (m ²)
2021	1,259,000
2020	830,477
2019	697,012
2018	391,819
2017	220,887
Total	3,399,195

Under Article 5 of the APMBC (and in accordance with its latest extension), Ukraine is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 December 2023. It will not meet this new deadline and will have to request another extension. In 2020, Ukraine stated that the fulfilment of its deadline was dependent upon “completion of hostilities, restoration of the constitutional order and gaining the full control over the occupied territories, including over the state border between Ukraine and the Russian Federation”.¹²⁹

While full-scale demining is impossible due to the ongoing conflict, coordination to support the Ukrainian authorities to locate, identify, and when possible, remove explosive ordnance is underway.¹³⁰ In addition to what is being cleared by international operators, substantial clearance is being undertaken by the MoD and the SESU, some of which is conducted immediately after contamination has occurred.

The clearance conducted by Ukrainian national bodies was not being reported. The 2022 conflict has certainly resulted in new contamination, the scale of which is unknown. The time needed to clear anti-personnel mines in Ukraine can only be estimated once hostilities have ended and a national contamination survey has been completed.¹³¹

The amount of area cleared in 2021 was higher than the amount of clearance reported in 2020, though this data is only based on information provided by the HALO Trust and DRC as Ukraine did not report clearance data for 2021 or in previous years in a manner consistent with the IMAS to make comparable clearance and survey figures. Additionally, the number of anti-personnel mines found and destroyed during planned clearance is very small— eleven in 2021, four in 2020, and eight in 2019— with both HALO Trust and DRC clearing large areas without finding any anti-personnel mines. Clearance data are not available from areas outside of government control, though it is believed that, at least in earlier years, pro-Russian rebels conducted some ad hoc clearance.¹³²

A step forward in 2021 saw the establishment of a long-awaited NMAA in November 2021 and the continued development in mine action structures, namely, SESU and MoD NMACs, although neither was fully functional at the end of 2021.

While Russia is not a State Party or signatory to the APMBC it also has obligations under international human rights law to clear anti-personnel mines as soon as possible in any areas of Ukraine over which it exercises effective control, by virtue of its duty to protect the right to life of every person under its jurisdiction.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION.

Ukraine has not provided information on whether it has a plan in place for dealing with residual risk post completion.

129 2020 Article 5 deadline Extension Request, p. 5.

130 GICHD press release, 13 May 2022, at: <https://bit.ly/3ArDfwb>.

131 Online presentation by Hannah Rose Holloway, DRC, CCM Intersessional Meeting, Geneva, 16 May 2022.

132 Side-event presentation by Mark Hiznay, Human Rights Watch, in Geneva, February 2015; and interview, 18 February 2015.

ARTICLE 5 DEADLINE: 1 MARCH 2023
 FIVE-YEAR EXTENSION REQUESTED TO 1 MARCH 2028

KEY DATA

**ANTI-PERSONNEL (AP)
 MINE CONTAMINATION: HEAVY
 NO CREDIBLE ESTIMATE**

AP MINE
 CLEARANCE IN 2021

1.5km²

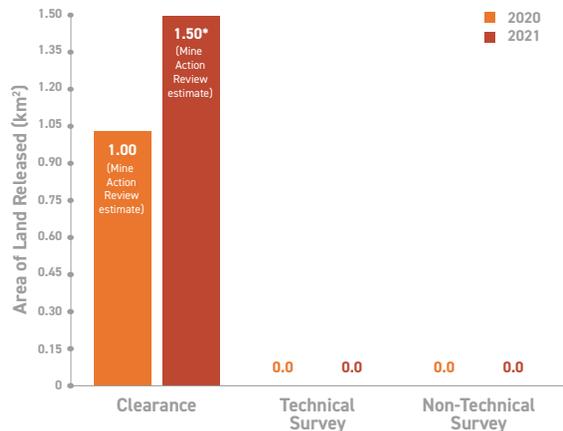
(MINE ACTION
 REVIEW ESTIMATE)

AP MINES
 DESTROYED IN 2021

1,676

(BASED ON UNDP DATA)*

LAND RELEASE OUTPUT



* Does not include results of Project Masam mine clearance operations.

CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

The Yemen Executive Mine Action Centre (YEMAC) embarked on the Yemen baseline survey (YBLS) in southern areas controlled by the internationally recognised government in April 2021 with support from Danish Refugee Council (DRC) and, from October 2021, The HALO Trust. By April 2022, it had identified 90km² of confirmed and suspected areas affected by explosive ordnance, including conventional and improvised mines. In the north, Houthi authorities agreed in November 2021 to create a coordination centre similar in function to the Yemen Mine Action Coordination Centre (YMACC) in Aden, but as of June 2022 had taken no action to implement the agreement. In March 2022, Yemen requested a fourth extension of its Article 5 deadline, seeking a further five years.

RECOMMENDATIONS FOR ACTION

- Houthi authorities and the forces that support them should halt the emplacement of mines and improvised devices and conform to the obligations of the Anti-Personnel Mine Ban Convention (APMBC).
- YEMAC and YMACC should develop a mine action work plan setting clear targets for survey and clearance of mines and explosive remnants of war (ERW).
- YMACC should clarify criteria for prioritising non-technical survey and clearance.
- YEMAC should engage with other government departments to facilitate importation of demining equipment and the issuance of visas to staff of its international implementing partners.
- YEMAC/YMACC should provide annual updates on the progress and findings of the Yemen Baseline Survey detailing the area surveyed, confirmed hazardous areas and suspected hazardous areas identified (by governorate), and the types of explosive ordnance identified, including anti-personnel mines of an improvised nature.
- The Supreme Council for the Management and Coordination of Humanitarian Affairs (SCMCHA) and YEMAC North should facilitate access of international mine action agencies and operators.
- The SCMCHA and YEMAC North should expedite the creation of a coordination office.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	3	YEMAC embarked in mid 2021 on a baseline survey to assess mine and other explosive ordnance contamination but survey capacity was limited and progress was insufficient to determine the extent of contamination in any of Yemen's 22 governorates. In the meantime, armed conflict and criminality continue to add explosive hazard contamination, with extensive use of anti-personnel mines, in particular mines of an improvised nature.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	4	Mine action in Yemen, one of the world's poorest countries, is entirely dependent on international donor funding. Conflict between Sana'a-based and Aden-based authorities has de facto split YEMAC, undermining its national role and leaving YEMAC North subject to Coalition sanctions. YEMAC's two components do not coordinate their activities. YEMAC South opened a coordination centre in the south in 2020 to develop partnerships with international organisations as part of UN-supported moves to strengthen the programme. YEMAC North reached agreement with de facto authorities on setting up a similar coordination body in the north but, as of August 2022, no follow-up action had been reported.
GENDER AND DIVERSITY (10% of overall score)	5	5	Yemen's 2022 Article 5 deadline extension request identifies inclusion of women as a priority and YEMAC in the south has taken steps to employ women in field operations as well as office roles. In 2020, it trained the first female bomb disposal operator and deployed a number of female staff for explosive ordnance risk education and non-technical survey. In 2021, YEMAC planned to include 10 women among 30 candidates for non-technical survey training. The extension request states "there is no objection to including more women."
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	4	YEMAC, with support from UNDP and the Geneva International Centre for Humanitarian Demining (GICHD) installed Information Management System for Mine Action (IMSMA) Core in 2021 while the North works with a much older New Generation database. Data available on results of survey and clearance are not comprehensive. Yemen has regularly submitted APMBC Article 7 transparency reports but its latest report (covering 2021) provided limited information on the progress of survey and clearance.
PLANNING AND TASKING (10% of overall score)	5	5	Yemen's mine action continues to provide an emergency response focused on life-saving interventions and civilian infrastructure rather than systematic or planned clearance. Its Article 5 extension request identifies priority areas of activity, including particularly the baseline survey, but does not set out a detailed work plan. In the south, tasks are issued by YMACC but criteria for prioritising are unclear.
LAND RELEASE SYSTEM (20% of overall score)	4	4	YEMAC reports it is revising and updating 95% of its national mine action standards (NMAS). It reported it had revised 32 chapters of NMAS in 2021, including standards relating to land release, and that these were compliant with the International Mine Action Standards (IMAS) and the Oslo Action Plan. The new standards have yet to be approved by the government and were not yet in effect as of August 2022.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	6	YEMAC requested a five-year extension to its Article 5 deadline in March 2022 so as to achieve the goal of its existing extension period by conducting a baseline survey. YEMAC's emergency response operations reportedly cleared 4.5km ² of battle area in 2021, up from 3.1km ² the previous year, and a destroyed substantially higher number of items of explosive ordnance but it has yet to undertake systematic area clearance of mined land. The Saudi-funded Project Masam reported clearance of 10.8km ² of mined area but its results are not independently quality assured and do not appear in Yemen's Article 7 report. No data are available on any clearance or survey conducted in the Houthi-controlled north.
Average Score	4.6	4.4	Overall Programme Performance: Poor

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Yemen Executive Mine Action Centre (YEMAC)
- Yemen Mine Action Coordination Centre (YMACC)

NATIONAL OPERATORS

- YEMAC
- Yemen Army Engineers

INTERNATIONAL OPERATORS

- Danish Refugee Council Humanitarian Disarmament and Peacebuilding Sector (DRC)

- The HALO Trust
- Norwegian People's Aid (NPA)
- Project Masam/SafeLane Global/Dynasafe

OTHER ACTORS

- United Nations Development Programme (UNDP)
- Geneva International Centre for Humanitarian Demining (GICHD)
- The Development Initiative (TDI)
- Prodigy Systems

UNDERSTANDING OF AP MINE CONTAMINATION

Yemen has heavy contamination by conventional and improvised anti-personnel mines and a wide array of other explosive ordnance but the extent is not known after seven years of conflict in which all parties have extensively used landmines. In addition, areas previously cleared have been re-contaminated and shifting conflict lines have hindered systematic survey. A baseline survey started in April 2021 in areas controlled by the internationally recognised government (IRG) based in Aden had identified 90km² of contamination by April 2022.¹

Results of the baseline survey conducted in 2021 and published in Yemen's revised Article 5 extension request identified contamination in six governorates totalling 80.54km² (see Table 1). This included 45 suspected hazardous areas (SHAs) totalling 18.52km² and 144 confirmed hazardous areas (CHAs) totalling 62.03km², with one-third of the total located in Hodeida governorate.² YEMAC reported later that the contamination identified through non-technical survey in 2021 amounted to 78.42km², including SHAs totalling 18.24 km² and CHAs totalling 60.18km². YEMAC said that through technical survey it identified additional SHAs amounting to 0.28km² and CHAs amounting to 1.72km².³

Table 1: Results of Yemen Baseline Survey 2021⁴

Governorate	SHAs	SHA area (m ²)	CHAs	CHA area (m ²)	Total area (m ²)
Abyan	0	0	35	11,694,095.0	11,694,095.0
Aden	8	1,359,208.9	25	3,656,949.7	5,016,158.6
Al-Dhale	4	649,941.7	11	3,055,853.0	3,705,794.7
Hodeidah	7	6,647,249.9	15	19,906,088.4	26,553,338.3
Lahj	20	9,220,679.7	31	7,855,656.1	17,076,335.8
Taiz	6	638,491.1	27	15,858,393.8	16,496,884.9
Totals	45	18,515,571.3	144	62,027,036.0	80,542,607.3

A United Nations panel reported in 2021 that the Houthis had made "widespread" use of mines in villages, schools, near water sources, on beaches, and on roads, posing a constant threat to civilians and provoking displacement.⁵ Houthi officials have acknowledged using landmines⁶ and have reportedly laid large numbers of improvised explosive devices (IEDs), including mines of an improvised nature, along frequently shifting frontlines in the conflict. Analysis of some 2,400 improvised devices since 2017 found 70% to be mines of an improvised nature.⁷ Contamination is especially high along Yemen's west coast where mines were placed with the aim of stalling the advance of pro-government Yemeni and Saudi coalition forces towards the strategic port of Hodeida and more recently around Marib, a focus of intense fighting in 2020 and 2021. A mine blast that hit a convoy carrying the IRG Minister of Defence west of Marib city in February 2020 pointed to continuing Houthi anti-vehicle mine use.⁸

1 Email from Marie Dahan, Partnership & Coordination Analyst, UNDP, 1 June 2022.

2 2022 Article 5 deadline extension request (revised), August 2022, pp. 8–9.

3 Email from Ameen Saleh Al-Aqili, Director, YEMAC, 20 September 2022.

4 2022 Article 5 deadline extension request (revised), August 2022, pp. 8–9.

5 Letter from the Panel of Experts on Yemen to the President of the Security Council (S/2021/79), 25 January 2021, pp. 3, 44.

6 J. Gambrell and M. Harb, "Landmines will be hidden killer decades after war", *Associated Press*, 24 December 2018.

7 UNDP Yemen, "Emergency Mine Action Project – Yemen Phase Five Termination, Evaluation Brief EMA Project", 2 August 2021.

8 "Yemen land mine kills six in convoy carrying defense minister, who is unharmed", *Reuters*, 19 February 2020.

YEMAC reported new emplacement of mines in Hadramaut, Mahrah, and Shabwah, mostly by al-Qaeda in the Arabian Peninsula (AQAP) and Islamic State, including TM-46 or TM-57 anti-vehicle mines modified with sensitive pressure plates to function as anti-personnel mines.⁹ UN experts also report rising use of improvised devices by criminal groups, notably in governorates such as Hadramaut which have access to maritime supply routes. The great majority—around 70%—are mines of an improvised nature, notably TM-57 anti-vehicle mines hooked up to pressure plates and/or incorporating anti-handling features provided by MUV fuzes of a style produced by Russia.¹⁰

A range of newly-emplaced and/or new types of mines and improvised devices that Project Masam reported encountering in 2021 included bounding fragmentation mines activated both by tripwires, sometimes multiple tripwires, and/or pressure plates. They also observed increasing use of secondary explosive devices linked to mines or IEDs (and therefore targeting deminers), and the emplacement of improvised devices with a very large explosive charge in buildings.¹¹

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Management of mine action in Yemen is geographically divided along the lines of the conflict that erupted in March 2015 between the Houthis (Ansar Allah) movement controlling the capital Sana'a and much of the north and west (the DFA), and the IRG, operationally based in Aden and the south. The Sana'a-based interministerial National Mine Action Committee (NMAC), which previously formulated national mine action policy, is no longer recognised by the IRG, which reported it had disbanded in 2019. In the south, YEMAC has fulfilled a double role of regulator responsible for policy and planning while also serving as the sole national operator.¹²

YEMAC was established in Sana'a in January 1999 as a national mine action agency and nominally maintains a national role today, with more than 1,000 staff working in 20 of Yemen's 21 governorates as at late 2019.¹³ The United Nations Development Programme (UNDP) reported that in 2020 YEMAC conducted clearance in a total of 19 of Yemen's 21 governorates.¹⁴ In practice, however, YEMAC has split into two, centred round Sana'a and Aden. YEMAC South informed Mine Action Review there was no coordination between the two because YEMAC North was under the control of Houthi militias.¹⁵ Yemen's mine action continues to be almost entirely dependent on international donor support. YEMAC said government funding only covered costs of its staff.¹⁶

YEMAC North employed around 495 staff in 2021, working in northern governorates controlled by Houthi forces.¹⁷ It manages all aspects of mine action including survey and clearance, risk education, victim assistance, information management, and quality management, but with much less

equipment and assets than available to the south. YEMAC North and the Supreme Council for the Management and Coordination of Humanitarian Affairs (SCMCHA) agreed in November 2021 to set up a coordination centre but did not commit to a timeline for implementing it, and as of June 2022 it had not been created.¹⁸

In the south, YEMAC operated with some 650 staff¹⁹ mainly active in Abyan, Aden, Amran, Hadramaut, Lahj, and Taiz governorates. YEMAC also has an office in Mokha, and in 2019 it opened offices in Taiz to support operations around Hodeida, and in Marib for operations in al-Jawf governorate.²⁰ YEMAC said at the time that it had set up "skeleton" offices using its own resources pending receipt of financial support from UNDP.²¹ YEMAC's Article 5 deadline extension request, submitted in March 2022, said YEMAC was planning to open an office in Marib to support operations in Al Bayda, Al Jawf, and western Shabwah governorates. Operations included explosive ordnance disposal (EOD) spot tasks, non-technical survey, and risk education.²²

YEMAC South opened the YMACC in Aden in April 2020 in order to strengthen programme management in areas controlled by the IRG. The centre, which is intended to facilitate cooperation with international organisations, has responsibility for accrediting organisations and issuing task orders. It has departments for planning, information management, and quality assurance/quality control.²³ The centre convened its first coordination meeting on 9 April 2020, and by early 2021 it was employing 44 people.²⁴ It had set up technical working groups focused on non-technical survey and risk

9 Letter from the Panel of Experts on Yemen to the President of the Security Council (S/2021/79), 25 January 2021, p. 44.

10 Email from Gareth Collett, Chief Technical Adviser – Counter IED, UNDP, 6 July 2021; and zoom interview, 20 July 2021.

11 Email from Ousama Algosaibi, Project Manager, Project Masam, 29 May 2022.

12 Article 7 Report (covering 2018), Form A.

13 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, pp. 7 and 14.

14 UNDP Annual Report on Mine Action in Yemen 2020, February 2021, p. 9.

15 Email from Ameen Saleh Al-Aqili, YEMAC, 26 December 2021.

16 2022 Article 5 deadline Extension Request, p. 25.

17 Email from Marie Dahan, UNDP, 1 June 2022.

18 UNDP Annual Report on Mine Action in Yemen 2021, 15 February 2022, p. 18; and email from Marie Dahan, UNDP 1 June 2022.

19 Email from Marie Dahan, UNDP, 1 June 2022.

20 2019 Article 5 deadline Extension Request, pp. 5 and 22; and email from Stephen Robinson, Senior Technical Adviser, UNDP, 21 July 2020.

21 Article 7 Report (covering 2019), Form D.

22 Article 5 deadline Extension Request, March 2022, pp. 26–27.

23 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 12; and email from Ameen Saleh Al-Aqili, YEMAC, 26 December 2021.

24 Emails from Ameen Saleh Al-Aqili, YEMAC, 5 May 2021; and Stephen Robinson, UNDP, 27 May 2020.

education.²⁵ YMACC and its mine action implementing partners held monthly meetings in 2021 and the Mine Action area of responsibility, chaired by UNDP as the mine action coordinator, also met monthly.²⁶ UNDP said YEMAC needed to conclude its review of its organisational structure in order to raise the sector's efficiency and effectiveness.²⁷

Mine action stakeholders say the creation of YMACC has improved coordination with operators although decision-making boundaries between YEMAC and YMACC are not always clear. Other institutions significantly involved in decision-making or administrative procedures significantly affecting mine action include the Ministry of Planning and International Cooperation (MOPIC), the National Security Agency, and the Ministry of Defence, while mine action stakeholders also point to interventions by the Saudi

Ministry of Defence Evacuation & Humanitarian Operations Centre (EHOC).

UNDP provides technical and administrative support to YEMAC through a project conducted by six international and nine national staff working from a number of different offices. These included four project area coordinators based in Aden, Hodeida, Mokha, and Mukalla; two administrative staff in Sana'a; and three in Aden.²⁸ The UN supported mine action in Yemen from 1999 to 2003 through a programme implemented by the UN Office for Project Services (UNOPS). From 2003, the programme came under full national management. UNDP deployed an international adviser to YEMAC at the end of 2014 to support planning and programme management.²⁹ The DFA revoked the visa of UNDP's Senior Technical Adviser in 2021, but other UNDP staff were able to visit Sana'a in early 2022.³⁰

ENVIRONMENTAL POLICIES AND ACTION

YEMAC's implementing partners said they have had no indication that environmental management and protection feature in its planning and tasking. Revised national mine action standards include a chapter on Environment, Health and Safety Management but they exist only in draft form awaiting approval. DRC and HALO Trust both reported applying their organisations' global policy and standing operating procedures (SOPs), but DRC said its SOP was largely generic and not adapted to local environmental conditions.³¹

GENDER AND DIVERSITY

YEMAC said the inclusion of women in mine action was a priority in 2021 and, in Yemen's Article 5 deadline extension request submitted by the IRG in March 2022, repeated that it was the position of both YEMAC and YMACC.³² It started training female staff for EOD, non-technical survey, and risk education in 2020.³³ The 2022 extension request noted that YEMAC had employed 15 women in non-technical survey as well as another 15 women in risk education in order to ensure the different needs of women and girls as well as men and boys are taken into account. It said other women worked in information management and victim assistance. It stated "there is no objection to including more women".³⁴ However, YMACC was reportedly resistant to employing women in multi-task teams.³⁵

UNDP noted that integrating women into the mine action programme remained "challenging", but it reported that among 17 women who underwent training in 2021, three took

a Level 2 EOD course, three others attended an improvised explosive device disposal (IEDD) good practice course and engage in IED disposal operations with the Directorate of Family Protection, and 10 women were trained in non-technical survey.³⁶

Social and cultural conventions present a significant impediment to efforts to promote inclusion in the sector. Women's traditional role as responsible for family care is seen as discouraging women from applying for jobs. Operators report cases where husbands have forbidden women applicants from attending interviews. Risk education is conducted separately for women, often by female staff, to encourage participation of women, who are considered valuable informants on account of their knowledge of local conditions acquired carrying out family chores such as collecting wood and herding livestock.³⁷

25 UNDP *Annual Report on Mine Action in Yemen 2020*, p. 14.

26 Email from Nicholas Torbet, HALO Trust, 19 April 2022.

27 UNDP *Annual Report on Mine Action in Yemen 2020*, p. 20.

28 UNDP *Annual Report on Mine Action in Yemen 2020*, p. 84.

29 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 9; and interview with Stephen Robinson, UNDP, in Geneva, 20 July 2020.

30 Emails from Ameen Saleh Al-Aqili, YEMAC, 26 December 2021; and Stephen Bryant, UNDP, 7 February 2022.

31 Emails from Marie-Josée Hamel, Regional Programme Advisor – Middle East, DRC, 30 March 2022 and Nicholas Torbet, HALO Trust, 19 April 2022.

32 Email from Ameen Saleh Al-Aqili, YEMAC, 26 December 2021; and Article 5 deadline Extension Request, March 2022, p. 21.

33 Email from Ameen Saleh Al-Aqili, YEMAC, 5 May 2021; and UNDP *Annual Report 2020*, p. 15.

34 Article 5 deadline Extension Request, March 2022, p. 21.

35 Email from Marie-Josée Hamel, DRC, 30 March 2022.

36 UNDP, *Annual Report on Mine Action in Yemen 2021*, p. 15.

37 Email from Esteban Bernal, Programme Manager, Humanitarian, Disarmament and Peace Building, DRC, 23 March 2021.

Employment of women among international operators remained at a low level. DRC said 21% of its national employees were women and none worked in managerial or supervisory positions, but at least one woman was employed in each of its three-person non-technical survey teams.³⁸ Women made up only 14% of HALO Trust's staff overall, but included eight women in four non-technical survey teams.³⁹

INFORMATION MANAGEMENT AND REPORTING

YEMAC, with support from UNDP and the Geneva International Centre for Humanitarian Demining (GICHD), upgraded its headquarters Information Management System for Mine Action (IMSMA) database, installing the Core version which UNDP reported became operational in September 2020.⁴⁰ The system was installed in YMACC in 2021 and will serve as a centralised data centre.⁴¹ YEMAC's northern office works with an older IMSMA system.⁴²

Efforts continued in 2021 to bring the system into line with international standards. YEMAC and its implementing partners developed a range of hard copy and electronic reporting forms, including non-technical survey forms, which underwent extensive modification in the course of the year. Operators said the quality of data and access to it had improved during the year but observed the system involved considerable duplication and could benefit from streamlining.⁴³

UNDP said an information management technical working group (TWG) is considered one of the vital mine action groups in which all implementing partners and stakeholders participate,⁴⁴ but its meetings were suspended in 2021

because of COVID-19 and have not resumed on a regular basis. Implementing partners say the need for inclusive discussion on information management has increased and that the lack of such meetings has hampered timely decision making.⁴⁵

Gaps in reporting remained a significant concern in 2021. YEMAC stated that all mine action data collected by operators are nationally owned and shared. It said Project Masam provides monthly reports detailing the operating sites of its teams, operating results, and locations of mine contamination.⁴⁶ International implementing partners say that some actors are not disclosing operating results, creating uncertainty about what areas have been surveyed or cleared, risking duplication of efforts or the omission of hazardous areas in the national database.⁴⁷ Among key operational challenges facing the sector, UNDP reported "the lack of cooperation between Project Masam and YEMAC (South) in terms of sharing statistically verifiable data on contamination in areas where Project Masam operates."⁴⁸

PLANNING AND TASKING

Mine action in Yemen continues on an emergency basis in a context of continuing conflict that has not lent itself to detailed advance planning, responding instead to immediate threats from all forms of explosive ordnance.⁴⁹ UNDP observed that YEMAC also needed to organise field operations to address longer term impacts of contamination from explosive remnants of war (ERW) as well as emergency responses. UNDP also reported an urgent need for maritime survey and clearance to improve safety for international shipping, lower costs of food, and restore confidence in the local fishing industry.⁵⁰

Yemen submitted an Article 5 deadline extension request in March 2022 including a work plan that identified general areas of activity such as emergency response, survey, and risk education, but the request gave no details. Yemen said it would update its plans every year or two.⁵¹

YEMAC identified its priority for 2021 as conducting baseline survey in line with the Article 5 deadline extension request, expanding risk education, improving coordination with humanitarian agencies in identifying operating priorities, and updating SOPs and national mine action standards (NMAS).⁵² YEMAC priorities in 2021 included planning survey

38 Email from Marie-Josée Hamel, DRC, 30 March 2022.

39 Email from Nicholas Torbet, Head of Region – Middle East (Yemen, Libya), HALO Trust, 19 April 2022.

40 *UNDP Annual Report on Mine Action in Yemen 2020*, p. 13; and email from Esteban Bernal, DRC, 23 March 2021.

41 Interview with Stephen Robinson, UNDP, Geneva, 23 March 2021; and *UNDP Annual Report 2021*, p. 10.

42 Email from GICHD, 30 April 2020.

43 Emails from Marie-Josée Hamel, DRC, 30 March 2022; and Nicholas Torbet, HALO Trust, 19 April 2022.

44 *UNDP Annual Report on Mine Action in Yemen 2021*, p. 11.

45 Email from Nicholas Torbet, HALO Trust, 19 April 2022.

46 Email from Ameen Saleh Al-Aqili, YEMAC, 26 December 2021.

47 Email from Marie-Josée Hamel, DRC, 30 March 2022.

48 *UNDP Annual Report on Mine Action in Yemen 2021*, p. 6.

49 Article 5 deadline Extension Request, March 2022, p. 26.

50 *UNDP Annual Report on Mine Action in Yemen 2021*, p. 20.

51 Article 5 deadline Extension Request, March 2022, p. 27.

52 Email from Ameen Saleh Al-Aqili, YEMAC, 5 May 2021.

and clearance in conjunction with operators; directing implementation of the baseline survey; accrediting and tasking mine action organisations; building up operational capacity; mobilising donor support; and prompt investigation of demining accidents.⁵³

Mine action sector priorities remained largely unchanged in 2022. The 2022 Article 5 deadline extension request keeps the baseline survey as its top priority along with building the capacity and resources of the mine action sector. The request emphasises flexibility and states that the plans it set out are a “living document” that will be subject to continuous review to adapt to changing circumstances.⁵⁴

International operators received the first task orders from YMACC in July 2020, marking a significant step toward planning and coordination.⁵⁵ Lack of clarity on the boundaries between YEMAC and YMACC exposed some initial coordination challenges and UNDP said YEMAC needed to finalise a review of its internal structure in order to increase efficiency.⁵⁶ International operators said the process of issuing task orders had improved in 2021 but still suffered from a lack of prioritisation and coordination which prevented timely planning. YMACC had monthly meetings with implementing partners who reported it consulted them on work plans and issued task dossiers in a timely manner.⁵⁷

Bureaucratic obstacles, particularly with regard to equipment imports and the issuance of visas, remained a major problem for the sector. International operators described it as the biggest impediment holding back implementation of YEMAC plans for survey and clearance. YEMAC denied there was an issue. YEMAC informed Mine Action Review that: “Yemen does not have any obstacles or delays in matters of importing equipment.” It said delays experienced by some operators were due to their own administrative procedures, errors in their applications, or a lack of understanding of the required legal procedures. It also noted that in meetings with MOPIC, national mine action authorities pointed out the importance of importing equipment for survey and clearance.⁵⁸

HALO Trust noted it had tried for two years to import a range of equipment, including Minelab F3 detectors, delaying operations. It eventually received approval in late 2021 but took delivery only in July 2022.⁵⁹ DRC similarly reported a serious blockage to importing equipment, also citing customs complications in transit countries as an additional delaying factor. The transfer of responsibility for issuing visas from MOPIC to the Ministry of Interior in the second half of 2021 saw the time taken to issue visas for international staff typically increase from one month to three months, causing further delays implementing planned activities.⁶⁰

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Yemen is in the process of revising and updating its national mine action standards. The existing NMAS were based on the International Mine Action Standards (IMAS) when they were drawn up in 2007, pre-dating most of Yemen's new contamination. In 2019, YEMAC acknowledged that the standards were obsolete and said SOPs based on the standards were not consistently applied by its clearance personnel.⁶¹

YEMAC reported it had revised 32 chapters of NMAS in 2021, including standards relating to land release, and that these were compliant with IMAS and the Oslo Action Plan. The new standards have yet to be approved by the government⁶² and had not come into effect as of May 2022. DRC said its local SOPs, which are based on its global SOPs but adapted for Yemen, were updated and approved in 2021. SOPs for non-technical survey were revised by the non-technical survey

manager and approved by the organisation's head office.⁶³ HALO Trust said it had developed new SOPs for non-technical survey and drafted SOPs for clearance that would be finalised after it had taken delivery of the new detectors.⁶⁴

Project Masam said it paused operations on several occasions in 2021 to review SOPs and conduct refresher training on Tactics, Techniques and Procedures (TTP) to deal with new types of Houthi-laid landmines and improvised mines encountered in operations.⁶⁵

Criteria for prioritising tasks remained unclear. Yemen's Article 5 deadline extension request and latest Article 7 report say it has a prioritisation mechanism and augments it with input from local authorities and humanitarian agencies.⁶⁶ Yemen's revised Article 5 extension request states that YMACC has developed a national prioritisation matrix based

53 Ibid.

54 Article 5 deadline Extension Request, March 2022, p. 29.

55 Emails from DRC, 25 March 2021; and Matthew Smith, Programme Manager, HALO Trust, 17 May 2021.

56 UNDP *Annual Report on Mine Action in Yemen 2021*, p. 20.

57 Emails from Marie-Josée Hamel, DRC, 30 March 2022; and Nicholas Torbet, HALO Trust, 19 April 2022.

58 Email from Ameen Saleh Al-Aqili, YEMAC, 26 December 2021.

59 Emails from Nicholas Torbet, HALO Trust, 19 April and 15 September 2022.

60 Emails from Marie-Josée Hamel, DRC, 30 March 2022; and Nicholas Torbet, HALO Trust, 19 April 2022.

61 UNDP, “Emergency Mine Action Project, Annual Progress Report 2019”, 20 January 2020, p. 17; and 2019 Article 5 deadline Extension Request, p. 16.

62 Email from Ameen Saleh Al-Aqili, YEMAC, 26 December 2021.

63 Email from Marie-Josée Hamel, DRC, 30 March 2022.

64 Email from Nicholas Torbet, HALO Trust, 19 April 2022.

65 Email from Ousama Algosaibi, Project Masam, 29 May 2022.

66 Article 5 deadline Extension Request, March 2022, p. 7; Article 7 Report (covering 2021), Form D.

on open source data covering district size, the number of mine incidents and accidents, estimated total population, and accessibility which is updated every three months but also says there is a temporary prioritisation matrix for issuing task orders.⁶⁷ Implementing partners said it had not been circulated so they were unaware of the criteria. As a result, implementing partners requested task orders from YMACC giving priority to areas they knew or had conducted some non-technical survey and were already present.⁶⁸ UNDP said national mine action authorities would use threat impact

assessments prepared by experts it had contracted to identify priority mine action projects for supporting delivery of humanitarian assistance.⁶⁹

UNDP underscored the need for increased training of YEMAC field staff to equip them to deal efficiently with the increased and increasingly diverse contamination and said it would support such development by recruiting international experts to upgrade YEMAC staff skills.⁷⁰

OPERATORS AND OPERATIONAL TOOLS

YEMAC is nominally the biggest operator employing some 400 personnel in YEMAC North and 550 personnel in YEMAC South but both organisations lacked financing and it was unclear how many survey or clearance teams they deployed. Estimates of capacity are complicated by the presence of ghost deminers and, in the south, by patchy reporting on the part of YEMAC team leaders.⁷¹

At the end of 2020, YEMAC reported that its staff of 491 in the south included 30 manual clearance teams with 272 personnel; 15 non-technical survey teams with 60 staff; 7 technical survey teams with 49 staff; and 2 EOD teams with 22 people.⁷² It is unclear if the structure and composition of operational teams changed in 2021. Yemen's Article 5 deadline extension request in March 2022 said the national programme had a total of 66 mine action teams but gave no details of how these assets were distributed around the country or how many were active.⁷³

Project Masam, funded by Saudi Arabia's King Salman Humanitarian Aid and Relief Center, operated in 2021 with 32 multi-task clearance teams and 320 national deminers, the same operating capacity it has deployed since 2018. In addition, it had 264 staff in management, logistics and operations. These included a total of 35 international staff, including four in management and logistics, 13 technical advisors/mentors, four medics, eight security and communications staff and six explosive dog detection handlers.⁷⁴ Project Masam said that it "trains, equips and supervises over 450 Yemeni nationals", including deminers, administration, logistics, and security support staff, supported by technical mentors. It operated with headquarters in Aden and Marid and deployed teams in Aden, Al-Jawf, Aldala'a, Al-Hudaydah, Maa'rib, Shabwa, and Taiz.⁷⁵ Saudi Arabia was reported in July 2021 to have extended its \$33.6 million contract with Project Masam and its implementing partner, SafeLane Global, by another year.⁷⁶

DRC had a total staff of 33 people, including five teams conducting non-technical survey and risk education working mainly from Aden, although it also received a task order for these activities in Lahj governorate. It also had nine people working in three battle area clearance (BAC)/EOD teams but they did not conduct any clearance in 2021 as they awaited permission to import equipment. In the hope imports would receive clearance in 2022, DRC planned to add three multi-task teams to its capacity.⁷⁷

The HALO Trust, with 66 staff, operated two four-person non-technical survey/risk education teams and three five-strong EOD teams trained to Level 1 that were conducting mainly BAC and bulk demolitions. It also deployed three five-person multi-task teams (MTT) for non-technical survey and EORE. MTT team leaders were trained to EOD Level 3 and all teams were due to be trained for mine clearance by the end of 2022. HALO Trust also operated an eight-person mechanical team working with a Bobcat Backhoe and a front loader. HALO opened a new office in Turbah, Taiz governorate, late in 2021 to serve as a base for activities beginning in 2022, including non-technical survey, EOD, and mine clearance. It also saw prospects for expanding operations in Lahj and Al-Dhale governorates. In April 2022, HALO added another 24 operations personnel to its EOD capacity. Non-technical survey teams use Survey123 for data collection and migrate it directly to HALO's Global Operation Information Management System (GO-IMS), which it brought into operation in Yemen in early 2022.⁷⁸

Norwegian People's Aid (NPA) completed registration with MOPIC in November 2021 and established an office in Aden to help YEMAC develop a mine detection dog (MDD) programme in the south. NPA has one MDD technical adviser and two team leaders to provide technical and managerial support. NPA previously had 12 dogs undergoing long-leash training at its Global Training Centre in Bosnia and Herzegovina and

67 2022 Article 5 deadline extension request (revised), August 2022, pp. 11–12.

68 Emails from Marie-Josée Hamel, DRC, 30 March 2022; and Nicholas Torbet, HALO Trust, 19 April 2022.

69 UNDP Annual Report on Mine Action in Yemen 2021, p. 11.

70 UNDP Annual Report on Mine Action in Yemen 2021, p. 20.

71 Interview with mine action stakeholders, Geneva, 23 June 2022.

72 Email from Ameen Saleh Al-Aqili, YEMAC, 5 May 2021.

73 Article 5 deadline Extension Request, March 2022, p. 15.

74 Email from Ousama Algosaibi, Project Masam, 29 May 2022.

75 Project Masam website, "Where we work", at: <https://bit.ly/3L0UoQy>, accessed 27 April 2022.

76 "Saudi Arabia extends mine clearing contract in Yemen", *Arab News*, 21 July 2021.

77 Email from Marie-Josée Hamel, DRC, 30 March 2022.

78 Emails from Nicholas Torbet, HALO Trust, 19 April and 15 September 2022.

brought these to Yemen in October 2021. NPA selected 12 MDD handlers from a group put forward by YEMAC and ran a training course on support for technical survey. The handlers and dogs deployed at the start of March 2022 and by early April had released 6,860m² of battle area.⁷⁹

DEMINER SAFETY

Yemen's mine action programme has experienced heavy casualties among deminers in the past four years, particularly in Project Masam, which suffered 37 casualties between May 2018 and April 2020.⁸⁰ In 2021, Project Masam reported two fatalities, one in a demining incident, the other attributed to a security incident resulting from operating in a war zone. Three other personnel were injured in demining incidents. Project Masam said all incidents were investigated internally and by YEMAC.⁸¹ DRC and HALO Trust reported they did not sustain any casualties in 2021.⁸²

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Yemen's mine action programme has focused on emergency clearance of explosive ordnance threats of all types rather than systematic area clearance or release of mined land, reflecting the challenges posed by years of war, constantly shifting frontlines, re-mining of cleared land, and scattered use of improvised devices by criminal groups.

Productivity rose in 2021 but continues to be hampered by cumbersome and opaque regulation governing imports of equipment and slowing issuance of visas to international staff. HALO Trust waited for two years to receive approval for bringing in mine detectors, eventually taking delivery in July 2022.⁸³ The government transferred responsibility for visas from MOPIC to the Ministry of Interior in October 2021 resulting in longer delays that continued into 2022, hampering plans for training and mentoring national staff. Movements between the South and the North also require permits which can take months to issue and applications often are denied or receive no response.⁸⁴

LAND RELEASE OUTPUTS IN 2021

YEMAC reportedly cleared 4.49km² of battle area in 2021, according to UNDP data, a hefty 43% more than the previous year (see Table 2). It also appears to have sharply increased the number of explosive ordnance items destroyed, reporting 1,676 anti-personnel mines destroyed in 2021 compared with 923 the previous year and 1,032 improvised devices compared with 512 in 2020.⁸⁵ Yemen's Article 7 report for 2021 reported destruction also of 2,439 "IEDs" and 35,886 anti-vehicle mines along with 83,138 items of unexploded ordnance UXO.⁸⁶ These results do not take account of Project Masam operating results and therefore appear to understate the total area cleared and items destroyed.

Table 2: YEMAC clearance of mines and ERW (reported by UNDP)⁸⁷

Year	Area cleared (m ²)	AP mines destroyed	IEDs destroyed	AV mines destroyed	CMR	Other UXO destroyed
2019	3,115,830	1,536	786	10,091	7,071	41,687
2020	3,132,896	923	512	5,317	403	54,108
2021	4,489,389	1,676	1,032	5,034	1,777	61,397

79 Email from Faiz Mohammad Paktian, Programme Manager, NPA, 8 April 2022.

80 Project Masam reported 37 casualties between May 2018 and April 2020: 21 killed and 16 injured.

81 Email from Ousama Algosaibi, Project Masam, 29 May 2022.

82 Emails from Marie-Josée Hamel, DRC, 30 March 2022; and Nicholas Torbet, HALO Trust, 19 April 2022.

83 Email from Nicholas Torbet, HALO Trust, 19 April 2022.

84 Email from Marie-Josée Hamel, DRC, 30 March 2022.

85 UNDP Annual Report 2021, Mine Action Programme Dashboard, received by email 29 August 2022.

86 Article 7 Report (covering 2021), Form D.

87 UNDP Annual Report 2021, Mine Action Programme Dashboard, received by email 29 August 2022.

SURVEY IN 2021

YEMAC launched the Yemen baseline survey (YBLS) in April 2021 but said non-technical survey operations started in June and reported survey was conducted on 171 hazardous areas in 2021, mostly in three governorates.⁸⁸ By April 2022, UNDP reported it had identified 83.3km² in six governorates affected by explosive ordnance, including anti-personnel mines. YEMAC reportedly deployed 15 teams for the YBLS in 2021 (increasing to 16 in 2022), supported by DRC (eight teams) and from October 2021 by HALO Trust (two teams increasing to four in 2022).⁸⁹

Table 3: YBLS results April 2021–April 2022⁹⁰

Operator	Location	Area surveyed (m ²)	CHA (m ²)	SHA (m ²)
YEMAC	Abyan, Aden, al-Dhale, Lahj	29,421,704	24,348,597	5,073,107
DRC	Lahj, Hodeida, Taiz	52,493,213	43,722,032	8,771,181
HALO Trust	Lahj, Taiz	1,365,088	1,045,419	319,669
Totals		83,280,005	69,116,048	14,163,957

CLEARANCE IN 2021

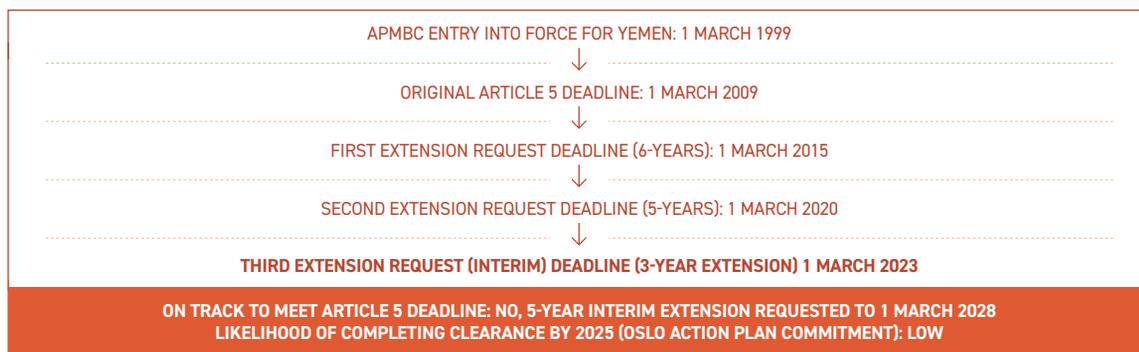
Project Masam reported clearing 10.8km² in 2021 and destroying 1,704 conventional anti-personnel mines, and 46,076 improvised anti-personnel mines together with 48,173 anti-vehicle mines. Project Masam said it was not practical to conduct IMAS-compliant procedures for cancelling land through non-technical survey in its area of operations because of constantly shifting lines of conflict and Houthi tactics of remaining areas previously cleared. As a result, it almost always conducts full clearance.⁹¹

Yemen reported in its 2022 Article 5 deadline extension request that between 2018 and 2021, Project Masam cleared

a total of 28.75km² finding 4,267 anti-personnel mines, 6,228 IEDs, 101,159 anti-vehicle mines, and 186,758 items of UXO.⁹² However, the UN has reported that Project Masam does not share statistically verifiable data,⁹³ its results are not recorded in YMACC's IMSMA database, and they do not appear in Yemen's APMBC Article 7 reports.

As data are inconsistent between sources, and anti-personnel mine clearance is not disaggregated from clearance of anti-vehicle mines and battle area clearance, for the purposes of global reporting, Mine Action Review has estimated the amount of mined area cleared in Yemen in 2021 at 1.5km².

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the third extension, for three years, granted by States Parties in 2019), Yemen is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2023.

88 Article 7 Report (covering 2021), Form D. YEMAC reported survey of 33 HAs in Abyan, 37 in Aden, 43 in Lahj, 21 in each of Hodeida and Taiz, and 16 in al-Dhale.

89 Email from Marie Dahan, UNDP, 1 June 2022.

90 Ibid.

91 Email from Ousama Algosaibi, Project Masam, 29 May 2022.

92 2022 Article 5 deadline Extension Request, p. 18.

93 UNDP Annual Report on Mine Action in Yemen 2021, p. 6.

Yemen presented its third extension request in 2019 as an interim request. In 2020, after five years of war, Yemen had no idea of the extent of its mine contamination. It asked for three years to give it time to conduct a baseline survey which would provide the basis for another extension request supported by up-to-date contamination data allowing an informed assessment of the time needed for progress on its Article 5 obligations. In 2020, however, Yemen lacked the institutional framework, capacity and resources to launch the YBLS which only started in April 2021, almost half way through the extension period, and in March 2022 it requested another deadline extension.

The new request is also in effect an interim request. It states as a "startling" fact that it is asking for five years to do what it had set out to do in the previous extension period, namely to establish a baseline estimate of mine contamination.⁹⁴ Additionally, it proposes to use the time to "reorient" the mine action sector and build capacity to meet explosive hazard challenges it was not previously equipped to tackle, including heavy contamination by improvised mines and IEDs. In addition to land-based contamination, UNDP has also flagged the threat posed to international shipping and the local fishing industry, both key sources of food to a population experiencing acute hunger. The plan does not set out clear targets or priorities for non-technical survey.⁹⁵

Plan implementation faces a number of severe limitations. The seven-year war between Ansar Allah and the Saudi-backed IRG has added significant explosive hazard threats and fractured government authority, obstructing the development of a national response. The programme of activity outlined in Yemen's extension request is confined to areas under the control of the IRG. In the north, mine action is reportedly limited mainly to spot tasks and a little survey and constrained by limited resources and access for international staff is limited.⁹⁶ In the south, the war

is only the most visible of multiple and complex security challenges, including al-Qaeda in the Arabian Peninsula and criminal enterprise, which have limited physical access to hazardous areas. Meanwhile, mine action teams have faced severe capacity constraints ranging from shortages of fuel to lack of expertise and equipment, aggravated by complex bureaucratic procedures holding up imports of critical equipment such as mine detectors, and delays in issuing visas to international staff required for training and mentoring programmes.

Funding may also prove a constraint on Yemen's mine action programme. The extension request estimates that Yemen needs \$48 million over the five years of the extension period but provides no clarity on what is the basis for this assessment.⁹⁷ Most of the funding for mine action since 2018 has come from Saudi funding for Project Masam, estimated at between \$30 million and \$40 million a year since 2018.⁹⁸ UNDP received approximately \$14 million from other international donors in 2021 but was budgeting for donor support of \$8 million in 2022.⁹⁹

Table 3: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	*1.5
2020	*1.0
2019	*1.0
2018	*0.1
2017	*1.0
Total	*4.6

* Mine Action Review estimates

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Yemen does not have plans in place to address residual contamination once its Article 5 obligations have been fulfilled.

⁹⁴ 2022 Article 5 deadline Extension Request, p. 3.

⁹⁵ UNDP Annual Report on Mine Action in Yemen 2021, p. 6.

⁹⁶ Interview with Stephen Bryant, UNDP, Geneva, 23 June 2022.

⁹⁷ 2022 Article 5 deadline Extension Request, p. 5.

⁹⁸ Yemen's Article 5 deadline extension request recorded Saudi funding of \$120 million for Project Masam between 2018 and 2020.

⁹⁹ Interview with Stephen Bryant, UNDP, Geneva, 23 June 2022.

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
JUST ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

NATIONAL ESTIMATE AS AT AUGUST 2021

23.51 km²

AP MINE CLEARANCE IN 2021

2.44 km²

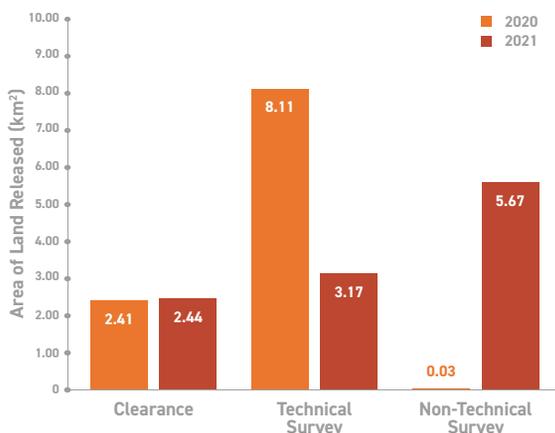
(NATIONAL AUTHORITY FIGURE)

AP MINES DESTROYED IN 2021

26,534

(INCLUDING 77 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): MEDIUM

KEY DEVELOPMENTS

Zimbabwe exceeded its land release targets for 2021 despite the challenges posed by the COVID-19 pandemic. In November 2021, Mount Darwin became the first district in Zimbabwe to be declared fully completed by humanitarian operators. All mined areas remaining in Zimbabwe are now confirmed hazardous areas (CHAs). The challenge for Zimbabwe in meeting its Article 5 deadline under the Anti-Personnel Mine Ban Convention (APMBC) remains securing the requisite funding from donors in a country with significant competing social and economic challenges.

RECOMMENDATIONS FOR ACTION

- The Zimbabwe Mine Action Centre (ZIMAC) should prioritise efforts to secure additional national and international funding to meet its 2025 clearance completion deadline.
- Zimbabwe should elaborate a gender and diversity policy and an implementation plan for the mine action programme.
- Zimbabwe should complete as soon as possible its review of procedures for “missed-mine drills” (executed where gaps in the pattern minefield are found) in order to improve clearance efficiency.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	8	Zimbabwe has a good understanding of remaining mine contamination with only CHAs remaining. In 2021, ZIMAC estimated that only about 11km ² of land is actually contaminated with anti-personnel mines and that other mined area in the national database (more than 20km ²) can be released by survey. The amount of previously unknown contamination added to the database decreased considerably in 2021 compared to 2020.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	The mine action programme is managed effectively by ZIMAC, with good consultation and collaboration with partners. There is a high degree of national ownership with the government continuing to provide US\$500,000 annually to the mine action programme despite increasing financial hardship in the country. ZIMAC's Communication and Resource Mobilisation Strategy was due to be officially launched in 2020 and has been delayed twice due to the COVID-19 pandemic. A mid-term review of Zimbabwe's National Strategy took place in November 2021.
GENDER AND DIVERSITY (10% of overall score)	6	6	ZIMAC does not have a gender and diversity policy and implementation plan but has committed to developing a policy by the end of 2022. The importance of gender is acknowledged in the National Mine Action Strategy and integrated into Annual Work Plans. Survey and community liaison teams are reportedly inclusive and gender-balanced both in their make-up and during community consultations. Operators report varying proportions of women employed. The Zimbabwean Armed Forces' National Mine Clearance Unit (NMCU) has no women in operational roles.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	8	8	ZIMAC continued to improve its information management in 2021. Zimbabwe submits detailed Article 7 reports annually. An information management seminar planned for 2021 was rescheduled to late 2022, due to the COVID-19 pandemic.
PLANNING AND TASKING (10% of overall score)	8	8	Zimbabwe has a National Mine Action Strategy for 2018–25. This was reviewed in 2021 and was due to be launched with the support of the Geneva International Centre for Humanitarian Demining (GICHD) in October 2022. In 2021, as in 2020, Zimbabwe exceeded the land release targets set out in its multiyear work plan published in 2019. In its latest Article 7 report ZIMAC presented revised annual land release targets to 2025 and identified the resources, time, and funding needed to complete clearance.
LAND RELEASE SYSTEM (20% of overall score)	8	8	There was a small decrease in overall capacity across operators in 2021. However, APOPO ¹ began clearance activities during the year. Greater use of mechanical assets and mine detection dogs (MDDs) has increased efficiency in recent years. Time spent on "missed mine drills", when gaps in the mine pattern are found, remains a challenge. However, trials using MDDs and excavation equipment are underway to improve this. Despite this, operators continue to clear tens of thousands of anti-personnel mines annually, destroying one of the world's highest number of mines cleared per square kilometre.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	9	9	Zimbabwe released 11.28km ² of mined area in 2021, exceeding its land release target for the year despite the continued challenges imposed by COVID-19. Most came from cancellation, particularly from the resurvey conducted by APOPO before commencing clearance of their task. Zimbabwe's clearance output, at 2.44km ² , was only marginally more than in 2020. Zimbabwe will need to secure additional funding and increase capacity in order to meet its land release targets but if it can do so should be able to meet its Article 5 deadline of end 2025. This will be a considerable achievement for one of the world's most heavily mined countries in a particularly challenging political and economic context.
Average Score	8.0	8.0	Overall Programme Performance: VERY GOOD

1 APOPO stands for Anti-Persoonsmijnen Ontmijnende Product Ontwikkeling, which translates into English as 'Anti-Personnel Mines Demining Product Development'. APOPO is a Belgian non-governmental organisation (NGO).

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Mine Action Authority of Zimbabwe (NAMA AZ)
- Zimbabwe Mine Action Centre (ZIMAC)

NATIONAL OPERATORS

- Zimbabwean Armed Forces' National Mine Clearance Unit (NMCU)

INTERNATIONAL OPERATORS

- APOPO
- The HALO Trust
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

Five of Zimbabwe's ten provinces are contaminated with anti-personnel mines.² As at the end of 2021, Zimbabwe reported a total of just over 23.5km² of confirmed mined area remaining (see Table 1).³ This is a decrease from the 34.1km² reported at the end of 2020.⁴ Of the seven remaining minefields, six stretch along the borders with Mozambique, covering four provinces, while one is inland in Matabeleland North province.⁵ According to the Zimbabwe Mine Action Centre (ZIMAC), the baseline of contamination is complete following the completion of significant re-survey in 2016.⁶ The Geneva International Centre for Humanitarian Demining (GICHD) believes that Zimbabwe has gained clarity on remaining contamination.⁷ Similarly, in 2021, the Committee on Article 5 Implementation noted Zimbabwe's "high degree of clarity" on its remaining contamination.⁸

All contaminated areas remaining in Zimbabwe are confirmed hazardous areas (CHAs), albeit which are, in general, very widely drawn. That said, ZIMAC believes that the true mined area is less than half of that in its official estimate. Indeed, as ZIMAC told Mine Action Review in August 2021, of the total confirmed mined area, only some 11km² is thought to be actually contaminated, with considerable area between mine lines that can be released through survey.⁹

Table 1: Anti-personnel mined area (at end 2021)¹⁰

Province	CHAs	Area (m ²)
Mashonaland Central	43	4,435,475
Mashonaland East	46	9,521,239
Matabeleland North	7	905,537
Masvingo	21	3,749,862
Manicaland	20	4,895,314
Totals	137	23,507,427

In 2021, a total of 448,734m² of previously unknown contamination was added to the database, primarily as a result of reshaping of polygons during pre-clearance resurveys.¹¹ It also included 41,288m² of minefield added by The HALO Trust, following reports from the local community.¹² This is a significant decrease on the 1.97km² of previously unknown contamination added to the database in 2020, also due to both the expansion of existing CHAs as a result of pre-clearance re-survey¹³ and some areas reported to HALO by local communities.¹⁴

2 Zimbabwe National Mine Action Strategy, 2018–2025, "Reviewed Version", p. 6.

3 Article 7 Report (covering 2021), p. 2.

4 Email from Maj. Cainos Tamanikwa, Operations Officer, ZIMAC, 27 April 2021.

5 Article 7 Report (covering 2021), p. 2.

6 Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

7 Email from Asa Massleberg, Programme Manager and Senior Advisor, GICHD, 8 July 2022.

8 Preliminary Observations, Committee on Article 5 Implementation, APBMC Intersessional Meetings, 20–22 June 2022, Geneva, p. 1.

9 Email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

10 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

11 Ibid.

12 Email from Samuel Fricker, Programme Manager, The HALO Trust, 30 May 2022.

13 Emails from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; Peter Avenell, Country Director, Mines Advisory Group (MAG), 15 April 2021; and Chimwemwe Tembo, Programme Manager, Norwegian People's Aid (NPA), 16 April 2021; and Article 7 Report (covering 2020), p. 2.

14 Email from Samuel Fricker, HALO Trust, 13 April 2021.

Zimbabwe's mine contamination, the overwhelming majority of which is of anti-personnel mines, originates from the laying of minefields in the late 1970s during a decolonisation war. At the time of its independence in 1980, Zimbabwe was left with seven major mined areas along its borders with Mozambique and Zambia, and one inland minefield laid by the Rhodesian Army.¹⁵ Initially, anti-personnel mines were laid in very dense belts (on average 2,500 mines per kilometre of frontage) to form a so-called "cordon sanitaire", with up to 5,500 mines per kilometre in some places. Over time, this cordon sanitaire was breached or subject to erosion. In response, in many sections, a second belt of "ploughshare" directional fragmentation mines protected by anti-personnel mines was laid behind the cordon sanitaire. Few areas contain anti-vehicle mines and it is thought that the number of such mines remaining is low.¹⁶

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The National Mine Action Authority of Zimbabwe (NMAAAZ) is a policy and regulatory body on all issues relating to mine action in Zimbabwe. ZIMAC was established in 2000 within the Ministry of Defence (MoD) as the focal point and coordination centre of all mine action in the country. ZIMAC is mandated to report to NMAAAZ.¹⁷ In August 2019, ZIMAC's office relocated outside of a military cantonment allowing access to civilian operators.¹⁸

ZIMAC holds quarterly coordination meetings with all stakeholders; operators report being closely involved in the decision-making process. Communication between ZIMAC and NMAAAZ, operators, and other Zimbabwean government ministries is reported to be good with regular bilateral meetings and visits from the director of ZIMAC.¹⁹ To date, donors have not attended quarterly coordination meetings but ZIMAC is seeking to improve coordination with donors.²⁰

Operators report co-operative and productive working relationships with ZIMAC, but also identify areas for practical improvement. The approval processes for international visas for staff and visitors is very slow, normally requiring a minimum of three months. However, ZIMAC has provided long-term memorandums of understanding (MoUs) and does its best to assist.²¹ APOPO also notes that it would be helpful to receive reports or recommendations from ZIMAC more frequently after quality assurance (QA) visits and to have increased support from ZIMAC in donor interactions.²²

The GICHD has provided strategic planning support to Zimbabwe since 2016.²³ The GICHD also provides information management (IM) support to ZIMAC with an advisor working with the ZIMAC information management team and operators on the Information Management System for Mine Action (IMSMA) and data handling improvements.²⁴ A mid-term review of Zimbabwe's national strategy, supported by the GICHD, took place in Harare in November 2021, bringing the relevant national and international stakeholders together. ZIMAC planned to launch the updated strategy to 2025 in October 2022.²⁵ The 2021 mid-term review meeting has been described as a "very participatory process",²⁶ which resulted in "greater clarity on achievements and challenges".²⁷

According to ZIMAC's Article 7 Report covering 2021, a total of \$51.34 million is required by the mine action programme to meet its extended Article 5 deadline by 2025.²⁸ In 2021, the government provided US\$100,000 to cover the cost of the national mine action centre and US\$400,000 for survey and/or clearance of anti-personnel mined area,²⁹ matching the funding it provided in 2020.³⁰ For 2022, ZIMAC expected government funding levels to remain the same, though more support is expected for the Zimbabwean Armed Forces' National Mine Clearance Unit (NMCU) from Army channels.³¹

According to ZIMAC, the Government of Zimbabwe has committed US\$500,000 to the NMCU and for the operational costs of ZIMAC every year since 2010.³² In 2021, however,

15 2013 Article 5 deadline Extension Request, Executive Summary, p. 1; and email from (then) Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017.

16 Email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

17 2013 Article 5 deadline Extension Request, p. 7.

18 Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

19 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; Chimwenwe Tembo, NPA, 25 March 2020; Samuel Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.

20 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022 and interview with Maj. Cainos Tamanikwa, ZIMAC, in Geneva, 24 June 2022.

21 Emails from Samuel Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.

22 Email from John Sorbo, Programme Manager, Mine Action, Mozambique and Zimbabwe, APOPO, 16 August 2022.

23 Email from Asa Mattleberg, GICHD, 8 July 2022.

24 Email from GICHD, 30 April 2021.

25 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Asa Mattleberg, GICHD, 16 August 2022; and interview with Maj. Cainos Tamanikwa, ZIMAC, in Geneva, 24 June 2022.

26 Email from Samuel Fricker, Programme Manager, The HALO Trust, 30 May 2022.

27 Email from Asa Mattleberg, GICHD, 8 July 2022.

28 Article 7 Report (covering 2021), Appendix A, p. A-20.

29 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Article 7 Report, (covering 2021), p. 12.

30 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

31 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

32 Article 7 Report (covering 2017), Form D.

ZIMAC raised concerns about rising operational costs, particularly in fuel and labour, as well as the significant loss of United Kingdom funding.³³ As at August 2022, it was reported that the UK had reconsidered and would continue to fund Zimbabwe's mine action programme.³⁴ Even so, further resource mobilisation efforts will be essential going forward. ZIMAC stresses that all operators were highly active in engaging potential new donors and encouraging existing donors to increase support.³⁵ Zimbabwe also held a virtual side-event for potential donors at the APMB Nineteenth Meeting of States Parties in 2020.³⁶ At the time of writing, a sector-wide funding proposal to the European Union (EU) was being elaborated.³⁷

With assistance from the GICHD and the International Committee of the Red Cross (ICRC), ZIMAC finalised a Communication and Resource Mobilisation Strategy in the first half of 2019. This was due to be officially launched in May 2020 but, due to the COVID-19 pandemic, was delayed twice, with a new expected launch date of the third quarter in 2022.³⁸ The GICHD planned to visit ZIMAC in October 2022 to update the resource mobilisation strategy and support its launch.³⁹ Some operators have called for urgency on the implementation of the resource mobilisation strategy and stress the time-critical importance of gaining increased donor support in order to meet the 2025 deadline.⁴⁰

As mentioned, ZIMAC has been receiving ongoing capacity development support from the GICHD. In addition, Norwegian People's Aid (NPA) has planned to conduct a week of Quality Management System (QMS) training with ZIMAC in the third quarter of 2022.⁴¹ While The HALO Trust is not providing any formal capacity development support to ZIMAC, it did host a quarterly operators' technical working group in late 2021, intended to complement the quarterly coordination meetings hosted by ZIMAC and attended by the heads of non-governmental organisation (NGO) programmes. The new technical working groups are attended by operations management personnel and focus on technical challenges. HALO has hosted two of these groups so far and operators have agreed to rotate hosting going forward.⁴² In its 2018–2025 National Mine Action Strategy, ZIMAC acknowledges the key importance of coordination and commits to continuing to organise these quarterly meetings.⁴³

One challenge that has been highlighted is the need to develop a plan for the effective demobilisation of the several hundred local operational staff working in the mine action sector once Zimbabwe reaches completion. The issue was raised by the EU in recent discussions on its potential funding and in discussions with other potential donors.⁴⁴ While solutions to this challenge will extend well beyond the remit of mine action stakeholders, it is something stakeholders will need to consider in a country facing high unemployment and economic instability as Zimbabwe's expected completion date nears.

ENVIRONMENTAL POLICIES AND ACTION

ZIMAC reports that Zimbabwe has a national mine action standard (NMAS) on environmental management and a policy on environmental management,⁴⁵ although not all stakeholders were aware of its existence.⁴⁶ The HALO Trust refers to NMAS 10.07, which covers "Safety and Occupational Health and Protection of the Environment".⁴⁷ This comprehensive document provides operational guidance on a range of environmental considerations, including but not limited to air, water, and soil pollution; reduction and disposal of waste, especially toxic and hazardous waste; obstruction of watercourses; burning of vegetation; environmental considerations at worksites and temporary accommodation facilities, as well as at fuel, oil and lubricant areas and maintenance areas. It also covers reduction of energy consumption and carbon dioxide (CO₂) emissions and environmental considerations related to use of land and risk to heritage.⁴⁸

In terms of good practice, ZIMAC outlines how the use of highly destructive mechanical clearance methods is not permitted in areas with very large trees. Manual clearance only is used in such areas.⁴⁹

Operators vary in the degree to which they have environmental policies and management systems in place.

33 Interview with Maj. Cainos Tamanikwa, ZIMAC, in Geneva, 24 June 2022.

34 Email from Asa Massleberg, GICHD, 17 August 2022.

35 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

36 Article 7 Report (covering 2021), p. 12.

37 Online interview with John Sorbo, APOPO, 11 August 2022.

38 Emails from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; and (as Major) 27 April 2021 and 2 June 2022; and Article 7 Report (covering 2021), Annex A, p. A-19.

39 Email from Asa Massleberg, GICHD, 8 July 2022.

40 Email from Peter Avenell, MAG, 17 May 2022 and online interview with John Sorbo, APOPO, 11 August 2022.

41 Email from Gemma Walsh, Programme Manager, NPA, 2 June 2022.

42 Email from Samuel Fricker, HALO Trust, 30 May 2022.

43 Zimbabwe National Mine Action Strategy, 2018–2025, Reviewed Version, p. 19.

44 Interview with John Sorbo, APOPO, 11 August 2022.

45 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

46 Emails from Peter Avenell, MAG, 17 May 2022; Gemma Walsh, NPA, 2 June 2022; and Asa Massleberg, GICHD, 8 July 2022.

47 Email from Samuel Fricker, HALO Trust, 30 May 2022.

48 Zimbabwe National Mine Action Standards 10.07, First edition (February 2013), Safety and Occupational Health. Protection of the Environment.

49 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

At the time of writing, APOPO had a Standing Operating Procedure (SOP) pending approval by ZIMAC, which includes environmental management. During planning and tasking for survey and clearance, APOPO adheres to the following practices to minimise potential environmental harm:

- All excavation holes and detonation craters are refilled after external quality control (QC).
- Measures are in place to prevent wildfires during demolitions.
- Unnecessary cutting down of trees is avoided.
- Rubbish pits and latrines are dug to prevent environmental contamination.
- Processed soil is returned to the affected site (e.g., after soil removal in Missed Mine Drills).
- Temporary latrine holes are dug at every control point and filled in once the control point is no longer in use.
- Use of gas instead of firewood or charcoal is in place at camps.⁵⁰

The HALO Trust has global policies and SOPs on environmental management, both of which are applicable to the Zimbabwe programme. HALO describes how the selection of manual versus mechanical teams to conduct clearance is the primary environmental consideration during planning and tasking, weighing the impact of the more environmentally intrusive mechanical clearance against the operational

benefits or need. HALO also aims to situate field camps in areas that will not impact the local environment, and place camps as close to minefields as possible to minimise travel times, and thus vehicle emissions. Waste generation and disposal at camps are closely monitored and HALO field camps have been run on solar power since 2016. HALO has also begun trials of electric vegetation trimmers, with the eventual aim of fully replacing the existing petrol fleet.⁵¹

MAG operations follow IMAS (07.13) and take into account the need for vegetation and ground preparation, measures to avoid soil erosion and pollution, and management of deminer worksites to ensure proper disposal of waste.⁵²

NPA has an environmental management system in place, including an environmental policy and environmental SOP. It is in the process of updating its SOPs, including the chapter on Environmental Protection.⁵³ NPA outlines how these regulations will “prevent or mitigate all significant harmful effects of demining camps and operations to an acceptable level”, for example prohibiting the major servicing of vehicles and bulk storage of liquids at work sites. Detailed instructions on the disposal of waste fuel and lubricants are already provided in NPA’s current environmental regulations. To protect vegetation, NPA cuts shrubby vegetation at ground level to allow the swinging of detectors, but only cuts trees if they present an obstruction to the use of the detector to confirm a hazard in the safe lane.⁵⁴

GENDER AND DIVERSITY

ZIMAC does not have a gender and diversity policy and implementation plan. However, in its latest Article 7 report Zimbabwe stresses that it is bound by national policy, which upholds gender equality of opportunity and seeks to support women to take on roles which have been male-dominated. Zimbabwe asserts that no barriers exist to gender-balanced participation in mine action.⁵⁵

ZIMAC has said it will seek assistance from international stakeholders to formulate a gender and diversity policy by the end of 2022.⁵⁶ In the meantime, Zimbabwe’s National Mine Action Strategy 2018–2025 refers to the importance of addressing gender and diversity considerations and existing guidelines that stakeholders should use as a reference, including the UN’s Gender Guidelines for Mine Action Programmes.⁵⁷ While there is not a specific standard on gender mainstreaming in the NMAS, reference to gender, such as within NMAS 07 (“Management of Demining

Operations”), requires that “special efforts should be made to ensure gender balance and diversity of background for Community Liaison Officers”.⁵⁸ The GICHD confirms that gender and diversity are integrated into Zimbabwe’s national mine action strategy and annual work plans.⁵⁹

ZIMAC confirms that all community groups are routinely consulted in survey and community liaison activities, with efforts undertaken to ensure that all age and gender groups are consulted. Survey and community liaison teams are gender-balanced and diverse, with personnel recruited locally from affected areas to incorporate ethnic and minority groups who speak the language of the community. Demining and community liaison teams also include some women as leaders. Community liaison teams meet children of all age groups during visits to schools.⁶⁰ All mine action data are disaggregated by sex and age.⁶¹

50 Emails from John Sorbo, APOPO, 20 June and 16 August 2022.

51 Emails from Samuel Fricker, HALO Trust, 30 May and 14 August 2022.

52 Email from Roxana Bobolicu, MAG, 29 September 2022.

53 Emails from Gemma Walsh, NPA, 2 June and 8 July 2022.

54 Email from Gemma Walsh, NPA, 8 July 2022.

55 Article 7 Report, Annex A, Zimbabwe’s Revised Mine Action Work Plan for 2022–2025, p. A-1

56 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

57 Email from Tom Dibb, HALO Trust, 22 February 2018; and Zimbabwe National Mine Action Strategy, 2018–2025, Reviewed Version, p. 15.

58 Email from Samuel Fricker, HALO Trust, 20 July 2019.

59 Email from Asa Masteberg, GICHD, 8 July 2022.

60 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020, and (as Major) 2 June 2022.

61 Article 7 Report, Annex A, Zimbabwe’s Revised Mine Action Work Plan for 2022–2025, p. A-1; and email from Asa Masteberg, GICHD, 8 July 2022.

ZIMAC reports that gender is taken into account during the planning and prioritisation of minefields for clearance, such as consideration of the risks taken usually by women and girls to cross minefields to fetch water and that of men and boys who often herd cattle or plough near mined areas.⁶² However, given the nature of the minefields, which are essentially one long and continuous line, operational access constraints often dictate clearance priorities as much as other factors.⁶³ At the same time, according to The HALO Trust, post-clearance surveys reflect the gendered impact of clearance. Women and children are often the major beneficiaries of clearance, as they are responsible for more than 80% of water collection, with clearance providing safer and more direct access to water sources.⁶⁴

ZIMAC reported that international operators working in Zimbabwe are encouraged to prioritise recruitment from communities living adjacent to the mine affected areas. In 2020, APOPO recruited from the minority Shangani ethnic group who live in mine-affected communities.⁶⁵ In 2022, APOPO reported prioritising recruitment of local youths from Ward 15 of the Chiredzi South District, close to the Gonarezhou national park and border with Mozambique, where APOPO is undertaking clearance. Hiring local youths has reduced cases of poaching and illegal immigration in search of employment and has been received very positively by community leaders.⁶⁶

No women are employed in operational roles in the NMCU because staff are recruited from the corps of military engineers, where very few women are working. However, according to ZIMAC, women are specifically encouraged to apply for operational positions in job advertisements by international operators. However, NMCU deminers are drawn exclusively from soldiers and are therefore all male).⁶⁷ In 2021, 15% of ZIMAC's employees were women; all were employed in administrative positions as clerks; none was in an operational or managerial/supervisory position, with the exception of two Victim Assistance Officers, supervisory posts occupied by women. However, while attached to ZIMAC, this position falls under the Ministry of Public Service, Labour and Social Welfare.⁶⁸

In 2021, ZIMAC found community liaison to be effective in encouraging more women to join mine action, with all

operators now employing considerable numbers of female deminers, team leaders, and supervisors.⁶⁹ This represents some progress since 2020, when ZIMAC stated that the number of women employed in mine action fell short of "required" levels and noted that Zimbabwean women were somewhat reluctant to work in mine action. Hence, more effort was to be placed on raising awareness among women and ensuring equal opportunities to employment.⁷⁰

International operators confirmed that each organisation had gender policies in place for their programme staff.⁷¹ While, in 2020, all operational organisations noted positive trends in the increasing number of women employed in programmes⁷² only NPA saw a slight increase in 2021. That said, all operators demonstrated continued commitment to measures that encourage and support employment of women in mine action and some recruited into new roles intended to promote this further.

NPA confirm that their recruitment process adheres to a gender policy and encourages gender balance in staff composition. In 2021, a total of 26 women were employed by NPA in Zimbabwe, representing 24% of all staff. Three women were employed in managerial/supervisory positions, representing 40% of the total, and 21 women were employed in operational positions, representing 31% of operational staff.⁷³ NPA saw an increase in the proportion of women in supervisory/managerial positions compared to 2020, when it stood at 27%, while the proportion of women in operational positions remained the same.⁷⁴ NPA has pledged to continue to adopt a non-discriminatory and fully participatory approach throughout all activities.⁷⁵

In 2021, 24% of The HALO Trust's employees in Zimbabwe were women, with 14% of managerial/supervisory positions (including a team leader), occupied by women as well as 24% of operational positions.⁷⁶ This represents a slight decrease compared to 2020, when 15% of managerial/supervisory positions and 26% of operational positions were occupied by women.⁷⁷ HALO notes that, while their national operations leadership is still dominated by men, the organisation is actively encouraging promotion of qualified female candidates into leadership roles, and was proud to report that their international operations management team became fully female in September 2021.⁷⁸

62 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020.

63 Emails from Samuel Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, Regional Director West Africa and Latin America, MAG, 1 August 2019.

64 Email from Samuel Fricker, HALO Trust, 20 July 2019.

65 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

66 Email from John Sorbo, APOPO, 16 August 2022.

67 Email from Maj. Cainos Tamanikwa, 23 August 2022.

68 Emails from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021 and 2 June 2022; and interview in Geneva, 24 June 2022.

69 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

70 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020.

71 Ibid.; and emails from Samuel Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, NPA, 15 July 2019.

72 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; Samuel Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, NPA, 15 July 2019.

73 Emails from Gemma Walsh, Programme Manager, NPA, 2 June and 8 July 2022.

74 Email from Chimwemwe Tembo, NPA, 16 April 2021.

75 Emails from Gemma Walsh, NPA, 2 June and 8 July 2022.

76 Email from Samuel Fricker, HALO Trust, 30 May 2022.

77 Email from Samuel Fricker, HALO Trust, 13 April 2021.

78 Email from Samuel Fricker, HALO Trust, 30 May 2022.

In 2021, HALO reported positively on some changes introduced the previous year, including a small allowance to cover the costs of childcare and a female nurse to ensure confidential medical services could be offered to female staff; previously all nurses on the programme were male.⁷⁹ HALO reports that the female nurse, who rotates through the operations camps, has been extremely well received by staff and has been able to raise awareness among staff of additional resources available. HALO has also begun coordinating with the Ministry of Health to provide gender-specific trainings, screenings, and awareness sessions for staff, for example, on cervical cancer. While HALO has not yet seen an increase in the number of female staff, which has been limited by reduced funding and reduced overall capacity, HALO's existing employees have reported that these changes have significantly increased their quality of life.⁸⁰

HALO hired a new female Safeguarding and Staff Wellness officer in late 2021, and a new Community Liaison Manager in early 2022 to support the community outreach team, including improving the participation of women during survey and community liaison and in the prioritisation, planning, and tasking of survey and clearance. HALO's Area of Operations, presently focused on Rushinga District, is mostly culturally homogenous, comprised of the Shona people. While their community outreach team is gender balanced and includes both Shona and Ndebele speakers, no new measures to improve the participation of ethnic minority groups during survey or planning were necessary during 2021.⁸¹

Mines Advisory Group (MAG) reports equal access to employment for qualified women and men in its survey and clearance teams in Zimbabwe, including for managerial level/supervisory positions. One quarter of MAG's staff were women in 2021, with 22% of managerial/supervisory positions occupied by women and 30% of operational positions.⁸² This is a similar picture to 2020, when approximately 30% of MAG's operational staff were women as were 20% of staff at managerial level.⁸³

In 2021, a female deminer was promoted to Deputy Team Leader in MAG, but otherwise no vacancies were opened, and thus no opportunity to recruit or promote more female staff.⁸⁴ In 2020, MAG offered breastfeeding mothers an additional three months of arrangements to facilitate breastfeeding after the first three months of maternity leave.⁸⁵ In 2021, MAG hoped this encouraged more women staff to remain with the organisation.⁸⁶

APOPO has a gender and diversity policy and implementation plan and, in June 2022, a female Human Resources Co-ordinator came into post to follow up on implementation. The organisation reports offering equal access to employment for qualified women and men in survey and clearance teams, including for managerial level/supervisory positions. In 2021, their first year of operating in Zimbabwe, 31% of APOPO's employees were women. Women occupied 50% of managerial/supervisory positions and 34% of operational positions.⁸⁷

APOPO asserts that all communities, including women, children and ethnic minorities in mine-affected areas are consulted during clearance. Their needs are measured during Impact Assessment; for example, through community meetings, school visits, household surveys, and discussions with village heads, in accordance with the organisation's SOPs. APOPO notes that their SOPs have been improved through the addition of a comprehensive section on gender-balance in survey and community liaison teams. Survey and community liaison are conducted by a team that originates from the communities along the minefield concerned, and all minority groups are said to be well represented. From time to time, beneficiary interviews are conducted to better understand how beneficiaries feel about ongoing clearance. Traditional leadership and authorities in the communities are consulted continuously. APOPO disaggregates all data by gender and age.⁸⁸

INFORMATION MANAGEMENT AND REPORTING

ZIMAC operates an IMSMA New Generation (NG) database.⁸⁹ In line with Oslo Action Plan (Point 9), Zimbabwe confirms its information database is accurate, up to date, and sustainable.⁹⁰ The GICHD concurs that information is generally accurate and that the programme can easily extract relevant and up-to-date data as required, with effective data collection forms.⁹¹ ZIMAC holds monthly meetings with operators to cross-reference data, which according to operators has improved the accuracy and reliability of the database.⁹²

79 Email from Samuel Fricker, HALO Trust, 13 April 2021.

80 Email from Samuel Fricker, HALO Trust, 30 May 2022.

81 Ibid.

82 Email from Peter Avenell, MAG, 17 May 2022.

83 Email from Peter Avenell, MAG, 15 April 2021.

84 Email from Peter Avenell, MAG, 17 May 2022.

85 Email from Peter Avenell, MAG, 15 August 2022.

86 Email from Peter Avenell, MAG, 17 May 2022.

87 Emails from John Sorbo, APOPO, 20 June and 16 August 2022.

88 Ibid.

89 Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.

90 Article 7 Report (covering 2021), p.3.

91 Email from Asa Masteberg, GICHD, 8 July 2022.

92 Emails from Chimwenwe Tembo, NPA, 25 March 2020; Samuel Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.

In 2020, virtual meetings were held; both with operators' information managers to check data quality and with the GICHD information management advisor to trouble shoot the IMSMA NG system. The plan for 2021 was to have a seminar once the COVID-19 situation eased.⁹³ However, due to continued challenges imposed by the COVID-19 pandemic, the seminar did not take place and has been rescheduled again to late 2022.⁹⁴

ZIMAC states that, in 2021, information in the database was continually reviewed to ensure it was up to date and accurate and cross-checked with operator databases every one to three months. Polygon data are also reviewed when it is deemed prudent to do so, for example, whenever a resurvey takes place.⁹⁵

MAG reported that, in 2021, it had made internal improvements to monthly data collection and that it reviews data before including in reports.⁹⁶

APOPO is in continuous communication with the ZIMAC Information Manager. APOPO does note data collection forms as an area where some improvements could be made.⁹⁷

The HALO Trust notes that, while IM teams across stakeholders continued to work together in 2021, changes in IM team composition and leadership across most operators during the year delayed progress. HALO also suggests that, across the mine action programme and stakeholders, use of nationally owned and shared data could be strengthened and that better access to IMSMA for operators would be helpful.⁹⁸

ZIMAC's latest Article 7 report covering 2021 is comprehensive and of generally good quality.

PLANNING AND TASKING

In 2018, with the support of the GICHD,⁹⁹ Zimbabwe launched its first ever National Mine Action Strategy, covering 2018–25. The strategic plan complements Zimbabwe's Article 5 deadline extension request to 2025, which was approved by States Parties to the APMB in December 2017. Operators have lauded the Strategy for its detail and its realistic outlook on delivery, which it is hoped will encourage donor funding.¹⁰⁰ A strategy review in 2021 concluded that the national programme remains on track to complete clearance by its current Article 5 deadline. ZIMAC planned to launch the updated strategy with the support of GICHD in October 2022.¹⁰¹

Zimbabwe's latest Article 7 Report, covering 2021, includes an updated estimate of remaining contamination and updated annual targets for the remainder of the extension period. These include 6.3km² to be addressed in 2022; 7.5km² to be addressed in 2023; 5.7km² to be addressed in 2024; and the remaining 3.9km² to be addressed in 2025 (see Table 2).¹⁰²

Zimbabwe exceeded its land release target for 2021, as it had done in 2020 with 11.28km² released in total in 2021, despite some continued challenges posed by the COVID-19 pandemic.

Going forward, once an operator has completed clearance of their assigned area their capacity will be redeployed to other minefields (see Table 2).¹⁰³

Clearance is prioritised according to impact, with contaminated areas closest to highly populated areas addressed first.¹⁰⁴ NPA uses an impact assessment to prioritise areas for release once they have been allocated by ZIMAC.¹⁰⁵ The HALO Trust also prioritises minefields which are closest to impacted populations and which have had a high number of accidents. For reasons of efficiency, however, operations tend to proceed linearly west to east or east to west (allowing concentrated logistical support and command and control), rather than opening tasks all over the frontage of the border.¹⁰⁶ APOPO also assigns areas close to communities as highest priority when undertaking clearance.¹⁰⁷

Operators report positively on the support offered by ZIMAC to their operations. For example, APOPO notes that clearance and survey task dossiers are issued in a timely and effective manner¹⁰⁸ and The HALO Trust notes the support provided by ZIMAC's monitoring and QC teams.¹⁰⁹

93 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

94 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

95 Ibid., and interview, in Geneva, 24 June 2022.

96 Email from Peter Avenell, MAG, 17 May 2022.

97 Email from John Sorbo, APOPO, 20 June 2022.

98 Emails from Samuel Fricker, HALO Trust, 30 May and 14 August 2022.

99 Email from Asa Mattleberg, GICHD, 16 August 2022.

100 Email from Samuel Fricker, HALO Trust, 20 July 2019.

101 Email from Asa Mattleberg, GICHD, 16 August 2022.

102 Article 7 Report (covering 2021), Appendix A, Table A1, P. A-21.

103 Ibid.

104 Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

105 Email from Chimwemwe Tembo, NPA, 25 March 2020.

106 Email from Samuel Fricker, HALO Trust, 17 April 2020.

107 Email from John Sorbo, APOPO, 20 June 2022.

108 Ibid.

109 Email from Samuel Fricker, HALO Trust, 30 May 2022.

Table 2: Annual land release targets 2022-25 (m²)¹¹⁰

Minefield	2022	2023	2024	2025	Totals	Comments
Musengezi to Mazowe (HALO)	1,400,000	1,400,000	1,300,000	335,475	4,435,475	
Mazowe to Rwenya River (Cordon Sanitaire) (MAG)	800,000	1,835,653	1,600,000	1,615,610	9,521,239	Complete figures to be confirmed after NPA's survey MAG to retain cordon-sanitaire tasks. Ploughshare tasks to be split between HALO Trust and NPA. ¹¹¹
Nyamapanda to Mazowe Ploughshare (HALO and NPA)	N/A	N/A	1,800,000	1,869,976		
Crooks Corner to Sango Border (Reinforced Ploughshare) (NMCU)	900,000	1,017,880	N/A	N/A	1,917,880	On completion NMCU capacity will be moved to Lusulu and APOPO's area and later to other minefields.
Crooks Corner to Sango Border (Cordon Sanitaire) (NMCU)	138,918	N/A	N/A	N/A	138,918	
Crooks Corner to Sango Border (Cordon Sanitaire) (APOPO)	500,000	590,000	503,064	100,000	1,693,064	
Rusitu to Muzite Mission (NPA)	1,500,000	2,401,766	N/A	N/A	3,901,766	
Sheba Forest to Leacon Hill (NPA)	993,548	N/A	N/A	N/A	993,548	
Lusulu (NMCU)	100,000	300,000	505,537	N/A	905,537	
Totals	6,332,466	7,545,299	5,708,601	3,921,061	23,507,427	

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national legislation specific to mine action in Zimbabwe. ZIMAC reported that Zimbabwe conducts a review of its NMAS every three years in line with updates to international mine action standards (IMAS).¹¹² ZIMAC planned to review the NMAS in 2021 with input from operators to keep them in line with new developments in the IMAS.¹¹³ Although this was not completed in 2021, it is a work in progress, with the reviews of standards for mine detection dogs (MDDs) and mechanical clearance scheduled to be completed by the end of June 2022¹¹⁴ and an aim to complete the full NMAS review by the end of 2022.¹¹⁵

Operators report that ZIMAC have embarked on the process of gaining input on the NMAS review from operators, though HALO remark that this has been somewhat ad hoc.¹¹⁶ MAG undertook a minor review of SOPs with ZIMAC, resulting in some adjustments which, at the time of writing, were with ZIMAC pending final approval.¹¹⁷ ZIMAC also requested that The HALO Trust support the NMAS review with a first draft of the Mechanical National Standards and that NPA consider the animal detection system (ADS) NMAS. Both drafts have been submitted and at the time of writing, were currently under review by the ZIMAC Technical Team, with a view to conducting a workshop where the standards can be finally adjusted to the Zimbabwe country context.¹¹⁸

¹¹⁰ Article 7 Report (covering 2021), Appendix A, Table A1, P. A-21.

¹¹¹ Email from Samuel Fricker, HALO Trust, 14 August 2022.

¹¹² Email from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

¹¹³ Article 7 Report (covering 2020), p. 35.

¹¹⁴ Article 7 Report (covering 2021), p. 3.

¹¹⁵ Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and interview in Geneva, 24 June 2022. Article 7 Report (covering 2021), Annex A, p. A-19.

¹¹⁶ Email from Samuel Fricker, HALO Trust, 30 May 2022.

¹¹⁷ Email from Peter Avenell, MAG, 17 May 2022.

¹¹⁸ Email from Gemma Walsh, NPA, 2 June 2022.

An ongoing challenge for operators and ZIMAC alike continued to be the search for technical solutions to decrease the time spent on missed-mine drills, when gaps in the mine pattern are found.¹¹⁹ According to operators, the drills should be reviewed to establish a more efficient method of conducting them as they are time consuming and seemingly ineffective as mines are found only very rarely.¹²⁰ COVID-19 hampered progress on a full review in 2020, as opportunities for field visits and coordination meetings were severely limited.¹²¹ However, discussions were held on the issue between operators and ZIMAC in 2021, and operators have been given autonomy to explore their own innovations for full assessment at a later stage. Such exploration includes the use of MDDs by NPA and use of a Minelab GPZ700 excavator by HALO.¹²² HALO notes use of the GPZ700 has been extremely promising so far and hoped to have the method accredited by the middle of 2022.¹²³ ZIMAC reports that research is also underway to see how MMD efficiency can be improved, including trials of a new detector, which can detect mines at greater depth than previous detectors.¹²⁴ It is a positive development that ZIMAC is seeking solutions to this longstanding challenge and encouraging operators to innovate. APOPO suggests that ZIMAC could support operator efforts further through production of case studies and closer assessment of productivity using the various solutions under trial.¹²⁵

With regard to use of dogs in the drills, ZIMAC explains that it has not been possible to establish the maximum depth at which dogs can detect. This is a key consideration given that mines are being found at depths of up to 40cm. Now that ZIMAC has a standard for use of MDDs, they may be employed in future, but likely in combination with surface excavation, to ensure sufficiently deep exploration. ZIMAC plans to test use of MDDs in the missed-mine drills in 2022, based on a new standard.¹²⁶ NPA adds that, following use of their MDD teams in 2021 to focus on Targeted Technical Survey, there is now capacity to trial MDDs specifically for missed mine drills.¹²⁷

ZIMAC conducts regular QA, and, in recent years, an independent QC team was dispatched to conduct QC by sampling a minimum of 10% of completed tasks.¹²⁸ Operators have previously confirmed that the ZIMAC QA/QC process was rigorous, with well trained and experienced staff. The HALO Trust noted that the combination of a separate sampling team and a highly accessible monitoring team worked especially well, with the former providing thorough external oversight and the latter helping teams to work through any problems.¹²⁹ Although the handover process can be time-consuming, delaying the return of land to communities, this is a logistical challenge and not a problem with the NMA.¹³⁰ This said, it may be helpful for ZIMAC to coordinate with other government departments as necessary and explore what could be done to speed up the return of land to communities.

OPERATORS AND OPERATIONAL TOOLS

The Zimbabwean Armed Forces' NMCU and, since 2013, The HALO Trust and NPA, all conduct land release in Zimbabwe. MAG became operational in December 2017, and APOPO signed their MoU in 2016, but were not operational until December 2020 when they began training their first demining teams.¹³¹ APOPO began survey and clearance operations in 2021.¹³²

APOPO has been tasked to survey and clear a 7km² area on a 37km-long stretch of minefield along the border with Mozambique. The minefield is in Chiredzi district, Masvingo province, in south-eastern Zimbabwe, in a conservation area just outside Gonarezhou national park in an area known as the Sengwe Wildlife Corridor.¹³³ Through clearance, the aim is to create a safe passage for both local communities and tourists, as well as reduce the human-wildlife conflict, caused by wildlife overpopulation, where the presence of landmines has prevented normal animal migration.¹³⁴

119 Emails from Samuel Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, MAG, 1 August 2019.

120 Emails from Samuel Fricker, HALO Trust, 5 August 2021; Peter Avenell, MAG, 20 May 2020; and John Sorbo, APOPO, 16 August 2022, and online interview, 11 August 2022. APOPO, for example, notes that in June 2022, 74 operational hours were spent on missed mine drills.

121 Email from Samuel Fricker, HALO Trust, 13 April 2021.

122 Emails from Peter Avenell, MAG, 17 May 2022; Samuel Fricker, HALO Trust, 30 May 2022; Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Gemma Walsh, NPA, 2 June 2022.

123 Email from Samuel Fricker, HALO Trust, 30 May 2022.

124 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

125 Interview with John Sorbo, APOPO, 11 August 2022.

126 Interview with Maj. Cainos Tamanikwa, ZIMAC, in Geneva, 24 June 2022.

127 Email from Gemma Walsh, NPA, 2 June 2022.

128 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 12 June 2018.

129 Email from Samuel Fricker, HALO Trust, 20 July 2019.

130 Email from Samuel Fricker, HALO Trust, 17 April 2020.

131 Article 7 Report (covering 2020), p. 15; and email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

132 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and John Sorbo, APOPO, 20 June 2022.

133 Emails from Ashley Fitzpatrick, APOPO Zimbabwe, 27 July 2019 and 9 August 2020.

134 "Switzerland Boosts APOPO Zimbabwe Demining Project", 13 December 2021, at: <https://bit.ly/3PbEuFA>.

Table 3: Operational clearance capacities deployed in 2021¹³⁵

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
HALO Trust	30	249	0	3	Deminers includes medic-deminers who operate as deminers, and mechanical operator deminers. 7% decrease in personnel but 3 additional machines compared to 2020.
NPA	5	53	2 dogs/2 handlers	0	33% decrease in deminers compared to 2020. Four manual deminers are attached to MDD Team.***
APOPO	4	34	0	0	New capacity in 2021.
MAG	3	30	0	0	14% decrease on peak personnel of 35 in 2020.
NMCU	16	134	0	1	11% decrease in personnel since 2020.
Totals	58	500	2 dogs/2 handlers	4	

* Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters. *** NPA MDD team authorised to conduct clearance only of metalized areas where a detector cannot be employed, as well as for technical survey.¹³⁶

There was an 6% decrease in overall manual clearance capacity across all operators from 534 personnel at peak in 2020 to 500 in 2021. This compares to an overall increase of 6% from 2019 to 2020, which was possible due to an increase in donor funding.¹³⁷ Zimbabwe has highlighted the exclusion of Zimbabwe from the United Kingdom's 2022 funding plans as a "major blow to the programme", with the Foreign, Commonwealth and Development Office (FCDO) previously contributing approximately half of total programme funding received.¹³⁸ In August 2022, however, it was reported that the United Kingdom had reconsidered and would continue to offer funding.¹³⁹ This being said, efforts to secure increased support from new and existing donors remain urgent.

In 2021, uncertainties in funding from the United Kingdom (FCDO) and the United States Department of State (DoS) led to a reduction in capacity of three teams from NPA and two teams from HALO, though HALO managed to adjust budgets and reduce a potential loss of 60 deminers to a loss of just 20. Zimbabwe did see an increase in dog teams employed by NPA, from two to three in 2021, as well as an increase from three to six machines, due to additions by HALO.¹⁴⁰

APOPO did not have a non-technical survey team in place in 2021 but had four technical survey teams operating, including a total of 34 deminers. APOPO's technical survey

teams operating in 2021 also functioned as clearance teams, as shown in Table 3.¹⁴¹ APOPO expected to hire additional clearance staff in 2022, ideally a male and female team, if sufficient donor funding could be secured. In July 2022, APOPO planned to begin Team Leader training, covering its new SOPs, Leadership, Quality Management, and Reporting Procedures, as well as presentation skills and staff training abilities.¹⁴²

MAG had two non-technical survey teams of five personnel and three technical survey and clearance teams of thirty personnel in 2021. As at June 2022, MAG did not expect any major changes to the number of non-technical or technical survey and/or clearance personnel in 2022. However, MAG cautioned that they had experienced some uncertainties over donor funding and faced a "confusing scenario for planning".¹⁴³ Given these uncertainties over funding and capacity, ZIMAC reassigned some of MAG's task area, which encompasses the Mazowe to Rwenya River minefield in Mashonaland East, to NPA and The HALO Trust, who are expected to reach completion of their current tasks ahead of 2025. ZIMAC commends MAG's work as "instrumental in changing the behaviour of the communities living close to this stretch" through its community liaison work, leading to a reduction in the number of mine accident victims.¹⁴⁴

135 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; Peter Avenell, MAG, 17 May 2022; Gemma Walsh, NPA, 2 June 2022; and John Sorbo, APOPO, 20 June 2022.

136 Email from Maj. Cainos Tamanikwa, ZIMAC, 12 August 2022.

137 Emails from Samuel Fricker, HALO Trust, 13 April 2021; Chimwemwe Tembo, NPA, 16 April 2021; and Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

138 Statement of Zimbabwe, APMBC 19th Meeting of States Parties (19MSP), virtual meeting, 15–19 November 2021.

139 Email from Asa Masteberg, GICHD, 16 August 2022.

140 Interview with Maj. Cainos Tamanikwa, ZIMAC, 24 June 2022.

141 Email from John Sorbo, APOPO, 20 June 2022.

142 Ibid.

143 Email from Peter Avenell, MAG, 17 May 2022.

144 Article 7 Report, (covering 2021), Annex A, p. A-9.

In 2021, The HALO Trust had one non-technical survey team of two personnel. Like other operators, HALO deploys combined technical and clearance personnel, consisting of 30 teams of 249 deminers, (see Table 3 above).¹⁴⁵ HALO's capacity decreased slightly in 2021 compared to 2020, with a reduction from 32 manual demining teams in March 2021 to 30 manual demining teams in the middle of the year, but maintaining two mechanical operator demining teams throughout the year.¹⁴⁶ This loss in manual demining capacity was due to a reduction in regular funding from the UK government as well as completion of one-off UK government Aid-Match project for which funding was not renewed. In 2022, HALO expected a further reduction in funding from the UK government. Combined with increasing local costs, this will likely lead to a further reduction in capacity in the latter half of the year.¹⁴⁷ ZIMAC highlights that The HALO Trust needs to secure further funding to increase its current capacity and be able to meet its 2025 deadline in Mashonaland Central as well as the area to be re-assigned from MAG to HALO in Mashonaland East.¹⁴⁸

NPA had one non-technical survey team of two personnel in 2021, along with one MDD team dedicated to technical survey and comprising four manual deminers and two dog handlers. Due to funding cuts from the UK FCDO and the US PM/WRA, (Bureau of Political-Military Affairs, Office of Weapons Removal and Abatement), NPA reduced the number of its clearance teams from eight to five in 2021. At time of writing, NPA was working on a resource mobilisation strategy and hoped to secure funding to increase future capacity once more.¹⁴⁹ As per 2020, NPA used its two MDDs to conduct technical survey in 2021.¹⁵⁰ NPA's 2021 operations were funded by the Norwegian Ministry of Foreign Affairs, which has guaranteed funding to 2025.¹⁵¹

In 2021, Zimbabwe's NMCU had 15 manual demining teams, totalling 150 deminers, and one mechanical team, used solely for ground preparation. As has been highlighted, opportunity for reduction through technical survey continued to decrease in the NMCU's assigned area from Mwenzi to the Sango Border. NMCU teams that had completed their tasks were relocated to support clearance of the Cordon Sanitaire minefield assigned to APOPO. Similarly, in 2022, ZIMAC envisaged using some of the NMCU's capacity to support any areas assigned to operators that are lagging behind target. ZIMAC notes that government funding for NMCU is guaranteed at the current level until clearance is complete. However, ZIMAC adds that funding requirements will increase beyond this 2023, when old detectors will require replacement.¹⁵²

ZIMAC expects the number of deminers in the country to further fall by over forty in 2022, due to funding shortages,¹⁵³ something which must be addressed if Zimbabwe is to remain on track to meet its 2025 deadline.

Zimbabwe notes that mechanical assets, first introduced in 2016, have been useful in tackling deeply buried mines on hard ground as well as in areas with highly mineralised soils. MDDs have been instrumental in quickening technical survey and enabling fast deployment of manual deminers to lanes.¹⁵⁴

In 2020, The HALO Trust began trials of a new mechanical asset: the "MMD Sizer". This is a custom-built mobile sizer/crushing unit, donated by equipment manufacturer MMD, which processes minefield spoil through two sets of crushing teeth without the need for subsequent physical inspection. Full trials of the machine were hampered by the COVID-19 pandemic in 2020.¹⁵⁵ However, in the first half of 2021, HALO was able to complete successfully trials and full deployment of the MMD Sizer, reporting that it did prove more effective than other mechanical assets previously used. However, the unit is only able to function effectively in certain conditions, limited to use in the dry season, and limited by task accessibility, as the machine is not highly manoeuvrable. HALO notes that the MMD Sizer is extremely effective when deployed near communities, as the crushing units can ignore significant metal contamination, which would normally slow down manual demining extensively.¹⁵⁶

In 2021, HALO also managed to deploy some demining equipment obtained from Mozambique in 2020, which Mozambique had held since declaring completion of its Article 5 obligations, four and a half years earlier. HALO describes how, after restoring the equipment to full working order, it has helped with operations, noting that the detectors have proved extremely useful. However, given the age of these assets, breakdowns have been more frequent than with newer equipment, bringing maintenance requirements and costs.¹⁵⁷

MAG does not currently use any mechanical assets or MDDs in its operations but, since 2020, has been pursuing the possibility of procuring a digger asset to support the programme. A representative from the digger provider was unable to meet with MAG in 2021, due to COVID-19 quarantine restrictions. As at May 2022, MAG was still awaiting security clearance for this visit to go ahead, despite repeated requests.¹⁵⁸

145 Email from Samuel Fricker, HALO Trust, 30 May 2022.

146 Article 7 Report (covering 2021), Annex A, p. A-7.

147 Email from Samuel Fricker, HALO Trust, 30 May 2022.

148 Article 7 Report (covering 2021), Annex A, p. A-8.

149 Email from Gemma Walsh, NPA, 2 June 2022; and Article 7 Report (covering 2021), Annex A, p. A-11.

150 Emails from Chimwemwe Tembo, NPA, 16 April 2021; and Gemma Walsh, NPA, 2 June 2022.

151 Article 7 Report (covering 2021), Annex A, p. A-12.

152 *Ibid.*, p. A-14.

153 Zimbabwe National Mine Action Strategy, 2018–2025, Reviewed Version, p. 9.

154 Article 7 Report (covering 2021), Annex A, Zimbabwe's Revised Mine Action Work Plan for 2022–2025, p. A-2.

155 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; and Samuel Fricker, HALO Trust, 17 April 2020, 13 April 2021, and 14 August 2022.

156 Email from Samuel Fricker, HALO Trust, 30 May 2022.

157 *Ibid.*

158 Emails from Peter Avenell, MAG, 24 July 2020 and 17 May 2022.

As highlighted in the Land Release System section above, in 2021 and continuing into 2022, Zimbabwe was running trials of new tools to improve the efficiency of Missed Mine Drills, as well as excavation and detection of deeply buried mines. The outcome of these trials was expected by the middle of 2022.¹⁵⁹ ZIMAC has supported these trials by operators through involvement of its QA staff; monitoring to see whether the emerging practices are likely to meet national requirements.¹⁶⁰ APOPO planned to implement ArcGIS (a Geographical Information System mapping and analytics platform) in the second part of 2022.¹⁶¹

The HALO Trust comments that the commencement of operator working groups in 2021, attended by operations management teams, are proving an excellent platform for sharing innovations and lessons, and that changes to SOPs and processes are likely to occur as a result of this platform, later in 2022.¹⁶²

DEMINER SAFETY

ZIMAC reported four accidents involving deminers in 2021, all involving excavation of R2M2 anti-personnel mines. One APOPO deminer suffered amputation of two fingers and another was involved in an accident but sustained no injuries. Two HALO Trust deminers also suffered injuries during clearance operations.¹⁶³ ZIMAC states that, in 2021, all accidents were investigated as per the national standards, and that lessons learnt were shared with other operators and highlighted during quarterly stakeholder and operations meetings.¹⁶⁴ APOPO notes that, after any accident, all its deminers are pulled out to reflect on lessons learned, with refresher trainings undertaken to mitigate against future accidents.¹⁶⁵ The HALO Trust concurs that accidents were investigated by a team comprising of HALO and ZIMAC staff. The findings were then presented to HALO Headquarters' technical team for external review, then shared with ZIMAC for review and dissemination. HALO also presented key findings at the ZIMAC coordination meetings, attended by all operators.¹⁶⁶

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

A total of 11.28km² of mined area was released in 2021,¹⁶⁷ exceeding Zimbabwe's 2021 target of 9.34km².¹⁶⁸ Of the 11.28km², more than 2.44km² was cleared, more than 3.16km² was reduced through technical survey, and more than 5.67km² was cancelled through non-technical survey. A total of 26,457 anti-personnel mines were found and destroyed.

Zimbabwe saw an increase in land released compared to the 10.55km² released in 2020. ZIMAC reports that this was mainly due to an increase in cancellation, particularly from resurvey by APOPO before commencing clearance of their task. The width of the minefield concerned was originally thought to be over 100 metres, but after resurvey, was discovered to have an average width of only 30 metres.¹⁶⁹

A total of 0.45km² of previously unknown contamination was added to the database in 2021.¹⁷⁰

SURVEY IN 2021

In 2021, a total of 8.84km² was released through survey, of which more than 5.67km² was cancelled through non-technical survey (see Table 4), and more than 3.16km² was reduced through technical survey (see Table 5).¹⁷¹ There was a huge increase in non-technical survey output from 0.29km² cancelled in 2020, mainly due to APOPO's resurvey. There was also a significant 61% decrease in the amount of technical survey, down from 8.11km² the previous year.¹⁷²

159 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

160 Email from Maj. Cainos Tamanikwa, ZIMAC, 23 August 2022.

161 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

162 Email from Samuel Fricker, HALO Trust, 30 May 2022.

163 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Samuel Fricker, HALO Trust, 30 May 2022.

164 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

165 Email from John Sorbo, APOPO, 20 June 2022.

166 Email from Samuel Fricker, HALO Trust, 30 May 2022.

167 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

168 Article 7 Report (covering 2020), Annex A, p. A-22.

169 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

170 Ibid.

171 Ibid.; and Article 7 Report (covering 2021), pp. 4–5.

172 Emails from (then) Capt. Cainos Tamanikwa, ZIMAC, 2 June 2022 and 6 April 2020.

MAG cancelled 908m² through non-technical survey and reduced 82,361m² through technical survey in 2021. MAG reported a decrease of approximately 78% in land reduced through survey in 2021 compared to 2020, due to rates of COVID-19 infection among staff. This affected capacity and necessitated measures to ensure COVID-safe operations.¹⁷³

APOPO commenced survey and clearance in Zimbabwe in January 2021. During its first year of operations, APOPO cancelled 5,175,930m² through non-technical survey and reduced 24,999m² through technical survey. APOPO also completed technical survey of 18,157m² in Sango Border Sector 1; as this had not yet been added to the national database at the time of writing, it is not included in Table 5 below. APOPO reported that COVID-19 lockdown restrictions at times prevented survey and community liaison teams visiting communities. APOPO also experienced some logistical constraints, as many suppliers ceased operating due to the pandemic, making procurement of some items difficult.¹⁷⁴

The HALO Trust cancelled an area of 10,187m² through non-technical survey and reduced a total of 1,009,082m² through technical survey.¹⁷⁵ HALO was able to approximately double the amount of land reduced in 2021 compared to 2020, explaining that this increase is simply a matter of timing and not indicative of a broader trend or change. For 2022, HALO expected that the figure for clearance will reduce again as teams start on new tasks, which will likely continue throughout the year. HALO is nearing completion of all ploughshare tasks, hence it will soon be primarily focused on clearing the remaining cordon sanitaire minefields.¹⁷⁶ Cordon sanitaire minefields are tasks that normally require full clearance with no reduction possible as the polygons are usually very accurate and there is strong evidence of

contamination within fence-lines and roads. The HALO Trust is therefore not expecting reduction levels to remain as high as they have been.¹⁷⁷

Despite some continued disruption from COVID-19, HALO was able to conduct demining operations every calendar month, albeit with some redeployment and limiting the size of teams to support social distancing in camps. HALO also ended operations across the programme earlier than planned, in December 2021, due to a spike in infections and lost some time in operations on various occasions throughout the year due to waves of infection in the camps.¹⁷⁸

NPA conducted its final full non-technical survey in 2018, cancelling only a nominal area of 895m² by non-technical survey in 2020. As such, NPA defines all remaining minefields assigned to it in Zimbabwe as CHAs. NPA reduced a total of 2.32km² through technical survey in 2021.¹⁷⁹ This is an increase on the 1.9km² reduced through technical survey by NPA in 2020. This increase was made possible by the introduction of Targeted Technical Survey, whereby MDDs are directed to the areas (spots) most likely contaminated within the mine rows. This has been successful so far, increasing productivity by up to 25%.¹⁸⁰

Based on lessons learned in 2020, NPA prepared a COVID-19 contingency plan for 2021, including budgeting for the costs of associated consumables used to mitigate against the spread of the virus and of meeting COVID-19 rules and regulations. As such, NPA was able to sustain operations in 2021 without significant impact from the continued pandemic. That said, the suspension of intercity public transport did increase the cost of transporting operational staff to and from their homes and regular COVID-19 testing of staff proved quite costly.¹⁸¹

Table 4: Cancellation through non-technical survey in 2021¹⁸²

Area	Operator	Area cancelled (m ²)
Sango border to Mwenezi river (Cordon Sanitaire)	APOPO	5,111,792
Musengezi to Mazowe (Mt Darwin and Rushinga districts)	HALO	61,352
Mazowe to Rwenya (Army Camp)	MAG	908
Masvingo (Mwenezi to Sango Border Post (Ploughshare))	NMCU	500,000
Total		5,674,052

173 Emails from Peter Avenell, MAG, 17 May and 4 July 2022.

174 Email from John Sorbo, APOPO, 20 June 2022.

175 Email from Samuel Fricker, HALO Trust, 30 May 2022.

176 Ibid.

177 Emails from Samuel Fricker, HALO Trust, 13 April 2021 and 30 May 2022.

178 Email from Samuel Fricker, HALO Trust, 30 May 2022.

179 Email from Gemma Walsh, NPA, 2 June 2022.

180 Ibid.

181 Ibid.

182 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Article 7 Report (covering 2021), pp. 4–5.

Table 5: Reduction through technical survey in 2021¹⁸³

Area	Operator	Area reduced (m ²)
Mashonaland Central-Musengezi to Mazowe (Mt Darwin and Rushinga districts)	HALO	1,043,149
Mashonaland East (Mazowe to Rwenya)	MAG	82,361
Manicaland (Sheba to Leacon Hill Stretch)	NPA	1,467,061
Manicaland (Rusitu to Muzite Stretch)	NPA	570,480
Sango border to Mwenezi river Cordon Sanitaire (Chikukutsi Sector 2)*	APOPO	4,065
Total		3,167,116

* As at August 2022, APOPO had also completed Technical Survey of 18,157m² in Sango Border Sector 1. However, while completion of this task had been submitted to ZIMAC, it had not yet added to the national database so it is not included here.¹⁸⁴

CLEARANCE IN 2021

In 2021, a total of 2.44km² of mined area was released through clearance with 26,457 anti-personnel mines and 3 anti-vehicle mines found and destroyed.¹⁸⁵ This is a slight increase on the 2.41km² of mined area released through clearance in 2020, though a slightly higher number of 26,911 anti-personnel mines were found and destroyed in that year.¹⁸⁶

A total of 77 anti-personnel mines were recovered and destroyed during explosive ordnance disposal (EOD) spot tasks in 2021, as well as 83 items of unexploded ordnance and one improvised explosive device (IED).¹⁸⁷

In 2021, only one task of 19,749m², cleared by the NMCU, resulted in no anti-personnel mines being found and destroyed. This was in Masvingo province, at the Mwenezi to Sango Border Post, (a ploughshare minefield). The intention was to undertake clearance as part of a continuous stretch of minefield, previously inaccessible due to a swamp. ZIMAC have explained that clearance may have been previously undertaken or that it is possible no mines were ever laid, given its inaccessibility due to dense vegetation and location on a flood plain.¹⁸⁸

APOPO, having commenced operations in Zimbabwe in January 2021, cleared 0.27km² of mined area and destroyed 3,687 anti-personnel mines and 3 anti-vehicle mines during the year.

MAG cleared 153,252m² of mined area and destroyed 296 anti-personnel mines in 2021. MAG also removed and destroyed three anti-personnel mines on an EOD cattle recovery call-out in March 2021, (reported as EOD spot tasks and not included in Table 6 below). MAG reported a decrease of approximately 78% in both cleared and reduced land in 2021 compared to 2020. As noted above with regards to survey, this was due to the significant operational impact of COVID-19.

Sadly, one MAG colleague passed away due to COVID-19. Staff were advised not to report to work if they experienced flu-type symptoms and MAG reports that a considerable number of individual staff days were lost as well as a full 35 operational days, due to the pandemic in 2021.¹⁸⁹

The HALO Trust cleared 980,655m² of mined area and destroyed 20,231 anti-personnel mines in 2021. The amount of land cleared was comparable to that it cleared in 2020. HALO conducted 58 EOD spot tasks in 2021, which resulted in the destruction of a further 60 anti-personnel mines (not included in Table 6 below). HALO completed three tasks in 2021, across land totalling 31,053m², which proved to have no anti-personnel mine contamination. This consisted of one former military outpost and two other tasks, which were re-clearance of washaways in minefields previously cleared by a commercial operator, where communities believed the operator had 'skipped' the washaways. HALO also sampled a task bordering a protected village, which found no mine contamination. This is not included in Table 6 below.¹⁹⁰

NPA cleared 403,381m² of mined area and destroyed 784 anti-personnel mines in 2021,¹⁹¹ an overall decrease on the 938,268m² cleared by NPA in 2020. However, NPA notes that the clearance rate achieved per deminer remained comparable to previous years as it averages from 38m² to 42m² depending on ground conditions. In July 2021, due to lack of funding, NPA reduced its capacity from eight manual teams to five, resulting in a significant decrease in clearance thereafter. No anti-personnel mines were destroyed by NPA during EOD spot tasks.¹⁹²

¹⁸³ Ibid.

¹⁸⁴ Email from John Sorbo, APOPO, 16 August 2022.

¹⁸⁵ Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Article 7 Report (covering 2021), pp. 5-6.

¹⁸⁶ Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; and Article 7 Report (covering 2020), p. 5.

¹⁸⁷ Emails from Maj. Cainos Tamanikwa, ZIMAC, 12 and 15 August 2022.

¹⁸⁸ Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and interview in Geneva, 24 June 2022.

¹⁸⁹ Emails from Peter Avenell, MAG, 17 May and 4 July 2022.

¹⁹⁰ Email from Samuel Fricker, HALO Trust, 30 May 2022.

¹⁹¹ Email from Gemma Walsh, NPA, 2 June 2022.

¹⁹² Ibid.

Table 6: Mine clearance in 2021¹⁹³

Area	Operator	Area cleared (m ²)	Areas cleared	AP mines destroyed	AV mines destroyed
Mashonaland Central-Musengezi to Mazowe (Mt Darwin and Rushinga districts)	HALO	1,219,532	129	21,278	0
Mashonaland East (Mazowe to Rwenya)	MAG	153,252	2	296	0
Manicaland (Sheba to Leacon Hill Stretch)	NPA	357,974	7	630	0
Manicaland (Rusitu to Muzite Stretch)	NPA	217,658	5	154	0
Masvingo Province Mwenezi to Sango Border Post (Ploughshare)	NMCU	19,749	1	0	0
Mwenezi to Sango Border Post (Cordon Sanitaire)	NMCU	85,143	1	536	0
Sango border to Mwenezi river (Cordon Sanitaire)	APOPO	387,117	2	3,563	3
Totals		2,440,425	147	26,457	3

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the eight-year extension granted in 2017), Zimbabwe is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. At the beginning of the extension period, land release activities were being undertaken in only four out of the seven major mined areas in the country. In 2021, all seven areas were being worked on.¹⁹⁴

Zimbabwe is just on track to meet its deadline, although progress in Article 5 implementation may be impacted by the COVID-19 pandemic, internal economic instability, and significant loss of funding, particularly from the UK FCDO (though this was to be confirmed at the time of writing), in 2021–22; all highlighted by Zimbabwe as major challenges.¹⁹⁵

The COVID-19 pandemic continued to affect operations in 2021, although it did not cause activity to be suspended, as it had done in April 2020, when government lockdown restrictions meant it took about three months for operators to return to full clearance capacity.¹⁹⁶ The first two months of 2021 also impacted demining operations as Zimbabwe was fighting the second wave of the pandemic.¹⁹⁷ Demining activities are suspended or slowed from November to March every year due to high rainfall and sporadic flooding in the summer months. As most of the contaminated areas are in low-lying areas which are prone to storms and flooding this may impact land release output going forward.¹⁹⁸

It is commendable that, despite the range of challenges outlined here, Zimbabwe exceeded its land release targets for 2021 and achieved a 7% increase in land release output from the previous year. As was the case in 2020, the amount of area reduced through technical survey going forward is likely to fall as the remaining polygons are narrow.¹⁹⁹

¹⁹³ Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June and 12 August 2022; and Article 7 Report (covering 2021), pp. 4–5.

¹⁹⁴ Article 5 Update to the APBMC Intersessional Meetings, Geneva, 20–22 June 2022, p. 1.

¹⁹⁵ Statement of Zimbabwe, APMBC 19th MSP, virtual meeting, 15–19 November 2021.

¹⁹⁶ Emails from Samuel Fricker, HALO Trust, 13 April 2021; and Chimwemwe Tembo, NPA, 16 April 2021.

¹⁹⁷ Article 7 Report (covering 2020), p. 35.

¹⁹⁸ *Ibid.*; and Article 7 Report (covering 2021), Appendix A, p. A-20.

¹⁹⁹ Article 7 Report (covering 2021), p. 19 and Appendix A, p. A-4.

Table 7: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	2.44
2020	2.41
2019	2.76
2018	2.11
2017	1.66
Total	11.38

Some redistribution of Areas of Operation (AOOs) has begun among operators to help keep the sector on track for national completion. In early 2022, ZIMAC had already worked with MAG, NPA, and The HALO Trust to redistribute some AOO in Mudzi district from MAG to HALO and NPA, due to capacity constraints in MAG.²⁰⁰ HALO commenced work on some of its re-assigned tasks in June 2022 and NPA is projected to do so once tasks in Manicaland province are complete.²⁰¹ The HALO Trust welcomes that ZIMAC has been proactive in re-allocating AOOs to enable operators to include this in annual planning and protect efforts to stay on track towards completion.²⁰²

There are many strengths of Zimbabwe's mine action programme, such as having a well organised and nationally-owned mine action centre, significant national clearance capacity, clarity on the remaining contamination challenge, a strong commitment to complete clearance, experienced operators working in the country, and a positive interaction with affected communities.²⁰³ Progress and

activities so far illustrate a collaborative working environment in which operators can quickly ramp up capacity and output, putting additional funds immediately to use towards an achievable goal. The GICHD, for example, commends ZIMAC for continuously encouraging information sharing, fostering effective co-ordination, showing openness to new ways of working and demonstrating strong national ownership.²⁰⁴

However, a lack of sufficient resources may seriously impede progress going forward. If Zimbabwe is to meet its Article 5 deadline, ZIMAC believes that overall demining capacity will need to be increased. In its latest Article 7 report ZIMAC estimated that it will require a total of over \$51 million to reach its target at a rate of about US\$14 million per year. While the government will continue to fund ZIMAC and the NMCU, the majority of funding is expected to come from the international community.²⁰⁵ ZIMAC remains optimistic that it can meet its Article 5 deadline and that this increased funding could be secured from both government and donors.²⁰⁶ It is evident that a strong updated national strategy and additional resources are key to keep Zimbabwe's ambitious but, so far, robust, mine action programme on track. As the 2025 deadline approaches, ZIMAC should launch the strategy review conducted in November 2021 in conjunction with urgent implementation of the resource mobilisation strategy.²⁰⁷ ZIMAC also acknowledges that "funding is the greatest obstacle for Zimbabwe to achieving its 2025 goal".²⁰⁸

In November 2021, Mount Darwin became the first district in Zimbabwe to be declared fully completed by humanitarian operators; a significant milestone on the path to national completion, and, as HALO describes, "proof for donors, beneficiaries, operators and government that this mission is achievable, and, with the right effort and cooperation can be achieved in line with the strategy".²⁰⁹

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

On the matter of potential "residual" contamination that might be found after completion of major clearance operations, ZIMAC has national capacity to deal with this and plans in place.²¹⁰ ZIMAC asserts that Zimbabwe's military forces began mine clearance long before international operators boosted efforts and, if well-equipped, the same army engineers are fully capable of dealing with residual contamination.²¹¹ It will fall to ZIMAC, the NMCU, and the army engineers, who are stationed in all provinces, to deal with any new explosive devices discovered.²¹² It is planned that, as the army will have responsibility for clearing any residual contamination, the NMCU will develop a strategy on the management of residual contamination as Zimbabwe's completion date approaches.²¹³

200 Email from Samuel Fricker, HALO Trust, 30 May 2022; and Article 7 Report (covering 2021), Annex A, p. A-7.

201 Email from Samuel Fricker, HALO Trust, 14 August 2022.

202 Email from Samuel Fricker, HALO Trust, 30 May 2022.

203 Zimbabwe National Mine Action Strategy, 2018–2025, Reviewed Version, p. 36.

204 Email from Asa Massleberg, GICHD, 8 July 2022.

205 Article 7 Report (covering 2021), Appendix A, p. A-20.

206 Email from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022.

207 Emails from Peter Avenell, MAG, 17 May 2022; and John Sorbo, APOPO, 16 August 2022.

208 'Zimbabwe National Mine Action Strategy, 2018–2025, Reviewed Version, p. 19.

209 Emails from Samuel Fricker, HALO Trust, 30 May and 14 August 2022.

210 Article 7 Report (covering 2021), p. 3.

211 Email from Maj. Cainos Tamanikwa, ZIMAC, 23 August 2022.

212 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

213 Emails from Maj. Cainos Tamanikwa, ZIMAC, 2 June 2022; and Asa Massleberg, GICHD, 8 July 2022.

STATES NOT PARTY

The background consists of several overlapping, semi-transparent geometric shapes in various shades of orange and red. The shapes are angular and layered, creating a sense of depth and movement. The colors range from a deep, dark red to a bright, light orange. The overall composition is abstract and modern.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

PARTIAL NATIONAL AUTHORITY ESTIMATE

3 km²

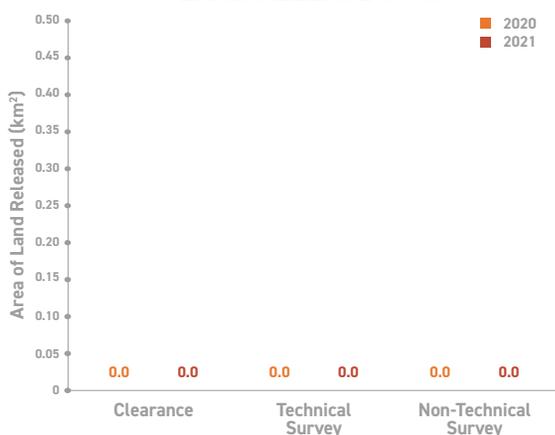
AP MINE
CLEARANCE IN 2021

0 m²

AP MINES
DESTROYED IN 2021

0

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

The 2020 armed conflict between Armenia and Azerbaijan over Nagorno-Karabakh ended with Azerbaijan regaining most of its internationally recognised territory except for a part of Nagorno-Karabakh.¹ No new mined area was recorded in Armenia in 2021 and no mine clearance or other land release was planned or undertaken. Recorded contamination of area contaminated with anti-personnel mines—only a partial reporting—covers just over 3km².²

Armenia's Center for Humanitarian Demining and Expertise (CHDE) focused on survey and clearance of cluster munition remnants (CMR) and explosive ordnance (EO) contamination in 2021.³ In 2022, the CHDE initiated a baseline non-technical survey to determine more precisely the extent and type of contamination. Priorities for clearance will be defined when the survey is complete.⁴

RECOMMENDATIONS FOR ACTION

- Armenia should commit to not use anti-personnel mines and should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Armenia should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Armenia should clarify the extent of remaining mine contamination, including in zones where access is restricted to the military.
- Armenia should mobilise the necessary resources to finish mine clearance and set a deadline for completion of operations.

1 T. De Waal, "Unfinished Business in the Armenia-Azerbaijan Conflict", Carnegie Europe, 11 February 2021, at <https://bit.ly/3PFvArz>.

2 Emails from Margaret Lazyan, Head of Mine Risk Education and Victim Assistance, Centre for Humanitarian Demining and Expertise (CHDE), 26 April 2021; and Karine Shamiryan, Head of International Affairs, CHDE, 27 May 2022.

3 Email from Margaret Lazyan, CHDE, 26 April 2021.

4 Emails from Vaghinak Sargsyan, CHDE Senior Non-Commissioned Officer (SNCO) Director, 13 June 2022; and Karine Shamiryan, CHDE, 27 May 2022.

- Armenia should expedite the adoption of national mine action legislation and finalise a strategic mine action plan as soon as possible.
- Armenia should establish a platform for dialogue and cooperation with mine action operators and other stakeholders for information sharing and learning.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Center for Humanitarian Demining and Expertise (CHDE)

NATIONAL OPERATORS

- CHDE (in addition to serving as the NMAA, the CHDE conducted survey in 2021)

INTERNATIONAL OPERATORS

- The HALO Trust

OTHER ACTORS

- United Nations Development Programme (UNDP)
- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

There has been no release of mined areas in Armenia for two years and reported contamination in Armenia has remained constant since the end of 2019. At the end of 2021, Armenia had an estimated 9.52km² of mined area, with more than 5.69km² of confirmed hazardous area (CHA) and a further 3.83km² of suspected hazardous area (SHA)⁵ (see Table 1). This is the same as reported in 2019 and 2020.⁶ Mined area contaminated with anti-personnel mines was estimated at 3.01km² (2.90km² of CHA and 0.1km² of SHA).⁷ A baseline non-technical survey began in 2022 to determine the extent of CMR and other explosive ordnance, including new contamination arising from the 2020 conflict.⁸

Mined areas contain anti-personnel mines or anti-vehicle mines, or a combination of both, as well as unexploded ordnance (UXO).⁹ Of 94 CHAs, 55 contain anti-personnel mines, totalling just under 2.9km². The remaining 39 CHAs totalling 2.8km² contain anti-vehicle mines only.¹⁰ Three of the six SHAs, totalling just over 0.1km², are thought to be contaminated by anti-personnel mines, with the remaining 3.7km² suspected to contain only anti-vehicle mines.¹¹

Table 1: Mined area (at end 2021)¹²

Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
AP mines	41	2,176,085	3	105,500
AV mines	39	2,791,608	3	3,728,442
AP and AV mines	11	706,046	0	0
AP mines and UXO	2	12,769	0	0
AP and AV mines and UXO	1	4,842	0	0
Totals	94	5,691,350	6	3,833,942

AP = Anti-personnel AV = Anti-vehicle

Four of Armenia's eleven administrative areas (ten provinces plus Yerevan) contain mined areas. Three are contaminated with both anti-personnel and anti-vehicle mines while the fourth (Vayots Dzor) is contaminated solely with anti-vehicle mines, as set out in Table 2.¹³

⁵ Email from Karine Shamiryan, CHDE, 27 May 2022.

⁶ Emails from Margaret Lazyan, CHDE, 25 June 2020 and 26 April 2021.

⁷ Email from Karine Shamiryan, CHDE, 27 May 2022.

⁸ Emails from Vaghinak Sargsyan, CHDE, 11 May 2022; and Karine Shamiryan, CHDE, 27 May 2022.

⁹ Email from Margaret Lazyan, CHDE, 26 April 2021.

¹⁰ Email from Karine Shamiryan, CHDE, 27 May 2022.

¹¹ Ibid.

¹² Ibid.

¹³ Emails from Margaret Lazyan, CHDE, 26 April 2021; and Karine Shamiryan, CHDE, 27 May 2022.

Table 2: Mined area by province (at end 2021)¹⁴

Province	Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
Gegharkunik	AP mines	3	584,022	2	105,123
	AV mines	5	2,428,128	3	3,728,442
Syunik	AP mines	32	1,424,512	1	377
	AV mines	21	280,425	0	0
	AP and AV mines	8	676,617	0	0
	AP mines and UXO	2	12,769	0	0
	AP and AV mines and UXO	1	4,842	0	0
Tavush	AP mines	6	167,551	0	0
	AV mines	10	15,603	0	0
	AP and AV mines	3	29,429	0	0
Vayots Dzor	AV mines	3	67,452	0	0
Totals		94	5,691,350	6	3,833,942

A Landmine Impact Survey (LIS) was conducted in Armenia in 2005, followed by partial survey of 17 sites by The HALO Trust in 2012, and then again, in 2012–13, by the Swiss Foundation for Mine Action (FSD). FSD found 17 SHAs estimated to cover 26km² and 114 CHAs that covered 21km² in four districts bordering Azerbaijan. Thirteen of these areas, totalling 1.8km², contained only UXO and not mines.¹⁵ In 2019, the CHDE conducted non-technical survey in Syunik province but military-restricted zones continued to be off limit for survey and clearance.¹⁶

Mine and explosive remnants of war (ERW) contamination in Armenia is primarily the consequence of armed conflict with Azerbaijan in 1988–94, in which both sides used mines. The heaviest contamination exists in areas previously occupied by Armenia but regained by Azerbaijan during the 2020 conflict. The reclaimed territory contains heavily contaminated land, including around Nagorno-Karabakh, and a massive mined area along the 350km-long line of contact (LoC) that previously separated Armenian and Azerbaijani forces.¹⁷

Armenia's border with Georgia has been cleared of mines whereas the border with Türkiye (formerly known as Turkey), also mined during the Soviet era, is still contaminated.¹⁸ While non-technical survey in 2012–13 by FSD did not find evidence of mines outside the buffer zones in Ararat province, which borders Türkiye, certain areas on that border have not yet been surveyed because they are controlled by Russian border troops.¹⁹ The LIS conducted under United Nations Development Programme (UNDP) auspices in 2005 had identified Ararat province as contaminated with anti-personnel mines, but this is not confirmed by the data provided from the CHDE.²⁰

Armenia reported new CMR and other explosive ordnance contamination in Gegharkunik, Syunik, and Tavush provinces as a result of the conflict with Azerbaijan in 2020 (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Armenia for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The CHDE was established by the Armenian government in 2011 as a non-commercial State body responsible for conducting survey and clearance and identifying contaminated areas. In 2014, the CHDE was made Armenia's national mine action authority (NMAA).²¹ An Advisory Board oversees the CHDE at the Deputy Ministerial level, with representation from the Ministry of Defence; Ministry of Emergency Situations; Ministry of Territorial Administration and Infrastructure; Ministry of Education, Science, Culture and Sports; the Ministry of Justice; and the Ministry of Foreign Affairs.²²

¹⁴ Emails from Vaghinak Sargsyan, CHDE, 11 May 2022; and Margaret Lazyan, CHDE, 26 April 2021.

¹⁵ CHDE, "FSD non-technical mine action survey", Yerevan, 2013, p. 12.

¹⁶ Emails from Margaret Lazyan, CHDE, 19 April 2019 and 25 June 2020.

¹⁷ See Mine Action Review's *Clearing the Mines 2022* report on Azerbaijan for further information.

¹⁸ Emails from Ruben Arakelyan, CHDE, 19 March 2014 and 28 April 2017, and interview in Geneva, 1 April 2014.

¹⁹ CHDE, "FSD non-technical mine action survey", CHDE, Yerevan, 2013, p. 9; and emails from Varsine Miskaryan, CHDE, 8 August 2016; and Ruben Arakelyan, CHDE, 28 April 2017.

²⁰ "Landmine Impact Survey", UNDP, 2005, at: <http://bit.ly/3tfQtr0>, p. 29.

²¹ Emails from Ruben Arakelyan, CHDE, 8 June 2015; and Margaret Lazyan, CHDE, 10 August 2020.

²² Emails from Geneva International Centre for Humanitarian Demining (GICHD), 13 July 2022; and Ani Zakaryan, Head of the Information Management, CHDE, 21 July 2022.

In 2013, in conformity with a government decree, the CHDE began developing national mine action legislation. The CHDE began drafting the law in 2015²³ with the support of the Organization for Security and Co-operation in Europe (OSCE) office in Yerevan.²⁴ In 2019, the CHDE expected to submit the draft mine action law to the new Parliament of Armenia for discussion before the end of the year.²⁵ This did not occur. As at May 2022, the draft mine action law was reported to still be under development with the possibility that it would be finalised by the end of 2022.²⁶

In 2021, the government allocated AMD317.6 million (approx. US\$695,000) to cover the costs of the CHDE and AMD6.3 million (approx. US\$14,000) for survey and clearance operations.²⁷ The national authorities do not provide direct funding to The HALO Trust, which undertook limited activities in Armenia in 2021.²⁸

In 2021, the Grant Assistance for Grassroots Human Security Projects (GGP) programme, financed by Japan, initiated a project for Medical Support and First Aid Training. The project will provide training in the provision of explosive ordnance risk education (EORE) and first aid in mine-impacted communities in Armenia. The GGP included the supply of an ambulance to be used in support of clearance operations.²⁹

UNDP provides capacity development to the CHDE within the framework of the "Strengthening the Capacities of National Mine Action Authorities in Armenia" project. Under the same project, the Geneva International Centre for Humanitarian Demining (GICHD) plans to support the CHDE in installing Information Management System for Mine Action (IMSMA) Core, conducting needs assessments, and training staff on the updated information management system. In June 2022, the CHDE reported that the process was underway.³⁰ UNDP and the GICHD will also support the CHDE in elaborating the National Mine Action Strategy and Law on Mine Action.³¹

ENVIRONMENTAL POLICIES AND ACTION

The CHDE deploys methods and tools to avoid damaging the environment where possible.³² Armenia does not yet have a national mine action standard on environmental management but plans to develop one.³³

The HALO Trust, in its limited operations in Armenia, seeks to minimise the environmental impact of its survey and clearance activities. It minimises fuel consumption by sharing vehicles; it does not burn vegetation during clearance or remove vegetation unnecessarily; it takes care not to contaminate water sources with fuels, lubricants, and paints; and it takes rubbish away when leaving a task. The HALO Trust also plans to conduct clearance around agricultural planting and harvesting cycles³⁴

GENDER AND DIVERSITY

The CHDE does not have a gender policy and associated implementation plan but has reported that gender has been mainstreamed in Armenia's draft national mine action strategy. During community liaison activities, all groups affected by mine contamination are consulted, including women and children. According to the CHDE, the needs of women and children in affected communities are taken into account in prioritisation, planning, and tasking of survey and clearance operations. However, the CHDE does not disaggregate mine action data by sex.³⁵

The CHDE says it offers equal employment opportunities for both men and women. Only 17 of the 50 CHDE employees in 2021 were women (32%, down from 36% in 2020), while 6 of 16 managerial positions were held by women. Two of six staff in the Operations Department are women, as are two working in the training centre and five of six staff in the EORE Group. Survey teams do not include representatives from different ethnic or minority groups.³⁶

23 Email from Varsine Miskaryan, CHDE, 8 August 2016.

24 Email from Ruben Arakelyan, CHDE, 28 April 2017.

25 Email from Margaret Lazyan, CHDE, 19 April 2019.

26 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

27 Ibid.

28 The HALO Trust report clearing an unfuzed landmine in 2021 which it registered as an unknown improvised landmine. Email from Fiona Kilpatrick-Cooper, Head of Region – Europe (South Caucasus), HALO Trust, 2 September 2022.

29 Email from Margaret Lazyan, CHDE, 26 April 2021.

30 Ibid.

31 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

32 Ibid.

33 Ibid.

34 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

35 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

36 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

The HALO Trust disaggregates mine action data by age and sex. It is an equal opportunities employer, but due to the local cultural context and nature of the work, most HALO staff deployed in Armenia are men.³⁷ It has a team of four people based in Armenia: two are administrative staff (both women) and two are operational staff (both men). When HALO Trust deploys clearance and survey teams to Armenia, they are selected from its staff in Nagorno-Karabakh. In 2021, no women were engaged in HALO's operations in Armenia in 2021.³⁸

INFORMATION MANAGEMENT AND REPORTING

The CHDE manages the national IMSMA database.³⁹ The CHDE had been planning to install IMSMA Core in 2019 but this was delayed due to the outbreak of COVID-19 and was due to be installed in June 2022.⁴⁰ In June 2022, the GICHD and UNDP held a workshop with other partners in Armenia to help identify the needs of the CHDE and other mine action stakeholders. This will feed into the design of forms and procedures for the new IMSMA Core database in Armenia.⁴¹ In 2020, the CHDE elaborated quality assurance (QA) and quality control (QC) forms using KoboCollect Software to improve data collection in the field.⁴² IMSMA Core will allow the direct entry of data into the database using Survey 123.⁴³

PLANNING AND TASKING

The draft National Strategic Plan on Mine Action was presented for the approval to the Armenian Government in 2018. In early 2021, however, the plan was under reconsideration due to the emergence of new challenges (primarily CMR and other EO contamination resulting from the 2020 conflict)⁴⁴ and as at May 2022, it was still being developed.⁴⁵ The main objectives of the draft Plan were to address, as a priority, anti-personnel mines in CHAs that have a humanitarian impact, increasing community safety in support of the achievement of the 2030 Sustainable Development Goals.⁴⁶

Tasking for clearance is based on CHDE criteria. Priority is given first to contaminated areas that are up to 1km away from a population centre, then to those near agricultural land, and finally to contaminated areas that negatively affect the environment. These are mostly located in the mountains. To optimise efficient deployment of resources, clearance plans are typically drawn up on a community-by-community basis.⁴⁷

Reflecting the immediate focus on CMR and EO contamination as a result of the 2020 conflict, Armenia's annual work plan of 2021 envisaged battle area clearance (BAC) of 45,000m² of CMR and other UXO in the Kornidzor area (Syunik province); technical survey and clearance of 15,000m² of contaminated land in Davit Bek (also Syunik province); and non-technical survey in Gegharkunik, Syunik, and Tavush provinces to identify new contamination from the 2020 conflict.⁴⁸

In 2022, the CHDE started the baseline non-technical survey to determine the extent of new EO contamination arising from the 2020 conflict, and planned to clear 50,000m² of EO-contaminated area and to reduce a further 60,000m².⁴⁹ By mid-2022, the baseline non-technical survey had already been completed in Syunik province.⁵⁰ Priorities for clearance will be defined once the non-technical survey results have been collated and analysed.⁵¹

37 Ibid.

38 Ibid.

39 Email from Ruben Arakelyan, CHDE, 19 March 2014.

40 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

41 Email from GICHD, 13 July 2022.

42 Emails from Margaret Lazyan, CHDE, 25 June 2020 and 26 April 2021.

43 Email from GICHD, 13 July 2022.

44 Emails from Margaret Lazyan, CHDE, 10 August 2020 and 26 April 2021.

45 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

46 Email from Margaret Lazyan, CHDE, 19 April 2019.

47 Email from Ruben Arakelyan, CHDE, 28 April 2017.

48 Email from Margaret Lazyan, CHDE, 26 April 2021.

49 Emails from Vaghinak Sargsyan, CHDE, 11 May 2022; and Ani Zakaryan, CHDE, 21 July 2022.

50 Email from Vaghinak Sargsyan, CHDE, 13 June 2022.

51 Ibid.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The Armenian National Mine Action Standards (NMAS) were approved by the government in April 2014.⁵² In 2018, amendments were made to the NMAS on mine risk education, accreditation of demining organisations, and use of mine detection dogs (MDDs). No amendments were made to the NMAS in 2021.⁵³ According to the CHDE, reviews of the NMAS follow changes to the International Mine Action Standards (IMAS) and international best practice.⁵⁴

The CHDE has been developing standard operating procedures (SOPs) for several years.⁵⁵ SOPs on manual mine clearance, BAC, marking of hazardous areas, and medical support were elaborated by 2018.⁵⁶ In 2020, the

CHDE elaborated SOPs on Information Management (IM), non-technical survey, technical survey, explosive ordnance disposal (EOD) and quality management (QM).⁵⁷ The CHDE has no strategy to address residual contamination. The only national capacity to address contaminated areas discovered following completion of clearance is within the CHDE.⁵⁸

As previously mentioned, Armenia does not yet have a national mine action standard on environmental management, but reportedly plans to develop one.⁵⁹ The HALO Trust, when conducting occasional deployments in Armenia, operates under SOPs that were updated in line with those in Nagorno-Karabakh, which are accredited by the CHDE.⁶⁰

OPERATORS AND OPERATIONAL TOOLS

In 2021, with the focus on BAC, the CHDE deployed three non-technical survey teams, each comprising a team leader and three surveyors, compared with one non-technical survey team in 2020. Two technical survey teams were deployed by the CHDE in 2021.⁶¹ The CHDE had planned to add one new non-technical survey team and one or two demining teams in 2021; in fact, two non-technical survey and two technical survey teams were added. The CHDE is still planning to deploy two more clearance teams.⁶² The CHDE's plans to acquire mechanical clearance equipment did not materialise in 2020 or in 2021 due to changes in domestic law, which impeded procurement.⁶³

QM is conducted in accordance with IMAS and the NMAS. QA is conducted by dedicated officers who make regular field visits to inspect cleared land.⁶⁴ QC is conducted once clearance of the land has been completed, but prior to handover.⁶⁵

COVID-19 had no impact on landmine survey operations in Armenia in 2021.⁶⁶

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE IN 2021

In 2021, for the second consecutive year, no anti-personnel mined area was surveyed or cleared.⁶⁷ In 2019, the last year when mine clearance was undertaken in Armenia, 16,180m² of anti-personnel mined area was cleared and two anti-personnel mines found and destroyed.

52 Email from Margaret Lazyan, CHDE, 19 April 2019.

53 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

54 Emails from Margaret Lazyan, CHDE, 19 April 2019 and 26 April 2021.

55 Email from Varsine Miskaryan, CHDE, 8 August 2016.

56 Email from Margaret Lazyan, CHDE, 8 August 2018.

57 Email from Margaret Lazyan, CHDE, 26 April 2021.

58 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

59 Ibid.

60 Email from Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

61 Email from Margaret Lazyan, CHDE, 26 April 2021.

62 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

63 Emails from Margaret Lazyan, CHDE, 26 April 2021; and Karine Shamiryan, CHDE, 27 May 2022.

64 Email from Ruben Arakelyan, CHDE, 8 June 2015.

65 Email from Margaret Lazyan, CHDE, 8 August 2018.

66 Emails from Vaghinak Sargsyan, CHDE, 11 May 2022; and Fiona Kilpatrick-Cooper, HALO Trust, 18 May 2022.

67 Emails from Vaghinak Sargsyan, CHDE, 11 May 2022; and Ani Zakaryan, CHDE, 21 July 2022.

PROGRESS TOWARDS COMPLETION

No goal is set for clearance of all anti-personnel mined area in Armenia. No target date has been set for the completion of even partial mine clearance in Armenia, due to the uncertainty over future capacity and funding.⁶⁸ Moreover, due to the new UXO contamination resulting from the 2020 conflict with Azerbaijan, in 2021 the CHDE prioritised BAC and technical survey in part of Syunik, and non-technical survey in the newly contaminated provinces of Gegharkunik, Syunik, and Tavush.⁶⁹

Over the past five years, demining in Armenia has been slow and productivity rates low, as Table 3 illustrates, and very little demining has taken place. Armenia claims that challenges in its mine and ERW clearance include the low level of contamination and the random distribution of mines, which creates obstacles for the effective and efficient implementation of technical survey and clearance activities, and the absence of donor funding.⁷⁰

The CHDE launched a baseline non-technical survey in 2022 and planned to clear mined and battle areas of 50,000m² in 2022, with priorities to be determined following the completion of the non-technical survey.⁷¹

Table 3: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	0
2020	0
2019	*0.02
2018	*0.01
2017	0
Total	0.03

* Areas rounded up

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

According to the CHDE, Armenia has included provisions for addressing previously unknown mined areas following completion in national strategies. Currently the only national survey and clearance capacity in place to address previously unknown mined areas discovered following completion is the team at the CHDE.⁷²

68 Emails from Margaret Lazyan, CHDE, 19 April 2019 and 26 April 2021.

69 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

70 Emails from Margaret Lazyan, CHDE, 10 August 2020; and Ruben Arakelyan, CHDE, 28 April 2017.

71 Email from Vaghinak Sargsyan, CHDE, 11 May 2022.

72 Ibid.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

(MINE ACTION REVIEW ESTIMATE)

AP MINE
CLEARANCE IN 2021

18.38 km²

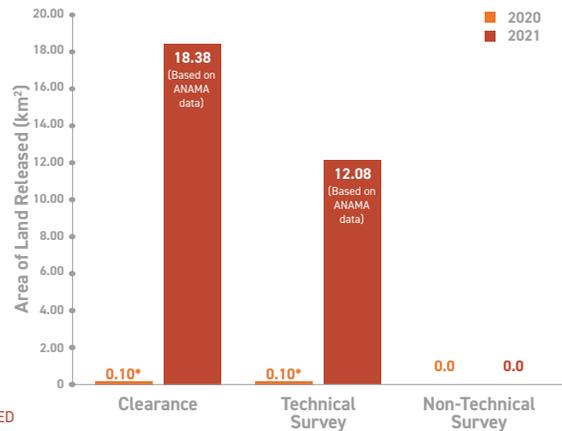
(BASED ON ANAMA DATA)

AP MINES
DESTROYED IN 2021

4,388

(INCLUDING 1,909 DESTROYED
IN SPOT TASKS)

LAND RELEASE OUTPUT



* This figure includes land released through both technical survey and clearance combined in 2020.

KEY DEVELOPMENTS

The six-week armed conflict between Armenia and Azerbaijan in 2020 ended with Azerbaijan regaining control over seven districts of its internationally recognised territory formerly controlled by Armenia, along with part of Nagorno-Karabakh. The area along the former Line of Contact (LOC) between Armenia and Azerbaijan is heavily mined, leading to a huge area of anti-personnel mine contamination falling under Azerbaijan's control. A massive effort to survey and clear areas containing mines and explosive remnants of war (ERW) is underway and the Mine Action Agency of the Republic of Azerbaijan (ANAMA, formerly the Azerbaijan National Agency for Mine Action), with the support of the United Nations Development Programme (UNDP), is making progress to put in place the required systems and processes to support implementation. ANAMA, reported clearing 18.38km² of land in which anti-personnel and anti-vehicle mines were found and destroyed in 2021. It is thought that this is based on the total size of area for task polygons in which mines were found during land release, rather than targeted clearance of confirmed mine fields.

RECOMMENDATIONS FOR ACTION

- Azerbaijan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Azerbaijan should continue to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- ANAMA, which is the national mine action coordination body by Presidential Decree, should continue and prioritise efforts to conduct an evidence-based survey of the regained territories to better define the location and extent of the contamination and enhance planning and prioritisation of clearance.
- ANAMA should continue to strive to ensure that the revised National Mine Action Standards (NMAS), known as the Azerbaijan National Mine Action Requirements (ANMAR), are formally adopted and are fully understood and routinely implemented by all entities conducting clearance.
- ANAMA should finalise and publish its new mine action strategy, to replace the one that expired in 2018, reflecting the significant increase in explosive ordnance (EO) contamination now under Azerbaijan's control.
- Azerbaijan should systematically collect and report publicly on data on contaminated areas as well as progress in survey and clearance.

- ANAMA should complete the transition to Information Management System for Mine Action (IMSMA) Core as soon as possible. Data on anti-personnel mine clearance should be disaggregated from clearance of areas containing anti-vehicle mines or EO other than anti-personnel mines.
- ANAMA should consider the creation of regular technical working groups, as an inclusive platform to share developments; exchange lessons learned; and promote best practice.
- ANAMA should elaborate a gender and diversity policy for mine action and an associated implementation plan.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Mine Action Agency of the Republic of Azerbaijan (ANAMA, formerly the Azerbaijan National Agency for Mine Action)

NATIONAL OPERATORS

- ANAMA
- Ministry of Defence (MoD, engineering unit of Azerbaijani Armed Forces)
- Ministry of Emergency Situations (MoES)
- Border Services Command
- Four national commercial demining companies, each with an international commercial sub-contractor:
 - Qaya partnering with SafeLane Global
 - Safe Point partnering with RPS
 - Alpha Demining partnering with Altay Group
 - Azerbaijan Demining Company partnering with Piper
- One national demining NGO: International Eurasia Press Fund (IEPF)

INTERNATIONAL OPERATORS

- ALTAY Group (Turkish company) – ceased operations in Azerbaijan in 2022
- Turkish Armed Forces

OTHER ACTORS

- United Nations Development Programme (UNDP)
- Marshall Legacy Institute (MLI)
- Mines Advisory Group (MAG)
- Geneva International Centre for Humanitarian Demining (GICHD)

EXPLOSIVE ORDNANCE RISK EDUCATION

- The International Committee of the Red Cross (ICRC), UN Children's Fund (UNICEF), UNDP, and the Office of the UN High Commissioner for Refugees (UNHCR), as well as national NGOs DAYAG/Relief Azerbaijan, are supporting ANAMA to implement EORE projects.

UNDERSTANDING OF AP MINE CONTAMINATION

The precise extent of contamination from anti-personnel mines in Azerbaijan is currently unknown but is certainly massive, especially along the 254km-long LOC that previously existed between Armenian and Azerbaijani forces. The defensive belts of berms, anti-tank ditches, and barbed wire, along the LOC, which are calculated to vary between 3km and 7km in depth, contain massive quantities of both anti-personnel and anti-vehicle mines, and the zone is now recognised as one of the largest mined areas in the world.¹ The areas along the LOC were heavily mined over the three decades after 1990 by all parties to the conflict.² Further minefields and other EO contamination, including abandoned explosive ordnance (AXO), are found in areas previously occupied by Armenia outside the Nagorno-Karabakh region.

Since the Russian-brokered ceasefire agreement came into effect on 10 November 2020, Azerbaijan has regained full control of the seven districts adjacent to Nagorno-Karabakh: the four districts (Fuzuli, Jabrayil, Qubadli, and Zangilan) over which it took back control from Armenia, and the three districts (Aghdam, Kalbajar, and Lachin) from which Armenia

agreed to withdraw its forces and return the districts to Azerbaijani control.³ Azerbaijan also regained control of a substantial part of Nagorno-Karabakh, the rest of which is patrolled by a Russian peacekeeping force but still governed by the de-facto Nagorno-Karabakh authorities.⁴ (See the Mine Action Review Clearing the Mines report on Nagorno-Karabakh for further information).

Previously, in 2018, ANAMA had estimated that mine contamination in areas occupied by Armenia covered between 350km² and 830km², and contained between 50,000 and 100,000 mines.⁵ The figure, however, is now believed to be a significant underestimate. According to a mine map of Aghdam provided by Armenia in June 2021, that district alone contains 97,000 anti-personnel and anti-vehicle mines.⁶ That is only one of the total seven districts reclaimed by Azerbaijan in 2020.

The full extent of contamination across Azerbaijan will only be better known after completion of a countrywide survey that includes the areas it has newly regained.

1 Online interview with Steiner Essen, Senior Mine Action Consultant, UNDP, and Guy Rhodes, Chief Technical Advisor, UNDP, 29 April 2021; and email from Guy Rhodes, UNDP, 23 June 2021.

2 Statement of Armenia, APMBC Intersessional Meetings (online), 22–24 June 2021.

3 See, e.g., International Crisis Group (ICG), "The Nagorno-Karabakh Conflict: A Visual Explainer", last updated 7 May 2021, at: <https://bit.ly/3uiOou2>.

4 ICG, "The Nagorno-Karabakh Conflict: A Visual Explainer", last updated 7 May 2021, at: <https://bit.ly/3uiOou2>.

5 ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 5.

6 Statement of Azerbaijan, APMBC Intersessional Meetings (online), 22–24 June 2021; and "Armenia and Azerbaijan exchange detainees for mine maps", Euroasianet, 23 June 2021, at: <https://bit.ly/3gXYWdx>.

Mine contamination in Azerbaijan is predominantly the consequence of the 1988–94 armed conflict with Armenia, which saw landmines laid by both sides. During the most recent conflict in 2020, media reported that the retreating Armenian forces planted mines in civilian infrastructure, lamp posts, canals, road junctions, rural and urban paths, courtyard entrances, cemeteries, and riverbanks.⁷ The most heavily contaminated areas are along the previous borders and confrontation lines between Armenia and Azerbaijan, including the area in and around Nagorno-Karabakh.

Areas of highest mine contamination include a mix of anti-personnel and anti-vehicle mines. ANAMA has found several cases of anti-personnel mines improvised with anti-vehicle mines, or OZM-type Armenian-produced mines

with booby traps. Some of the cases of improvised mines were found in areas beyond the former LOC, including in cemeteries, along river banks, in destroyed settlements, springs, etc. Improvised mine contamination is believed to cover approximately 5% of the total mined area.⁸

Azerbaijan began large-scale clearance of mines and ERW in December 2020 in the territory it had regained. The Azeri Prosecutor General and Ministry of Interior (MoI) issued a joint warning to citizens to avoid "travelling to the recently de-occupied territories without proper permission and until the areas are cleared of mines and unexploded ordnance".⁹ Military personnel, deminers, and many civilian returnees have been killed or wounded by different forms of explosive ordnance.¹⁰

Table 1: Mine contamination by type (at end 2021)¹¹

Location	Type of mine contamination	CHAs	Area (km ²)
Former LOC	Anti-personnel mines	800	1,600
	Anti-vehicle mines	200	
Other regained territories	Mixed anti-personnel and anti-vehicle mines	350	300
Totals		1,350	1,900

CHAs = Confirmed hazardous areas

Table 2: Anti-personnel mined area only by district (excluding anti-vehicle and mixed anti-personnel and anti-vehicle mined areas) (at end 2021)¹²

Districts	CHAs
Aghdam	272
Fuzuli	157
Jabrayil	6
Kalbajar	114
Khojavend	55
Qubadli	1
Tartar	194
Zangilan	1
Total	800

7 "Mines, Karabakh and Armenia's Crisis", *New Eastern Europe*, 16 April 2021, at: <https://bit.ly/3vezeaC>.

8 Email from Ramil Azizov, Operations Manager, ANAMA, 16 August 2022.

9 Improving Prospects for Peace after the Nagorno-Karabakh War, International Crisis Group, 22 December 2020, at: <https://bit.ly/2Sqvpkg>, p. 7.

10 "Two Azerbaijani Citizens Injured by Leftover Mine in Liberated Fuzuli District - Prosecutor General's Office", *Azernews*, 15 November 2020, at: <https://bit.ly/3bLiC2s>; "Armenian Land Mine Kills 4 Azerbaijani Civilians in Newly Liberated Fuzuli", *Dailybash*, 28 November 2020, at: <https://bit.ly/3bP1hpf>; "Dying To Go Home: Displaced Azerbaijanis Risk Mines, Munitions To See Homeland", *RadioFreeEurope*, 18 February 2020, at: <https://bit.ly/3vgaKh5>; "Information on the special emergency clearance operations executed along the frontline territory by ANAMA November 2, 2020", ANAMA website, accessed on 23 May 2021, at: <https://bit.ly/347Lwph>; Baku accuses Yerevan of shelling frontline villages with phosphorus shells", *RIA news*, 4 November 2020, (Russian) at: <https://bit.ly/3faQyYs>; and "ANAMA Director Gazanfar Ahmadov gave an interview to the Russian news agencies ITAR-TASS and RIA Novosti", ANAMA website, accessed on 23 May 2021, (Russian), at: <https://bit.ly/3ucsAAM>.

11 Email from Ramil Azizov, ANAMA, 16 August 2022.

12 Ibid.

ANAMA said that ongoing general and technical survey conducted in the liberated territories (8,725.5km²) reveals mined areas both along the former LOC and beyond it, including agricultural fields, graveyards, gardens, and other areas of social and economic value. According to preliminary data, 1,605km² are confirmed as having the highest level of contamination, while 7,120.5km² are believed to have medium or low-level contamination. In total, some 6,071km² are identified as priority areas for humanitarian demining.¹³ According to ANAMA, Armenia laid mines in haste, including while retreating, which have been found in recently cultivated land, with mine ploughs abandoned nearby. According to incident reports, 210 villages beyond the former LOC have been found to be contaminated by mines.¹⁴ Armenia denied the claims, stating that the retreating Armenian forces had had scarcely enough time to evacuate the bodies of the 1,500 Armenian soldiers who had been killed during the fighting.¹⁵ Between the trilateral statement of November 2020 and the end of 2021, 199 people have become mine victims (36 killed and 163 wounded). According to the data and information from prosecutor office, 125 people became victims as a result of mine explosions beyond the former LOC.¹⁶ This potentially indicates the presence of significant contamination beyond the LOC.

Azerbaijan has requested “the immediate release of information by Armenia on the location of the remaining minefields”.¹⁷ Armenia maintains that most of the mines were emplaced by Azerbaijan since the early years of the conflict to deter the Nagorno-Karabakh forces.¹⁸ Following extensive international mediation, Armenia released some minefield records providing information on 263,067 anti-personnel

mines and 127,427 anti-vehicle mines as well as other explosive devices. According to ANAMA, these records constitute only 5% of the regained areas and less than a third of the high-threat areas of the LOC reflected in United Nations Mine Action Service (UNMAS)/UNDP’s mine action assessment report of Azerbaijan in December 2020. Maps of 71km² of the LOC have not been released. The accuracy of the maps has yet to be fully determined, but Azerbaijan said only some 25% of the data had proven to be accurate/reliable.¹⁹

A more accurate picture of the extent of mined area in areas under the control and jurisdiction of Azerbaijan, will only be determined once survey of suspected and confirmed mined areas has been completed. Remote Aerial Minefield Survey (RAMS) multispectral data analysis methodology is being used to help identify suspected hazardous areas (SHA) as part of the baseline survey. In August 2022, ANAMA reported that a systematic non-technical survey programme was currently being established, and that ECHO funding started in April/May 2022. According to ANAMA, evidence-based technical survey is conducted prior to clearance, according to the national work plan. Due to the fact that there are no inhabitants in the regained areas, determination of the baseline of contamination is currently not through inclusive consultation with women, girls, boys, and men. However, ANAMA plans for survey teams to be gender balanced.²⁰

Azerbaijan is also suspected to be contaminated with cluster munition remnants and other ERW: both unexploded ordnance (UXO) and AXO, the extent of which is not known (see Mine Action Review’s *Clearing Cluster Munition Remnants* report on Azerbaijan for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

ANAMA, the Azerbaijan National Agency for Mine Action, was established by Presidential Decree 854 in 1999 to plan, coordinate, manage, and monitor mine action in the country. In mid-January 2021, by Presidential decree, ANAMA was restructured and elevated to the status of a public legal entity as the Mine Action Agency of the Republic of Azerbaijan.²¹ As at July 2022, a draft national mine action law was expected to be approved by the end of the year.²²

Prior to the 2020 conflict, ANAMA had been conducting demining operations with two national operators it was contracting – Dayag-Relief Azerbaijan (RA) and the International Eurasia Press Fund (IEPF). In March 2020,

the mine action programme was restructured and RA’s field personnel were incorporated within ANAMA while RA as an organisation continued to provide logistical support to ANAMA.²³ Following the 2020 conflict, the size of ANAMA and the extent of clearance operations in Azerbaijan have been rapidly scaled up to address the significant mine and ERW contamination newly under Azerbaijan’s control. An interministerial mine action working group, chaired by ANAMA, meets twice monthly and includes Azerbaijan’s most significant ministries, including the Ministry of Defence (MoD), Ministry of Interior, Ministry of Emergency Situations (MoES), and the State Border Service.²⁴

13 Ibid.

14 Ibid.

15 Statement of Armenia, APMBIC Intersessional Meetings (online), 22–24 June 2021.

16 Email from Ramil Azizov, ANAMA, 16 August 2022.

17 Statement of Azerbaijan, APMBIC Intersessional Meetings (online), 22–24 July 2021.

18 Statement of Armenia, APMBIC Intersessional Meetings (online), 22–24 July 2021.

19 Email from Ramil Azizov, ANAMA, 16 August 2022; and ANAMA, “Mine Action in Azerbaijan: Priorities and Needs”, Baku, May 2022.

20 Email from Ramil Azizov, ANAMA, 16 August 2022.

21 “Azerbaijan establishes Mine Action Agency”, *APA news*, 15 January 2021, at: <https://bit.ly/35MhtEu>.

22 Email from Samir Poladov, ANAMA, 7 July 2022.

23 Email from Nijat Karimov, ANAMA, 28 July 2020.

24 Interview with Vugar Suleymanov, Chairman of the Board, ANAMA; and Samir Poladov, ANAMA, Baku, 29 March 2022; and presentation by ANAMA, International Conference on Humanitarian Mine Action and the Sustainable Development Goals, Baku, 31 March–1 April 2022.

Since February 2021, ANAMA has been responsible for coordinating the various activities of several State implementing agencies, NGOs, and commercial contractors in order to execute a work plan elaborated with the involvement of relevant stakeholders and approved by the Government.²⁵ It has endeavoured to start putting in place the necessary structures and procedures to allow systematic survey and clearance of vast areas of territory contaminated with anti-personnel mines and ERW which Azerbaijan regained during the 2020 conflict. Progress is being made, such as in elaboration of the national mine action law and national mine action standards, and is ongoing. On 31 March–1 April 2022, ANAMA and UNDP organised an international conference in Baku on Mine Action and the SDGs. The conference brought together key actors from the international mine action community to share best practices and lessons learned in mine action, including in the use of advanced technologies. Among the recommendations made at the conference were the establishment of an in-country donor coordination mechanism, such as a Mine Action Forum, and of technical working groups (TWGs) to address key challenges (such as land release, information management, explosive ordnance risk education, and victim assistance).²⁶

Azerbaijan has developed a three-phase redevelopment and resettlement plan in which mine action is recognised as a precursor at the highest levels and as a national priority. The government of Azerbaijan currently funds 95% of all mine action activities and has linked mine action with the National Redevelopment and Resettlement plan as part of its commitment to the Sustainable Development Goals (SDGs).²⁷ ANAMA is also proposing that Azerbaijan include mine action as a new Sustainable Development Goal (SDG).²⁸

UNDP provides capacity development to ANAMA. In 2020, the capacity development project was extended to 2023.²⁹ In March 2021, the UNDP crisis response and UN's Central Emergency Response Fund provided US\$1 million to ANAMA to train, equip, and deploy emergency response teams to clear mines and UXO. UNDP planned to further scale up its financial and technical support to ANAMA.³⁰ UNDP is providing ANAMA with a strategic advisor, a non-technical survey advisor, and an information management advisor, and furnished operational support in the form of equipment and vehicles.³¹ UNDP supported ANAMA in the drafting of the demining law, Azerbaijan's national mine action requirements (ANMAR), and environmental management tools on mine action; in mobilisation of three pilot non-technical survey

and EOD teams under European Civil Protection and Humanitarian Aid Operations (ECHO); and in conducting two needs assessment that are being used in the ANAMA Donor Strategy which is endorsed by the Ministry of Foreign Affairs (MoFA). With funding from the UK Foreign, Commonwealth & Development Office (FCDO), UNDP will undertake projects to enhance ANAMA's quality management system and to provide support in the creation of a gender strategy and policy.³²

The Geneva International Centre for Humanitarian Demining (GICHD) also supported ANAMA in 2021, in particular with respect to information management. In March 2021, the GICHD visited Azerbaijan at the request of ANAMA to conduct a needs assessment. Information management support was later conducted remotely. In addition, three ANAMA staff also attended an online regional quality management (QM) training in June 2021 and a staff member attended a non-technical survey regional training in Croatia in November 2021, both of which were conducted under the umbrella of the Eastern Europe, Caucasus and Central Asia Regional Cooperation Programme (EECCA RCP).³³

Mines Advisory Group (MAG) signed a memorandum of understanding (MoU) with ANAMA in December 2021, and is operating with funding from the United States (US) and Canada. MAG, which has a country director and two technical advisors deployed in Azerbaijan, is providing management training for 20 ANAMA demining team supervisors. The training, which began in mid-February 2022, covers survey and clearance of explosive ordnance; operational planning, reporting, accident investigation, internal quality assurance (QA) and quality control (QC); and the deployment of demining assets, including machinery and mine detection dogs (MDDs). MAG had previously been present in Azerbaijan in 2000–02, training deminers, section and team leaders, and personnel from the training department, of the non-governmental organisation (NGO) Dayag-Relief Azerbaijan (RA).³⁴

ANAMA is also receiving capacity development support from the European Union (EU), France, United Kingdom (UK), and the US Department of State; the International Committee of the Red Cross (ICRC); the UN Children's Fund (UNICEF); and the Marshall Legacy Institute (MLI).³⁵ MLI has been operational in Azerbaijan since 2005, with an MDD partnership programme. It has provided 60 MDDs to ANAMA to date and it agreed a new two-year partnership in 2021, funded by Azerbaijan and the private sector in the United States.³⁶ UNICEF, ICRC, UNDP, and the Office of the UN High

25 ANAMA, "Mine Action in Azerbaijan: Priorities and Needs", Baku, May 2022.

26 Statement of the International Conference on Humanitarian Mine Action and the Sustainable Development Goals, Baku, 31 March–1 April 2022.

27 Email from Mark Buswell, Strategic Advisory, UNDP, 13 September 2022.

28 Email from Samir Poladov, ANAMA, 7 July 2022.

29 Email from Nijat Karimov, ANAMA, 21 May 2021.

30 "ANAMA and UNDP join forces to support mine action in Azerbaijan", Press release, UNDP website, 17 March 2021, at: <https://bit.ly/3hPXtrB>.

31 Emails from Samir Poladov, ANAMA, 6 June 2022; and Mark Buswell, UNDP, 6 September 2022.

32 Email from Mark Buswell, UNDP, 6 September 2022.

33 Email from GICHD, 19 April 2022.

34 Presentation by MAG, International Conference on Humanitarian Mine Action and the Sustainable Development Goals, Baku, 31 March–1 April 2022; and email from Olivier David, Country Director, MAG, 25 April 2022.

35 Email from Samir Poladov, ANAMA, 6 June 2022.

36 Presentation by MLI, International Conference on Humanitarian Mine Action and the Sustainable Development Goals, Baku, 31 March–1 April 2022.

Commissioner for Refugees (UNHCR) are also supporting ANAMA to implement explosive ordnance risk education (EORE) projects. EORE is deemed a major component of the risk management for returnees and the EORE working group, led by ANAMA, is coordinating the wider strategy and programming for 2023.³⁷

In January 2022, ANAMA established a new mobile field camp for deminers in Aghdam district, which it plans to use to expand mine clearance operations and increase personnel. The mobile container-type camp can be moved to other areas, depending on the location of demining activities.³⁸

In its Anti-Personnel Mine Ban Convention (APMBC) Article 7 report covering 2021, Türkiye (formerly known as Turkey) reported the provision of training to Azerbaijan Armed Forces personnel in mine action, mine clearance, and mine detection, as well as mine/improvised explosive device (IED) awareness, in addition to deploying Turkish military demining teams and machines (see section below on Operators and Operational Tools).³⁹

In 2021, the Azerbaijani government funded over 95% of the mine action programme's operating costs, with the remaining 4.3% of the total budget funded by donors.⁴⁰ In May 2022, a donor strategy was drafted and endorsed by MoFA.⁴¹ The strategy, which is reviewed quarterly, identified the key priorities for assistance (see section below, "Progress Towards Completion" for further details).⁴²

Azerbaijan is not party to the APMBC, but a senior representative from MoFA attended the intersessional meetings in June 2022 as an observer, during which Azerbaijan delivered a statement.⁴³

ENVIRONMENTAL POLICIES AND ACTION

Azerbaijan's newly revised national standards (ANMAR), which cover all demining activities, include a dedicated chapter on Environmental Protection in its national standards.⁴⁴

According to the ANMAR, "it is the intent of the National Mine Action Programme (MAP) of the Republic of Azerbaijan that these requirements shall be complied with to ensure that the environment is not degraded by mine action work and land is returned in a state that is similar to, or where possible better than, before mine action operations commenced, and that permits its intended use." The Environmental Protection chapter includes information on Azerbaijan's mine action environmental management system (EMS); requirements for mine action organisations; requirements for the identification, assessment, and mitigation of environmental aspects

(including waste disposal, water supplies, burning and removal of vegetation, animals, open burning and demolition, environmental aspects of mechanical mine action operations, emergency preparedness, monitoring, cultural and historical sites, and completion and remediation).

The Government of Azerbaijan may also require the conduct of a formal environmental impact assessment (EIA) in relation to large or publicly significant mine action projects, or ones that will take place in areas of known environmental vulnerability.⁴⁵

UNDP also supported development of environmental tools and delivered a workshop on the purpose, use, and application of the tools in May 2022.⁴⁶

GENDER AND DIVERSITY

ANAMA does not have a gender and diversity policy in place. While women made up around 30% of ANAMA's total workforce, including 25% of managerial and supervisory positions at ANAMA, no women were working in an operational role as at June 2022.⁴⁷ ANAMA said that it encourages women to engage in a variety of roles and planned to implement a capacity building project in 2022 for female demining teams.⁴⁸

37 Email from Mark Buswell, UNDP, 6 September 2022.

38 "Azerbaijan Plans to Clear 40,000 Hectares of Liberated Land from Armenian Landmines", *Caspian News*, 30 January 2022.

39 Turkey (now renamed Türkiye) Article 7 Report (covering 2021), Forms D and I.

40 Emails from Samir Poladov, ANAMA, 6 June and 7 July 2022.

41 Email from Mark Buswell, UNDP, 6 September 2022.

42 ANAMA, "Mine Action in Azerbaijan: Priorities and Needs", Baku, May 2022.

43 Statement of Azerbaijan, APMBC Intersessional Meetings, 20–22 June 2022.

44 Emails from Samir Poladov, ANAMA, 6 June 2022; and Ramil Azizov, ANAMA, 16 August 2022.

45 ANMAR, Section IV Management Systems, Chapter 9 Environmental Protection.

46 Email from Mark Buswell, UNDP, 6 September 2022.

47 Email from Samir Poladov, ANAMA, 6 June 2022.

48 Ibid.

The rapid upscaling of ANAMA's mine action operations taking place provides a valuable opportunity for ANAMA to improve the proportion of women in operational roles and to mainstream gender and diversity throughout its programme. One of the goals of the UNDP-ANAMA capacity strengthening project is to introduce a gender-sensitive approach to mine action to Azerbaijan.⁴⁹ ANAMA, with support from UNDP, have contracted a gender consultant to help develop a policy and strategy on gender by the first quarter of 2023, including the deployment of female deminers.⁵⁰ Relevant risk education and victim data are disaggregated by gender and age.⁵¹

According to ANAMA, survey and community liaison personnel are mostly from affected communities and there are no restrictions on the basis of ethnic groups or religious affiliation. Risk education teams create a network of affected communities, which include women and children. The government's reconstruction and rehabilitation programme is aimed at returning internally displaced persons (IDPs), including women and children, to their homelands and ensuring sustainable development of repatriated communities in a safe environment.⁵²

INFORMATION MANAGEMENT AND REPORTING

Azerbaijan's newly revised national mine action standards include the establishment of a single, unified, information management system, which ANAMA is implementing.⁵³ As at June 2022, ANAMA was in the process of transitioning to IMSMA Core and had already established an Online ArcGIS Portal. Draft forms to record daily progress, non-technical survey, and hazardous areas, and for external QC were already in place. ANAMA intended to launch the new IMSMA Core system in 2022. Information management approaches will also be used by other ministries to support evidence-based decision making.⁵⁴

Both ANAMA and UNDP report that efforts are ongoing to improve the quality of data in the mine action database, including with respect to disaggregation of data by land release method and contamination type. Verification of data occurs initially at the regional level and then at headquarters. With the significant upscaling of operations and area of responsibilities since 2020, the progress reporting period was reduced from two weeks to one.⁵⁵ ANAMA plans to upgrade the information management system and have started to migrate to IMSMA Core.⁵⁶

All data on clearance operations, including those of the military, are reported centrally to ANAMA.⁵⁷

PLANNING AND TASKING

The existing national mine action strategy was for 2013–18. Its main aims were said to be to continue mine and ERW clearance in support of government development projects and to provide safe conditions for the local population in affected regions.⁵⁸ The strategy expired at the end of 2018 and had not been replaced as of writing. In May 2021, ANAMA reported that a new strategy was being developed with a UNDP Chief Technical Advisor contracted and deployed to Azerbaijan to contribute to and speed up the process.⁵⁹ As at June 2022, elaboration of the new strategy was ongoing.⁶⁰

ANAMA develops annual work plans which are approved by the Cabinet of Ministers. Priority setting comes from the Cabinet of Ministers, as the highest level executive body in the country. Priorities are set in accordance with national rehabilitation, repatriation, and reconstruction plans in the regained territories.⁶¹

49 UNDP, "Review & Recommendation to Azerbaijan National Agency for Mine Action (ANAMA) in Support of its Transformation into International Centre for Demining assessment 2018", 17 July 2018.

50 Emails from Samir Poladov, ANAMA, 6 June 2022; and Mark Buswell, UNDP, 6 and 13 September 2022.

51 Emails from Samir Poladov, ANAMA, 6 June 2022; and Mark Buswell, UNDP, 6 September 2022.

52 Ibid.

53 Presentation by ANAMA, International Conference on Humanitarian Mine Action and the Sustainable Development Goals, Baku, 31 March–1 April 2022; and email from Mark Buswell, UNDP, 13 September 2022.

54 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022; and email from Samir Poladov, ANAMA, 6 June 2022.

55 Emails from Nijat Karimov, ANAMA, 21 May 2021; and Samir Poladov, ANAMA, 6 June 2022.

56 Email from Samir Poladov, ANAMA, 6 June 2022.

57 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022.

58 Email from Sabina Sarkarova, ANAMA 2 May 2018.

59 Email from Nijat Karimov, ANAMA, 21 May 2021.

60 Email from Samir Poladov, ANAMA, 6 June 2022.

61 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022; presentation by ANAMA, International Conference on Humanitarian Mine Action and the Sustainable Development Goals, Baku, 31 March–1 April 2022; and emails from Samir Poladov, ANAMA, 6 June 2022; and Ramil Azizov, ANAMA, 16 August 2022.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Azerbaijan has its own National Mine Action Standards (NMAS), known as the Azerbaijan National Mine Action Requirements (ANMAR), which were adopted in 2001 and subsequently revised in 2003, 2004, and 2010.⁶² In 2021, all chapters of the ANMAR were fully revised in line with IMAS.⁶³ The draft of the revised standards has been provided to all operators,⁶⁴ and ANAMA expected the revised standards to be formally approved by the Cabinet of Ministers in 2022.⁶⁵ ANAMA plans to train operators on the new standards.⁶⁶

The ANMAR provide the foundation for acceptable standards of operations and management and form the basis on which activities are conducted and measured. The approval and adoption of the ANMAR by the Cabinet of Ministers is critical and will be the driver for ensuring that all entities conducting clearance apply the latest national standards and update their standing operating procedures (SOPs) accordingly, and for ANAMA monitoring to ensure the ANMAR are being implemented across the board.

OPERATORS AND OPERATIONAL TOOLS

Since the conflict in 2020, there has been a steady expansion plan of operational capacity, including recruitment, training, and equipment support to help meet ANAMA's clearance requirements. In 2021, mine clearance was conducted by national state entities ANAMA, the MoD, MoES, and the Border Services Command. In addition, national NGO IEPF and the Turkish-based commercial company, ALTAY Group, also conducted clearance in 2021, but the latter ceased operations in Azerbaijan in 2022. Clearance capacity has continued to further increase in 2022, including four national commercial demining companies, each with an international commercial sub-contractor, to assist with operational planning and help build capacity.⁶⁷

Table 3: Operational resources for mine clearance (at 20 May 2022)⁶⁸

Operator	Operational staff	MDDs	Machines
ANAMA	654	35	16
MoD	411	4	7
MoES	50	10	0
State Border Service	20	0	0
Alpha Demining*	60	5	2
Qaya Safety Solutions*	25	0	1
Safe Point*	16	0	0
Azerbaijan Demining*	10	0	0
Totals	1,246	54	26

* Local private entities

ANAMA continues to undergo significant restructuring following the conflict with Armenia in 2020, with the total number of ANAMA employees having risen from 500 employees in 2020 to between 1,200 and 1,500 employees in 2021.⁶⁹ According to UNDP, ANAMA had initially planned to train, equip, and deploy an additional 100 deminers per month in order to respond to the surge in need since the end of the 2020 conflict. This monthly upscaling rate, however, could not be sustained and ANAMA instead has been encouraging the expansion of other operator capacities, including a significant commercial base; and has been envisaging to strengthen its role as the national mine action centre.⁷⁰

62 Email from Tural Mammadov, ANAMA, 19 October 2016.

63 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022.

64 Email from Samir Poladov, ANAMA, 6 June 2022.

65 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022; and email from Samir Poladov, ANAMA, 7 July 2022.

66 Email from Samir Poladov, ANAMA, 7 July 2022.

67 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022.

68 ANAMA, "Mine Action in Azerbaijan: Priorities and Needs", Baku, May 2022.

69 "Dying To Go Home: Displaced Azerbaijanis Risk Mines, Munitions To See Homeland", *Radio Free Europe*, 18 February 2021, at: <https://bit.ly/3vgaKh5>; and "Following war, Armenia and Azerbaijan Reckon with Unexploded Ordnance", *EurasiaNet*, 23 December 2020.

70 Email from Guy Rhodes, UNDP, 23 June 2021.

In 2021, ANAMA had 5 clearance teams totalling 487 deminers; 10 MDDs (with 39 handlers); and 10 mechanical assets (with 40 personnel).⁷¹ As at July 2022, ANAMA's operational capacity had increased to 762 deminers, 30 MDDs, and 24 machines, in addition to deploying other technical tools such as scanners, ground penetrating radar, and drones.⁷² Capacity in mid 2022 was a significant increase on 2020, when ANAMA had a total capacity of 300 deminers, 6 machines, and 40 MDDs.⁷³ ANAMA and the MoD conduct both technical survey and clearance, using MDDs and machines as well as demining personnel.⁷⁴ ANAMA had two non-technical survey teams totalling six personnel in 2021, together with five technical survey teams totalling 25 personnel.⁷⁵ ANAMA planned to further increase non-technical survey, technical survey, and clearance capacity in 2022.⁷⁶

The MoD established a humanitarian demining battalion, and the MoES and Border Services Command also conduct clearance of explosive ordnance in Azerbaijan.⁷⁷ In 2021, the MoD had one clearance team (number of deminers unspecified), 4 MDDs, and 7 mechanical assets; the MoES had one clearance team of 17 deminers; and the Border Services Command had one clearance team of 10 deminers.⁷⁸

As at March 2022, there were also four national commercial demining companies, each with an international commercial sub-contractor, to assist with operational planning and help build capacity.⁷⁹ In addition, as at June 2022, there was one national NGO conducting demining, IEPF.⁸⁰ IEPF had one technical survey team with five personnel in 2021; together with one clearance team of 34 deminers.⁸¹ A second national NGO, Dayag-Relief (RA), was conducting explosive ordnance risk education and was in the process of being trained to also conduct demining.⁸² All actors are accredited and trained by ANAMA, in accordance with the Decree, and all data are reported and entered into ANAMA's IMSMA database. ANAMA conducts monitoring and external QA for operators and issues hand-over certificates after QA.⁸³

The Turkish ALTAY Group and the Turkish Armed Forces are also conducting mine and ERW clearance in Azerbaijan. According to ANAMA, in 2021, ALTAY Group had 4 clearance teams totalling 40 deminers, 6 MDDs, and one mechanical asset.⁸⁴ However, it ceased mine clearance operations in Azerbaijan in 2022. According to Türkiye, eight military demining teams have been conducting demining operations in Azerbaijan since December 2020, to support the mine clearance activities conducted by Azerbaijan. In addition, six demining machines (MEMATT-I) manufactured in Türkiye were sent to Azerbaijan in 2021 and Türkiye plans to complete the deployment of 20 demining machines (MEMATT-II) to Azerbaijan in the coming years.⁸⁵ ANAMA expected to have a total of 24 of its own machines by the end of 2022.⁸⁶

Azerbaijan is using the RPS proprietary Remote Aerial Minefield Survey (RAMS) tools, such as drone-based thermal, multispectral, and RGB (red, green, blue) sensor devices to assess suspected areas and collect information on emplaced mines and ordnance, along with other information, such as the location of trenches and military positions. ANAMA uses RAMS to support non-technical and technical survey in non-populated areas.⁸⁷

ANAMA continues to study the best practices being applied in the mine action sector and remains open for proved systems that would serve for more effective and efficient planning of the humanitarian demining in Azerbaijan.⁸⁸

ANAMA now has a QM division, reporting to the Chairman of ANAMA and QM capacity has been increased by around 300%, reflecting the significant upscaling of clearance operations in the reclaimed territories of Azerbaijan. Previously, QC was conducted on 10% of land, but this has been reduced to 5%, while frequent site visits have been maintained.⁸⁹

71 Email from Ramil Azizov, ANAMA, 16 August 2022.

72 Email from Samir Poladov, ANAMA, 7 July 2022.

73 Emails from Nijat Karimov, ANAMA, 21 May and 23 July 2021.

74 Email from Samir Poladov, ANAMA, 7 July 2022.

75 Email from Ramil Azizov, ANAMA, 16 August 2022.

76 Email from Samir Poladov, ANAMA, 6 June 2022.

77 Emails from Samir Poladov, ANAMA, 7 July 2022; and Ramil Azizov, ANAMA, 16 August 2022. "Over 700 mines, munitions defused in liberated lands in April", *Azernews*, 15 April 2022, at: <https://bit.ly/3xfbg1b>; and "Army's engineer-sapper units demine over 2,300 ha of liberated lands in May", *Azernews*, 1 June 2022, at: <https://bit.ly/3xkjmFG>.

78 Email from Ramil Azizov, ANAMA, 16 August 2022.

79 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022.

80 Interview with Samir Poladov, ANAMA, and Mark Buswell, UNDP, in Geneva, 23 June 2022.

81 Email from Ramil Azizov, ANAMA, 16 August 2022.

82 Interview with Samir Poladov, ANAMA, and Mark Buswell, UNDP, in Geneva, 23 June 2022.

83 Email from Samir Poladov, ANAMA, 7 July 2022.

84 Email from Ramil Azizov, ANAMA, 16 August 2022.

85 Türkiye APMBC Article 7 Report (covering 2021), Forms D and I.

86 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022.

87 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022; and emails from Samir Poladov, ANAMA, 7 July 2022; Ramil Azizov, ANAMA, 16 August 2022; and Mark Buswell, UNDP, 13 September 2022.

88 Email from Ramil Azizov, ANAMA, 16 August 2022.

89 Interview with Vugar Suleymanov and Samir Poladov, ANAMA, Baku, 29 March 2022.

DEMINE SAFETY

In 2021, three ANAMA personnel were injured during mine clearance operations involving PMN-3 and PMN-2 mines. ANAMA reported that all demining accidents are investigated.⁹⁰

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

In 2021, almost 18.38km² of anti-personnel and anti-vehicle mined area was cleared, with the destruction of 4,388 anti-personnel mines (including 240 of an improvised nature), 1,949 anti-vehicle mines, and 2,973 items of UXO. A further 12.08km² of mined area was reduced through technical survey.⁹¹

SURVEY IN 2021

According to data provided by ANAMA, more than 12.08km² of anti-personnel and anti-vehicle mined area was reduced through technical survey in 2021, excluding data from the MoD (see Table 4).⁹² This is a huge increase on the previous year, when ANAMA released a total of 100,977m² of mined area through combined survey and clearance.⁹³

Table 4: Area reduction through technical survey of all mined area in 2021 (excluding MoD)⁹⁴

District	Organisation	Area cleared (m ²)
Aghdam	ANAMA	1,683,246
Fuzuli	ALTAY Group	317,201
	ANAMA	3,710,387
	Russia MES	253,700
Jabrayil	ANAMA	3,308,582
Khojaly	ANAMA	259,431
Khojavend	ANAMA	783,391
Qubadli	ANAMA	215,300
Shusha	ANAMA	303,497
Tartar	IEPF	587,017
Zangilan	ANAMA	660,000
Total		12,081,752

ANAMA reported that anti-personnel mined area was confirmed in Tartar district by IEPF; and in Fuzuli, Jabrayil, Qubadli, and Zangilan districts by ANAMA.⁹⁵

CLEARANCE IN 2021

In 2021, a total of almost 18.38km² of mined area was cleared, with the destruction of 4,388 anti-personnel mines (including 240 of an improvised nature), 1,949 anti-vehicle mines, and 2,973 items of UXO (see Table 5). This includes 1,909 anti-personnel mines and 1,143 anti-vehicles mines destroyed by ANAMA and the MoD during spot tasks.⁹⁶

According to data provided by ANAMA, a further 36.67km² was cleared in which no anti-personnel mines, anti-vehicle mines, or other EO were reported to have been found (almost 0.32km² cleared by Altay Group; more than 36.10km² by the MoD; and more than 0.25km² by the Russian MoES). Mine Action Review has not included this clearance in the annual total for 2021, as no anti-personnel mines were reported to have been discovered.⁹⁷

⁹⁰ Email from Ramil Azizov, ANAMA, 16 August 2022.

⁹¹ Ibid.

⁹² Ibid.

⁹³ Email from Nijat Karimov, ANAMA, 23 July 2021.

⁹⁴ Email from Ramil Azizov, ANAMA, 16 August 2022.

⁹⁵ Ibid.

⁹⁶ Ibid.

⁹⁷ Ibid.

According to ANAMA, an area of 519 hectares (5.19km²) was cleared that was found not to contain anti-personnel mines, but which was contaminated by other types of ERW.⁹⁸ However, it is unclear how this corresponds to the above-mentioned 36.67km².

The area cleared in 2021 is a significant increase on 2020, when ANAMA did not formally clear anti-personnel mined area, and a total of 100,977m² of land was released through survey and clearance combined. A total of 5,669 anti-personnel mines, 4,563 anti-vehicle mines, and 3,281 items of UXO were destroyed during spot tasks in 2020.⁹⁹

Table 5: Clearance of anti-personnel and anti-vehicle mines in 2021¹⁰⁰

Operators	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
ANAMA	17,994,486	3,109	1,564	1,845
IEPF	380,624	1,279	385	1,128
Totals	18,375,110	4,388	1,949	2,973

In its statement as an observer to the APMBC intersessional meetings in July 2021, Azerbaijan declared that ANAMA has cleared about 30km² since the start of the demining operation in its reclaimed territories, destroying in the process 8,256 anti-personnel mines, 3,792 anti-tank mines, and 9,211 items of UXO.¹⁰¹ The 30km² of contaminated area cleared is thought to include clearance of all EO contamination, and not only mined area.

PROGRESS TOWARDS COMPLETION

Following the six-week armed conflict between Armenia and Azerbaijan that broke out in September 2020, the size of anti-personnel mine contamination falling under Azerbaijan's control and jurisdiction has magnified exponentially. ANAMA has adapted rapidly to restructure itself and upscale operations to address the increased contamination and workload. It estimates that it will take approximately 10 years to complete anti-personnel clearance in Azerbaijan, provided the necessary expansion takes place.¹⁰² This is exceptionally ambitious given the extent of contamination.

According to ANAMA, some 600,000 internally displaced persons are poised to return to the liberated territories. As at August 2022, new access routes and other infrastructure projects had reached the former LOC, and increased traffic is now supporting reconstruction efforts and resettlement plans. ANAMA has said that due to the extent of the problem it remains severely underfunded to respond to growing needs, redevelopment, and resettlement plans. It is therefore in search of international support and funding to deal with the vast extent of mine contamination especially along the former LOC and in other parts of the regained area.¹⁰³ In its statement as an observer at the APMBC Intersessional

meetings in June 2022, ANAMA identified the following needs: data and technology, including for aerial survey; scaling up RAMS capacity as a method for gathering data; increase of demining capacity through national NGOs; support for the institutional capacity building of ANAMA; increasing ANAMA's mechanical demining capacities and MDDs; establishing and supporting female demining teams; and demarcation and permanent fencing.¹⁰⁴

Azerbaijan submitted voluntary APMBC Article 7 transparency reports in 2008 and 2009 but has not submitted a report in the last ten years. Accuracy of reporting of contamination, survey, and clearance data continues to be an issue in Azerbaijan. So too are the effectiveness and efficiency of land release methodology, with many areas being cleared that prove to have little or no mine contamination.

ANAMA reported that 50% of the workforce had been suspended in 2021 due to COVID-19, but no details were provided on the length of the suspensions or impact on demining efforts.¹⁰⁵

98 Ibid.

99 Email from Nijat Karimov, ANAMA, 23 July 2021.

100 Email from Ramil Azizov, ANAMA, 16 August 2022.

101 Statement of Azerbaijan, APMBC Intersessional Meetings, 22–24 June 2021.

102 Email from Ramil Azizov, ANAMA, 16 August 2022.

103 Ibid.

104 Statement of Azerbaijan, APMBC Intersessional Meetings, 20–22 June 2022; and ANAMA, "Mine Action in Azerbaijan: Priorities and Needs", Baku, May 2022.

105 Email from Ramil Azizov, ANAMA, 16 August 2022.

Table 6: Five-year summary of AP mine clearance

Year	Area cleared (km ²)
2021	18.38
2020	0.10
2019	1.01
2018	0.35
2017	4.00
Total	23.84

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Azerbaijan has a national capacity which could be deployed to deal with residual risk post-completion. In July 2020, ANAMA reported that the elaboration of a plan for the management of residual risk is contingent upon the liberation of contaminated areas that are currently occupied by Armenia.¹⁰⁶ As at August 2022, updated plans for the management of residual risk had yet to be reported.

¹⁰⁶ Email from Nijat Karimov, ANAMA, 30 July 2020.

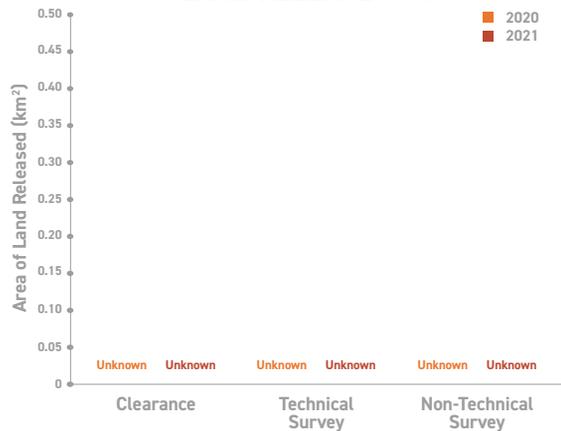
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- China should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- China should clear all remaining anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority
- No national mine action centre

NATIONAL OPERATORS

- Chinese People's Liberation Army (PLA)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

The precise extent of mine contamination remaining in China is not known. While very significant demining has occurred over the last two decades, some use of anti-personnel mines around military infrastructure remains.

In the 1990s, the United States reported that China had emplaced mines along its borders with India, the Russian Federation, and Vietnam.¹ China's military estimated that around two million mines of a wide variety of types were emplaced on the Vietnam border alone.² China has not reported on mine contamination along its borders with Russia and India or on operations to clear them.

1 US Department of State, "Hidden Killers 1994", Washington, DC, September 1998, p. 18, and Table A-1.

2 "Landmine sweeping on Sino-Vietnam border nearly completed", *Xinhua*, 31 December 2008, at: <https://on.china.cn/31F8D7u>.

China conducted clearance operations along its border with Vietnam between 1992 and 1999,³ between 2005 and 2009,⁴ and between 2015 and 2018.⁵ In 2009, China said it had completed demining along the Yunnan section of its border with Vietnam and that this “represents the completion of mine clearance of mine-affected areas within China’s territory.”⁶ This was followed by a statement in 2011 when a Foreign Ministry official reported that China maintains a small number of minefields “for national defence”.⁷ Two months later, at the Eleventh Meeting of States Parties to the Anti-Personnel Mine Ban Convention (APMBC), China said that large-scale demining activities had “on the whole eliminated the scourge of landmines in our territories”.⁸

At the Third Review Conference of the APMBC in 2014, China said it had “basically eradicated landmines on its own territory”.⁹ At the Fourth Review Conference in 2019, China said that, since the 1990s, it has carried out large-scale demining operations on the border many times. In the past three years, China has cleared approximately 58km² of mined area on its borders with Vietnam and Myanmar and “enclosed” 25km² of minefields (permanently perimeter-marking, fencing, and closing down mined areas).¹⁰ China began demining its border with Myanmar at the end of 2018 with a team of more than 300 deminers.¹¹

Demining of the Vietnam border was conducted in three “campaigns” in Yunnan province and Guangxi Zhuang Autonomous Region. The first was in 1992–94 and the second in 1997–99.¹² However, these two campaigns did not deal with

minefields located in disputed areas of the border, where 500,000 mines covered an estimated 40km². After a technical survey of mined areas, China embarked on a third clearance campaign in Guangxi Zhuang Autonomous Region and Yunnan province in 2005. China stated in 2009 that it had completed clearance of this border after clearing a total of 5.15km².¹³

In early November 2015, however, China embarked on a further demining operation along the border with Vietnam.¹⁴ Official victim numbers are not publicly available but civilian casualties were common in the bordering villages throughout the three decades that preceded the clearance.¹⁵ A physical rehabilitation centre in Kunming operated by the Yunnan branch of the Chinese Red Cross Society reported having produced prostheses to 400 mine victims between 2004 and 2019.¹⁶

In its Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency report submitted in March 2017, China reported that in November 2015–February 2017, the Chinese army cleared 18.4km² of minefields on the Yunnan border.¹⁷ According to media reports, Yunnan province contained 113 minefields and accounted for more than 95% of the total mined areas on the Chinese-Vietnamese borders. Mines were often laid in very hard-to-access mountainous areas. Online media reported that the last cleared field was handed over to the community by the Chinese People’s Liberation Army (PLA) marking the official completion of the third and last clearance operation in Yunnan province on November 2018.¹⁸

PROGRAMME MANAGEMENT

There is no formal mine action programme in China. Any mine clearance is conducted by the PLA as a military activity.

According to China, the military is building international humanitarian mine clearance professional classrooms and conducting research on the application of virtual reality technology in humanitarian mine clearance training.¹⁹ China has reportedly completed its upgrade of humanitarian demining classrooms and the construction of supporting

facilities, so as to provide good teaching conditions for conducting foreign aid demining training.²⁰ China also reported that it had carried out technical research related to mine and unexploded ordnance (UXO) clearance and destruction, and research on unmanned aerial vehicles (UAV) survey technology for mines and explosive remnants of war (ERW) and on a multi-parameter real-time monitoring and effect evaluation system for mine detection training.²¹

3 Ministry of Defence, “Post-war Demining Operations in China”, December 1999, p. 11. Before the clearance operations, there were said to be more than 560 minefields covering a total area of more than 300km².

4 Interview with Shen Jian, Ministry of Foreign Affairs, Beijing, 1 April 2008; and L. Huizi and L. Yun, “Chinese soldiers nearly done with landmine sweeping on the Sino-Vietnam border”, *Xinhua*, 31 December 2008.

5 “Yunnan completes de-mining mission along Sino-Vietnamese border”, *Xinhua*, 16 November 2018, at: <https://bit.ly/2yYXXnL>.

6 Statement of China, Second Review Conference, Cartagena, 4 December 2009.

7 Email from Lai Haiyang, Attaché, Department of Arms Control & Disarmament, Ministry of Foreign Affairs, 7 September 2011.

8 Statement of China, APMBC 11th Meeting of States Parties, Phnom Penh, 29 November 2011.

9 Statement of China, Third APMBC Review Conference, Maputo, 26 June 2014.

10 Statement of China, Fourth Anti-Personnel Mine Ban Convention (APMBC) Review Conference, Oslo, 27 November 2019.

11 J. Li, “Minesweeping operations along China-Myanmar border kick off”, *China Military Online*, 28 December 2019, at: <https://bit.ly/3f7P3qy>.

12 “Landmine sweeping on Sino-Vietnam border nearly completed”, *Xinhua*, 31 December 2008.

13 Statement of China, Second APMBC Review Conference, Cartagena, 4 December 2009.

14 P. Scally, “Huge land mine clearance underway in Wenshan, Honghe”, Blog post, *Gokunming*, 5 November 2015, at: <https://bit.ly/20WbdVe>.

15 “Guardians of the Extreme Realm: Life and Death Demining in the Southwest Frontier”, *CCTV*, 11 September 2019, (Chinese), at: <https://bit.ly/35XtJ5f>.

16 “From breadwinners to dependents, how can mine victims heal?”, *CGTN*, 4 April 2019, at: <https://bit.ly/3hiwt2f>.

17 CCW Amended Protocol II Article 13 Report (covering 2016), Form B. Unofficial translation.

18 “Soldier loses both hands and eyes from a blast while clearing mines along Vietnam border”, *The Global Times*, 6 December 2018, at: <https://bit.ly/35YRIke>.

19 CCW Amended Protocol II Article 13 Report (covering 2019), Form B.

20 CCW Amended Protocol II Article 13 Report (covering 2021), Form B. Unofficial translation.

21 CCW Amended Protocol II Article 13 Report (covering 2021), Forms B and C.

In 2019, China said that it has continuously improved its demining capabilities and has developed a complete set of mine clearance equipment and technologies that meet international mine action standards and high cost-efficiency. It claimed to have achieved breakthroughs in research and development, including in unmanned mine detection and laser demining (use of directed energy weapons to destroy landmines).²² In 2022, China reported that the PLA Army Engineering University has set up special teaching content on landmine compliance in 20 professional teaching classes, with a total of 783 trainees.²³

China said that it sent experts to participate in the review and revision of international mine action standards (IMAS)²⁴ and that "China subscribes to the purposes of the Ottawa Convention and supports the ultimate goal of comprehensive landmine ban".²⁵

In its reporting under CCW Amended Protocol II covering 2021, China said it donated US\$200,000 to the ASEAN Regional Mine Action Centre (ARMAC) for co-hosting relevant regional meetings. It also reported that it had provided mine detection equipment and humanitarian supplies to Cambodia and Lao PDR to help them strengthen their mine clearance capacity building. On 28 July 2021, China and Cambodia jointly held a video consultation meeting of the co-chairs of the ASEAN Defense Ministers' Meeting (ADMM) Plus Mine Clearance Expert Group, and on 14 September 2021, China and Cambodia co-hosted the tenth meeting of this group. On 23 December 2021, representatives from China participated in the online meeting of the ASEAN Technical Expert Group on Mine Clearance organized by ARMAC.²⁶

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in China in order to minimise potential harm from clearance.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

China has completed the compilation of the "Standard for Disposal of Improvised Explosive Devices" and promoted the application of this standard in related fields in China.²⁷

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Media accounts reported that mine clearance resumed in November 2017 in the Yunnan border area and in the Guangxi Zhuang Autonomous Region.²⁸ Clearance was reportedly completed in November 2018, with 2,300 explosive items found and destroyed across 1.5km² in Guangxi province.²⁹ In Yunnan province an estimated 200,000 explosive items were found and destroyed in over 50km² of mined area between November 2015 and November 2018.³⁰

In its 2022 CCW Amended Protocol II report (covering 2021), China reported the destruction of 866 landmines (together with 11,151 artillery shells, 505 aerial bombs, 13,217 grenades, and 2,893 other ERW), but did not provide additional details and it is not known whether the mines destroyed were

anti-personnel mines or anti-vehicle mines.³¹ In its Amended Article II Article 13 report (covering 2020), China reported that, working in close cooperation, its military and public security departments disposed of 436 mines in 2020 without providing further details.³² In September 2021, it was reported by an online media source that Chinese authorities had begun clearance operations along the Chinese side of the border between Yunnan province and Myanmar, near Yunnan's Nansan township and near the Mengdai township.³³

22 Statement of China, Fourth APMBC Review Conference, Oslo, 27 November 2019.

23 CCW Amended Protocol II Article 13 Report (covering 2021), Form A. Unofficial translation.

24 CCW Amended Protocol II Article 13 Report (covering 2021), Form E. Unofficial translation.

25 Statement of China, Security Council Open Debate on Mine Action, 8 April 2021.

26 CCW Amended Protocol II Article 13 Report (covering 2021), Form E. Unofficial translation.

27 Ibid.

28 "Land mine removal resumes on border", *China Daily*, 29 November 2017, at: <https://bit.ly/2ZXUwtr>; and "China's Guangxi completes de-mining mission along Sino-Vietnam border", *China Daily*, 26 November 2018, at: <https://bit.ly/33xCdNT>.

29 "China's Guangxi completes de-mining mission along Sino-Vietnam border", *China Daily*, 26 November 2018.

30 "Yunnan completes de-mining mission along Sino-Vietnamese border", *Xinhua*, 16 November 2018, at: <https://bit.ly/2yYXXnL>.

31 CCW Protocol V Annual Report (covering 2021), Form A. Unofficial translation.

32 CCW Amended Protocol II Article 13 Report (covering 2020), Form E.

33 "China Begins Landmine Removal Operation Along Border With Myanmar", *Radio Free Asia*, 13 September 2021, at: <https://bit.ly/3D3lhQB>.

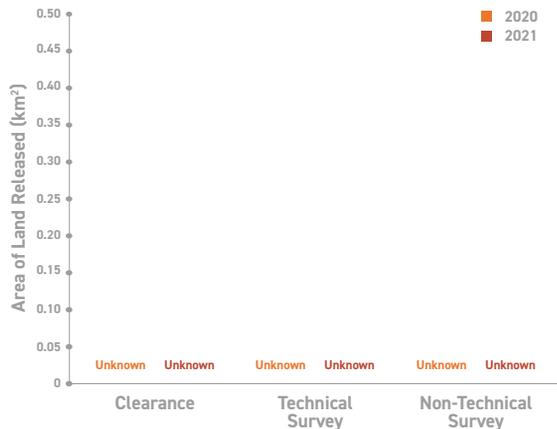
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Cuba should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Cuba should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority
- No national mine action centre

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

The extent of mine contamination in Cuba is unknown and is believed to have remained unchanged in the recent years. Cuban authorities maintain minefields around the United States (US) naval base at Guantanamo in the south-east of Cuba. According to online media, the Cuban government placed anti-personnel mines around the base as a means to defend against a possible US invasion.¹ In 2007, Cuba said it carries out "a strict policy with regard to guaranteeing a responsible use of anti-personnel mines with an exclusively defensive character and for [Cuba's] national security".² According to an earlier statement by the Ministry of Foreign Affairs, existing minefields are duly "marked, fenced and guarded" in accordance with Convention on

1 "People of Guantanamo live under the danger of anti-personnel mines", *Radiotelevisionmartí*, 4 December 2014, (Spanish), at: <https://bit.ly/3x4vCZD>.

2 Statement by Rebeca Hernández Toledano, First Secretary, Permanent Mission of Cuba to the UN, "Item 29: Assistance in mine action", UN General Assembly, Fourth Committee, New York, 6 November 2007.

Certain Conventional Weapons (CCW) Amended Protocol II.³ Cuba is party to the original CCW Protocol II but has not acceded to the amended version.⁴

In 1996, the then US President, Bill Clinton, issued an order to clear the US Guantanamo base of all "hair-triggered" explosives. By 1999, the US marines had cleared approximately 50,000 anti-personnel and anti-tank mines on the US side of the fence separating Cuba from the US naval base in Guantanamo and replaced them with motion and sound sensors.⁵

According to a book published in 2008, mines laid around the naval base detonate "at least once a month",⁶ but it has not been possible to independently confirm this claim. In February 2018, a fire broke out in the 17-mile strip of land separating the Guantánamo base from Cuban territory which reportedly detonated 1,000 landmines and burned 1,700 acres over three days before being extinguished.⁷

PROGRAMME MANAGEMENT

There is no mine action programme in Cuba.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Cuba has not conducted clearance in its minefields around the US naval base at Guantánamo over the last twenty years.

3 Statement of the Directorate of Multilateral Affairs, Ministry of Foreign Affairs, 19 June 2000.

4 High Contracting Parties and Signatories CCW, at: <https://bit.ly/3JFnFQM>.

5 "Marines unload deactivated land mines for destruction at Guantanamo Bay, Cuba", US Department of Defence archives, at: <https://bit.ly/3x3BB0f>; and "Guantánamo 'minesweepers' perform a delicate task: Deadly devices disabled one by one", *Miami Herald*, 6 March 2018 (original published on 18 March 1999).

6 "The Cuban mines detonate at least once a month, sometimes starting fires that sweep across the fence line. [Staff Sergeant Kaveh Wooley of the US Marines]... described a fire that started the previous summer and turned into a giant cook-off, with about 30 mines exploding...." D. P. Erikson, *Cuba Wars: Fidel Castro, the United States, and the Next Revolution*, Bloomsbury, United States, October 2008, pp. 196–97.

7 "U.S. and Cuban forces unite to fight a common foe: wildfire at Guantanamo", *USA Today*, 1 March 2018, at: <http://bit.ly/2KytDH9>.

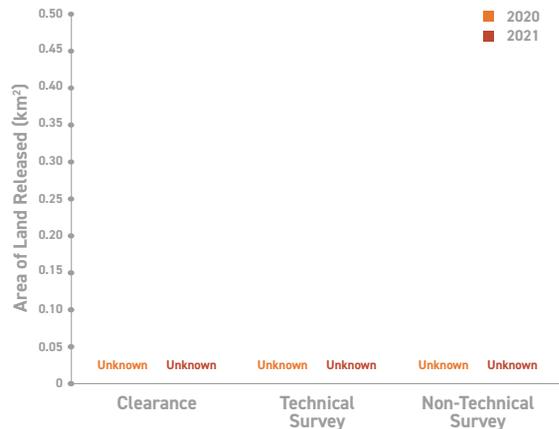
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE
CLEARANCE IN 2021
UNKNOWN

AP MINES
DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Egypt should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Egypt should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Egypt should not use anti-personnel mines under any circumstances.
- Egypt should report accurately on land release, disaggregating clearance from release by survey.

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- National committee for the Supervision of Mine Clearance and the Development of the North West Coast
- The Executive Secretariat for the Demining and Development of the North West Coast (ESDD)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

NATIONAL OPERATORS

- Corps of Military Engineers

UNDERSTANDING OF AP MINE CONTAMINATION

The precise extent of anti-personnel mine contamination in Egypt remains unknown and past estimates have been wholly unreliable. Egypt is contaminated with mines in the Western Desert, which date from the Second World War, and in the Sinai Peninsula and Eastern Desert, which are a legacy of wars with Israel between 1956 and 1973. Some mine incidents in Sinai in the last decade may have been caused by mines emplaced by anti-government jihadist groups.¹ It was reported in August

¹ "Sinai landmine kills three soldiers", *News24*, 9 March 2015, at: <http://bit.ly/31LTzVp>.

2016 that Islamic State had been digging up Second World War-era landmines and re-using them.² Between the middle of 2019 and October 2020, allegations were made of new anti-personnel mine use by non-State armed groups (NSAGs) in Egypt. These were unconfirmed as of writing.³ The Egyptian military may also be using anti-personnel mines. In May 2015, the military stated to an Egyptian newspaper that it had begun placing landmines around military outposts in Sinai, which resulted in the reported deaths of two militants.⁴

Most of the Western Desert contamination occurred around the location of Second World War battles that took place between the Qattara depression and Alamein on the Mediterranean coast. Other affected areas lie around the city of Marsa Matrouh and at Sallum near the Libyan border. In November 2016, during a ceremony to mark the opening of a new prosthetic limb centre, the United Kingdom's Ambassador to Egypt announced that all the maps of minefields laid by British and Allied forces during World War II had been handed over.⁵ According to the head of the military engineering department, though, the British minefield maps were "sketch maps" and most of the mines were buried randomly.⁶ Major General Mahrous Kilani, Head of the General Secretariat for Mine Clearance, reported that while the mine maps are an indication of possible mine locations many mines have been found in areas that are unmarked by the maps.⁷

In January 2018, the British MP Daniel Kawczynski put a written question to the UK Secretary of State for International Development asking whether her Department was taking steps to assist with the mapping and disposal of Second World War mines in the Tobruk and El Alamein regions. The United Kingdom reiterated that maps of minefield locations had been provided to the Egyptian authorities and claimed, incorrectly, that, since 2006, through multilateral funding along with other donors (including Germany, Japan, New Zealand, and the United States), it had funded clearance of 130,446 acres (almost 528km²) of land around El Alamein.⁸ Either the figure is inaccurate or the UK government actually meant land release, rather than full clearance.

The Egyptian government has claimed that some 17 million mines remained in the Western Desert and another 5.5 million in Sinai and the Eastern Desert.⁹ In an April 2009 assessment, though, the United Nations (UN) Mine Action Team cautioned that data needed careful analysis to

avoid reporting areas that had already been cleared and thereby misrepresenting the problem.¹⁰ In this regard, in October 2017, it was reported by the European Union (EU)'s ambassador to Egypt that 2,680km² of land in the North West Coast was claimed to still be contaminated.¹¹

In August 2010, the Executive Secretariat for the Demining and Development of the North West Coast (Executive Secretariat) reported to donors that the army had destroyed 2.9 million mines while clearing 38km² in five areas, leaving "more than 16 million mines" covering an estimated area of 248km².¹² Details of items cleared are not consistent with other available information. In November 2019, Egypt's Minister of Investment and International Cooperation announced that Egypt had cleared 2,182km² in El Alamein, without elaborating further.¹³ This figure is wildly inaccurate and/or it may refer to all forms of land release, not merely clearance.

In 2013, the army handed over to the Ministries of Housing and of Planning and International Cooperation an area of some 105km² in the Western Desert, which it had reportedly cleared of mines and unexploded ordnance (UXO). Details of clearance operations were not reported. Minister of Housing Tarek Wafiq was quoted as saying that, with the completion of the project, one-fifth of the Western Desert had been cleared.¹⁴

In August 2016, it was reported that Islamic State had been harvesting the explosives from Second World War mines still uncleared in Egypt. According to Ambassador Fathy el-Shazly, formerly the head of Egypt's Executive Secretariat for Mine Clearance, "We've had at least 10 reports from the military of terrorists using old mines. Even now, these things trouble us in different ways."¹⁵ These findings were reiterated in June 2017 at a UN Security Council briefing when Egypt's permanent representative to the UN Amr Abdel-Latif Abul Atta stated that "abandoned mines and explosive remnants of wars have become a source of access for armed movements and terrorists to find materials for manufacturing improvised explosive devices".¹⁶ It was reported in January 2018 that Ansar Bayt al-Maqdis (ABM), which pledged allegiance to Islamic State in 2014, has been using old mines and caches of explosives left in Sinai to produce different types of explosive devices. There were at least five major attacks by terrorist groups using such devices in Egypt in 2017.¹⁷ This should serve as a wake-up call to Egypt to pursue mine clearance with far greater vigour than it has done so thus far.

2 P. Schwartzstein, "ISIS Is Digging Up Nazi Land Mines in Egypt", *Newsweek*, 10 August 2016, at: <http://bit.ly/2KBMtgz>.

3 Landmine Monitor Report 2020, at: <http://bit.ly/2Qw7LY>, p. 1.

4 Egypt Mine Ban Policy, Landmine Monitor, 15 October 2020, at: <http://bit.ly/3trc5kb>.

5 A. Nayder, "Helping Landmine Victims in Marsa Matrouh-And Preventing More", *Because*, 3 November 2016, at: <http://bit.ly/2Hbsl2V>.

6 Egypt and Libya: Land Mines: Written question – 122961, 16 January 2018, at: <http://bit.ly/2Z4gJsB>.

7 "MG: We cleared 130,000 acres of mines in El Alamein and there was no single incident", *Times of Egypt*, 26 February 2018, Unofficial translation at: <http://bit.ly/33EQrMO>.

8 Egypt and Libya: Land Mines: Written question – 122961, 16 January 2018.

9 State Information Services, "Landmines in Egypt", 20 July 2009; M. Abdel Salam, "First phase of demining in Egypt complete", *Bikyamasr* (blog), 18 April 2010.

10 UN Mine Action Team, "Egypt Mine Action Inter-agency Assessment", 14–18 April 2009, p. 11.

11 "Egypt battles landmines 75 years after El Alamein", *Agence France-Presse*, 28 October 2017, at: <http://bit.ly/2H92GYA>.

12 "Egypt Mine Action Project Northwest Coast: Phase I Accomplishments", Presentation by Amb. Fathy El Shazly, Director, Executive Secretariat, Cairo, August 2010.

13 "Clearance of over 2000km² of landmines in El Alamein", *Al-Mal news*, 14 November 2019, at: <http://bit.ly/3ebFEjm>.

14 N. al Behairy, "20% of the Sahara in West Egypt cleared of landmines", *Daily News*, 20 March 2013.

15 P. Schwartzstein, "ISIS Is Digging Up Nazi Landmines From World War 2 As Explosives", *Newsweek*, 10 August 2016.

16 UN Security Council meeting, UN doc. SC/12866, 13 June 2017, at: <http://bit.ly/2YSmjPl>.

17 "How Egyptian security dealt with IEDs threat?", *Egypt Today*, 1 January 2018, at: <http://bit.ly/2HbRwCe>.

PROGRAMME MANAGEMENT

Egypt's mine action programme has been developing extremely slowly since 2007 and includes only the basic structures and institutions to regulate, coordinate and implement mine action activities. As at 2015, the programme consisted of a three-tier structure that comprised the National committee for the Supervision of Mine Clearance and the Development of the North West Coast; the Executive Secretariat for the Demining and Development of the North West Coast (ESDD); and the Corps of Military Engineers, which has overall responsibility for demining operations in Egypt.¹⁸

In January 2017, Egypt's Minister of International Cooperation alongside a representative of the Ministry of Defense announced the establishment of the National Centre for Landmine Action and Sustainable Development. The centre set out to release 600km² of land in the North West Coast.¹⁹

A joint project between UNDP and Egypt entitled, "Support the North West Coast Development Plan and Mine Action Programme: Mine Action" was conducted in two phases from 2007 to 2014 and from 2015 to 2017.²⁰ In August 2017, it was reported that negotiations had begun on a third phase of the project to allocate \$5 million to clear the rest of the northern coast and the Sinai peninsula.²¹ The project supported the expansion of the organizational structure of the ESDD, which is mandated with coordinating and monitoring the implementation of the development plan and humanitarian mine action activities in the North West Coast.²² As at July 2020, it was reported that a total area of 2,182km² of land has been demined (released) from 5,100km² of contaminated land since the beginning of the project in 2009.²³

Trained deminers from the Corps of Military Engineers conduct manual and mechanical demining. The ESDD is said to have procured 461 mine detectors, 355 demining suits

and protective helmets, 1 Casspir armoured vehicle with the "Mine Lab" detecting device, and 5 Amtrak vehicles.²⁴

According to the ESDD website, "the Executive Secretariat's Quality Management Unit proactively guarantees quality in all key processes, makes sure that quality requirements are fulfilled in accordance with international mine action standards (IMAS), measures process performance, develops procedures, and provides the right equipment".²⁵ Funding was also used for capacity building, establishing a quality management unit, and supporting the creation of the Information Management System for Mine Action (IMSMA) database.

In November 2019, Egypt's Minister of Investment and International Cooperation signed a Memorandum of Understanding (MoU) with the Geneva International Centre for Humanitarian Demining (GICHD) on mine clearance and development of Egypt's North West coast. The MoU provides a cooperation framework to enhance capacity building for the Egyptian mine action programme but according to the GICHD there has been no activity since the signing of the MoU in 2019.²⁶

In May 2017, Kuwait granted Egypt an aid package of almost US\$1 million through the Arab Fund for Economic and Social Development, for mine clearance in the North-West Coast area.²⁷ In January 2019, Egypt called for renewed international support for mine clearance, especially around El Alamein. Parliament member Mohamed el-Ghoul resubmitted a 2017 motion demanding financial compensation from the countries that laid mines in Egypt, mainly Germany and the United Kingdom.²⁸

In March 2022, the Executive Secretariat participated in an Arab Regional Cooperation Programme (ARCP) IMSMA Core Workshop organised by the GICHD in Beirut.²⁹

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Egypt in order to minimise potential harm from clearance.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Egypt has not reported on its release of mined areas in recent years and no target date has been set for the completion of mine clearance. New use of mines by the military is seemingly inconsistent with its obligations under international law.

18 UNDP Project Document, at: <http://bit.ly/3ghRon1>, p. 6.

19 "Establishment of National Center for Mines Action and Sustainable Development completed: Nasr", *Daily News Egypt*, 23 January 2017, at: <http://bit.ly/3dqbcmu>.

20 UNDP, "Support to the North West Coast Development and Mine Action Plan", undated.

21 "Egypt to invest \$17.5M in Anti-Mines Action Project", *APA News*, 11 August 2017, at: <http://bit.ly/2z1ChYn>.

22 The Executive Secretariat for the Demining and Development of the North West Coast website, accessed 5 July 2020, at: <http://bit.ly/3ivjTwl>.

23 Ibid.

24 Ibid.

25 Ibid.

26 "Egypt, Switzerland sign agreement on demining North West Coast", State Information Service, 14 November 2019, available at: <http://bit.ly/2CcF0mj>; and email from Boris Ohanyan, Junior Programme Officer, GICHD, 22 March 2022.

27 "Kuwait provides KWD 300,000 to help clear landmines from Egypt's north coast", *Ahram Online*, 8 May 2017, at: <http://bit.ly/33Grilg>.

28 "Cairo seeks international help to clear millions of land mines", *Al-Monitor*, 11 February 2019, at: <http://bit.ly/2Z9k18K>.

29 Email from Boris Ohanyan, GICHD, 22 March 2022.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

2.8KM²

AP MINE
CLEARANCE IN 2021

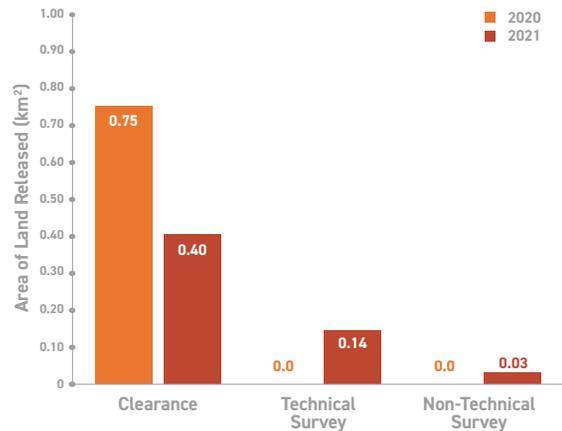
0.4KM²

AP MINES
DESTROYED IN 2021

66

(INCLUDING 21 DESTROYED
IN SPOT TASKS)

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Georgia should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Georgia should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Georgia should continue to engage in bilateral political dialogue with Azerbaijan as well as multilateral dialogue with all stakeholders via the Landmine Free South Caucasus (LFSC) Campaign, to enable full clearance of the Red Bridge border minefield.
- Georgia should grant access to The HALO Trust to complete survey and clearance of remaining mined areas.
- Georgia should develop a resource mobilisation strategy and engage with donors to secure the resources needed to complete clearance.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- State Military Scientific Technical Centre (DELTA)
- Humanitarian Demining Control Division (HDCD)

NATIONAL OPERATORS

- Engineering Battalion of the Ministry of Defence (MoD)
- Georgian State Security Service (SSS) Explosive Ordnance Disposal (EOD) team

INTERNATIONAL OPERATORS

- The HALO Trust

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

The full extent of mine contamination in Georgia is not known due to access restrictions and lack of survey. According to official estimates, as set out in Table 1, Georgia has at least 2.8km² of contamination across six mined areas in the Tbilisi Administered Territory (TAT),¹ although the size of two of these areas is not reported. Contamination comprises both anti-personnel mines, and, in one area, also anti-vehicle mines.² Georgia also has 10,900m² of contamination across two mined areas in Abkhazia,³ an autonomous republic outside of the Georgian government's effective control.

Table 1: Mined area (at end 2021)⁴

Territory	Region	District/ Municipality	Village	Type of mine contamination	Mined areas	Area (m ²)
TAT	Kvemo Kartli	Marneuli	Kirach-Muganlo	Mixed	1	2,738,730
	Mtskheta-Mtianeti	Dushe	Kadoeti	Anti-personnel	1	24,000
	Mtskheta-Mtianeti	Dusheti	Barisakho	Anti-personnel	2	28,058
	Shida Kartli	Khashuri	Osiauri	Anti-personnel	1	N/K
	Samegrelo-Zemo Svaneti	Mestia	Khojali	Anti-personnel	1	N/K
Sub-totals					6	2,790,788
Abkhazia	Sukhumi	N/A	Lindava	Anti-personnel	1	10,500
	Ochamchire	N/A	Kindgi	Anti-personnel	1	400
Sub-totals					2	10,900
Totals					8	2,801,688

N/A = Not available N/K = Not known

The Humanitarian Demining Control Division (HDCD) of Georgia and The HALO Trust consider this baseline to be evidence-based and accurate.⁵ However, HALO cautions that the Georgian Government, through the HDCD, is in the process of conducting Georgia's first General Mine Action Assessment (GMAA), since 2011. This assessment may result in the current baseline being updated.⁶

In the mined areas of Barisakho, Kadoeti, Khojali, Osiauri, and at the Red Bridge in TAT, the full extent of contamination is unknown. The HALO Trust has faced challenges in securing the necessary permission and funding to be able to complete non-technical survey at any of them. In May 2019, however, HALO received permission to survey and clear at Kadoeti and Khojali, and in June 2022, HALO secured funding from Norway to conduct non-technical survey of these minefields. Non-technical survey was due to take place from August to September 2022.⁷

HALO also continues to advocate for permission for access to mined areas at Barisakho, Osiauri, and the Red Bridge, both through bilateral channels and through participation in the Landmine Free South Caucasus (LMFSC) Campaign, which brings governments and civil society organisations together to encourage dialogue and cooperation. HALO asserts that

both technical and non-technical survey are required at all the sites accurately to determine the size of the contaminated areas.

Estimates of the size of Kadoeti and Khojali minefields originate from HALO's initial non-technical survey of both tasks in 2009.⁸ The Kadoeti minefield, which was laid in 2008, stretches along 950 metres of road near the Administrative Boundary Line (ABL) with South Ossetia. A livestock accident in 2009 and a non-fatal vehicle accident in 2010 indicate that the area is still mined.

The mined areas at Khojali include two adjacent minefields about 12km from the ABL with Abkhazia. One of the two minefields is believed to lie along an approximately 300-metre-long path. In Barisakho, there are two mined areas close to a police station on the Russian border, which were laid to prevent entry from Ingushetia during the Second Chechen War. In Osiauri, a military base in the interior of the country, next to the main east-west road through Georgia, mines were laid around the perimeter of an ammunition storage area to defend the position in an event of an invasion.⁹

1 TAT does not include the republics of Abkhazia and South Ossetia, which are outside Georgia's effective control.

2 Email from Oleg Gochashvili, Head of Division, DELTA, 31 May 2022.

3 Emails from Michael Montafi, Programme Officer, HALO Trust, 17 May 2022; and (as Partnerships and Programme Support Manager), 26 July 2022.

4 Emails from Oleg Gochashvili, DELTA, 31 May 2022; and Michael Montafi, HALO Trust, 26 July 2022.

5 Emails from Oleg Gochashvili, DELTA, 31 May 2022; and Michael Montafi, HALO Trust, 17 May 2022.

6 Email from Michael Montafi, HALO Trust, 17 May 2022.

7 Emails from Michael Montafi, HALO Trust, 17 May and 26 July 2022.

8 Email from Michael Montafi, HALO Trust, 17 May 2022.

9 Emails from Michael Montafi, HALO Trust, 30 April 2021 and 17 May 2022.

The Red Bridge minefield is an unfenced 7km-long and 2.2km² minefield consisting of densely packed lines of anti-personnel and anti-vehicle mines at the "Red Bridge" border crossings between Azerbaijan, Armenia and Georgia. Laid in 1991 by Azerbaijan during the Nagorno-Karabakh war, it is the largest minefield in the Caucasus and the last major minefield not in the vicinity of a functioning military establishment. The Red Bridge minefield affects more than 4,000 people. As at May 2022, there had been 88 incidents: 22 involving humans and 66 involving livestock. No new incidents were reported during 2021.¹⁰

There may also be mined areas in South Ossetia as a result of the 1990–92 Georgian–Ossetian war, and the more recent 2008 conflict with Russia. The HALO Trust had planned to conduct non-technical survey in South Ossetia, but following a preliminary fact finding mission to South Ossetia by the HALO Abkhazia programme in 2008, no permissions for access or clearance have been given by the *de facto* South Ossetian authorities. South Ossetia is effectively subject to Russian control and is inaccessible to both Georgian authorities and international non-governmental organisation (NGO) demining operators. As at May 2022, the International Committee of the Red Cross (ICRC) remained the only international organisation with regular access to South Ossetia.¹¹

In addition to the minefields in TAT as noted in Table 1, five minefields located in the Gulripsh, Ochamchire, and Tkvarcheli regions of Abkhazia came to HALO's attention between 2019 and 2021.¹² HALO's original estimate of

the contaminated area, given in April 2021 as 10,300m², was based on preliminary assessments made by the programme's explosive ordnance disposal (EOD) teams, following interviews with informants and limited technical survey during EOD call-outs in 2019–21. However, the original estimate of these tasks did not include a newly discovered mined area at the village of Lindava in the Sukhumi region. Situated a few hundred metres from a minefield cleared by HALO in 2011, contamination at Lindava was brought to the attention of HALO by an EOD call-out after mine clearance began in the area in 2021. This new task totals an estimated 14,000m². HALO was able to begin clearance at Lindava, releasing 4,219m² of land and destroying three PMN-2 anti-personnel mines. The programme anticipates additional funding in 2022 to complete clearance of the remaining hazardous area at this site.¹³

DELTA reports that no areas of previously unrecorded anti-personnel mine contamination in TAT were added to Georgia's information management database in 2021.¹⁴

Georgia is believed to be free of cluster munition remnants (CMR), with the possible exception of South Ossetia, which is occupied by Russia and inaccessible to both the Georgian authorities and international mine action NGOs (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Georgia for further information).¹⁵ Georgia remains contaminated by other unexploded ordnance (UXO), likely in South Ossetia and also within Georgia in former firing ranges.

PROGRAMME MANAGEMENT

Georgia's national mine action authority is the Humanitarian Demining Control Division (HDCD). Renamed after a reorganisation in January 2019, HDCD sits under the State Military Scientific Technical Centre, known as DELTA, within the Ministry of Defence (MoD).¹⁶ The primary task of the HDCD is to coordinate mine action in Georgia, including overseeing the national mine action strategy and quality assurance (QA)/quality control (QC), and facilitating the development and implementation of Georgian National Mine Action Standards (NMAS), in accordance with the International Mine Action Standards (IMAS).¹⁷ HDCD also undertakes some non-technical and technical survey.¹⁸

For all mine action-related issues, The HALO Trust communicates with HDCD.¹⁹ The Georgian authorities are supportive of the granting of visas for international staff and the importation of demining equipment. The HALO Trust submitted several requests to the MoD seeking access to the remaining minefields, the last of which was submitted in April 2018. While, in 2019, HALO received permission to begin clearing two of the six remaining minefields, at Khojali and Kadoeti, permissions for the remaining four minefields have not yet been granted. HALO does not expect permissions for Barisakho or Osiauri to be forthcoming in the near future. This is mainly due to the perceived tactical value of these minefields to the Georgian military.²⁰

10 Emails from Michael Montañ, HALO Trust, 8 May 2020 and 17 May 2022.

11 Ibid.

12 Email from Michael Montañ, HALO Trust, 17 May 2022.

13 Emails from Michael Montañ, HALO Trust, 30 April 2021 and 26 July 2022.

14 Email from Oleg Gochashvili, DELTA, 31 May 2022.

15 Emails from Oleg Gochashvili, DELTA, 12 May 2020 and 31 May 2022; and Michael Montañ, HALO Trust, 17 May 2022.

16 Emails from Oleg Gochashvili, DELTA, 20 June 2016, and 28 March and 10 June 2019; and Matthew Walker, Programme Officer, HALO Trust, 8 April 2019; Decree 897 issued by the Minister of Defence, 30 December 2010; and Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 21 March 2017 to 31 March 2018), Form A.

17 Emails from Oleg Gochashvili, DELTA, 6 July 2015 and Michael Montañ, HALO Trust, 17 May 2022.

18 Email from Oleg Gochashvili, DELTA, 2 September 2022.

19 Email from Michael Montañ, HALO Trust, 21 June 2019.

20 Email from Michael Montañ, HALO Trust, 26 July 2022.

The Georgian government funds the running costs of the HDCD. This includes all salary and administrative expenses as well as the costs of non-technical and technical survey, QA/QC activities of ongoing clearance, and monitoring of stockpile destruction tasks.²¹ It also funds the Engineering Battalion, which carries out some survey and battle area clearance (BAC).²²

The national authority has received capacity development support from HALO Trust and the Geneva International Centre for Humanitarian Demining (GICHD). Outside regular liaison and information sharing, the HALO Trust did not provide any direct capacity development support to the national authorities in Georgia or the *de facto* Abkhaz authorities in 2021.²³ However, previously, HALO has provided training on IMAS, geographic information systems (GIS), clearance and survey techniques.²⁴

The GICHD has provided training for HDCD staff on the Information Management System for Mine Action (IMSMA) Core database, ammunition storage, and technical survey.²⁵ In 2020, one HDCD staff member conducted an online course on IMAS and Compliance organised by the GICHD.²⁶ In 2021,

two members of DELTA/HDCD staff attended three trainings organised by the GICHD, which covered the management of mine action programmes, operational efficiency, quality management, and operations analysis.²⁷

In 2021, one DELTA/HDCD specialist participated in EOD training provided by the Combat Engineer Battalion of the Georgia MoD and the US company, Golden West.²⁸

In November 2021, a regional conference "Towards a Landmine Free South Caucasus", organised by LINKS Europe in cooperation with DELTA, took place in Tbilisi. The event was attended by government officials, diplomats, and members of civil society organisations from Armenia, Azerbaijan, and Georgia.²⁹ A further meeting was planned for the middle of 2022 to promote further regional progress in mine action.³⁰ The HALO Trust is also a member of the Landmine Free South Caucasus (LMFSC) campaign, which it has found to be a useful platform for advocating for the release of the remaining minefields in Georgia as well as continued lobbying for the accession of all three States in the South Caucasus to the Anti-Personnel Mine Ban Convention (APMBC).³¹

ENVIRONMENTAL POLICIES AND ACTION

DELTA report that Georgia's draft National Mine Action Standards contain a standard on environmental management and policy, although The HALO Trust was not aware of this.³² DELTA also states that all national and international demining operators are expected to abide by state laws relating to environmental protection when planning and conducting of demining operations.³³

The HALO Trust has in place an environmental policy as well as strict environmental standard operating procedures (SOPs), which aim to leave the environment in a state similar to or, where possible, better than it was before demining operations, and in a state that permits intended land use once operations are complete.³⁴

GENDER AND DIVERSITY

DELTA and The HALO Trust each has gender and diversity policies in place. HALO supports use of mixed-gender teams to conduct survey, which allows for greater engagement with women and children.³⁵ In 2021, HALO continued to collaborate with local women's organisations to increase the visibility of its work to women. The HALO Abkhazia programme was able to partner with United Nations (UN) Women in Abkhazia to distribute information about ending violence against women, including how to access UN Women-supported local shelter hotlines.³⁶ If HALO is given permission to work in the remaining minefields in the TAT, community liaison and survey teams will be mixed gender and inclusive of ethnic minorities.³⁷ HALO Trust's EOD teams in Abkhazia are mixed ethnic Georgian and ethnic Abkhaz.³⁸

21 Emails from Oleg Gochashvili, DELTA, 31 May and 2 September 2022.

22 Email from Oleg Gochashvili, DELTA, 12 May 2020.

23 Email from Michael Montafi, HALO Trust, 17 May 2022.

24 Emails from Matthew Walker, HALO Trust, 8 April 2019; Michael Montafi, HALO Trust, 8 May 2020; and Oleg Gochashvili, DELTA, 10 June 2019.

25 Email from Oleg Gochashvili, DELTA, 12 May 2020.

26 Email from Oleg Gochashvili, DELTA, 28 April 2021.

27 Email from Oleg Gochashvili, DELTA, 31 May 2022.

28 CCW Protocol V Article 10 Report (covering 2021), Form A.

29 "Georgia supports efforts to clear the South Caucasus from all landmines and unexploded ordnance", *commonsplace.eu*, 7 November 2021.

30 Email from Oleg Gochashvili, DELTA, 31 May 2022.

31 Email from Michael Montafi, HALO Trust, 17 May 2022.

32 Emails from Oleg Gochashvili, DELTA, 31 May 2022; and Michael Montafi, HALO Trust, 17 May 2022.

33 Email from Oleg Gochashvili, DELTA, 31 May 2022.

34 Email from Michael Montafi, HALO Trust, 17 May 2022.

35 Email from Matthew Walker, HALO Trust, 8 April 2019.

36 Email from Michael Montafi, HALO Trust, 17 May 2022.

37 Email from Matthew Walker, HALO Trust, 8 April 2019.

38 Email from Michael Montafi, HALO Trust, 8 May 2020.

There is equal access to employment for qualified women and men in survey and clearance teams in Georgia, including for managerial level/supervisory positions although proportionately the number of women remains low. Among the HDCD's staff in 2020 and 2021, one of seven members, the GIS/IMSMA specialist, was a woman. While no women were employed by HDCD in operational roles or in managerial/supervisory positions in 2020 or 2021, 1% of military personnel within the EOD Company of Combat Engineer Battalion were women in 2021.³⁹

As at May 2022, women made up 28% of HALO Trust staff in Abkhazia, with 15% of managerial and supervisory positions occupied by women and 28% of operational positions occupied by women. There is also a female member of staff based in Tbilisi, dedicated to the administration of the Georgia programme (HALO's only member of staff outside Abkhazia). This slight decrease, from 36% of staff in the Abkhazia programme being women in 2020 to 28% in the first part of 2022, reflects a downsizing of the programme in 2021, when HALO reduced the number of BAC teams deployed to Primorsky, following completion of a large grant from the European Union (EU).⁴⁰ HALO Trust's EOD teams in Abkhazia are mixed ethnic Georgian and ethnic Abkhaz and comprise both men and women.⁴¹

INFORMATION MANAGEMENT AND REPORTING

The HDCD uses the IMSMA database and, according to The HALO Trust, the data are accurate. Data archives go back to 2009 and are regularly updated, based on HALO Trust's operations reports and on work by the Engineering Battalion. The IMSMA database is updated regularly and is administered by a certified specialist within the HDCD, trained by the GICHD, who receives regular refresher training in the latest procedures.⁴² In 2021, two members of DELTA/HDCD staff attended three trainings organised by the GICHD, which included operations analysis.⁴³ Previously, in 2019, HDCD personnel attended an IMSMA Core workshop, hosted by the GICHD and the Organization for Security and Co-operation in Europe (OSCE) in Kiev (Ukraine).⁴⁴ In 2020, one HDCD staff member conducted an online course on IMAS and Compliance organised by the GICHD.⁴⁵

The data in the national information management system are accessible to the HALO Trust.⁴⁶ HALO Trust uses its own IMSMA-compatible data collection forms that DELTA has approved while the HDCD QA/QC team also has its own forms.⁴⁷

Georgia outlines how various government agencies, in particular the Defence Forces and the EOD team of the Georgian State Security Service, work effectively to report contamination discovered through their established networks and in response to information from local residents. The HDCD regularly collects, analyses, documents, and stores information on areas contaminated by mines or explosive remnants of war (ERW). The HDCD also compiles and regularly updates digital and printed maps of contaminated and cleared areas within and through the national IMSMA database. Finally, Georgia reports that cooperation on data exchange between all relevant ministries, national agencies, and foreign organisations is ongoing and effective.⁴⁸

PLANNING AND TASKING

Georgia has a national mine action strategy. Its main aims and targets are focused on clearing the remaining mined areas (unless they are deemed to have military utility) and to clear other areas contaminated with ERW.⁴⁹ Implementation of Georgia's 2021 annual mine action plan was compromised by COVID-19 restrictions, poor funding of humanitarian demining operators, and national staffing

challenges. However, Georgia has a mine action plan in place for 2022. DELTA prioritises clearance in areas of high risk to the population, as well as land used for livestock and other agriculture, along with roads, border security, and other key infrastructure. In addition, Georgia has long-term plans for survey and clearance of mines and UXO at commercial sites to support the country's socio-economic development.⁵⁰

39 Emails from Oleg Gochashvili, DELTA, 28 April 2021 and 31 May 2022.

40 Emails from Michael Montafi, HALO Trust, 30 May 2021, 17 May 2022, and 7 and 10 June 2022.

41 Email from Michael Montafi, HALO Trust, 8 May 2020.

42 Emails from Michael Montafi, HALO Trust, 8 May 2020 and 17 May 2022.

43 Email from Oleg Gochashvili, DELTA, 31 May 2022.

44 Email from Oleg Gochashvili, DELTA, 12 May 2020.

45 Email from Oleg Gochashvili, DELTA, 28 April 2021.

46 Email from Matthew Walker, HALO Trust, 8 April 2019.

47 Emails from Oleg Gochashvili, DELTA, 28 March 2019; and Michael Montafi, HALO Trust, 8 May 2020.

48 CCW Protocol V Article 10 Report (covering 2021), Form B.

49 Email from Oleg Gochashvili, DELTA, 28 March 2019.

50 Email from Oleg Gochashvili, DELTA, 31 May 2022.

DELTA further explains how, in the aftermath of the August 2008 Russian-Georgian conflict, the safety of local populations clearly determined prioritisation of mine and UXO clearance. However, at this point in time, Georgia has no national level prioritisation system for clearance and clearance operations are conducted by HALO as and when possible and when resources allow. Clearance is also sometimes conducted at the request of ministries, organisations or commercial companies to facilitate safe infrastructure development.⁵¹

HALO collaborates with the national mine action authorities to determine annual operational planning and task priority. HALO uses an internal prioritisation matrix to grade tasks, taking socio-economic data (sex and age disaggregated) into account. Key considerations include accident history, existing evidence, population proximity, post-clearance land use, frequency of land use, direct and indirect beneficiaries, and the economic impact on beneficiaries.⁵²

HALO did not carry out any activities in TAT in 2021 or 2020, due to lack of funding for clearance of the Kadoeti and Khojali minefields, the two tasks that have permissions from the Government of Georgia. HALO maintained only a residual presence in the TAT, with one Programme Administrator in place to support procurement and transfer of supplies and equipment required by the HALO programme in Abkhazia. HALO also maintains an International Donor Liaison Officer, attached to the programmes in both the TAT and Abkhazia. This arrangement is anticipated to continue regardless of whether HALO has active projects in TAT, as long as operations continue in Abkhazia.

In 2020, HALO secured three-year funding for its EOD work in Abkhazia and will maintain this capacity until at least 2023.⁵³ In Abkhazia, HALO's operations continued in Primorsky, along with responding to EOD call-outs.⁵⁴

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

As at June 2022, Georgia's National Mine Action Standards and National Technical Standards Guidelines were drafted and awaiting approval by the GICHD IMAS department. Once approved by GICHD IMAS, they were due to be translated into Georgian and then sent to Parliament for approval.⁵⁵ The International Ammunition Technical Guidelines (IATGs) have been translated into Georgian but the translation of the IMAS remains ongoing.⁵⁶

In 2021, The HALO Trust updated its manual clearance SOP to include:

- Two metres ODOL (One Deminer One Lane). The two-metre ODOL method has been developed as a more efficient technique, using the same principles as the one-metre ODOL;
- Set-up and signal isolation for the Ebinger 421GC Detector, due to its suitability for signals produced by mineralised soil, common in HALO's Area of Operations.
- Updates to the review process for making changes to safety distances.⁵⁷

OPERATORS AND OPERATIONAL TOOLS

The Ministry of Defence retains a small demining and EOD capacity in TAT. In 2021 the EOD Company of Combat Engineer Battalion had one survey team (for both non-technical and technical survey), and one manual clearance team of ten personnel.⁵⁸ The HDCD coordinates and monitors operations and does not conduct any clearance activities. However, the HDCD does carry out non-technical and technical survey.⁵⁹ As previously, the Georgian State Security Service (SSS) EOD team did not carry out any survey or clearance but conducted EOD tasks in response to call-outs.⁶⁰ In Abkhazia, the emergency services (EMERCOM) have a small EOD capacity, although HALO Trust is generally relied upon to deal with all items of UXO.⁶¹ EMERCOM did not conduct any mine clearance in Georgia in 2021.⁶²

51 Emails from Oleg Gochashvili, DELTA, 31 May and 26 July 2022.

52 Emails from Michael Montafi, HALO Trust, 30 April 2021 and 17 May 2022.

53 Email from Michael Montafi, HALO Trust, 30 April 2021.

54 Email from Michael Montafi, HALO Trust, 17 May 2022.

55 Email from Oleg Gochashvili, DELTA, 31 May 2022.

56 Emails from Oleg Gochashvili, DELTA, 28 April 2021 and 31 May 2022.

57 Emails from Michael Montafi, HALO Trust, 17 May and 26 July 2022.

58 Emails from Oleg Gochashvili, DELTA, 31 May, 26 July, and 2 September 2022.

59 Email from Oleg Gochashvili, DELTA, 2 September 2022.

60 Email from Oleg Gochashvili, DELTA, 31 May 2022.

61 Emails from Oleg Gochashvili, DELTA, 28 March 2019 and 12 May 2020; and Matthew Walker, HALO Trust, 8 April 2019.

62 Email from Oleg Gochashvili, DELTA, 31 May 2022.

The COVID-19 pandemic continued to impact mine action in Georgia 2021, although to a lesser extent than in 2020, when all mine clearance activities were suspended in TAT, except for responses to call-outs and EOD spot tasks by the Georgian SSS EOD team.⁶³ DELTA reported that the impact of COVID-19 on operational capacity decreased in 2021, but that restrictions still made mine action challenging.⁶⁴ The HALO Trust report that COVID-19 did not have any impact on HALO's mine clearance operations in 2021. Since the outbreak of COVID-19 in Abkhazia in March 2020, HALO has taken a range of measures to ensure the safety of its staff and beneficiaries.⁶⁵

The HALO Trust, which is the only international operator working in the country, conducts survey and both BAC and mine clearance in Abkhazia.⁶⁶ HALO's operations in TAT remained suspended in 2021 due to lack of donor funding. However, with funding now secured, non-technical survey of mined areas was due to take place in Kadoeti and Khojali between August and September 2022.⁶⁷

In Abkhazia in 2021, The HALO Trust fielded a dedicated mine clearance team, consisting of four deminers, for the

first time since 2011. HALO also deployed two EOD call-out teams (totalling eight personnel).⁶⁸ HALO's BAC operations in Primorsky continued alongside responding to EOD call-outs. HALO did not expect any major changes to the number of survey and/or clearance personnel in 2022.⁶⁹

HALO continued to respond to the COVID-19 crisis in Abkhazia in 2021 through the deployment of six HALO ambulances, serving hospitals, laboratories, and communities with patient transfer services and transportation of PCR (polymerase chain reaction) test samples and contact tracing teams.⁷⁰

In 2021, the international demining company, SAFELINE Global, requested accreditation from DELTA/HDCD to conduct offshore survey and clearance of Poti Harbour, in order to allow some construction work to proceed safely. As at May 2022, the accreditation process was ongoing.⁷¹

In TAT, quality management (QM) is conducted by DELTA. In Abkhazia, The HALO Trust is responsible for its own QM.⁷²

There were no demining accidents in Georgia in 2021.⁷³

Table 2: Operational clearance capacities deployed in 2021⁷⁴

Operator	Manual clearance teams	Total deminers*	Mechanical assets/machines**	Comments
HALO Trust	1	4	2	First manual clearance team deployed by HALO in Abkhazia since 2011. Also deployed two EOD call-out teams, (eight personnel). At Primorsky, HALO deployed two BAC teams (14 personnel), one sub-surface BAC team (8 personnel) one mechanical team (4 personnel), and one mechanical support team (4 personnel).
EOD Company of Engineer Battalion of MoD of Georgia	1	10	0	
Totals	2	14	2	

* Excluding team leaders, medics, and drivers ** Excluding vegetation cutters and sifters

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

A total of almost 0.4km² of land was released through clearance in Georgia in 2021, destroying in the process 45 anti-personnel mines and 2,015 items of UXO (see Table 5). All clearance took place in Abkhazia; none in TAT. In addition, 21 anti-personnel mines and 85 anti-vehicle mines were destroyed in EOD spot tasks by HALO Trust (operating in Abkhazia only), and the

63 Email from Oleg Gochashvili, DELTA, 28 April 2021.

64 Email from Oleg Gochashvili, DELTA, 31 May 2022.

65 Email from Michael Montafi, The HALO Trust, 17 May 2022.

66 Email from Irakli Chitanava, HALO Trust, 2 May 2017.

67 Emails from Michael Montafi, HALO Trust, 17 May 2022; and Oleg Gochashvili, DELTA, 31 May 2022.

68 Emails from Michael Montafi, HALO Trust, 17 May and 26 July 2022.

69 Ibid.

70 Ibid.

71 Email from Oleg Gochashvili, DELTA, 31 May 2022.

72 Email from Oleg Gochashvili, DELTA, 28 March 2019.

73 Emails from Oleg Gochashvili, DELTA, 31 May 2022; and Michael Montafi, HALO Trust, 17 May 2022.

74 Ibid.

Georgian State Security Service SSS EOD teams (operating in TAT only).⁷⁵ The amount of land released through clearance decreased, compared to the 2020 figure of 0.8km².⁷⁶

No land was released through technical or non-technical survey in TAT in 2021, as was the case in 2020. In Abkhazia, 1.67km² was released through survey, of which 0.25km² was cancelled through non-technical survey and 1.42km² was reduced through technical survey (see Tables 3 and 4).

SURVEY IN 2021

No mined area was released through survey in 2021 in TAT, nor in the two years previously, with HALO Trust still seeking the necessary permissions and funding to complete non-technical survey at the five mined areas remaining there. However, having gained permission in 2019 and securing funding in June 2022, HALO planned to conduct non-technical survey at the Kadoeti and Khojali minefields during August to September 2022.⁷⁷

In Abkhazia, 25,453m² of mined area was cancelled through non-technical survey by HDCD (see Table 3), and 0.14km² was reduced through technical survey by HDCD and the Engineering Battalion of the MoD (see Table 4). This is a significant increase compared to the two years previously, when no mined areas in Abkhazia were released through survey.

Table 3: Non-technical survey of anti-personnel mined area in 2021⁷⁸

Region/Village	Operator	Area cancelled (m ²)
Samegrelo-Zemo Svaneti/Kulevi	HDCD	25,453
Total		25,453

Table 4: Technical survey of anti-personnel mined area in 2021⁷⁹

Region / Village	Operator	Area reduced (m ²)
Samegrelo-Zemo Svaneti/Kulevi	HDCD	109,067
Samegrelo-Zemo Svaneti/Poti	MoD Engineering Battalion	32,451
Total		141,518

The HDCD and EOD Company conducted survey in two areas of the Samegrelo Zemo-Svaneti region; at v. Kulevi in March to April 2021, and at a former Coast Guard Base (Ministry of Internal Affairs of Georgia), near Poti harbour, in October 2021 to March 2022. At v. Kulevi, survey showed no anti-personnel mines were present and technical survey was conducted to establish the possible presence of UXO or abandoned explosive ordnance (AXO). None was recovered and the area has been recognised as clear. At the former Coast Guard Base, near Poti harbour, survey and QA/QC were conducted to identify the possible presence of UXO/AXO. There too, no ordnance was found and the area has also been recognised as clear.⁸⁰

CLEARANCE IN 2021

In 2021, HALO cleared 397,766m² of hazardous area in Abkhazia, destroying in the process 45 anti-personnel mines and 2,015 items of UXO.⁸¹ This is a decrease compared to 2020, when HALO cleared 753,903m² of hazardous area in Primorsky, Abkhazia, destroying in the process 155 anti-personnel mines, 3 anti-vehicle mines, and 12,208 items of UXO.⁸² That said, HALO highlights that, thanks to securing donor funding, it was able to undertake clearance operations across a greater number of areas in Abkhazia in 2021 compared to 2020; when clearance took place only at Primorsky. Anti-personnel mines destroyed by HALO outside of Primorsky in 2020 had not been laid but were either stored in stockpiles or discarded in uninhabited areas.⁸³

Having secured funding from the Embassy of Norway in Tbilisi, HALO was able to complete clearance of four tasks in Abkhazia in 2021 at minefields located in the Gulripsh, Ochamchire, and Tkvarcheli regions. HALO also conducted clearance at a newly discovered contaminated area at the village of Lindava, on the outskirts of Sukhumi, which was brought to their attention by an EOD call-out. Having cleared 4,219m² at Lindava in 2021, HALO estimates that some 10,500m² of mined area remains there. In June 2022, HALO had secured additional funding from Norway to complete the Lindava task later in the year. HALO is also seeking additional donor funding to clear the remaining known mined area, located in the Ochamchire region of Abkhazia.⁸⁴

75 Emails from Oleg Gochashvili, DELTA, 31 May 2022; and Michael Montafi, HALO Trust, 17 May 2022.

76 Emails from Oleg Gochashvili, DELTA, 28 April 2021; and Michael Montafi, HALO Trust, 30 April 2021.

77 Email from Michael Montafi, HALO Trust, 17 May 2022.

78 Email from Oleg Gochashvili, DELTA, 31 May 2022.

79 Ibid.

80 Email from Oleg Gochashvili, DELTA, 13 June 2022.

81 Emails from Oleg Gochashvili, DELTA, 31 May 2022 and Michael Montafi, HALO Trust 17 May 2022.

82 Email from Michael Montafi, HALO Trust, 28 April 2021.

83 Emails from Michael Montafi, HALO Trust, 28 April 2021 and 17 May 2022.

84 Emails from Michael Montafi, HALO Trust, 17 May and 26 July 2022.

HALO continued clearance operations in Primorsky in 2021, where the anti-personnel mines destroyed were the result of BAC and mechanical clearance of an ammunition storage area explosion that took place in August 2017. The mines were scattered across the landscape as a result of the explosion and had not been emplaced.⁸⁵ With adequate funding, HALO Trust had originally hoped to finish the clearance of Primorsky by December 2021.⁸⁶ While this did not happen, HALO did complete clearance at Primorsky in July 2022, having received additional funding from the Swiss Federal Department of Foreign Affairs (FDFA).⁸⁷ This resulted in total clearance of 3,143,245m² and the destruction of 100,042 items of UXO, including 3,866 anti-personnel mines and 7 anti-vehicle mines. This is since HALO's clearance began at Primorsky in August 2017.⁸⁸

With the exception of the Upper Amtkel task in Abkhazia, all areas cleared by The HALO Trust in Georgia in 2021 proved to contain anti-personnel mines.⁸⁹

HALO's ethnic Georgian and ethnic Abkhaz EOD teams, funded by the UK's Conflict, Stability and Security Fund (CSSF), continued to respond to call-outs in the conflict-affected areas across the whole of Abkhazia. In 2021, HALO responded to 162 civilian call-outs and nine call-outs from the *de facto* Abkhaz military, resulting in the destruction of 17 anti-personnel mines, 4 anti-vehicle mines, and 372 items of UXO.⁹⁰ In addition, the State Security Service EOD team destroyed four anti-personnel mines and 81 anti-vehicle mines during EOD spot tasks.⁹¹

The Russian military reportedly undertook some mine clearance in the Sokhumi airport area in 2021. However, this was without any agreement or coordination with HDCD and DELTA has received no specific information on this.⁹²

Table 5: Mine clearance in Abkhazia* in 2021⁹³

Region/Village	Operator	Area cleared (m ²)	AP mines destroyed*	AV mines destroyed	UXO destroyed
Ochamchire/Atara	HALO Trust	4,003	2	0	2
Gulripshy/Amtkel Mountain	HALO Trust	7,802	0	0	0
Gulripshy/Upper Amtkel	HALO Trust	5,498	1	0	12
Tkvarcheli/Agubedia	HALO Trust	4,862	2	0	1
Sukhumi/Lindava	HALO Trust	4,219	3	0	0
Gudauta/Primorsky	HALO Trust	371,382	**37	0	2,000
Totals		397,766	45	0	2,015

* No clearance took place in TAT in 2021. ** Anti-personnel mines destroyed at Primorsky were the result of BAC and mechanical clearance of the site of an unplanned ammunition storage explosion that occurred in August 2017. As such these mines were not emplaced but rather scattered around the storage area.

No target date has been set for completion of anti-personnel mine clearance in Georgia. DELTA reiterated in 2021 that, "given all the impediments, it is difficult to name specific timelines".⁹⁴ The Red Bridge minefield is Georgia's largest, clearance of which has been identified as one of its key strategic mine action priorities.⁹⁵ Georgia previously reported plans to start clearing the Red Bridge minefield in 2015, but after discussions between Georgian and Azerbaijani representatives only survey was permitted.⁹⁶ The HALO Trust conducted non-technical survey between 1 and 3 July 2015, and then began technical survey on 4 July 2015. The following month, however, the Azerbaijani military demanded that technical survey operations be halted.⁹⁷ During 2018, Georgia reported further discussions with Azerbaijan regarding the clearance of Red Bridge minefield.⁹⁸ As at May 2022, however, The HALO Trust had not been granted permission to restart clearance there.⁹⁹

85 Email from Michael Montafi, HALO Trust, 17 May 2022.

86 Email from Michael Montafi, HALO Trust, 30 April 2021.

87 Emails from Michael Montafi, HALO Trust, 17 May and 22 August 2022.

88 Emails from Michael Montafi, HALO Trust, 18 and 22 August 2022.

89 Email from Michael Montafi, HALO Trust, 18 August 2022.

90 Emails from Michael Montafi, HALO Trust, 17 May and 26 July 2022.

91 Emails from Oleg Gochashvili, DELTA, 31 May 2022; and Michael Montafi, HALO Trust, 17 May 2022.

92 Email from Oleg Gochashvili, DELTA, 31 May 2022.

93 Ibid.

94 Ibid.

95 Email from Oleg Gochashvili, DELTA, 3 April 2017.

96 Interview with George Dolidze, Ministry of Foreign Affairs, in Geneva, 28 May 2009; and email from Oleg Gochashvili, DELTA, 3 June 2015.

97 Emails from Andrew Moore, HALO Trust, 18 October 2016; Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.

98 Email from Oleg Gochashvili, DELTA, 28 March 2019.

99 Email from Michael Montafi, HALO Trust, 17 May 2022.

In 2021, HALO continued to advocate for permission from the Government of Georgia to begin technical survey and clearance of the Red Bridge minefield at both the bilateral level and through public advocacy, as part of the LMFC Campaign. The HALO Trust reports that, while there are indications from the Georgian Ministry of Foreign Affairs (MFA) that progress has been made on general demarcation disputes between Georgia and Azerbaijan, there is still no clear evidence of progress towards Red Bridge clearance. The Georgian MFA stated in October 2021 that The HALO Trust remains the Georgian Government's preferred implementer for clearance of the Red Bridge minefield.¹⁰⁰

DELTA remains committed and has stated that the demining of the Red Bridge area will be one of the most important questions taken to a regional meeting was scheduled for summer 2022. This regional meeting is planned between LINKS Europe, with assistance from DELTA and the Ministry of Defence of Georgia, as part of the Landmine Free South Caucasus project. Participation is expected from the national ministries and demining programmes of Azerbaijan and Armenia as well as international mine action organisations such as The HALO Trust.¹⁰¹

In addition to being denied access to the Red Bridge minefield, no permission has been granted to date for HALO to conduct survey and clearance operations of mined areas in Barisakho or Osiauri.¹⁰² Barisakho has two mined areas are close to a police station on the Russian border and in Osiauri, a military base, mines were laid around the perimeter of an ammunition storage area to defend the position in an event of an invasion.¹⁰³

HALO has maintained a residual presence in TAT, while seeking the, now secured, permissions and funding to

conduct clearance in Kadoeti and Khojali. This arrangement is anticipated to be maintained regardless of having active projects in TAT so long as operations continue in Abkhazia.¹⁰⁴

Though HALO plans to maintain this residual presence in TAT, it expresses concern at the outlook for tackling the Red Bridge minefield, should HALO be forced to exit Georgia before necessary permission and funding to operate at Red Bridge are secured. HALO cautions that, while the Engineering Battalion of the MoD would be a suitable entity to deal with any residual contamination once all minefields have been cleared, it would struggle to conduct the large scale, systematic clearance that a minefield like Red Bridge would require. HALO also says, however, that, if permission to clear Red Bridge is granted in future, HALO would be prepared to return to undertake the clearance.¹⁰⁵

Georgia has highlighted that funding and resources continue to be a significant challenge for national mine action, with only one international humanitarian organisation operating in-country (HALO), and limited resources available to the State's EOD Company, which conducts humanitarian operations, under the Ministry of Defence.¹⁰⁶

In particular, Georgia describes how the HDCD lacks certain equipment and requires expert subject matter assistance regarding the creation and implementation of national mine action standards and national technical standards and guidelines, the elaboration of SOPs, as well as staff training on EOD Levels 1, 2, and 3; technical and non-technical survey; the management of mine action; and IMSMA database management. Additionally, HDCD requires further technical and financial support to conduct the planned General Mine Action Assessment, including support of QA/QC on cleared areas.¹⁰⁷

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Georgia's national strategy provides for action to address previously unknown mined areas that are found after completion.¹⁰⁸ The Engineering Battalion of the MoD has been trained to carry out EOD, demining, and BAC by the North Atlantic Treaty Organisation (NATO) Partnership for Peace and has the capacity to deal with any residual contamination once all the known minefields have been cleared.¹⁰⁹ However, Georgia expresses concern that this capacity to tackle residual contamination is limited.¹¹⁰

100 Ibid.

101 Email from Oleg Gochashvili, DELTA, 31 May 2022.

102 Ibid.

103 Email from Michael Montafi, HALO Trust, 30 April 2021.

104 Ibid.

105 Emails from Michael Montafi, HALO Trust, 17 May and 26 July 2022.

106 Email from Oleg Gochashvili, DELTA, 31 May 2022.

107 CCW Protocol V Article 10 Report (covering 2021), Form E.

108 Email from Oleg Gochashvili, DELTA, 31 May 2022.

109 Emails from Oleg Gochashvili, DELTA, 28 April 2021; and Michael Montafi, HALO Trust, 30 April 2021.

110 Email from Oleg Gochashvili, DELTA, 31 May 2022.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- India should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- India should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- India should report publicly on the extent and location of anti-personnel mines and prepare a plan for their clearance and destruction.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Director-General of Military Operations

NATIONAL OPERATORS

- Army Corps of Engineers
- Indian Police Service

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

The extent of anti-personnel mine contamination is not known. India used mines in three wars with Pakistan in 1947, 1965, and 1971, and in its war with China in 1962.¹ Large-scale mine-laying was conducted by government forces on and near the Line of Control (LoC) separating India and Pakistan during the 1971 war and the 2001–02 stand-off between the two states. Anti-personnel and anti-vehicle mines were laid on cultivated land and pasture, as well as around infrastructure and a number

¹ Recent Landmine Use by India and Pakistan, Human Rights Watch Backgrounder, May 2002, at: <http://bit.ly/3srXtQz>, p. 3.

of villages. In 2002, media resources reported that India was in the process of laying mines along virtually the entire length of its 2,897km border with Pakistan. One army commander said the mined area extended roughly two kilometres deep.²

Despite repeated official claims that all the mines laid were subsequently cleared, reports of contamination and casualties have persisted. A media report in 2013 cited a government statement that about 20km² of irrigated land was still mined in the Akhnoor sector of the line of control (LoC) alone.³ In June 2016, India's *NDTV* news reported that the Indian army was demining areas of the LoC in Rajouri district, Kashmir, in order to return land to communities for agricultural use as it vacated fields near the border that were reportedly taken over and mined during the Kargil Conflict in 1999 and Operation Parakram in 2001.⁴ India asserts that the Indian Armed Forces have never used landmines in internal armed conflicts in its northern and north-eastern states.⁵

The Landmine Monitor identified India as one of only a handful of countries that it believes to be actively producing mines.⁶ In 2019, according to an online media report the Indian Army was planning to procure one million anti-personnel mines over a five-year period to be used along the LoC.⁷ In 2021, it was reported that a new range of both anti-vehicle and anti-personnel mines were being introduced into the arsenal of the Indian Army to replenish its stockpiles.⁸

Landmine incidents continue to be reported, primarily involving Indian army personnel, but also civilians.

Security forces have also reported extensive use of mines and improvised explosive devices (IEDs) by Maoist fighters in the north-eastern states of Chhattisgarh, and Jharkhand causing civilian and military casualties. In July 2018, it was reported that 15 anti-vehicle mines placed by Maoist rebels were neutralised by security forces in Garhwa district, Jharkhand state.⁹ However, mine types are usually not specified and may include command-detonated explosive devices as well as mines (i.e. victim-activated explosive devices).¹⁰ In an audio press note sent to the media in August 2020, Maoist fighters assumed responsibility for the death of two youths who died in a landmine blast in Pedabayalu mandal, saying that they were targeting the police.¹¹ It was reported by the Landmine Monitor that villagers and police personnel in the states of Chhattisgarh and Jharkhand were killed or injured by improvised anti-personnel mines during 2021 and that these were attributed by officials to the Communist Party of India-Maoist (CPI-M) or its People's Liberation Guerrilla Army (PLGA).¹²

PROGRAMME MANAGEMENT

India has no civilian mine action programme. The Director-General of Military Operations decides on mine clearance after receiving assessment reports from the command headquarters of the respective districts where mine clearance is needed.

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in India in order to minimise potential harm from clearance.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

India has not submitted an Article 13 report under Amended Protocol II of the Convention on Certain Conventional Weapons (CCW), covering 2021. There is no publicly available official information on land release in 2021 as in previous years in India.

2 "India's Minefields Mean Bitter Harvest for Farmers", *The New York Times*, 4 January 2002, at: <http://nyti.ms/3mTiBhp>.

3 "Heavy rainfall worsening landmine peril for Kashmiri farmers", *Thomson Reuters Foundation*, 5 November 2013, at: <http://tmsnrtr.rs/33xqBun>.

4 "Farmers Hope to Return to Fields as Army Clears Landmines on Line of Control", *NDTV*, 27 June 2016, at: <http://bit.ly/2Z1AJlI>.

5 Recent Landmine Use by India and Pakistan, Human Rights Watch Backgrounder, May 2002, p. 3.

6 Landmine Monitor 2021, p.19, at: <https://bit.ly/3L2fL4k>.

7 "Army wants 1 million mines from private sector", *The Economic Times*, 3 October 2019, at: <https://bit.ly/3L22UiQ>.

8 "Indian Army Getting New Family of Anti-Tank and Anti-Personnel Mines", *NDTV*, 1 December 2021, at: <https://bit.ly/3L23A7S>.

9 "Jawans unearth 15 landmines on rebel turf", *The Telegraph India*, 6 July 2018, at: <http://bit.ly/33ycUeu>.

10 See, e.g., "15 police, driver killed by suspected Maoist landmine in western India", *Daily Sabah*, 1 May 2019, at: <http://bit.ly/2yZgobW>; "Jharkhand: Six Jaguar Force jawans killed in Maoist landmine blast", *The Indian Express*, 27 June 2018, at: <http://bit.ly/2Z1R6st>; "Farmer hurt in blast", *The Telegraph India*, 3 May 2018, at: <http://bit.ly/303gBqv>; and "Three killed in landmine blast triggered by Maoists in Chhattisgarh", *Hindustan Times*, 19 January 2017, at: <http://bit.ly/301Cvuk>.

11 "Andhra Pradesh, Maoists offer apologies for landmine blast", *The Times of India*, 11 August 2020, at: <http://bit.ly/3wWdnGh>.

12 Landmine Monitor Report 2021, pp. 12–13.

The Army Corps of Engineers is responsible for clearing mines placed by non-State armed groups.¹³ In July 2017, for instance, according to a media account, the Indian Army was manually clearing mines in the border districts of Jammu and Kashmir and was procuring more advanced demining equipment with a view to improving safety and decreasing the number of deminer casualties.¹⁴ Media reports have indicated the police also play an active part in clearing mines and other explosive hazards on an ad hoc basis in states dealing with insurgency.¹⁵

India has not reported any mine clearance in its Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency reports since 2006.¹⁶ No target date has been set for the completion of mine clearance. In a statement delivered at the Fourth Review Conference of the Anti-Personnel Mine Ban Convention (APMBC) in November 2019, India said: "Mines that are used for defensive military operations are laid within fenced perimeters and marked, in accordance with the requirements specified in AP [Amended Protocol] II. Post operations, these mines are cleared by trained troops".¹⁷

13 Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (covering 2006), Form B.

14 "Advanced tech to help soldiers map minefields", *The Times of India*, 10 July 2017, at: <http://bit.ly/2KyoVt7>.

15 "IEDs pose huge challenge in efforts to counter Naxals: Police", *The Indian Express*, 24 July 2017, at: <http://bit.ly/2MgNRrb>; and "Telangana police defuse landmines laid by Maoist in Mulugu, explosives recovered", *India Today*, 8 February 2022, at: <https://bit.ly/3JuTc82>.

16 CCW Amended Protocol II Article 13 Report (for 1 April 2019 to 31 March 2020), Form B.

17 Statement of India, Fourth APMBC Review Conference, Oslo, 26 November 2019.

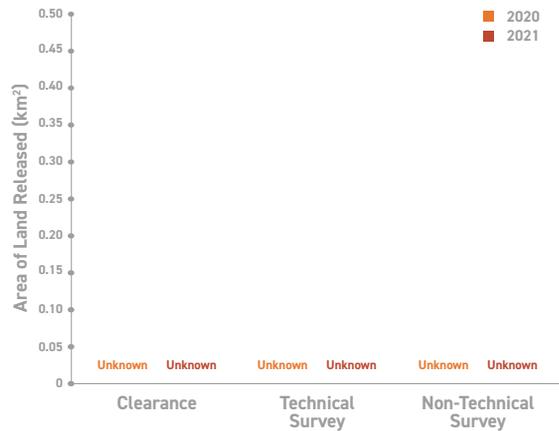
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Iran should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Iran should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Iran should report publicly on the extent and location of mined areas and prepare a plan for their clearance and destruction.
- Iran should ensure that clearance operations meet international mine action standards (IMAS), to ensure the safety of its deminers.

DEMINEING CAPACITY

MANAGEMENT CAPACITY*

- Iran Mine Action Center (IRMAC)

NATIONAL OPERATORS*

- IRMAC
- Iranian Army
- Iranian Revolutionary Guard Corps
- Petroleum Engineering and Development Company (PEDEC)
- Commercial operators

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- The International Committee of the Red Cross (ICRC)

* This is based on information from earlier years. It is not known if the information remains accurate.

UNDERSTANDING OF AP MINE CONTAMINATION

Iran is contaminated by anti-personnel and anti-vehicle mines, mainly as a result of the 1980–88 war with Iraq. The extent of the remaining mined areas is unknown, but mine contamination is concentrated in five western provinces bordering Iraq.

According to the Iran Mine Action Center (IRMAC), the initial estimation of "contamination" in Iran was 42,000km² (Ilam province, 17,000km²; Kermanshah province, 7,000km²; Khuzestan province, 15,000km²; Kurdistan province, 1,500km²; and West Azerbaijan, 1,500km²); which by February 2020 had reportedly been reduced by "90%".¹ For example, the Minister of Defence Hossein Dehghan said in 2014 that the 4,500km² of mines and explosive remnants of war (ERW) left by the Iran-Iraq war in the five western provinces had been reduced to 280km².² In February 2014, IRMAC reported that the five Western provinces had remaining contamination totalling 250km².³

According to online media sources, flooding that hit large parts of Iran in March and April 2019 exposed mines and unexploded ordnance (UXO) remaining in western provinces of Iran.⁴ Sources report that security forces continue to emplace mines in areas close to Iran's borders in order to deter cross-border smugglers and infiltration by anti-regime groups. There are also said to be mined areas around military bases.⁵

A further complication for contamination estimates pertains to reports of continuing casualties in areas that were supposed to have been cleared, calling into question whether mine clearance has been conducted to international standards.

One online report also describes how some remaining contamination is located in hard-to-reach areas, stating that "one per cent of the remaining lands with war mines include impassable mountainous areas", with some mined areas situated on slopes, marshes or as deep as three metres in the ground, making detection very challenging.⁶

After the Iran-Iraq war ended, a major operation was initiated to clean up the mines. In 2012, Kermanshah Province was declared "free from landmines" and the ministries of defence and interior celebrated the occasion. However, several people were killed and injured by landmines only a few days after the announcement, which led the government to consider re-clearing of the area.⁷

One online report states that officials have announced that 10,000 people in Iran have been victims of landmine accidents since the war, of whom 3,000 were killed and the other 7,000 injured.⁸

Iran is also believed to have cluster munition remnants (CMR) contamination (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Iran for further information).

PROGRAMME MANAGEMENT

IRMAC was established as the national mine action centre in 2005, taking the place of a Mine Action Committee within the Ministry of Defence. IRMAC is responsible for planning, data, managing survey, procurement, and the accreditation of demining operators. It also sets standards, provides training for clearance operators, concludes contracts with demining operators, and ensures quality assurance (QA) and quality control (QC) of their operations. It coordinates mine action with the General Staff of the Armed Forces, the Ministry of Interior, the Management and Planning Organisation of Iran, and other relevant ministries and organisations, and handles international relations.⁹ Several IRMAC staff are believed to be serving or former military personnel, including its Director, while others are civilians employed by the Ministry of Defence.

IRMAC is said to have a branch in every affected province. Available demining assets, such as mechanical assets, vary from province to province.

In March 2019, Iran hosted a three-day international roundtable on "humanitarian mine action: challenges and best practices", attended by representatives from other states, national and international demining organisations, the International Committee of the Red Cross (ICRC), and the United Nations Mine Action Service (UNMAS). The aim of the roundtable was to share knowledge and experience on mine action, challenges, and best practices.¹⁰

- 1 IRMAC PowerPoint presentation, available at: <http://bit.ly/38ALojt>; and presentation by Mr. Pourbagher, Deputy Director of IRMAC, National Directors Meeting, Geneva, 12 February 2020.
- 2 Ministry of Defence, "Commander Dehghan in the ceremony of World Mine Awareness Day: In Iran 28,000 hectares of land are landmine-contaminated", 8 April 2014.
- 3 IRMAC PowerPoint presentation at IRMAC headquarters, Tehran, 9 February 2014.
- 4 "Unexploded Ordnance Threatening Iranian Lives in Flood-Hit Areas", *IFP News*, 5 April 2019, at: <http://bit.ly/33Tsp0K>; and "Nationwide Flood Alert In Iran As Emergency Declared In Oil-Producing Province", *Radio Farda*, 31 March 2019, at: <http://bit.ly/2zjb3MJ>.
- 5 "Landmines Still a Major Menace in Iran", *Atlantic Council*, 25 August 2016, at: <https://bit.ly/3dVTKp2>.
- 6 "The ominous legacy of war still takes victims", *Iranian Labour News Authority*, 22 May 2020, at: <https://bit.ly/3S1UfBk>.
- 7 "Landmines Still a Major Menace in Iran", *Atlantic Council*, 25 August 2016, at: <https://bit.ly/3dVTKp2>.
- 8 "The ominous legacy of war still takes victims", *Iranian Labour News Authority*, 22 May 2020, at: <https://bit.ly/3S1UfBk> The English translation of this report available online also states that 3,000 people have been "injured" and 7,000 have been "injured and disabled", so it is unclear which information is correct.
- 9 IRMAC PowerPoint Presentation, Tehran, 9 February 2014; and IRMAC, "Presentation of IRMAC".
- 10 "Tehran hosts international roundtable on humanitarian mine action", *Mehr news agency*, 12 March 2019, at: <http://bit.ly/2Z4LsIE>; and ICRC, "International roundtable on humanitarian mine action: challenges and best practices", 15 March 2019, at: <http://bit.ly/2QH3cR6>.

In November 2019, Iran opened its first international humanitarian demining training centre in Tehran, with the aim of offering training courses on demining to other countries in the region struggling with landmine contamination.¹¹

Iran is believed to have dedicated significant resources and effort to clearing areas on its territory contaminated by mines, CMR and other ERW, but the results of survey and clearance have not been made publicly available.

ENVIRONMENTAL POLICIES AND ACTION

It is not known whether Iran has a national mine action standard (NMAS) on environmental management and/or a policy on environmental management. It is also not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in order to minimise potential harm from clearance.

INFORMATION MANAGEMENT

IRMAC actively maintains a national mine action database but it is not known to what extent it is comprehensive, up-to-date, and able to disaggregate anti-personnel mine contamination and clearance output from that of other explosive ordnance.

In 2020, IRMAC reported that it has a Geographic Information System (GIS) web-based, information management system, which integrates information on quality, safety, and the environment.¹²

The National Iranian Oil Company (NIOC) also maintains a mine action database recording the results of its own clearance contracts.¹³

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

IRMAC undertakes two main types of clearance activity: shallow clearance and deep clearance.¹⁴ There is no available information on quality management procedures. In the past, very high levels of casualties were recorded during demining in Iran. IRMAC reported that since its establishment, in 2005, 200 deminers have been killed or injured during clearance of mines and ERW, which equated at the time to one accident for every 15,000 mines or ERW detected.¹⁵ A study conducted in 2007 revealed that since the end of the Iraq-Iran war in 1988, 400 deminers were killed or injured in demining accidents.¹⁶

After Kermanshah province was declared “free from landmines” in 2012 but several people were killed and injured by landmines only a few days after the announcement, the government considered re-clearing the area. An Iranian parliamentarian commented that the clearance had not respected the minimum depth set in national standards.¹⁷

OPERATORS AND OPERATIONAL TOOLS

As of writing, no information was available on Iran's current survey and clearance capacity.

IRMAC combines the roles of regulator and operator, with demining teams and support staff deployed in five affected provinces. In Kurdistan province, IRMAC is conducting verification, mainly through mechanical clearance. IRMAC also responds to calls from the local community reporting landmines or items of UXO. Demining capacity in Kurdistan province is believed to stand at only around 12 personnel, a reduction on earlier capacity.¹⁸

The Iranian Army and Iranian Revolutionary Guard Corps assisted demining efforts to support the response to the flash flooding which affected Iran in March and April 2019.¹⁹ At the time of writing no information was available as to whether the Army or Revolutionary Guard Corps are conducting clearance.

11 "1st International Humanitarian Demining Training Center opens in Tehran", *Mehr News Agency*, 12 November 2019, available at: <http://bit.ly/2C7wRzG>.

12 IRMAC PowerPoint presentation; and presentation by Mr Pourbagher, Deputy Director of IRMAC, National Directors Meeting, Geneva, 12 February 2020.

13 "Iran", Landmine and Cluster Monitor, at: <https://bit.ly/2Qp4S5P>.

14 IRMAC PowerPoint presentation, 2020, p. 5.

15 IRMAC PowerPoint presentation, 2020; and presentation by Mr Pourbagher, Deputy Director of IRMAC, National Directors Meeting, Geneva, 12 February 2020.

16 "Horrible Facts About Landmines", *ISNA news*, at: <http://bit.ly/3a7i0Uc>.

17 "Landmines Still a Major Menace in Iran", *Atlantic Council*, 25 August 2016.

18 Information provided by Reza Amaninasab, Director, Ambassadors for development without borders, September 2019.

19 Ibid.

Commercial operators include AOM, Immen Sazan Omran Pars International, Immen Zamin Espadana, and Solh Afarinan-e Bedoun-e Marz (SABM). Three other companies, Imen Gostaran Mohit (IGM), Moshaver Omran Iran, and ZPP International, undertake QA/QC.²⁰ In 2017, SafeLane Global completed a 16-month project on behalf of the Southern Oil Company in Sindibad. It had been tasked with clearing 8km² of land adjacent to the Iranian border, although it was believed that this concerned mined area.²¹ No information was available on which commercial operators are currently active in mine action in Iran.

Petroleum Engineering and Development Company (PEDEC), the development arm of the National Iranian Oil Company, contracts and monitors commercial operators conducting clearance of Iran's oil and gas producing areas which are concentrated in mine-affected areas of western and south-western Iran bordering Iraq.²²

Commercial mine and ERW clearance in Iran is conducted to ensure that land is free from explosive ordnance before it is used for economic purposes or developed. It is separate to humanitarian demining of areas known or suspected to contain explosive ordnance in order to make the land safe for civilian use, which comes under the remit of IRMAC. In a number of countries, commercial demining is applied to areas whether or not there is firm evidence of a threat from explosive ordnance.

International operators are not believed to have been active in Iran since 2008.

At the time of writing no information was available on quality management procedures.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

No data were available from IRMAC on any mine survey or clearance in 2021, just as in previous years. Iran is believed to have dedicated significant resources and effort to clearing mined areas on its territory, but the results of survey and clearance, and the standards to which clearance has been conducted, have not made publicly available. According to IRMAC in 2020, more than 2 million mines and over 1 million items of ERW had been destroyed since the start of its programme 15 years earlier.²³

IRMAC lists the challenges it faces in humanitarian clearance in Iran as: high density of contamination; minefield barriers in place; flooding in contaminated areas, which hinders access; mines and UXO displaced by flooding; displacement of mines to bottom layers of soil (up to 6 metres); the transformation [degradation] of mines, and vegetation.²⁴

²⁰ Ibid.

²¹ SafeLane Global, "UXO, landmine & battle area clearance", accessed 15 June 2022 at: <https://bit.ly/3tBZtcf>.

²² Information provided by mine action expert on condition of anonymity.

²³ IRMAC PowerPoint presentation, 2020; and presentation by Mr Pourbagher, Deputy Director of IRMAC, National Directors Meeting, Geneva, 12 February 2020.

²⁴ Ibid.

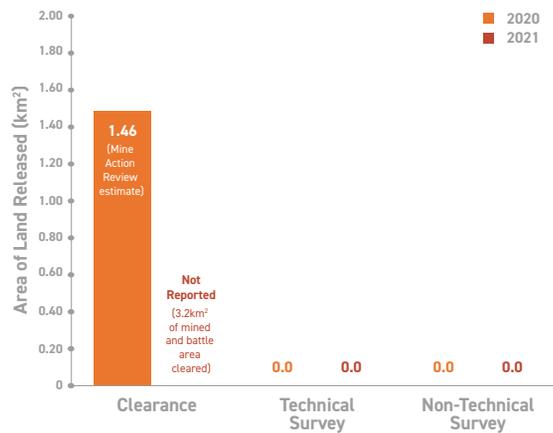
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: HEAVY (PRECISE EXTENT UNKNOWN)

AP MINE CLEARANCE IN 2021
NOT REPORTED
(3.2KM² OF MINED AND BATTLE AREA CLEARED)

AP MINES DESTROYED IN 2021
NOT REPORTED
(ANTI-PERSONNEL MINES WERE NOT DISAGGREGATED FROM OTHER ORDNANCE)

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Israel should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Israel should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Israel should report transparently on the full extent of anti-personnel mined area and their release, disaggregating anti-personnel mines from anti-vehicle mines and explosive remnants of war (ERW).

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- Israeli Mine Action Authority (INMAA)

NATIONAL OPERATORS

- Israel Defense Forces (IDF)
- IMAG
- 4M
- Minefree
- AMAN
- QUADRO Projects & Technologies LTD
- IEOD
- GA-MAN (Quality Assurance/Quality Control (QA/QC))
- 4CI SECURITY LTD (QA/QC)
- OpMS-Open Minded Solutions Ltd (QA/QC)

INTERNATIONAL OPERATORS

- The HALO Trust

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of anti-personnel mine contamination in Israel is not known. Israel reported 41.58km² of confirmed mined area and a further 48.51km² of suspected mined area, as at the end of 2017,¹ but has not provided updated contamination data since. The combined 90km² (as at end 2017) represents only the area affected by mines that is not deemed essential to Israel's security. The size of other mined areas is not made public.

The total figure reported at the end of 2017 included 18.38km² of mined area in the Jordan Valley (11.84km² of anti-personnel mined area, 6.19km² of anti-vehicle mined area, and 0.35km² of mixed mined area) and in the West Bank.² Since the last updated contamination data at the end of 2017 through to the end of 2021, The HALO Trust cleared a total of 37,466m² of anti-personnel mined area in the Jordan Valley and the West Bank, according to data reported to Mine Action Review. (See the *Clearing the Mines* reports on Palestine for 2021 and 2022 for further information).

Table 1: Mined area (at end 2017)³

Type of contamination	CHAs	Area (km ²)	SHAs	Area (km ²)
Anti-personnel mines only	201	19.93	5	39.54
Anti-vehicle mines only	29	17.00	8	1.17
Anti-personnel and anti-vehicle mines	2	4.65	9	7.80
Totals	232	41.58	22	48.51

CHA = Confirmed hazardous area SHA = Suspected hazardous area

The Israeli Mine Action Authority (INMAA) and Israeli Defence Forces (IDF) have continued to contract and conduct clearance operations since this time but have not provided comprehensive, disaggregated data on mine contamination or land release. In its Convention on Certain Conventional Weapons (CCW) Amended Protocol II report covering 2021, Israel reported that the IDF had made significant progress in re-surveying mine affected areas, and in examining the possibility of area cancellation, following the completion of a fully detailed non-technical survey.⁴

The head of the INMAA told media in 2020 that INMAA estimates a total of 200km² of mined areas in Israel. Of this, some 100km² are deemed essential to Israel's national security while the remaining 100km² will be cleared in order of priority. The online media source had obtained a map from the Israeli Ministry of Defence (MoD) that shows mines planted in a series of hotspots along Israel's eastern border. The minefields start from the north-eastern Israeli borders with Syria in the Golan Heights, with high concentration around the sea of Galilee (also known as the Tiberias lake). Mined areas stretch southwards along the Jordan valley (east) all the way to the southern region of Eliat bordering Egypt.⁵ It is not clear whether the map includes the minefields considered essential to Israel's security or only the ones that can be cleared.

Israel's mine problem dates back to the Second World War. Subsequently, Israel laid significant numbers of mines along its borders, near military camps and training areas, and near civilian infrastructure. In August 2011, Israel's military reported planting new mines to reinforce minefields and other defences along its de facto border with Syria in the Golan Heights.⁶ There the extent of mines laid by Syrian forces remains largely unknown although certain areas have been fenced off by the IDF. According to an online media report, however, fencing is not always properly maintained with warning signs, and civilians occasionally cross into minefields looking for edible plants.⁷

PROGRAMME MANAGEMENT

A March 2011 law on minefield clearance established the INMAA to undertake a "comprehensive programme of mine clearing projects inside Israel".⁸ The law's aim was "to create a normative infrastructure for the clearance of minefields that are not essential to national security, and to declare them as free from landmines with the highest degree of safety to civilians, in accordance with the international obligations of the State of Israel, and within the shortest period of time possible."⁹

1 Email from Michael Heiman, formerly Director of Technology and Knowledge Management, Israeli National Mine Action Authority (INMAA), 26 May 2018.

2 Ibid.

3 Ibid.

4 CCW Amended Protocol II Article 13 Report (covering 2021), Form B.

5 "Below the surface: Israel's mine map is exposed", N12, 19 September 2020, (Hebrew), at: <https://bit.ly/3xfQ9KV>.

6 "Israel army plants new mines along Syria border", *Associated Press*, 13 August 2011.

7 "New Golan mine-clearing project to begin this summer", *Jerusalem Post*, 16 March 2017, at: <http://bit.ly/2MyEKBC>.

8 Minefield Clearance Law 5771-2011 of March 2011, unofficial translation at: <http://bit.ly/2GDOQgJ>; CCW Amended Protocol II Article 13 Report (covering 2010), Form A. Form A refers to details provided in Form D, but information in Form D has been deleted.

9 Minefield Clearance Law 2011 (MCL 5771-2011).

The law provides for the establishment of a professional Advisory Board, to be composed of representatives of relevant ministries and governmental and municipal authorities, as well as a representative for mine victims. It calls for the formulation of annual and multi-year plans; coordination and cooperation between INMAA and the IDF; employment of private contractors in mine clearance operations; earmarking of specific government budget for such activities; and the creation of a National Minefield Clearance Fund which will receive, manage, and allocate donations.¹⁰

In February 2019, the Director of INMAA reported that a new regional law had given INMAA responsibility for clearing former military bases and for addressing abandoned explosive ordnance (AXO), unexploded ordnance (UXO), and anti-vehicle mines. Prior to this, the INMAA had only had responsibility for addressing anti-personnel mines and mixed mined areas.¹¹

INMAA was established within the MoD, with ministry staff responsible for planning mine action.¹² INMAA is in charge of clearance operations and release of land intended for

civilian use.¹³ It assumes responsibility to: establish a national policy for mine clearance, taking into consideration military procedures and international demining standards; liaise with operators to carry out demining activities; oversee mine clearance activities and contact relevant military commanders for the opening of closed military zones; coordinate activities with the IDF and other government authorities; execute public relations activities to increase awareness of existing minefields; and prepare annual and long-term demining plans.¹⁴

In 2017, the annual mine action budget for Israel was NIS41.7 million (approx. US\$11.5 million), of which NIS27 million was from the INMAA's budget and the remaining NIS14.7 million from additional external funding by various infrastructure development companies and state authorities.¹⁵ The size of INMAA's budget has not been made public since. The Geneva International Centre of Humanitarian Demining (GICHD) supported INMAA's technical activities in 2020¹⁶ but not in 2021.¹⁷

ENVIRONMENTAL POLICIES AND ACTION

The INMAA website indicates that Israel has a standard operating procedure (SOP) on environmental protection and preservation of nature and landscapes.¹⁸ The website has one page dedicated to "Preserving the environment" and another on how operations are conducted indicates that when a project is identified for clearance, research includes environment factors and environmental impact and involves various authorities and stakeholders including the Nature Reserves Authority, agricultural coordinators, and the regional council.¹⁹

GENDER AND DIVERSITY

The extent to which gender and diversity are mainstreamed in Israel's mine action programme is not known. Israel has stated that its mine risk education (MRE) material are all produced in both Hebrew and Arabic.²⁰

INFORMATION MANAGEMENT

According to Israel, in 2021, the IDF's Engineering Corps continued to promote improved minefield GPS recording and Geographic Information System (GIS) capacity to build an "accurate archive of manually-emplaced minefields". The Engineering Corps maintains a set of detailed regulations and instructions for recording minefields and mined areas.²¹ In addition, INMAA manages a "minefield information bank" that is open for public queries concerning demining plans and

programmes, and indicates measures taken to enhance public awareness of safety and security to minimise mine-related risks.²² In 2021, the IDF continued its programme to preserve the history of the minefields, including in digital records, while the Israeli Mapping Centre (IMC) produces "commercially available" maps with minefields said to be clearly marked.²³

10 CCW Amended Protocol II Article 13 Report submitted in 2022 (covering 2021), Form D.

11 Interview with Marcel Aviv, Director, INMAA, in Geneva, 7 February 2019.

12 Email from Michael Heiman, formerly INMAA, 26 May 2018.

13 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.

14 IDF website, "Israel National Mine Action Authority", undated but accessed 17 August 2022 at: <https://bit.ly/3AmMLAT>.

15 Email from Michael Heiman, formerly INMAA, 26 May 2018.

16 CCW Amended Protocol II Article 13 Report (covering 2020), Form E.

17 GICHD website, accessed on 21 July 2022 at: <https://bit.ly/3Pr9P7A>.

18 Standard 03.20 (Version 05/2020) listed on Israel's National Mine Action Authority (INMAA's) website (Hebrew text), accessed on 17 August 2022 at: <https://bit.ly/3dDNSEf>.

19 INMAA's website (Hebrew text), accessed on 17 August 2022 at: <https://bit.ly/3dpPL7t>.

20 CCW Amended Protocol II Article 13 Report (covering 2021), Form A.

21 Ibid., Form B.

22 Ibid., Forms A and B.

23 Ibid., Form A.

PLANNING AND TASKING

INMAA is "tasked with forming a national demining plan, which will be consistent with Israel's international obligations and based on IDF's demining procedures and instructions, as compatible as possible with International Mine Action Standards".²⁴ According to Israel, INMAA defines clearance policies, sets the national priorities, and implements them in coordination with the relevant governmental ministries, the IDF, and local authorities.²⁵

INMAA approves annual and perennial mine clearance plans which are executed by "civilian local operators".²⁶ INMAA's multi-year clearance plan for 2017–20 focused on technical survey and clearance in the Golan Heights in the spring/summer/autumn, and in the Jordan Valley and Arava Plain in the winter.²⁷ Information on the priorities of the updated mine

clearance plan were not made available but INMAA's website indicates that, since 2020, four clearance tasks have been in the planning stages for approximately 0.17km² across three minefields in the Golan Heights and for another 0.19km² in Naama Bell in the Jordan valley.²⁸

Clearance tasks are assigned according to a classification formula laid down by INMAA. The criteria used for the formula are largely based on the risk level and development potential of the affected areas.²⁹ INMAA has in the past (in the four years to 2016) studied the social and economic impacts of land released, as well as on the potential impact for future clearance sites,³⁰ but it is unclear to what extent this continues.

LAND RELEASE SYSTEM

National mine action standards, which concern rules and regulations covering clearance methods, quality management, legislation, and insurance, are available on the INMAA website and updated "on occasion".³¹ There are also IDF regulations and orders concerning marking, fencing, and monitoring, as well as demining and disposing of mines, booby-traps, and other devices.³² IDF's instructions and SOPs are reported to be regularly reviewed.³³

OPERATORS AND OPERATIONAL TOOLS

Commercial companies are contracted to conduct clearance as well as quality assurance (QA) and quality control (QC). In 2017, 106 demining personnel and 36 machines were deployed for clearance operations.³⁴ For 2021, INMAA listed seven approved mine clearance companies and three QA/QC companies in its CCW Amended Protocol II Article 13 Report.³⁵

In addition, the IDF conducts mine clearance according to their own mine action plans "that are executed by their military methods and techniques". They have an annual programme that includes demining, monitoring, and maintenance of mined area protection.³⁶ During the winter, the IDF give special attention to minefields that are close to farms, residential areas, or hiker routes, as mines may be carried into these areas by floods.³⁷ In 2021, Israel reported that the IDF conducted hundreds of inspections of the fencing and marking of minefields.³⁸

The HALO Trust works under the auspices of both INMAA and the Palestine Mine Action Centre (PMAC) in the West Bank (see the *Clearing the Mines* report on Palestine for further information). Every mine clearance project in Israel has an INMAA supervisor, a QA/QC contractor, and a clearance operator.

Israel uses several types of machines in its mine clearance operations for ground preparation, survey, and clearance. They are said to include, as and where appropriate, screening and crushing systems, bucket loaders, excavators, sifters, and flails/tillers. All mine clearance machines are tested and approved by INMAA during the initial preparation period of an operation.³⁹ Some of these operations are conducted by Israel directly, while others are performed by contractors.⁴⁰

24 Ibid., Form D.

25 Ibid., Form B.

26 Ibid.

27 Email from Michael Heiman, formerly of INMAA, 26 May 2018.

28 INMAA's website (Hebrew text), accessed 28 July 2022 at: <https://bit.ly/3B7y1aM>.

29 Email from Michael Heiman, INMAA, 23 July 2017.

30 Email from Michael Heiman, INMAA, 19 September 2016.

31 CCW Amended Protocol II Article 13 Report (covering 2020), Form B; and INMAA's website, accessed on 6 July 2021, (Hebrew text), at: <https://bit.ly/3ysdUj3j>.

32 CCW Amended Protocol II Article 13 Report (covering 2021), Form D.

33 Ibid., Form A.

34 Email from Michael Heiman, formerly of INMAA, 26 May 2018.

35 CCW Amended Protocol II Article 13 Report (covering 2021), Form G.

36 Email from Eran Yuvan, Ministry of Foreign Affairs, 29 April 2014; and CCW Amended Protocol II Article 13 Report (covering 2019), Form B.

37 CCW Amended Protocol II Article 13 Report (covering 2021), Form B.

38 Ibid.

39 Ibid., Form C.

40 Email from Michael Heiman, INMAA, 23 July 2017.

A pilot project using mine detection dogs (MDDs) in 2017⁴¹ had concluded that dogs would not be a valuable tool.⁴² However, after investigating and conducting further research into animal detection and behaviour, INMAA planned to conduct further trials.⁴³

According to its website, part of INMAA's plan since 2020 has been to conduct mechanical and manual clearance of nearly 0.17km² across three minefields in the Golan Heights, and of 0.19km² in Naama Bell in the Jordan valley.⁴⁴ According to online media reports, as at March 2021, clearance in Naama Bell area was reported to be underway,⁴⁵ and as at February 2022, clearance was nearing completion at least in one of the sites in the Golan Heights (Mitzpe Gadot)⁴⁶ although the INMAA website still shows both sites as in planning.⁴⁷

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

The precise extent of release of anti-personnel mined area has not been reported for 2021. Israel does not disaggregate in its CCW Amended Protocol II reporting between release of mined area and clearance of battle area. Israel reported that the IDF had made "significant progress" in re-surveying mined areas in 2021, as well as in assessing the possibility of area cancellation, following completion of non-technical survey.⁴⁸ No details were provided.

In reporting under CCW Amended Protocol II, Israel stated that, in 2021, INMAA cleared approximately 2.65km² of land, destroying 13,370 mines and ERW,⁴⁹ an increase from the 1.28km² cleared in 2020, when 1,200 mines and items of ERW were reported destroyed. In addition, the IDF Engineering Corps cleared 0.56km² in 2021, destroying 140 mines and ERW,⁵⁰ an increase on the 0.18km² reported cleared in 2020 but a decrease on the 243 mines and ERW destroyed in the process.⁵¹ Again, the available data are not disaggregated by type of mine. There was no reported clearance in the West Bank by The HALO Trust in 2021, as funding was not available.

PROGRESS TOWARDS COMPLETION

It is likely to take many decades to clear remaining anti-personnel mine contamination in Israel, even only in areas deemed not essential to Israel's security.

41 Ibid.

42 Email from Michael Heiman, formerly INMAA, 26 May 2018.

43 Interview with Marcel Aviv, INMAA, Geneva, 7 February 2019.

44 Israel INMAA website, accessed on 6 July 2021.

45 "Watch: Minefield clearance near Jericho Israel today", *The Limited Times*, 30 March 2021, at: <https://bit.ly/3wu6Wc9>.

46 "Documentation: Ammunition discovered in an old Syrian bunker in the Golan Heights was destroyed Israel today", *The Limited Times*, 1 February 2022, at: <https://bit.ly/3PX13hC>.

47 Israel INMAA website (Hebrew text), accessed on 28 July 2022 at: <https://bit.ly/3B7y1aM>.

48 CCW Amended Protocol II Article 13 Report (covering 2021), Form B.

49 Ibid.

50 Ibid.

51 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.

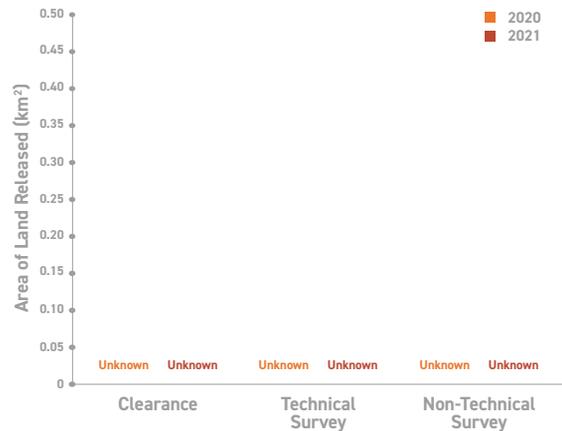
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE
CLEARANCE IN 2021
UNKNOWN

AP MINES
DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Kyrgyzstan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Kyrgyzstan should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Kyrgyzstan should detail whether it has fully addressed mine contamination in areas under its jurisdiction or control and, if not, report on the extent and location of remaining mined areas and clearance operations.

DEMINING CAPACITY

MANAGEMENT CAPACITY*

- Kyrgyzstan has no functioning mine action programme.

NATIONAL OPERATORS

- The Ministry of Defence (MoD) undertakes clearance of explosive remnants of war (ERW).

INTERNATIONAL OPERATORS

- None

OTHER ACTORS*

- None

* This is based on information from earlier years. It is not known if the information remains accurate.

UNDERSTANDING OF AP MINE CONTAMINATION

Kyrgyzstan is suspected to be contaminated by mines, though the precise location and extent of any mined areas is not known. According to the Minister of Defence (MoD), contamination in the southern Batken province bordering Tajikistan and Uzbekistan, the result of mine use by Uzbekistan's military between 1999 and 2000, was cleared by Uzbek forces in 2005.¹ It was reported, however, that rainfall and landslides had caused some mines to shift.² In 2003, Kyrgyz authorities claimed that

1 Fax from Abibilla Kudaiberdiev, Minister of Defence, 4 April 2011.

2 See, e.g., Y. Yegorov, "Uzbekistan agrees to remove minefields along its border with Kyrgyzstan", *Eurasia Daily Monitor*, Vol. 1, No. 41 (29 June 2004).

Uzbek forces had also laid mines around the Uzbek enclaves of Sokh and Shakhimardan located within Kyrgyzstan. Press reports have suggested that Uzbek troops partially cleared territory around the Sokh enclave in 2004–05 and that they completely cleared mines around the Shakhimardan enclave in 2004.³

In October 2017, Uzbek President Islam Karimov, and his Kyrgyz counterpart, Almazbek Atambaev, signed an agreement to demarcate some 85% of the countries' nearly 1,300km-long border and began discussing options for the 36 disputed sectors.⁴ In March 2021, the prime ministers of Kyrgyzstan and Uzbekistan reached an agreement to end territorial disputes. The agreement entails land swaps and facilitation of movement between the two countries. According to online media sources, the Kyrgyz head of security services, Kamchybek Tashiyev, announced that "issues around the Kyrgyz-Uzbek border have been resolved 100 percent" and that "there is not a single patch of disputed territory left".⁵ However, other sources suggested that, in April 2021, just a month later, Mr Tashiyev had told residents of some disputed areas in Kyrgyzstan's southern provinces that the agreement was "not completely a done deal".⁶ It has also been reported that the agreement was not ratified after Kyrgyz citizens voiced dissatisfaction over terms concerning use of a reservoir.⁷

Kyrgyzstan has admitted using anti-personnel mines in 1999 and 2000 to prevent infiltration across its borders, but has claimed that all the mines were subsequently removed and destroyed.⁸ In June 2011, a government official confirmed: "We do not have any minefields on the territory of Kyrgyzstan."⁹

In October 2011, ITF Enhancing Human Security (ITF), the Organization for Security and Co-operation in Europe (OSCE), and Kyrgyzstan's Ministry of Defence conducted a mine action assessment mission. The assessment confirmed that poor ammunition storage conditions as well as obsolete ammunition posed a serious threat to human security. Agreement on cooperation was reached on 23 July 2015, when the ITF signed a Protocol on Cooperation with the MoD of the Kyrgyz Republic.¹⁰ The ITF has reported that in 2014 it continued to implement activities agreed on in the Protocol on Cooperation, which included technical checks on anti-personnel mines and other ammunition in three storage warehouses.¹¹

PROGRAMME MANAGEMENT

Kyrgyzstan has no functioning mine action programme. Clearance of explosive remnants of war (ERW) is carried out by the MoD.¹²

The Commonwealth of Independent States (CIS), of which Kyrgyzstan is a member, has reported that on 24 June 2022, following a meeting of the CIS Council of Defence Ministers, Russia's Minister of Defence, Sergei Shoigu, pledged that a joint unit of humanitarian demining will be created in the CIS. No timeline for this was given.¹³ Kyrgyzstan has not shared any information on this with Mine Action Review and it is not known if Kyrgyzstan has been involved in these discussions.

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Kyrgyzstan in order to minimise potential harm from clearance.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

There are no reports of any survey or clearance of mined areas occurring in 2021.

3 S. Zhimagulov and O. Borisova, "Kyrgyzstan Tries to Defend Itself from Uzbek Mines", *Navigator* (Kazakhstan), 14 March 2003; and "Borders are becoming clear", Blog post, at: <http://bit.ly/2z0s7qU>.

4 "Tug-Of-War: Uzbekistan, Kyrgyzstan Look To Finally Settle Decades-Old Border Dispute", *Radio Free Europe*, 14 December 2017, at: <http://bit.ly/2yXsrXt>.

5 "Kyrgyzstan, Uzbekistan sign deal to end border disputes", *Euroasianet*, 26 March 2021, at: <https://bit.ly/3vD5QKA>.

6 "'No Issues Remain?' Not So Fast. Kyrgyz-Uzbek Border Disputes Don't Appear To Be Decided", *Radio Free Europe*, 2 April 2021, at: <https://bit.ly/3zrFrEK>.

7 "Kyrgyzstan reports deaths after Uzbek border troops open fire", *Aljazeera*, 6 May 2022, at: <https://bit.ly/3zuh4pT>.

8 Statement of Kyrgyzstan, Intersessional Meetings (Standing Committee on General Status and Operation of the Convention), Geneva, 8 May 2006; and Letter 011-14/809 from the Ministry of Foreign Affairs, 30 April 2010.

9 Letter from Amb. G. Isakova, Permanent Mission of Kyrgyzstan to the UN in Geneva, 29 June 2011.

10 ITF, "Kyrgyz Republic", accessed 10 October 2015, at: <http://bit.ly/31Fwd44>.

11 *Ibid.*

12 "Border guards of Kyrgyzstan begin clearance on the border with Tajikistan", *EurAsia Daily*, 4 May 2021, (Russian), at: <https://bit.ly/3dbir0T>.

13 CIS, "Russian Defense Minister Sergei Shoigu said that a joint unit of humanitarian demining will be created in the CIS", Press release, 27 June 2022, at: <https://bit.ly/3b1ulgn>.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE
CLEARANCE IN 2021

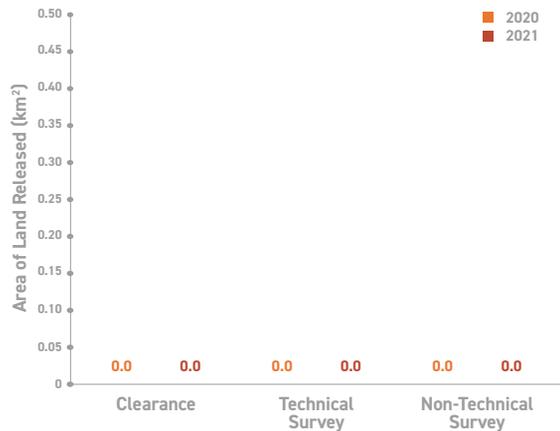
0M²

AP MINES
DESTROYED IN 2021

56

(BASED ON NATIONAL
AUTHORITY DATA)

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- The Lao People's Democratic Republic (Lao PDR) should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Lao PDR should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- In light of the continuing reports by clearance operators of anti-personnel mines being encountered during cluster munition remnant survey (CMRS) and roving tasks, the National Regulatory Authority (NRA) should consider convening a sector-wide meeting to discuss National Standards, accreditation, and procedures for addressing all mine contamination. This process might benefit from the establishment of a technical working group specifically for landmines.
- Lao PDR should ensure that its Information Management System for Mine Action (IMSMA) database disaggregates data on landmines, distinguishing anti-personnel mines from anti-vehicle mines.
- The NRA should adopt the new Safe Path Forward III strategy for the sector for 2021–30 as soon as possible.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Regulatory Authority (NRA) Board
- National Regulatory Authority (NRA)

NATIONAL OPERATORS

- UXO Lao
- Humanitarian teams of the Lao People's Army (Army 58)
- Commercial operators

INTERNATIONAL OPERATORS

- The HALO Trust
- Humanity and Inclusion (HI)
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)
- Commercial operators

OTHER ACTORS

- Asian Regional Mine Action Center (ARMAC)
- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)
- Tetra Tech

UNDERSTANDING OF AP MINE CONTAMINATION

While by far the greatest contamination in Lao PDR is from explosive remnants of war (ERW), in particular cluster munition remnants (CMR) (see the *Clearing Cluster Munition Remnants 2022* report on Lao PDR for further information), Lao PDR is also contaminated by anti-personnel and anti-vehicle mines. The extent of mine contamination is not known. During the Indochina conflict of the 1960s and 1970s, all sides in the war laid anti-personnel mines, particularly around military installations and patrol bases. Mined areas also exist in some border regions as a legacy of disputes or tensions with or within neighbouring countries.¹

A Humanity and Inclusion (formerly Handicap International, HI) survey in 1997 found mines in all 15 provinces it surveyed, contaminating 214 villages.² As at March 2022, HI had identified 54 suspected and confirmed minefields in 22 villages in Houaphanh district of Houaphanh province, where it is currently operating.³

Anti-personnel mines discovered included United States (US)-manufactured M7, M16, and M14 mines, Vietnamese MBV-78A1 mines, and Soviet POMZ mines.⁴ Across Lao PDR as a whole, the NRA has reported that “gravel mines” (US air-dropped anti-personnel mines) had all degraded, but remaining mine types included M14 anti-personnel blast mines, M16 bounding fragmentation mines, M18 claymore mines, and M15 and M19 anti-vehicle mines, Soviet or Chinese PMN anti-personnel blast mines, POMZ fragmentation stake mines, and TM41, TM46, and TM57 anti-vehicle mines.⁵

The remote location of many mined areas means that mines have little impact and are not a clearance priority. Of 81,646 items of explosive ordnance destroyed in 2021, only 56 (less than 0.07%) were mines.⁶ The NRA, however, has observed that “with a steady expansion of land use ‘mined areas’ will become areas for growing concern.”⁷

PROGRAMME MANAGEMENT

The NRA, created by government decree in 2004 and active since 2006, has an interministerial board composed of representatives from government ministries and is chaired by the Minister of Labour and Social Welfare.⁸ The Prime Minister of Lao PDR approved a new decree, “On the Organisation and Operations of the National Regulatory Authority for UXO in Lao PDR” in February 2018. The decree defines the position, role, duties, rights, organisational structure, and the working principles and methods of the NRA.⁹

The NRA acts as the coordinator for national and international clearance operators and serves as the national focal point for the sector. This includes overall management and consideration of policy, planning, projects, and coordination of the implementation of the national strategy nationwide, as well as NRA planning and coordination functions at the provincial and district levels.¹⁰ The current director of the NRA has been in post since June 2019.¹¹

The main focus of the NRA is on addressing the massive contamination from CMR and other ERW. However, responsibility for the clearance of mined areas in Lao PDR is also led by the NRA.¹²

The United Nations Development Programme (UNDP) provides programmatic and technical support to the NRA and UXO Lao, including with regard to information sharing and coordination.¹³ Further capacity development in information management (IM), quality management (QM), logistics, and operations support is provided, primarily to UXO Lao, and to a lesser extent the NRA, through a US-funded contractor, Tetra Tech.¹⁴ HI provides capacity development support to the provincial NRA in Houaphanh province.¹⁵

1 NRA website, “UXO types: Mines”, accessed 9 March 2020 (page no longer online).

2 Handicap International, “Living with UXO, National Survey on the Socio-Economic Impact of UXO in Lao PDR”, Vientiane/Brussels, 1997, p. 7.

3 Email from Julien Kempeneers, Humanitarian Mine Action Coordinator, 30 March 2022.

4 Emails from Julien Kempeneers, HI, 27 August 2019, and 25 March and 29 June 2020.

5 NRA website, “UXO types: Mines”, 9 March 2020 (page no longer online).

6 Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (covering 2021), Form A; Convention on Cluster Munitions (CCM) Article 7 Report (covering 2021), Form F.

7 NRA website, “UXO types: Mines”, 9 March 2020 (page no longer online).

8 CCM Extension Request 2019, Part B, Detailed Narrative, p. 18.

9 Government Decree No. 67, dated 12 February 2018; CCM Extension Request 2019, Part B, Detailed Narrative, p. 17; and Statement of Lao PDR on National Implementation Efforts, CCM Eighth Meeting of States Parties, Geneva, 3 September 2018.

10 CCM Extension Request 2019, Part B, Detailed Narrative, p. 18.

11 Email from Olivier Bauduin, US PM/WRA, 29 September 2020.

12 Email from Douangsy Thammavong, Deputy Director, NRA, 20 June 2022.

13 Email from Rupert Leighton, Chief Technical Advisor, UNDP, 12 September 2022.

14 Emails from Nigel Orr, Technical Advisor Survey and Clearance, Tetra Tech, 14 June 2019; and Simon Rea, Lao PDR Task Order Leader, Tetra Tech, 16 August 2022; and “US Renews Partnership with Lao PDR to Build Capacity in UXO Sector”, US Embassy in Lao PDR, 31 January 2020, at: <http://bit.ly/2LzmG8J>.

15 Email from Julien Kempeneers, HI, 30 March 2022.

In 2021, UXO Lao received capacity development support through various implementing partners as follows:

- Annual work plan formulation and confirmed hazardous area (CHA) prioritisation system; Excel training for asset management officers; project management training for mid-level management, and an exchange programme on IM and QM between UXO Lao and the Cambodian Mine Action Centre (CMAC) through South-South Cooperation, all supported by the Japan International Cooperation Agency (JICA).
- Communications training, supported by UNDP.
- Vallon VMH4 detector training, supported by Tetra Tech.¹⁶

A UXO Sector Working Group (SWG), led by the chair of the NRA board, and co-chaired by UNDP and the US Ambassador in Vientiane, which normally meets biannually, brings together key stakeholders, including donors.¹⁷ There were

two SWG meetings in 2021 – in June and November.¹⁸ Other meetings were convened by UNDP on the draft Safe Path Forward III Strategy.¹⁹

International clearance operators continued to have good cooperation and coordination with the NRA at the national level, and at provincial and district levels.²⁰ Humanitarian clearance operators are involved in key decision-making processes by the NRA, including through participation in sector meetings and Technical Working Groups (TWGs), sector meetings, and through fruitful discussions during other formal and informal meetings and field visits.²¹ One of the biggest challenges encountered by operators in Lao PDR continues to be the procedure for MoUs, which remains lengthy, complex, and labour-intensive (see the *Clearing Cluster Munition Remnants 2022* report on Lao PDR for further information).

ENVIRONMENTAL POLICIES AND ACTION

Lao PDR has a National Mine Action Standard (NMAS) on Environmental Management (chapter 21), but it is in need of revision. The NMAS refers to outdated national laws on environmental protection, rather than the current national environmental legal framework with which UXO sector activities should comply.²² It is hoped that the new Safe Path Forward III Strategy, which was still being finalised as at July 2022, will incorporate key environmental issues discussed during its drafting, such as waste management; water and waste-water management; protection of biodiversity and ecologically sensitive areas; impact assessment, monitoring, and reporting; and green office models in relation to UXO operations.²³

UXO Lao does not currently have an environmental management standing operating procedure (SOP), but said that the environment is taken into consideration during demining, in particular with respect to mine contamination.²⁴ Tetra Tech is supporting UXO Lao to revise their operations SOPs and said the revision will include a chapter on environmental management.²⁵

For details regarding measures being taken by international clearance operators to minimise potential harm to the environment from survey and clearance operations, please see the *Clearing Cluster Munition Remnants 2022* report on Lao PDR.

GENDER AND DIVERSITY

For details regarding gender and diversity in Lao PDR's survey and clearance programme, please see the *Clearing Cluster Munition Remnants 2022* report on Lao PDR.

¹⁶ Email from Noupin Phimmasy, Deputy Chief of Programme Office and Public Information Unit, UXO Lao, 4 June 2022.

¹⁷ Interview with Phil Bean, US PM/WRA, and Olivier Bauduin, Sterling International, in Geneva, 14 February 2018; CCM Extension Request 2019, Part B, Detailed Narrative, pp. 4 and 25; and email from Blossum Gilmour, Programme Manager, MAG, 21 March 2019.

¹⁸ Emails from Rebecca Letven, Country Director, MAG, 30 March 2022; Cameron Imber, Programme Manager, HALO Laos, 31 March 2022; and Katherine Harrison, Programme Coordinator, NPA, 11 May 2022.

¹⁹ Email from Katherine Harrison, NPA, 11 May 2022.

²⁰ Emails from Rebecca Letven, MAG, 30 March 2022; Cameron Imber, HALO Laos, 31 March 2022; Katherine Harrison, NPA, 11 May 2022; and Julien Kempeneers, HI, 30 March 2022.

²¹ Emails from Simon Rea, Regional Director, South and South East Asia, MAG, 17 June 2020; Rebecca Letven, MAG, 30 March 2022; Katherine Harrison, NPA, 6 May 2020 and 31 March 2021; and Cameron Imber, HALO Laos, 31 March 2022.

²² Email from Katherine Harrison, NPA, 11 May 2022.

²³ Ibid.

²⁴ Email from Noupin Phimmasy, UXO Lao, 4 June 2022.

²⁵ Email from Simon Rea, Tetra Tech, 16 August 2022.

INFORMATION MANAGEMENT AND REPORTING

In November 2019, Lao PDR stated at the Fourth Review Conference of the Anti-Personnel Mine Ban Convention (APMBC) in Oslo, that it was in the process of preparing a voluntary APMBC Article 7 report.²⁶ However, as at July 2022, a voluntary report had yet to be submitted. The only voluntary Article 7 report submitted previously by Lao PDR, was in 2011.

As yet, no distinction is made in the Information Management System for Mine Action (IMSMA) database in the NRA between anti-personnel mines and anti-vehicle mines.²⁷

For details regarding Information Management and Reporting in Lao PDR's survey and clearance programme more broadly, please see the *Clearing Cluster Munition Remnants 2022* report on Lao PDR.

PLANNING AND TASKING

As part of efforts to implement the Convention on Cluster Munitions (CCM) Vientiane and Dubrovnik Action Plans, the Lao Government adopted "Safe Path Forward II, 2011-20", a 10-year national strategy for the UXO sector. The strategy's goal was "to reduce the humanitarian and socio-economic threats posed by UXO to the point where the residual contamination and challenges can be adequately addressed by a sustainable national capacity fully integrated into the regular institutional set-up of the Government."

Through its funding of the agreement between Tetra Tech and the NRA, the United States continued to "support the Lao Government as it formulates its 10-year National Strategic Plan for the UXO Sector, a plan that will map the path to achieving SDG 18 – the elimination of UXO as a barrier to national development by 2030."²⁸

A new national strategic plan for the UXO Sector has been in the process of elaboration for 10 years, in line with SDG 18 under the 2030 SDG agenda. UNDP provided support to the NRA in elaboration of a new National Strategy for the UXO Sector (2021-30), "The Safe Path Forward III" in 2021, including a joint online consultation on the draft strategy in October 2021.²⁹ A new draft of the strategy was presented to stakeholders in February 2022.³⁰ At the CCM Intersessional Meetings in May 2022, Lao PDR announced that "Safe Path Forward III" was expected to be adopted in June 2022.³¹ As at August, it had been finalised and was being translated into English.³²

It is not known to what extent the new "Safe Path Forward III", will include addressing anti-personnel (and anti-vehicle) mine contamination.

LAND RELEASE SYSTEM

Lao PDR's National Standards make a clear distinction between UXO clearance (including CMR) and mine clearance, and for the purposes of the National Standards, "UXO does not include hand-laid mines but it may include disposal of 'one off' mines located during EOD roving tasks."³³ As such, the National Standard on UXO clearance only relates to UXO clearance operations and not to mine clearance operations.³⁴

According to Lao PDR's National Standard on Mine Clearance Operations (Chapter 12), "the systematic locating and clearing of hand-laid mines in known or suspected mined areas, are not commonly conducted in Lao PDR. However, it is known that mined areas exist in Lao PDR and at some stage in the future these areas will have to be cleared."³⁵

According to Chapter 7 of the National Standards, if a mine is located during UXO clearance, work is immediately ceased and "the clearance supervisor should then assess the situation and determine if the mine is a random one or part of a mined area. If the mine is assessed as being part of a mined area, work on the site is to cease and the matter reported to the tasking authority. Details of mined areas are to be reported by the clearance organisation concerned to the NRA head office and the NRA provincial office."³⁶

The standards also note that: "Some relatively small-scale mine clearance has been carried out by UXO Lao and by commercial operators in the past but mine clearance operations are not regularly carried out as a deliberate mine action activity in Lao PDR."³⁷

26 Statement of Lao PDR, Fourth APMBC Review Conference, Oslo, 29 November 2019.

27 Emails from Mark Frankish, UNDP, 26 August 2020; and Rupert Leighton, UNDP, 10 August 2022.

28 "US Renews Partnership with Lao PDR to Build Capacity in UXO Sector", US Embassy in Lao PDR, 31 January 2020.

29 Statement of Lao PDR on National Implementation Measures, Second CCM Review Conference (Part 1, virtual meeting), 25-27 November 2020; and email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

30 Emails from Cameron Imber, HALO Laos, 31 March 2022; Julien Kempeneers, HI, 30 March 2022; and Rebecca Letven, MAG, 30 March 2022.

31 Statement of Lao PDR on National Implementation Measures, CCM Intersessional meetings, Geneva, 16-17 May 2022.

32 Interview with Chomyaeng Phengthongsawat, NRA, in Geneva, 31 August 2022.

33 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 0: Introduction and Glossary", accessed on NRA website on 29 July 2021, p. xi.

34 Lao PDR NS, "Chapter 7: UXO Clearance Operations", accessed on NRA website on 29 July 2021, p. 5.

35 Lao PDR NS, "Chapter 12: Mine Clearance Operations", accessed on NRA website on 29 July 2021, p. 5.

36 Lao PDR NS, "Chapter 7: UXO Clearance Operations", p. 13.

37 Lao PDR NS, "Chapter 12: Mine Clearance Operations", accessed on NRA website on 29 July 2021, p. 5, note 1.

According to the National Standards: "Mine clearance operations are considerably more dangerous than UXO area clearance operations and the requirements and procedures for mine clearance are more stringent. When mine clearance operations are necessary, they are only to be carried out by accredited mine clearance organisations with personnel with the appropriate training and equipment and specific mine clearance operating procedures."³⁸

With respect to landmines, the National Standards are in need of being brought up to date in accordance with the latest International Mine Action Standards (IMAS). According to its reporting under Protocol V of the Convention on Certain Conventional Weapons (CCW), the standards section of the NRA reviews the national standards at least every three years and all mine action stakeholders are invited to participate in these reviews. According to Lao PDR's CCW transparency report, UXO/mine action organisations and other UXO/mine action stakeholders are encouraged to make written recommendations for changes to the national standards at any time, on which the NRA will seek input from other stakeholders and consider the recommendation and the inputs received.³⁹

The HALO Trust and HI have both provided the NRA with suggested amendments to the national standards regarding landmine survey and clearance.⁴⁰ NRA has said that the national standards related to anti-personnel mines were being reviewed,⁴¹ however as at March 2022, no updates had yet to be made to the national standards or operating procedures with respect to mines.⁴²

While the current national standards do already allow for mine clearance and set parameters for safe distances and other relevant issues, there is a need to strengthen national institutional knowledge on mine clearance, including in relation to quality assurance (QA) and training.⁴³

Non-governmental organisation (NGO) clearance operators in Lao are not currently formally accredited for mine clearance and permission for explosive ordnance disposal (EOD) is given on a case by case basis when landmines are found.⁴⁴ UXO Lao said that in collaboration with Tetra Tech, it was focused on revising its SOP with respect to addressing mine contamination. It expected the updated SOP to have been completed by the end of 2022.⁴⁵ The HALO Trust drafted a

mine clearance SOP and submitted it for approval to the NRA in 2021.⁴⁶ As at March 2022, HALO had yet to receive any feedback on the SOP, however, it had received the tacit approval of the NRA for mine clearance to commence. HALO Trust's first dedicated mine clearance teams were deployed in November 2021.⁴⁷

Over the course of 2021, HALO Laos has significantly increased its mine-threat survey and clearance capacity. This has involved training a non-technical survey team to focus solely on collecting information related to landmines and delineating mined areas. This has also involved the completion of three mine clearance operator courses that trained 42 staff to conduct manual demining. As at March 2022, two HALO mine clearance teams were conducting operations on the first dedicated mine clearance task in Laos PDR, a former Royal Lao Army military base in Phalanxai district, Savannakhet province, with significant contamination from fragmentation mines. HALO said that it was eager to work with the NRA and other operators to help them build capacity in this area. Representatives from the NRA and HI participated in HALO's mine clearance operator course which took place in June 2022.⁴⁸

HI reported that there had been good coordination between HALO Trust and HI EOD experts to discuss methodologies, equipment, detectors, and training stakes.⁴⁹ HI believes that reporting on the presence of landmines needs to be strengthened. Furthermore, HI highlighted that in practice, determining whether a mine is part of a bigger mined area can prove challenging, especially if field-based personnel are not trained (or equipped) to address anti-personnel mine contamination.

Landmines may, for example, have been left behind, moved by villagers, or washed away by water, and areas where there is no strong evidence that further mines are planted or emplaced might be reported or wrongly interpreted as mined areas.⁵⁰ At the July 2019 TWG meeting on clearance, HI proposed an addendum to the national standard to help address this.⁵¹ Landmines have been a regular topic of discussion in subsequent TWG meetings, and HI believed it would be useful to have a TWG with the NRA and interested operators, specifically for landmines, as had been suggested by the NRA at one point.⁵² However, as at July 2022, no such TWG had yet been established.

38 Lao PDR NS, "Chapter 12: Mine Clearance Operations", accessed on NRA website on 29 July 2021, p. 5.

39 CCW Protocol V Article 10 Report (covering 2022), Form F.

40 Emails from Cameron Imber, HALO Laos, 31 March 2022; and Julien Kempeneers, HI, 30 March 2022.

41 Email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

42 Email from Douangsy Thammavong, NRA, 20 June 2022.

43 Email from Rebecca Letven, MAG, 26 March 2021.

44 Emails from Julien Kempeneers, HI, 30 March 2022; Cameron Imber, HALO Laos, 31 March 2022; Katherine Harrison, NPA, 6 May 2020; and Rebecca Letven, MAG, 30 March 2022.

45 Email from Noupin Phimmasy, UXO Lao, 4 June 2022.

46 Email from Cameron Imber, HALO Laos, 14 March 2021.

47 Email from Cameron Imber, HALO Laos, 31 March 2022.

48 Ibid; and email from Olivier Bauduin, US PM/WRA, 23 August 2022.

49 Email from Julien Kempeneers, HI, 30 March 2022.

50 Emails from Julien Kempeneers, HI, 27 August 2019 and 30 March 2022.

51 Email from Julien Kempeneers, HI, 27 August 2019.

52 Email from Julien Kempeneers, HI, 16 March 2021.

HI is proposing that, in the National Standard on Survey (Chapter 6), areas shall only be designated as a "Suspected Mined Area" if there is evidence that the landmines have detonated or if people have observed mines there. If a single mine is found or destroyed, and there are no other signs or evidence of landmines in the area, a mine report must be created.⁵³

HI further discussed this issue with the Director of the NRA during a visit to Houamuang district in March 2020 and recommended that the National Standards could be expanded to include the suggestion that, "if a landmine is found in undeveloped land it shall be assumed to be part of a minefield" and "if the landmine is found in well-developed land it can be assumed to be a random one". HI also noted, however, that "additional information should be gathered to add weight to the conclusions; namely the location of wartime military bases and location of other landmine finds",⁵⁴ as well as whether mines discovered by members of the local community had been moved.

In addition, HI believes that the NRA should coordinate and organise training, and adjust the standards accordingly, with regard to CMRS in areas also affected by mines.

Demographic pressures regarding land will lead to people accessing remote places that could be mined. Action on locating and recording mined areas needs to occur before the older generations that know about the presence of landmines disappear.⁵⁵

With respect to spot tasks, HI will only destroy mines that are clearly identified in a spot task location where it can be accessed safely.⁵⁶ If mines are discovered during cluster munition survey or clearance operations, the task is immediately suspended and the discovery reported to HI's Operations Manager, who then visits the site to assess the situation. If the discovered mine was not emplaced and was found in land used for agriculture it is destroyed. Additional information is obtained about the threat of mines from the landowner and a risk assessment conducted before deciding whether or not operations are allowed to resume. If the mine found is emplaced and is in an area which has not been developed, the task is halted, additional data collected, and external boundaries of the site are tentatively identified (historically safe tracks). A mine report is then submitted by HI to the NRA.⁵⁷

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

The NRA reported to Mine Action Review that planned clearance of mined areas was conducted during 2021, led by the NRA.⁵⁸ However, no additional details were provided except that 56 mines were destroyed from a total of 81,646 items of explosive ordnance.⁵⁹ This compares to 32 mines in 92,299 items of UXO destroyed in 2020.⁶⁰ No anti-vehicle mines were discovered or destroyed in 2021.⁶¹

The data reported to Mine Action Review by humanitarian clearance operators (see Table 1) varied from the NRA data and totalled 64 anti-personnel mine discovered⁶² (nine of which were not destroyed by the operator as it was not possible to approach them safely). Table 1, which is based on operator data, does not include the Lao People's Army (Unit 58), which destroyed three anti-personnel mines in 2021 according to the NRA.⁶³

53 Email from Julien Kempeneers, HI, 30 March 2022.

54 Emails from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020; and Minla Nanthavong, HI, 2 August 2021.

55 Email from Julien Kempeneers, HI, 25 March 2020.

56 Ibid.

57 Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020.

58 Email from Douangsy Thammavong, NRA, 20 June 2022.

59 Ibid.; CCW Protocol V Article 10 Report (covering 2021), Form A; CCM Article 7 Report (covering 2021), Form F; and NRA Annual Project Progress Report for 2021 reporting period.

60 Email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

61 Email from Douangsy Thammavong, NRA, 20 June 2022.

62 Emails from Cameron Imber, HALO Laos, 31 March 2022; Julien Kempeneers, HI, 30 March 2022; Rebecca Letven, Programme Manager, MAG, 30 March 2022; Katherine Harrison, NPA, 11 May 2022; and email from Noupin Phimmasy, UXO Lao, 4 June 2022.

63 Email from Douangsy Thammavong, NRA, 20 June 2022.

Table 1: Mines discovered in 2021 (based on operator data)⁶⁴

Clearance operator	Emplaced anti-personnel mines	Emplaced anti-vehicle mines	Comments
HALO	23	0	Nine anti-personnel mines were discovered and destroyed while conducting mine-threat-specific non-technical survey. A further nine were discovered during non-technical survey, but were not destroyed as they could not be approached safely. One mine was discovered during mine clearance operations and four mines were discovered by teams responding to EOD call-outs.
HI	9	0	One M16 landmine was identified and destroyed during Clearing While Surveying (although the fuze was no longer in place) and eight mines were destroyed during EOD spot task call-outs from communities or non-technical survey.
MAG	4	0	Two anti-personnel mines were found and destroyed during clearance and two during roving spot tasks, the latter of which MAG assessed had either been physically moved or more likely rolled down a slope due to effects of heavy rain.
NPA	0	1	One type M7-A2 anti-vehicle mine was discovered and destroyed during a roving spot task.
UXO Lao	28	0	Seven anti-personnel mines were found and destroyed during non-technical survey, eleven during technical survey, three during area clearance, and seven during roving tasks.
Totals	64	1	

In February 2021, The HALO Trust trained and deployed a non-technical survey team with the express goal of identifying mined areas in Savannakhet province. CMRS was postponed in villages that were suspected of being mine-affected until the extent and nature of the contamination was confirmed by the non-technical survey team. HALO's first dedicated mine clearance teams were deployed in November 2021.⁶⁵

The HALO Trust discovered and destroyed a total of 14 anti-personnel landmines in Atsaphone, Phalanxai, and Thapangthong districts, Savannakhet province in 2021 (nine during mine-threat-specific non-technical survey, one during clearance, and four during EOD call-outs). Additionally, HALO discovered a further nine landmines during non-technical survey, but was unable to destroy them as they could not be approached safely.⁶⁶ HALO did not destroy any anti-vehicle mines in Lao PDR in 2021, although one anti-vehicle mine was reported in Phalanxai district, Savannakhet province, but could not be approached due to concerns the area was contaminated with anti-personnel mines.⁶⁷

In 2021, HI was active only from end of August 2021 to December 2021, due to MoU delays and COVID-19 lock downs. HI destroyed nine emplaced landmines in Houaphanh province in 2021: one M16 landmine identified during Clearing While Surveying (although the fuze was no longer in place) and 8 landmines destroyed during EOD spot task call-outs from communities and following non-technical survey activities.⁶⁸ While the amount of area surveyed by HI in 2021 was similar to the previous year, HI reported that it found fewer suspected and confirmed minefields in its new target villages during the year. In total HI discovered four suspected mine fields identified in three villages (Ban Pacha, Ban Bouamngam, Ban Nakeng), all in Houameuang district, Houaphanh province.⁶⁹

During non-technical survey and risk education visits, HI interviews older generations to understand the village history during the war, including anti-aircraft gun and other military positions; often M16 and M14 mines were laid around defensive positions. HI also collects information on injuries sustained in the forest due to mines and on areas not developed or which are not accessed due to previous accidents or reports of injured animals, or mines being detonated by fires during "slash and burn" operations. In some instances, villagers had collected or moved mines they had discovered.⁷⁰

⁶⁴ Emails from Cameron Imber, HALO Laos, 31 March 2022; Julien Kempeneers, HI, 30 March 2022; Rebecca Letven, Programme Manager, MAG, 30 March 2022; Katherine Harrison, NPA, 11 May 2022; and email from Nouphin Phimmasy, UXO Lao, 4 June 2022. There was a discrepancy in data reported by the NRA and data reported directly by some operators. According to data reported by the NRA, HALO destroyed 13 anti-personnel mines; HI 9 anti-personnel mines; MAG 9 anti-personnel mines, NPA 1 anti-personnel mine; and UXO 26 anti-personnel mines. In addition, the NRA reported that the Lao People's Army (Unit 58) destroyed 3 anti-personnel mines (email from Douangsy Thamavong, NRA, 20 June 2022).

⁶⁵ Email from Cameron Imber, HALO Laos, 31 March 2022.

⁶⁶ Email from Cameron Imber, HALO Laos, 31 March 2022.

⁶⁷ Ibid.

⁶⁸ Email from Julien Kempeneers, HI, 30 March 2022.

⁶⁹ Ibid.

⁷⁰ Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020.

In 2021, MAG destroyed a total of four anti-personnel mines. It discovered two emplaced anti-personnel (M16 bounding mines) in Pek and Phoukhout districts, Xiengkhouang province during cluster munition clearance. In addition, two further anti-personnel mines, both M16 bounding mines, were investigated by MAG's Technical Field Manager in Phoukhout district, Xiengkhouang. The mines were found to be fused and in an armed state and were safely destroyed by MAG's EOD team. They were, however, assessed not to be in their original place but have either been physically moved or more likely rolled down a slope/hill from a potential defence position higher up due to effects of heavy rain/weather.⁷¹

In 2021, NPA discovered and destroyed one anti-vehicle mine (type M7-A2) during a roving spot task in Pong-Tai village, Thateng district, Xekong province.⁷² NPA does not conduct landmine survey or clearance, but said it sometimes encountered a limited number of landmines left around old defensive positions. As NPA does not have personnel trained or equipment for mine clearance, as soon as any mines are encountered during cluster munition survey or clearance tasks, the rule is to suspend the task and report this to the operations manager, who will then task senior EOD staff and/or international technical advisors to assess the area. NPA will only destroy mines that are clearly identified and can be safely accessed. It then also prepares a mined area report that is submitted to the NRA.⁷³

UXO Lao, the oldest and largest clearance operator in Lao PDR, is a government organisation working under the Ministry of Labour and Social Welfare.⁷⁴ UXO Lao found and destroyed 28 anti-personnel mines in 2021, during non-technical survey, technical survey, and roving tasks in six provinces (Champassak, Houaphanh, Luang Prabang, Saravan, Savannakhet, and Xiengkhouang).⁷⁵

71 Email from Rebecca Letven, MAG, 30 March 2022.

72 Email from Katherine Harrison, NPA, 11 May 2022.

73 Email from Katherine Harrison, NPA, 8 August 2022.

74 Presentation by Saomany Manivong, UXO Lao, Vientiane, 2 May 2018.

75 Email from Noupin Phimmasy, UXO Lao, 4 June 2022.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

NATIONAL AUTHORITY ESTIMATE

17.5_{KM²}

AP MINE
CLEARANCE IN 2021

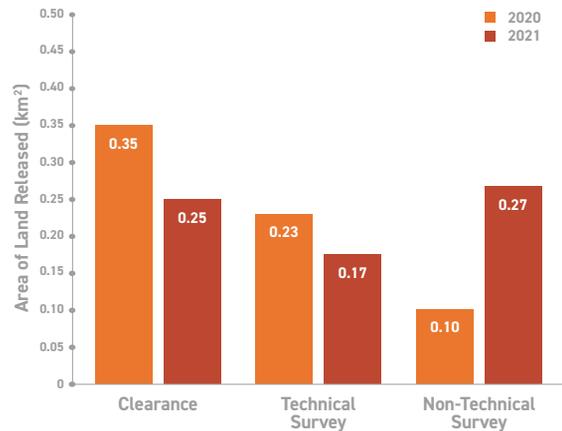
0.25_{KM²}

AP MINES
DESTROYED IN 2021

17,881

(INCLUDING 43 DURING
SPOT TASKS)

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

The Lebanon Mine Action Centre (LMAC) and its national and international partners continued to make progress in mine clearance in 2021, although mine clearance output fell for the third consecutive year in 2021, largely due to cuts in international funding. However, in a positive milestone, Humanity and Inclusion (HI) released all remaining contamination in the North governorate, the first governorate to be declared cleared of mine contamination. In 2021, LMAC also completed migrating from its former version of the Information Management System for Mine Action (IMSMA) New Generation to IMSMA Core, with support from the Geneva International Centre for Humanitarian Demining (GICHD).

RECOMMENDATIONS FOR ACTION

- Lebanon should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Lebanon should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Wherever possible, evidence-based non-technical survey and technical survey should be used to define areas of mine contamination more accurately prior to initiating clearance. This is particularly important in non-pattern minefields, such as the militia/scattered minefields in Mount Lebanon, and for contamination from anti-personnel mines of an improvised nature in the north-east of the country.
- Where appropriate, LMAC should consider using demining machinery and mine detection dogs (MDDs) as primary as well as secondary clearance assets.

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- Lebanon Mine Action Authority (LMAA)
- Lebanon Mine Action Centre (LMAC)
- Regional Mine Action Centres (RMAC-N and RMAC-RB)

NATIONAL OPERATORS

- Lebanese Armed Forces (LAF)/Engineering Regiment (ER)

INTERNATIONAL OPERATORS

- DanChurchAid (DCA)

- Humanity and Inclusion (HI)
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)
- UN Interim Force in Lebanon (UNIFIL)
- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2021, Lebanon had more than 17.5km² of confirmed mined area, including along the Blue Line, across 1,131 confirmed hazardous areas (CHAs) (see Table 1).¹ A total of 26,211m² of unrecorded legacy anti-personnel mine contamination across seven sites was added to the database in 2021.²

This is a small reduction of estimated contamination compared to the end of 2020, when Lebanon had over 18.2km² of confirmed mined area, including along the Blue Line, across 1,256 confirmed hazardous areas.³ Implementation of IMSMA Core enabled LMAC to identify some internal errors in the database regarding contamination data, which it continued to clean up in 2021.⁴

Table 1: Mined area by province (at end 2021)⁵

Province	CHAs	Area (m ²)*
Al Beqaa	53	5,021,701
Al Janoub and Al Nabatiyeh (south Lebanon)	843	6,948,610
Jabal Loubnan (Mount Lebanon)	235	5,534,350
Totals	1,131	17,504,661

* Includes 398,411m² containing anti-personnel mines of an improvised nature at in Al Beqaa in north-east Lebanon.

In addition, as at end of 2021, LMAC report that "Dangerous Areas" totalled 5,885,008m², some of which were suspected to contain booby-traps.⁶ These "Dangerous Areas" relate predominantly to rapid response or explosive ordnance disposal (EOD) spot tasks and are often the result of accidents having been reported to LMAC by the local community,⁷ for which further investigation/survey is required in order to confirm the existence, type, and extent of any contamination.⁸

The majority of mined areas are in the south of Lebanon, are in conventional minefields, laid according to a pattern, and the location of the mines is identified on minefield maps. The minefields in north Lebanon and Mount Lebanon are typically "militia" or "scattered" minefields (i.e. were laid without a pattern and for which minefield records and maps do not exist), and were laid by multiple actors during the civil war.⁹ In addition, there is a small amount of contamination from anti-personnel mines of an improvised nature (victim-activated improvised explosive devices (IEDs), totalling nearly 0.40km² and located in north-east Lebanon in Al Bekaa province.¹⁰ In 2021, HI released all remaining contamination in the North governorate, the first governorate in which mine clearance was completed.¹¹

1 Email from Lt.-Col. Fadi Wazen, Operations Section Head, LMAC, 1 June 2022.

2 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022. DCA reported discovering 1,704m² of previously unknown mined area during non-technical survey in 2021 (email from Mouhamed Chour, acting Country Director, DCA, 2 June 2022); HI reported discovering 15,616m² of previously unknown mined areas during non-technical survey in 2021 (email from Nahed Al-Khlouf, Country Manager, HI, 6 August 2022); and MAG reported discovering one area of previously unknown mined area in Rob Tlatine village, Marjaoun district, which totalled 1,670m² (email from Hiba Ghandour, Programme Manager, MAG, 7 April 2022).

3 Emails from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021 and 24 September 2022. The baseline of mined area as at end of 2021, as compared to end of 2020, is not fully explained by the results of survey and clearance in 2021. This is because 68,497m² of 2020 clearance by HI which was accidentally and erroneously excluded LMAC's 2020 annual report, was brought forward into the 2021 report.

4 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

5 Ibid.

6 Ibid.

7 Interview with Brig.-Gen. Elie Nassif, Director, and Brig.-Gen. Fakh, Head of Operations, LMAC, Beirut, 18 April 2016.

8 Interview with Brig.-Gen. Elie Nassif, and Brig.-Gen. Fakh, LMAC, Beirut, 18 April 2016.

9 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016.

10 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

11 LMAC, "Annual Report 2021", pp. 6 and 11; and email from Nahed Al-Khlouf, HI, 6 August 2022.

Lebanon's mine problem is largely a legacy of 15 years of earlier civil conflict and Israeli invasions of south Lebanon (in 1978 and 1982) and subsequent occupations that ended in May 2000, and there is a small amount of new mine contamination in "Jroud Aarsal" on the north-east border with Syria, resulting from spill-over of the Syrian conflict onto Lebanese territory in 2014–17.¹² The Lebanese territory in question was fully regained by the Lebanese Armed Forces (LAF) in August 2017 and was assigned to LMAC for survey and clearance. In addition to anti-personnel mines of an improvised nature (victim-activated IEDs), contamination in the north-east includes cluster munition remnants (CMR) and other explosive remnants of war (ERW).¹³

The LAF continue to play a major role in this northern region, as the number of rapid-response missions remains high. In recent years, LMAC has had to address contamination from mines migrating from the north Syrian border, through floods and riverbeds, to new areas in Wadi Khaled and Wadi Nahle

in the north.¹⁴ Mine migration can happen anywhere along the border river and LMAC only knows about the migrated mines through the reporting of accidents. LMAC surveyed the location of accidents and submitted a report to the LAF headquarters, recommending that, where possible, berms are raised in these locations to prevent future migration. The LAF Engineering Regiment search and clear large fade-out areas and put fences and marking up where possible, and mine risk education is conducted.¹⁵ In 2021, two new victims resulted from mines which had migrated from across the northern border. The accidents were in the vicinity of the region where previous accidents occurred. The LAF Engineering Regiment has been tasked to mark, search, and clear the locations where the accidents were recorded and other locations where there is a probability of finding migrated mines.¹⁶

For details on CMR contamination, see Mine Action Review's *Clearing Cluster Munition Remnants* report on Lebanon.

PROGRAMME MANAGEMENT

Lebanon's mine action programme is under the control of the military. The Lebanon Mine Action Authority (LMAA), which has overall responsibility for Lebanon's mine action programme, is the responsibility of the Ministry of Defence and is chaired by the Minister of Defence. In 2007, a national mine action policy outlined the structure, roles, and responsibilities within the programme, and LMAC was tasked to execute and coordinate the programme on behalf of the LMAA.¹⁷

LMAC, part of the LAF, is based in Beirut. Since 2009, the Regional Mine Action Centre-Nabatiyeh (RMAC-N), which is a part of LMAC, has overseen operations in south Lebanon and western Beqaa, under LMAC supervision.¹⁸ At the end of 2018, a new regional centre, the RMAC-Ras Baalbek (RMAC-RB), was established in the north-east of Lebanon, to oversee the mine action operations in this region.¹⁹ To a large extent LMAC has a well-functioning capacity, but, as they are army officers, the senior management of LMAC and RMAC are typically routinely rotated every two years or so, which can hamper development and continuity in the management of the three mine action centres.²⁰ The current director of LMAC started in March 2019, replacing his predecessor who had served as director for two years.²¹

A new standing operating procedure (SOP) for LMAC was developed and approved in 2020. The SOP specifies the roles of each section of LMAC and clarifies the responsibilities and cooperation between sections. It is hoped that it will help preserve institutional memory, assist new LMAC staff, and reduce the impact of staff rotations.²²

UN Development Programme (UNDP) personnel, funded by the European Union (EU), are also seconded to LMAC, providing support for capacity building, including transparency reporting, strategic reviews, IMSMA database entry, community liaison, and quality assurance (QA). In 2021, there were six UNDP personnel supporting LMAC.²³

UNDP received funding in 2020 from the Norwegian Embassy for a three-year project for 2020–23 of support to LMAC coordination capacities.²⁴ In April 2021, the Netherlands agreed a further three-year contract with UNDP for international support to LMAC, totalling US\$1.5 million.²⁵

The GICHD also provides support to LMAC on information management and on gender and diversity. LMAC staff have benefitted from courses under the regional framework of the Arab Regional Cooperation Programme (ARCP).²⁶

12 Emails from Lt.-Col. Fadi Wazen, LMAC, 7 March 2019; David Willey, Programme Manager, MAG, 7 March 2019; and Emile Ollivier, Grants Coordinator, NPA, 19 March 2019.

13 Email from Lt.-Col. Fadi Wazen, LMAC, 7 March 2019, and presentation in Beirut, 8 April 2018; LMAC, "Annual Report 2018", p. 14; and email from Hala Amhaz, NPA, 17 March 2021.

14 LMAC, "Annual Report 2019", pp. 7 and 25.

15 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

16 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

17 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014, pp. 4–5.

18 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.

19 Email from Lt.-Col. Fadi Wazen, LMAC, 21 August 2019.

20 LMAC, Lebanon Mine Action Strategy 2020–25, signed June 2020, p. 4.

21 Email from Brig.-Gen. Ziad Nasr, Director, LMAC, 26 March 2019.

22 Emails from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020 and 15 March 2021; and LMAC, "Annual Report 2020", p. 28.

23 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

24 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020; and LMAC, "Annual Report 2020", p. 28.

25 Email from Lt.-Col. Fadi Wazen, LMAC, 15 June 2021; and LMAC, "Annual Report 2021", p. 40.

26 Email from GICHD, 22 April 2022.

A "Mine Action Forum" was established in Lebanon in close partnership between LMAC and Norway following a workshop, in January 2018, convened in partnership between Norway and LMAC. The forum meets twice a year, with UNDP designated as the secretariat for the Forum.²⁷ In 2021, the Netherlands took over from Norway as Forum co-chair.²⁸

The Mine Action Forum provides an informal mechanism for LMAC to maintain open dialogue and information sharing with implementing partners and donors on national priorities and needs for the survey and clearance of CMR and landmines.²⁹ During each meeting, stakeholders present achievements compared to previously set action points, discuss challenges and needs, and then propose future steps for the coming six months.³⁰ In 2021, the Netherlands took the lead for the forum. The Forum is said to have resulted in better coordination and greater transparency as well as enhancements to land release methodology, enshrined in the revised national mine action standards (NMAS).³¹

There is good coordination and collaboration between LMAC/the RMAC and clearance operators, with the operators consulted before key decisions are taken.³² International clearance operators reported that an enabling environment exists for mine action in Lebanon, with LMAC facilitating the processing of visas for international staff and assisting with the importation of equipment, including exemption of customs fees for equipment.³³ Norwegian People's Aid (NPA) reported that a challenge was the length of time needed to obtain security clearances for new local staff. This process can take more than three months.³⁴

A technical working group (TWG) was established in March 2018, under the auspices of LMAC, based on recommendations of the Mine Action Forum and following the release of the revised NMAS. The TWG, provides a useful forum for LMAC/the RMACs to meet collectively with clearance operators to review and discuss field issues, including implementation of revisions to the NMAS, to identify issues, and suggest further NMAS revisions and potential ways to improve operational efficiencies. The LMAC is open to suggestions from operators for improvements.³⁵ The TWG met twice in 2021 – in March and December.³⁶

As in the previous year, the Lebanese government contributed US\$9 million annually in 2021 towards mine action in Lebanon (for both mine- and CMR-related work): to support costs associated with the running of LMAC (facilities and staff); for the LAF Engineering Regiment companies working in demining (four teams, two of which work on CMR, in addition to mechanical and mine detection dog (MDD) support); risk education; victim assistance, and training. However, the devaluation of the Lebanese Pound due to the economic crisis in the country severely reduces the amount actually received.³⁷

A Regional School for Humanitarian Demining in Lebanon (RSHDL) was established in partnership between Lebanon and France.³⁸ The School became operational in 2017, enabling civilian and military personnel from Arab and other countries to benefit from an array of courses and workshops on non-technical survey, EOD, operational efficiency, and gender and diversity.³⁹

ENVIRONMENTAL POLICIES AND ACTION

LMAC recognises its responsibility to ensure that demining operations are conducted responsibly and efficiently while also minimising the impact on the environment. Lebanon's NMAS on Safety and Occupational Health – Protection of the Environment (10.70) specifically aims to achieve this. LMAC and its implementing partners ensure that they operate in conformity with NMAS 10.70 including:

Coordinating with local authorities and landowners before start of operations.

Compiling a list of factors related to operations that may affect the environment for all types of assets, assessing the threat, and making informed decisions.

After demining and EOD operations have been completed at a worksite, but before the formal release of the area, implementing agencies are required to remove and appropriately dispose of all rubbish and large fragments of ordnance, and fill any holes in the ground to stabilise the surface to allow for natural regeneration, using water to consolidate the soil when appropriate.⁴⁰

27 LMAC, "Annual Report 2018", p. 23.

28 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

29 LMAC, "Annual Report 2018", p. 23; Statement of Lebanon on International Cooperation and Assistance, CCM Ninth Meeting of States Parties, Geneva, 4 September 2019; and LMAC, Lebanon Mine Action Strategy 2020–25, Foreword by the chair of the LMAA (Minister of Defence).

30 Statement of Lebanon, CCM Intersessional meetings, Geneva, 16 May 2022.

31 Emails from Lt.-Col. Fadi Wazen, LMAC, 7 March 2019 and 19 March 2020; LMAC, "Annual Report 2018", p. 23; and revised 2020 Article 4 deadline Extension Request, 25 February 2020, pp. 38 and 39.

32 Emails from Sylvain Lefort, Country Director, MAG, 24 March 2021; Hala Amhaz, NPA, 15 March 2021; Mahmoud Rahhal, POD, 8 March 2019; and David Ligneau, Mine Action Programme Manager, Humanity and Inclusion (HI), 21 April 2020.

33 Emails from Hiba Ghandour, MAG, 7 April 2022; and Southern Craib, Operations Manager, NPA, 28 March 2022.

34 Email from Southern Craib, NPA, 28 March 2022.

35 LMAC, "2018 Annual Report Lebanon Mine Action Centre", pp. 4, 7, and 17; and emails from Lt.-Col. Fadi Wazen, LMAC, 7 March 2019; Mouhamed Chour, DCA, 4 April 2022; Hiba Ghandour, MAG, 7 April 2022; Southern Craib, NPA, 28 March 2022; and Revised 2020 Article 4 deadline Extension Request, 25 February 2020, pp. 8 and 54.

36 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

37 Article 7 Report (covering 2021), Form I; and email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

38 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.

39 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; CCM Article 7 Reports (covering 2018 and 2019), Form A; Statement of Lebanon on International Cooperation and Assistance, CCM Seventh Meeting of States Parties, Geneva, 4–6 September 2017; and LMAC, "Annual Report 2020", p. 29.

40 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

DanChurchAid (DCA) reported that it is compliant with the Environmental Health and Safety Guidelines and that it follows the NMAS and the International Mine Action Standards (IMAS) procedures with regard to the environment. DCA's SOPs identify specific smoking areas at task sites to prevent uncontrolled fires and DCA monitors all vegetation-cutting procedures to prevent damage to flora that is protected under Lebanese law, especially when its teams are deployed in national reserves such as the Al Shuf Cedars, where DCA conducted clearance in 2021.⁴¹

HI has an environmental management system in place and its SOP21 on environmental management includes general protection for watercourses and groundwater, during vegetation clearance, in the construction and removal of temporary support facilities, during transport of toxic and hazardous materials, for livestock, wildlife, and cultural resources, and provision for the environmental awareness of clearance personnel. HI operates according to the NMAS and its SOPs at all times, with a view to minimising the

environmental impact of its operations.⁴²

Mines Advisory Group (MAG) has an environmental management system in place, which was in the process of being revised as at April 2022. MAG's environmental SOP takes into consideration the environment. In particular, special measures are implemented to avoid spreading of fires on mine clearance tasks, caused by demolitions.⁴³

NPA Lebanon said it has an environmental plan in place which it is implementing, including recent installation of a solar system; a recycling programme (paper, plastic, glass, and plastic); and fleet upgrading for fuel efficiency. NPA has also begun to track its environmental footprint through the use of an annual reporting tool. It also strives to minimise the removal of vegetation to the extent that it is safe to do so.⁴⁴

UNIFIL said it has been committed to environmental safety, including staggered timings for demining activities to reduce risks of bush fires during the summer season.⁴⁵

GENDER AND DIVERSITY

The gender and diversity-related policy applied at LMAC is that of the LAF military rules. According to LMAC, all its personnel are familiar with these rules and the specific provisions related to gender equality and inclusion, safeguarding, and behavioural codes.⁴⁶

LMAC has taken several actions to mainstream gender in its implementation plan, including through inclusive policies, data disaggregation in risk education and victim assistance, and participation in courses at the RSHDL.⁴⁷ In agreement with LMAC, the GICHD conducted a gender and diversity capacity assessment mission to Lebanon in July 2019.⁴⁸ In August 2019, LMAC appointed a new gender focal point.⁴⁹ The focal point participated in the Remote regional ARCP Gender Equality and Inclusion capacity development programme held online from October 2020 to March 2021.⁵⁰

Lebanon's new National Mine Action Strategy 2020–25, approved by the LMAA in June 2020, includes considerations on gender and diversity.⁵¹ Of the five objectives in the new strategy, the fifth states that: "The specific needs and perspective of women, girls, men and boys from all groups of society are considered, in order to deliver an inclusive

HMA [mine action] response". LMAC also acknowledges in the strategy that mine action "is a male-dominated environment and we have therefore a particular responsibility to empower women and ensure that we have a gender sensitive approach to our work".⁵² As per its strategic implementation plan, LMAC has drafted a code of conduct regarding gender, diversity, and inclusion, in collaboration with a committee composed of human resources personnel, safeguarding personnel, and gender focal points from the NGOs in Lebanon.⁵³ Lebanon's NMAS was due to be reviewed in 2022 from a gender perspective.⁵⁴

Of LMAC's total personnel, 17 (11%) are female. With respect to operational roles, eight (16%) of LMAC's 49 personnel are female. With respect to managerial/supervisory level positions at LMAC, none are currently held by women.⁵⁵ The number of staff at LMAC is determined by the LAF headquarters, so LMAC has limited control over the number of women, but it consistently requests that the percentage of women be increased.⁵⁶ However, the proportion of women at LMAC is more than double the 5% average of the Lebanese armed forces and LMAC seeks to improve this ratio further.⁵⁷

41 Emails from Mouhamed Chour, DCA, 4 April and 2 June 2022.

42 Email from Nahed Al-Khlouf, HI, 6 August 2022.

43 Email from Hiba Ghandour, MAG, 7 April 2022.

44 Email from Southern Craib, NPA, 28 March 2022.

45 Lt.-Col. (CHN) Dongjie Zhang, Chief – J3 Combat Engineer Section, UNIFIL Force HQ, 4 August 2022.

46 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020.

47 LMAC, "Annual Report 2018", p. 5; and email from Lt.-Col. Fadi Wazen, LMAC, 7 March 2019.

48 Email from Rana Elias, Cooperation Programmes Coordinator, GICHD, 26 August 2020.

49 Email from Lt.-Col. Fadi Wazen, LMAC, 21 August 2019.

50 Emails from GICHD, 14 May 2021 and 22 April 2022.

51 Emails from Lt.-Col. Fadi Wazen, LMAC, 19 March and 22 July 2020.

52 LMAC, Lebanon Mine Action Strategy 2020–25, p. 8.

53 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

54 Ibid.

55 Ibid.

56 Emails from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020 and 15 March 2021; and LMAC, "Plan for the Implementation and Monitoring of the LMAP Strategy (2020–25)", p. 19.

57 LMAC, "Annual Report 2020", p. 37.

DCA's gender focal point conducted internal training on gender and diversity mainstreaming in 2021 and encouraged DCA to enhance the role of women within the organisation. DCA also held meetings with other NGOs regarding strengthening the role of women and attended two meetings convened by LMAC on gender and diversity mainstreaming. It reported that 15 of its 69 overall staff in Lebanon are female, with women accounting for 53% of managerial/supervisory positions (8 women) and 14% of all operations positions (7 women).⁵⁸

HI, MAG, and NPA all reported having gender policies in place.⁵⁹

HI reported that in 2021 9% of its mine action programme staff (including explosive ordnance risk education, EORE personnel) were women. This included 5% of women in operations positions, but none in managerial or supervisory positions.⁶⁰

MAG reported that it consults women during survey and community liaison activities; that all its community liaison teams are mixed; and that its data is disaggregated by sex, age, and nationality. Overall, women account for 19% of MAG's Lebanon programme, including 18% of operational roles in MAG's survey and clearance teams in Lebanon, and 14% of managerial level/supervisory positions.⁶¹ MAG considers a wide range of elements under diversity as part of its operations, taking into consideration the diverse community and religious background of the areas in which it works and trying to consider these aspects during recruitment, to

ensure they are reflected in MAG's personnel.⁶² In 2021, MAG promoted the first women as Field Operations Manager and the first male National Technical Field Manager. MAG was able to establish a Gender Diversity and Inclusion Steering Committee for the programme.⁶³

NPA was implementing its organisational gender policy for Lebanon, based on recommendations from the GICHD. It is encouraging more women to apply for field positions through job postings and social media. NPA personnel participated in various trainings and fora on gender and diversity co-hosted by the GICHD and LMAC in 2021. As at June 2022, NPA reported that 22% of its employees are women, including 16% of employees in operational roles, and 50% of management personnel.⁶⁴ NPA disaggregates data by sex and age.⁶⁵

Both UNIFIL's Troop Contributing Countries (Cambodia and China) have female deminers, team leaders, and site supervisors and in total there are 14 women (11% of the total demining personnel).⁶⁶

Women, girls, boys, and men are said to be consulted during survey and community liaison activities.⁶⁷ According to LMAC, Lebanon's baseline of contamination has been developed over many years. As per Lebanon's NMAS, non-technical survey teams consult with women, girls, boys, and men, including, where relevant, minority groups, in order to make sure all available information is included.⁶⁸

INFORMATION MANAGEMENT AND REPORTING

In 2021, LMAC completed migrating from its former version of IMSMA (New Generation) to IMSMA Core, with support from the GICHD. The transition to IMSMA Core revealed errors in the province name in which some CMR tasks were registered, which were corrected.⁶⁹ As at April 2022, IMSMA Core was fully functional for all activities, but LMAC was still in a transition period for daily and weekly progress reporting.⁷⁰

LMAC hopes IMSMA Core will help facilitate the production of clearer reports that can be translated into dashboards for stakeholders, including donors, to monitor and follow.⁷¹ Operators believe that IMSMA Core will enable better direct access to data, which will enhance understanding of broader CMR contamination and assist in identifying tasks where further non-technical and technical survey could be valuable.⁷²

Some of the information in the database may not be accurate. This is especially the case with respect to scattered/militia minefields from civil war, for which non-technical survey was conducted many years ago, with limited reliable information available. It can be challenging to gain a clear picture of what contamination was cleared by the LAF and if the related clearance documents were transferred to LMAC and are included in the information management database.⁷³ LMAC has said that non-technical survey will be extremely important for these scattered minefields.⁷⁴

58 Email from Mouhamed Chour, DCA, 2 June 2022.

59 Emails from Emile Ollivier, NPA, 19 March 2019; David Willey, MAG, 7 March 2019; and David Ligneau, HI, 23 August 2019.

60 Email from Nahed Al-Khlouf, HI, 6 August 2022.

61 Emails from Hiba Ghandour, MAG, 7 April and 3 June 2022.

62 Email from Sylvain Lefort, MAG, 27 May 2021.

63 Email from Hiba Ghandour, MAG, 7 April 2022.

64 Email from Valerie Warmington, Programme Manager, NPA, 6 June 2022.

65 Email from Valerie Warmington, NPA, 28 May 2020.

66 Email from Lt.-Col (CHN) Dongjie Zhang, J3 Combat Engineer Section, UNIFIL Force HQ, 7 September 2022.

67 Email from Lt.-Col. Fadi Wazen, LMAC, 5 April 2019.

68 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020.

69 Article 7 Report (covering 2021), Form F; and email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

70 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

71 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC Operations Department, 28 June 2018; "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018"; and LMAC, "2018 Annual Report Lebanon Mine Action Centre", p. 14.

72 Email from Valerie Warmington, NPA, 28 May 2020.

73 Email from David Ligneau, HI, 21 April 2020.

74 LMAC, "Plan for the Implementation and Monitoring of the LMAP Strategy (2020-2025)", p. 16.

The GICHD provides support to LMAC under its Information Management Capacity Development Framework and conducts IM training sessions and workshops.⁷⁵

DCA has been using Tiramisu Information Management Tool (T-IMS) for the past three years.⁷⁶ HI uses ArcGIS and Trimble, in addition to IMSMA Core for reporting to LMAC.⁷⁷ MAG started using "Survey123" software in Lebanon in August 2021 after training and field testing the new data collection system.⁷⁸ MAG believes that synchronisation of its internal reporting system (Survey 123) and LMAC's IMSMA core would avoid the need for double reporting and help decrease the margin of errors.⁷⁹ In the second half of 2020,

NPA introduced the ARC-GIS programme for data collection to its information management system, which has allowed more precise monitoring and evaluation of the programme's activities, efficiency, outputs, and reporting.⁸⁰

In the Lebanon Mine Action Strategy 2020–25, and the accompanying implementation plan, LMAC states that it will initiate voluntary APMBC Article 7 reporting.⁸¹ In its Annual Report for 2020 (published in 2021), LMAC again said that it would initiate the process for voluntary reporting to the APMBC.⁸² However, as at July 2022, no APMBC voluntary Article 7 report had yet been submitted.

PLANNING AND TASKING

In September 2011, LMAC adopted a strategic mine action plan for 2011–20.⁸³ The plan called for clearance of all CMR by 2016 and for completion of mine clearance outside the Blue Line by 2020. Both goals were dependent on capacity, but progress fell well short of planning targets, which were not met.

LMAC has developed a new National Mine Action Strategy for 2020–25, with support from the European Union-funded UNDP project, in a participatory approach with national and international implementing agencies, mine action non-governmental organisations (NGOs), UN agencies, and donors.⁸⁴ The new strategy was signed by the LMAA in June 2020. A mid-term and final external review are planned, as well as annual reporting on progress.⁸⁵

LMAC has also elaborated a strategic implementation plan for 2020–25, based on the new strategy and in collaboration with implementing partners, to operationalise the new strategy with objectives, outputs, and indicators.⁸⁶ Results from the monitoring of the strategic implementation plan would be discussed at the operational level with implementing agencies at the TWG and a group of recommendations agreed and then presented at the biannual Mine Action Forum meetings.⁸⁷ The implementation plan will be revised annually by LMAC, the Institutional Support Programme (UNDP at present), and in consultation with humanitarian clearance operators LMAC planned to conduct a full review of the

strategy and implementation plan in 2022, in cooperation with all stakeholders.⁸⁸ In addition, LMAC had an annual work plan for 2021 which was subsequently shown to have been slightly over-ambitious – something which its 2022 work plan has taken into consideration.⁸⁹

According to LMAC, increased urbanisation; clearance of the Blue Line; spill-over from Syria creating new contamination, including IEDs; and the sudden increase in residents, have combined to result in a change to clearance priorities.⁹⁰ With regard to task prioritisation, LMAC conducted a study, whose results have informed a new national prioritisation system, based on three strategic categories: safety, economy, and treaty compliance. Each category contains subcategories which take operational considerations and impact into account.⁹¹ LMAC has introduced new forms for non-technical survey for entry into IMSMA Core which now capture information needed for the new prioritisation matrix. The new IMSMA Core only became fully functional in 2021, therefore additional information is still required to be able to specify the priorities. As at April 2022, non-technical survey teams had collected information and updated the priorities for three districts and were working to complete reprioritisation in 2022. In the meantime, LMAC is using the district-level priorities for the equitable distribution of teams.⁹²

75 Emails from GICHD, 14 May 2021 and 22 April 2022.

76 Email from Matthew Benson, Country Director, DCA, 4 June 2021.

77 Email from Nahed Al-Khlouf, HI, 12 August 2022.

78 Email from Hiba Ghandour, MAG, 7 April 2022.

79 Ibid.

80 Email from Hala Amhaz, NPA, 15 March 2021.

81 LMAC, Lebanon Mine Action Strategy 2020–25, June 2020, p. 4; and LMAC, "Plan for the Implementation and Monitoring of the LMAP Strategy (2020-2025)", p. 5.

82 LMAC, "Annual Report 2020", p. 26.

83 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.

84 LMAC, Lebanon Mine Action Strategy 2020–25; and LMAC, "Annual Report 2019", p. 7.

85 Email from Lt.-Col. Fadi Wazen, LMAC, 22 July 2020; and LMAC, Lebanon Mine Action Strategy 2020–25, p. 4.

86 Emails from Lt.-Col. Fadi Wazen, LMAC, 22 July 2020 and 15 March 2021; and LMAC, "Plan for the Implementation and Monitoring of the LMAP Strategy (2020–25)", p. 3.

87 LMAC, "Plan for the Implementation and Monitoring of the LMAP Strategy (2020–25)", p. 21.

88 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

89 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

90 LMAC, "Annual Report 2019", p. 30.

91 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021; and LMAC, "Annual Report 2020", p. 35.

92 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

DCA has deployed two non-technical survey teams for Baabda and Aley districts in Mount Lebanon, and said there had been a new re-prioritisation of tasks in this region. According to DCA, district level reports will be issued when finished including the prioritisation classification, which will help in the deployment of the clearance/technical survey teams.⁹³

HI's prioritisation of tasks is based on proximity to populated area, but mine clearance operations in north Lebanon and the Mount Lebanon area are also determined by seasonal factors: clearance of low altitude minefields during winter (October to April), and then clearance tasks above 2,000 metres begin in April and continue through the summer, depending on snow.⁹⁴ After completing mine clearance in the north in 2021, HI shifted its operations to Aley district in Mount Lebanon where its non-technical survey teams re-surveyed all tasks

assigned to it by LMAC. Tasks were re-prioritised according to LMAC criteria.⁹⁵

As per the previous year, in 2021 MAG received task dossiers and maps for minefields well ahead of deployment, which allowed it to conduct non-technical survey and prioritise these tasks for increased impact. It also allows for effective use of resources and deployment of teams.⁹⁶

Prior to 2016, demining along the border with Israel had been said to depend on "political developments",⁹⁷ but the Lebanese government subsequently took the decision to initiate larger-scale, planned clearance on the Blue Line.⁹⁸ Clearance by humanitarian demining operators, which began in November 2016,⁹⁹ was still ongoing as of writing.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Lebanon developed its first NMAS in 2010.¹⁰⁰ In 2017, LMAC revised and harmonised national standards with IMAS, adding new modules not present in the original standards.¹⁰¹ It has since continued to review and revise the NMAS to focus more on land release and evidence-based decision making, based on recommendations and analysis of operational data. Notable enhancements included reduction of the required clearance depth from 20cm to 15cm; revision of fade-out specifications for pattern minefields, and enhancements in how rapid response tasks are addressed and recorded.¹⁰² Lebanon's mine action strategy includes plans for a full review of the NMAS in 2022, which was to be conducted by a UNDP consultant.¹⁰³

Further updates were made to the NMAS in late 2019 and a full review of the standards was completed at the beginning of 2020¹⁰⁴ and released to implementing partners in July 2020.¹⁰⁵ These included the introduction of a new NMAS (07.14) on Risk Assessment, and a new standard (09.31) on improvised explosive device (IED) Disposal (IEDD), which

were adopted in March 2020.¹⁰⁶ With regard to technical survey, the NMAS no longer specifies a minimum percentage of area over which technical survey must be conducted, which permits LMAC to reduce technical survey when appropriate, especially on the Blue Line minefields and for CMR.¹⁰⁷ The NMAS also allows for areas under full clearance to be reduced (or in part reduced), based on information gathered during clearance, as well as for the original task boundaries to be changed based on experience during clearance. Changes were also made to the NMAS on demolitions.¹⁰⁸

Operators now have an opportunity to discuss specific land release considerations with LMAC for assigned clearance tasks, which arise during the pre-clearance assessment stage of operations. Such discussions might result in the refining of the task size or approved land release specifications (e.g. use of technical survey, for all or part of the task, rather than full clearance).¹⁰⁹

93 Email from Mouhamed Chour, DCA, 2 June 2022.

94 Emails from Chris Chenavier, HI, 7 April 2016; and David Ligneau, HI, 29 August 2018 and 9 April 2019; and Danila Zizi, HI, 26 July 2021.

95 Email from Nahed Al-Khlouf, HI, 6 August 2022.

96 Emails from Sylvain Lefort, MAG, 24 March 2021; and Hiba Ghandour, MAG, 7 April 2022.

97 Presentation by Maj. Bou Maroun, RMAC, Nabatiyeh, 4 May 2012; and response to Landmine Monitor questionnaire by Leon Louw, Programme Manager, UN Mine Action Support Team (UNMAST), 7 May 2014.

98 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.

99 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.

100 Email from Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.

101 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; Dave Wiley, MAG, 27 April 2018 and 7 March 2019; and Craig McDiarmid, Programme Manager, NPA, 17 April 2018 and 19 March 2019; and Revised 2020 Article 4 deadline Extension Request, 25 February 2020, p. 15.

102 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Dave Wiley, MAG, 27 April 2018; and LMAC, "Annual Report 2018", p. 17.

103 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

104 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

105 Email from Hala Amhaz, NPA, 15 March 2021.

106 Emails from Lt.-Col. Fadi Wazen, LMAC, 19 March and 2 September 2020.

107 Ibid.

108 Ibid.

109 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016; and with Lt.-Col. Fadi Wazen, LMAC, Beirut, 16 April 2019.

Most recently, LMAC has focused on further strengthening evidence-based non-technical and technical survey to more accurately define the presence of an explosive threat (or confirm its absence).¹¹⁰ A study on operational efficiency found that the NMAS generally places heavy limitations on how mine action operators are able to operate and that this drastically affects efficiency.¹¹¹ The study called for a comprehensive and harmonised understanding of, and training on, land release across stakeholders, with an emphasis on the importance of evidence-based technical survey before clearance.¹¹² Other recommendations included allowing a more flexible marking system based on the NMAS; extending the time slot for demolitions; and improving and expanding the role of animal detection systems (ADS).¹¹³

Participants at the Mine Action Forum meeting on 22 January 2021 agreed on the need to strengthen the use of technical survey and analyse existing methods and tools to identify areas for potential improvement in operational efficiency.¹¹⁴ LMAC subsequently reviewed and field tested the recommendations, and further updates to the NMAS on technical survey, battle area clearance (BAC), and minefield clearance were discussed in the TWG in 2021, and shared with operators for feedback. Training was subsequently conducted in April 2021 and the revised NMAS were adopted by LMAC and released in May 2021.¹¹⁵ NGO clearance operators updated their SOPs accordingly and commenced application of technical survey on BAC tasks.¹¹⁶ LMAC is supporting the LAF ER to update its SOPs.¹¹⁷

LMAC updated its strategic implementation plan to reflect the increased focus on technical survey,¹¹⁸ and it was agreed at the TWG meeting in December 2021 that more technical survey will be conducted by manual search teams. Further training was conducted in February 2022 to unify and enhance understanding of the concept and improve the application of technical survey in all hazardous areas, and specifically in CMR tasks.¹¹⁹

Mined areas in pattern minefields/along the Blue Line are classified into high-threat hazardous area (HTHA) and low-threat hazardous area (LTHA). The use of technical survey, instead of full clearance, is permitted for some parts

of CHAs based on discussion and agreement between LMAC operations officers and clearance operators.¹²⁰ Previously, full clearance had been required for 15 metres from the mine rows, but in the revised NMAS this has been changed to a required fade-out of five metres from the mine rows, and technical survey from the edge of the five-metre fade-out up to the minefield fence, for minefields in which the lanes have not been disrupted.¹²¹ If there is no fence, 10 metres of technical survey is required from the edge of the 5-metre fade-out. Fade-out for anti-vehicle mines has been reduced from 20 metres to 10.¹²²

Based on empirical evidence, international operators have not found mines further than five metres from the outer mine row, in minefields in which the lanes have not been disturbed.¹²³ Arguably therefore, technical survey beyond the five-metre fade-out should only be required if there is sufficient evidence to suggest mines have migrated from the mine rows. However, while technical survey is still required beyond the five metres from the outer mine row, the amended NMAS now provides for improved flexibility in the percentage of area searched as part of technical survey. Technical survey requirements are now being decided more in line with operational observations and decisions are being made collaboratively with RMAC, with good effect.¹²⁴

With respect to technical survey requirements, NPA focuses its efforts on areas adjacent to missing mines, where the terrain may have allowed migration or where there appears to be a logical tactical reason for laying mines somewhere other than the defined line. Until recently NPA had yet to discover any mines in these areas, but in 2022 reported that it had discovered six mines during technical survey in a single task which were well away from the mine rows. The six mines were all in an area that could have been run-off from the mine line, but were all found at a depth of approximately 10cm and were all orientated correctly. This suggests they may have been deliberately emplaced, possibly as a result of the engineers who originally laid the minefields having a number of mines "left over" which they subsequently deployed wherever convenient. These mines would not have been found had it not been for the requirement for technical survey.¹²⁵

110 Emails from Lt.-Col. Fadi Wazen, LMAC, 7 March 2019; Dave Wiley, MAG, 27 April 2018; and Craig McDiarmid, NPA, 17 April 2018; and Statement of Lebanon on Clearance, CCM Ninth Meeting of States Parties, Geneva, 2 September 2019.

111 Email from Hala Amhaz, NPA, 15 March 2021.

112 LMAC, "Annual Report 2020", p. 36.

113 Ibid.

114 LMAC, "Annual Report 2020", p. 26.

115 Emails from Lt.-Col. Fadi Wazen, LMAC, 15 June 2021 and 29 March 2022; and Hiba Ghandour, MAG, 7 April 2022.

116 Emails from Mouhamed Chour, DCA, 4 April 2022; and Hiba Ghandour, MAG, 7 April 2022.

117 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

118 Email from Lt.-Col. Fadi Wazen, LMAC, 15 June 2021.

119 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

120 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.

121 Email from Dave Wiley, MAG, 19 August 2019.

122 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.

123 Emails from Ali Nasreddine, MAG, 24 July 2018; Craig McDiarmid, NPA, 17 April 2018 and 8 April 2019; and Hala Amhaz, NPA, 17 March 2021.

124 Emails from Valerie Warmington, NPA, 23 July 2021; Southern Craib, NPA, 12 April 2022; and Hiba Ghandour, MAG, 7 April 2022.

125 Email from Southern Craib, NPA, 12 April 2022.

NPA believes changes could be considered to the procedure for missing mines in patterned minefields along the Blue Line. Many mines are missing due to water and soil-related movement or detonation by animals and the current "missed-mine" protocol is resource-intensive.¹²⁶ NPA believed a study of the empirical evidence would be useful, including how many missed mine drills each agency has performed and how many mines were discovered as a result.¹²⁷ NPA's own data suggests the process of the missing mine drill serves no useful purpose beyond added "peace of mind". Since 2017, NPA had conducted 1,648 missing mine drills in Lebanon and had found no mines or evidence of such. However, analysis of the data also suggests that the impact on clearance rates is not as significant as originally thought. On average a missing mine drill takes approximately 45 minutes to perform whereas a deminer would otherwise clear 1.55m² in the same time.¹²⁸

In 2019, NPA began to consider using Ground Penetrating Radar (GPR)-equipped detectors as a solution and was planning to arrange a potential trial of UN Mine Action Service (UNMAS)-owned dual sensor equipment in 2020 to conduct missed-mine checks.¹²⁹ COVID-19 lockdowns and evacuation of relevant UNMAS personnel, resulted in a delay of the planned trial in 2020.¹³⁰ As at April 2022, NPA had conducted limited trials on GPR detectors to date, and the trials were inconclusive with respect to their potential use on missing mines. NPA planned to conduct further trials in 2022 once the weather had improved.¹³¹ At the same time, following a TWG meeting in early 2021 in which international NGOs highlighted that missing mine excavations had not resulted in any missing mines being located, there has been increased flexibility from RMAC with regard to the "missing mine" drill. RMAC officers have permitted some of NPA's requests not to conduct the drill where there was evidence that the mine had been moved (and located nearby) or that it was previously detonated.¹³²

Minefields in areas outside of the Blue Line, for example in the north-east and in Mount Lebanon, will be studied on a case-by-case basis, to determine where full clearance is required and where technical survey must be applied.¹³³

In the north-east, technical survey, including with MDDs or using large-loop detectors, could be highly efficient in addressing a low level of threat dispersed over a large area.¹³⁴ In north of Lebanon, the main contamination is scattered minefields, and past land release has typically been characterised by large areas cleared and small number of anti-personnel mines destroyed. Where conditions allowed, HI applied technical survey methodology in 2021 in coordination with LMAC's operations section. This resulted in 53% of land being reduced and swifter release of land back to communities.¹³⁵

LMAC accepted the recommendations proposed by the clearance operators regarding the "metal-free" criteria, and LMAC's requirement for "metal-free" in the north-east was changed in early 2021. The criteria is now "half of the MUV-9 fuze" for the clearance of the minefields on the Blue Line, with confirmed contamination of No. 4 anti-personnel mines only.¹³⁶ NPA subsequently achieved its highest clearance rates in the north-east in the two months prior to it ending its operations in this region of Lebanon due to a drop in funding.¹³⁷

Both DCA and MAG, welcomed the change of the demolition timings to the morning, which MAG said provides a longer time window to conduct more demolitions if needed,¹³⁸ and which DCA said reduces fire risk at the sites.¹³⁹

LMAC has said that with the introduction of IMSMA Core, the assigning of tasks for non-technical survey teams, and the reviewing of them by the implementing partners and by LMAC's non-technical survey officer, is faster, easier, and very effective. LMAC's non-technical survey officer meets with the non-technical survey teams from implementing agencies on a weekly basis, to discuss results and planning. LMAC also assigns a group of tasks to implementing agencies rather than one task, and the operators have the capability in IMSMA Core to see which tasks are close by to the area in which they are working and to ask to expand their mission directly while in the field. Priority levels in accordance with the new system are then determined based on their reports.¹⁴⁰

OPERATORS AND OPERATIONAL TOOLS

In 2021, manual mine clearance was conducted by international operators DCA, HI, MAG, and NPA, along with the Engineering Regiment of the LAF. In addition, UNIFIL continued conducting clearance for humanitarian purposes (first commenced from June 2020), in addition to its regular demining operations for demarcation purposes on the Blue Line. Clearance capacity in Lebanon in 2021 was a significant decrease on the previous year, due to the drop in funding in 2021.¹⁴¹

The LAF Engineering Regiment has two BAC teams. A further three Engineering Regiment companies conduct rapid response call-outs. In addition, each deployed Combat brigade company has its own combat engineering company which can also conduct rapid-response call-outs. The LAF has seven MDD teams for technical survey and for use as a secondary asset supporting clearance. Through the Engineering Regiment, LMAC provides mechanical assistance to clearance operators that lack this capacity.¹⁴²

126 Email from Valerie Warrington, NPA, 28 May 2020.

127 Email from Hala Amhaz, NPA, 17 March 2021.

128 Email from Southern Craib, NPA, 12 April 2022.

129 Email from Valerie Warrington, NPA, 28 May 2020.

130 Email from Valerie Warrington, NPA, 23 July 2021.

131 Email from Southern Craib, NPA, 12 April 2022.

132 Email from Valerie Warrington, NPA, 23 July 2021.

133 LMAC, "Annual Report 2020", p. 10.

134 Email from Valerie Warrington, NPA, 23 July 2021.

135 LMAC, "Annual Report 2021", p. 16.

136 Email from Hiba Ghandour, MAG, 7 April 2022.

137 Email from Southern Craib, NPA, 12 April 2022.

138 Email from Hiba Ghandour, MAG, 7 April 2022.

139 Email from Mouhamed Chour, DCA, 2 June 2022.

140 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

141 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

142 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022; and LMAC, "Annual Report 2021", p. 19.

In Lebanon, machines are mostly used as secondary assets to support clearance teams (e.g. for ground preparation, rubble removal, or for fade-out); in areas where manual clearance is difficult; and for technical survey and LTHA.¹⁴³ Often, however, the terrain is not suitable for machines. Unfortunately, the economic crisis in Lebanon has resulted in huge budget cuts in all government institutions and therefore the LAF teams are not able to conduct the same level of activities as before, including with respect to some of the mechanical assets. Clearance operators who are supported by mechanical assets from the LAF are providing fuel, maintenance, and spare parts for the machines. In addition, new mechanical assets have been introduced by MAG, which will be used as primary assets.¹⁴⁴

Table 2: Operational clearance capacities deployed in 2021¹⁴⁵

Operator	Manual teams	Total clearance personnel*	Dogs and handlers	Machines**	Comments***
DCA	2	16	0	0	Combined mine and BAC capacity. Clearance personnel also conduct technical survey. LMAC reported that DCA had three clearance teams.
HI	3	24	0	0	Clearance personnel also conduct technical survey when required.
MAG	6	55	0	12	This was a decrease of 15 deminers in 2021 due to the end of FCDO funding as of March 2021. Mechanical assets were used to support both cluster munition and mine clearance operations.
NPA	2	16	0	0	NPA continued to operate with two mine clearance teams in 2021. Clearance personnel also conduct technical survey when required.
UNIFIL	5	124	0	1	Including team leaders, site supervisors, and also includes one EOD team, which is in addition to the five manual clearance teams. The demining machine is an armed excavator which can be used as a primary tool (using the bucket attachment for excavating and sifting) or for area confirmation or reduction (using the rotary attachment).
Totals	18	235	0	13	

* Clearance personnel may also conduct technical survey. ** Excluding vegetation cutters and sifters. *** Clearance teams also work on technical survey tasks.

The UNIFIL capacity was provided by its two Troop-Contributing Countries: Cambodia and China. Operational capacities and capabilities of UNIFIL are determined by operational need. In 2022, UNIFIL capacity totalled 124 personnel (five manual clearance teams, two EOD teams, and one mechanical team).¹⁴⁶ UNMAS provides initial training with UNIFIL demining units when they rotate into the country, refresher training, and QA and validation of the demining teams.¹⁴⁷

UNIFIL was established in 1978¹⁴⁸ in order to confirm the withdrawal of Israeli forces from southern Lebanon (which occurred in 2000); restore international peace and security; and assist the Government of Lebanon to re-establish its authority in the area.¹⁴⁹ The primary task of UNIFIL mine clearance teams has been to clear access lanes through minefields in order to visibly demarcate the 118km-long Blue Line. Historically, UNIFIL has not conducted clearance on the Blue Line for humanitarian purposes but only to facilitate placement of markers by clearing three-metre-wide lanes into mined areas,¹⁵⁰ and also to clear mines close to UNIFIL posts or which pose a danger to UNIFIL patrols. However, in a positive development, on 30 January 2020, UNIFIL and LMAC signed a MoU on Humanitarian Demining, and planned to work together, with UNIFIL helping the LAF/LMAC clear areas contaminated by both mines and unexploded ordnance (UXO).¹⁵¹ According to LMAC, UNIFIL Engineering Units subsequently started humanitarian demining in June 2020, with two teams.¹⁵² As per the MoU, LMAC joined UNMAS in the accreditation of the UNIFIL teams and QA visits.¹⁵³

143 Emails from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017; Samuel Devaux, HI, 4 April 2017; Dave Willey, MAG, 25 April 2017; and Lt.-Col. Fadi Wazen, LMAC, 5 April 2019.

144 Email from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022.

145 Emails from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022; Mouhamed Chour, DCA, 2 June 2022; Nahed Al-Khlouf, HI, 6 August 2022; Hiba Ghandour, MAG, 7 April 2022; Valerie Warmington, NPA, 7 September 2022; and Lt.-Col. (CHN) Dongjie Zhang, UNIFIL Force HQ, 7 September 2022.

146 Lt.-Col. (CHN) Dongjie Zhang, UNIFIL Force HQ, 7 September 2022.

147 Lt.-Col. (CHN) Dongjie Zhang, UNIFIL Force HQ, 4 August 2022.

148 UN Security Council Resolutions 425 (1978) and 426 (1978).

149 UNIFIL, "UNIFIL Mandate", at: <http://bit.ly/2YpCwuD>.

150 Presentation by Maj. Pierre Bou Maroun, RMAC, Nabatiyeh, 4 May 2012; and emails from Henri Francois Morand, UNMAS, 2 October 2015 and 18 September 2017.

151 Emails from Lt.-Col. Zengliang Zhou, UNIFIL, 20 April 2020; and Lt.-Col. Fadi Wazen, LMAC, 19 March 2020.

152 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021; and LMAC, "Annual Report 2020", p. 17.

153 LMAC, "Annual Report 2020", p. 17.

With respect to non-technical survey capacity (for both mines and CMR) in 2021, LMAC reported that there were seven non-technical survey teams in total: two LMAC teams (totalling two personnel); two DCA teams (totalling four personnel); one HI team (totalling three personnel); one MAG team (totalling three personnel); and one NPA team (totalling two personnel up to the end of March and then one person thereafter).¹⁵⁴ As at April 2022, NPA no longer had dedicated non-technical or technical survey capacity and when survey is required, suitably trained NPA personnel are drawn from existing clearance capacity.¹⁵⁵

National operator LAMINDA ceased survey and clearance operations in Lebanon in August 2020, due to the economic situation in Lebanon and the inability to fund overhead expenses.¹⁵⁶

DCA's clearance capacity remained constant in 2021 and was expected to continue to remain the same in 2022.¹⁵⁷

HI's demining personnel decreased remained at three teams totalling 24 deminers for clearance and technical survey in 2021.¹⁵⁸ MAG's EU grant ended on 31 January 2021, resulting in a reduction of one multi-task team in the north-east, and MAG's UK Foreign, Commonwealth & Development Office (FCDO) grant ended on 31 March 2021, reducing capacity by 2.5 teams in the South.¹⁵⁹

NPA employs a multitask approach, with all deminers, team leaders, and team supervisors trained to address all explosive ordnance types in Lebanon, which has enabled NPA to respond to changing priorities and operational constraints. This has been helpful in mitigating the impact of COVID-19 disruptions, such as reassigning deminers between mine and

CMR tasks as needed.¹⁶⁰ NPA saw a significant reduction in overall operational capacity in 2021 due to loss of funding, in particular from the EU and FCDO, which resulted in closure of NPA's sub-base and operations in north-east Lebanon from the end of April 2021.¹⁶¹

LMAC encourages research, application, and sharing of the innovative technological means and methodologies.¹⁶² MAG Lebanon has introduced two new mechanical assets: the Rebel Crusher, introduced in late 2021, used for processing (crushing) of soil contaminated with anti-personnel mines; and the GCS-200 equipped with flail attachment for mechanical ground preparation of technical survey lanes. MAG has conducted trials with the Rebel Crusher and training for GCS-200. As at April 2022, both assets were in the accreditation process and were planned to be deployed once accredited.¹⁶³

As part of non-technical survey on the north-east border of Lebanon, contaminated during spill-over of the Syrian conflict in 2014–17, drones were used for the first time in 2018, and proved very helpful in helping inform survey efforts according to LMAC.¹⁶⁴ HI organised a visit by its unmanned aerial vehicles (UAV) expert partner to Lebanon on 19–23 April 2021, to study the feasibility of the use of drones/UAV in HI's land release operations, with a view to enhancing the non-technical and technical survey processes as well as testing innovative methods based on thermal and LiDAR sensors. The visit found that Lebanon is a "perfect environment" for the deployment of drones and a project for 2022 was developed and submitted to donors.¹⁶⁵ HI began using drones in its operations in Mount Lebanon in 2022, in collaboration with LMAC.¹⁶⁶

DEMINER SAFETY

According to LMAC, there were three demining accidents in 2021, two in MAG and one in UNIFIL (one person also injured by a N14 mine during clearance operations).¹⁶⁷ The two accidents in MAG occurred during clearance operations on 3 March and 12 October resulting in one person injured in each accident. MAG performed internal investigations and the investigation reports were shared with LMAC.¹⁶⁸ LMAC also conducted an external investigation of MAG's accident.¹⁶⁹ UNIFIL confirmed it had one demining accident in 2021, which was investigated by the technical investigation team of UNIFIL. UNIFIL said that an after action report (AAR) of the

incident was produced and shared, which highlighted the following:

- "Change in investigation procedure to include technical representative from Combat Engineering Branch of UNFIL HQ;
- Specific casualty evacuation flow chart and rehearsals including air evacuation of casualty
- Change in demining SOPs suiting the deployment and terrain in respect of incident reporting, management, and investigation".¹⁷⁰

154 LMAC, "2021 Annual Report Lebanon Mine Action Centre", p. 17; and emails from Lt.-Col. Fadi Wazen, LMAC, 29 March 2022; Mouhamed Chour, DCA, 2 June 2022; Nahed Al-Khlouf, HI, 12 August 2022; Hiba Ghandour, MAG, 7 April 2022; and Southern Craib, NPA, 28 March and 12 April 2022.

155 Email from Southern Craib, NPA, 12 April 2022.

156 LMAC, "Annual Report 2020", p. 8; and email from Lt.-Col. Fadi Wazen, LMAC, 15 June 2021.

157 Email from Mouhamed Chour, DCA, 4 April 2022.

158 Email from Nahed Al-Khlouf, HI, 6 August 2022.

159 Emails from Sylvain Lefort, MAG, 24 March and 27 May 2021.

160 Email from Valerie Warmington, NPA, 7 September 2022.

161 Email from Southern Craib, NPA, 28 March 2022.

162 Email from Hiba Ghandour, MAG, 7 April 2022.

163 Ibid.

164 Presentation by Lt.-Col. Fadi Wazen, LMAC, at the Regional School for Humanitarian Demining in Lebanon (RHDSL), Beirut, 8 April 2019 and email 24 September 2022.

165 LMAC, "Annual Report 2021", p. 50.

166 Email from Nahed Al-Khlouf, HI, 6 August 2022.

167 Email from Lt.-Col. Fadi Wazen, LMAC, 24 September 2022.

168 Emails from Hiba Ghandour, MAG, 7 April and 16 August 2022.

169 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

170 Lt.-Col. (CHN) Dongjie Zhang, UNIFIL Force HQ, 4 August 2022.

LMAC has said that lessons learned from demining accidents are shared with all implementing agencies. Clearance operators were not aware of any accident reports having been shared by LMAC in the last three years,¹⁷¹ but said that LMAC shared lessons learned in bilateral meetings and technical workshops.¹⁷²

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

A total of 682,453m² of mined area (i.e. area suspected or confirmed to contain anti-personnel mines) was released in 2021, of which 246,817m² was cleared, 169,288m² was reduced through technical survey, and 266,348m² was cancelled through non-technical survey. A total of 17,881 anti-personnel mines were destroyed in 2021, including 43 during EOD spot tasks.

A total of 26,211m² of unrecorded anti-personnel mined area was added to the database in 2021.¹⁷³

SURVEY IN 2021

In 2021, 266,348m² of mined area was cancelled through non-technical survey and 169,288m² was reduced through technical survey (see Tables 3 and 4).¹⁷⁴ This is an increase compared to the 99,778m² of mined area cancelled through non-technical survey in 2020 (due to the shift in focus of non-technical survey teams to minefields, having completed non-technical survey of all CMR tasks in 2020) and a decrease on the 226,562m² reduced through technical survey in 2020.¹⁷⁵

Table 3: Cancellation through non-technical survey in 2021¹⁷⁶

Province	Operator	Area cancelled (m ²)
Bekaa and South Lebanon	MAG	102,222
Mount Lebanon	DCA	36,906
Mount Lebanon and North Lebanon	HI	86,615
North Lebanon	LMAC	40,605
Total		266,348

Table 4: Reduction through technical survey in 2021¹⁷⁷

Operator	Area reduced (m ²)
DCA	12,842
HI	53,410
MAG	86,046
NPA	16,990
Total	169,288

A total of 26,211m² of previously unrecorded legacy anti-personnel mine contamination was identified by non-technical survey teams across seven sites and was added to the database in 2021.¹⁷⁸

171 Emails from Southern Craib, NPA, 12 April 2022; Mouhamed Chour, DCA, 17 August 2022; Nahed Al-Khlouf, HI, 12 August 2022; and Hiba Ghandour, MAG, 16 August 2022.

172 Email from Nahed Al-Khlouf, HI, 12 August 2022.

173 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022. DCA reported discovering 1,704m² of previously unknown mined area during non-technical survey in 2021 (email from Mouhamed Chour, DCA, 2 June 2022); and MAG reported discovering one area of previously unknown mined area in Rob Tlatine village, Marjaoun district, which totalled 1,670m² (email from Hiba Ghandour, MAG, 7 April 2022).

174 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022. In Lebanon, the term "Mined Area" is used to denote dangerous areas entered into the database when the first impact survey was executed, which were not accessible, and where the type of hazard was not identified. However, for the purposes of this report, mined area refers to areas suspected or confirmed to contain anti-personnel mines.

175 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

176 LMAC, "Annual Report 2021", p. 18; and email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

177 LMAC, "Annual Report 2021", p. 17; and emails from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022; Mouhamed Chour, DCA, 2 June 2022; Nahed Al-Khlouf, HI, 12 August 2022; and Southern Craib, NPA, 12 April 2022. There was a discrepancy between data reported by LMAC and what was reported by MAG. MAG reported reducing 104,733m² of mined area on the Blue Line and 4,542m² in north-east Lebanon in 2021. The differences are believed to be due to LMAC only reporting land release after full completion and hand over (emails from Hiba Ghandour, MAG, 7 April and 16 August 2022).

178 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022. DCA reported discovering 1,704m² of previously unknown mined area during non-technical survey in 2021 (email from Mouhamed Chour, DCA, 2 June 2022); HI reported discovering 15,616m² of previously unknown mined areas during non-technical survey in 2021 (email from Nahed Al-Khlouf, HI, 6 August 2022); and MAG reported discovering one previously unknown mined area in Rob Tlatine village, Marjaoun district, which totalled 1,670m² (email from Hiba Ghandour, MAG, 7 April 2022).

CLEARANCE IN 2021

A total of 246,817m² of mined area was cleared in Lebanon in 2021 (219,470m² by demining NGOs and UNIFIL, and 27,347m² by LAF), destroying in the process a total of 17,838 anti-personnel mines (16,998 by demining NGOs and UNIFIL; and 840 by the LAF), 5 anti-vehicle mines, and 1,303 items of other UXO (see Table 5).¹⁷⁹ In addition, during EOD spot tasks in 2021, MAG destroyed 1 anti-personnel mine and the LAF destroyed 42 anti-personnel mines and 32 anti-vehicles mines.¹⁸⁰

Total clearance in 2021 was a decrease on the nearly 0.35km² of mined area cleared in 2020 (0.21km² by demining NGOs and 0.14km² by LAF).¹⁸¹

LMAC has its own category for IED tasks and they are not registered as mine clearance. However, any victim-activated IEDs discovered are included in the total of anti-personnel mines destroyed.¹⁸² None of the anti-personnel mines destroyed in 2021 was of an improvised nature.¹⁸³

Table 5: Mine clearance in 2021¹⁸⁴

Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
DCA	28,075	2,606	0	14
HI	67,117	42	0	32
MAG	69,030	6,813	5	1,250
NPA	26,245	3,658	0	7
LAF	27,347	840	Not reported	Not reported
UNIFIL	29,003	3,879	0	0
Totals	246,817	17,838	5	1,303

AP = Anti-personnel AV = Anti-vehicle

The CHAs tasked by LMAC to clearance operators do not include obligatory fade-out distances, which can considerably increase the overall size of the task.¹⁸⁵

HI reported that it cleared nine tasks totalling 35,200m² suspected to contain anti-personnel mines in 2021 but which proved to contain none.¹⁸⁶ This represents more than half of the total area cleared by HI in 2021, highlighting the importance of technical survey prior to clearance. MAG reported that in 2021 it cleared one mined area in the south (35,966m²) and one mined area in the north-east (130m²) which were found not to contain anti-personnel mines.¹⁸⁷

The amount of mined area cleared by DCA in 2021, was an increase on the previous year, due to reduced impact of COVID lockdowns and of protests and roadblocks in 2021; an agreed reduction in the percentage of the area requiring technical survey; and the 2021 clearance tasks being suitable for deployment of several types of detectors, including large loop detectors.¹⁸⁸

179 Emails from Lt.-Col. Fadi Wazen, LMAC, 1 June and 24 September 2022; and LMAC, "Annual Report 2021", p. 13.

180 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022; and LMAC, "Annual Report 2021", p. 15. MAG itself reported that it did not destroy any anti-personnel mines during EOD spot tasks in 2021, although it did destroy an anti-personnel mine in late 2020 which may account for the discrepancy (emails from Hiba Ghandour, MAG, 7 April and 16 August 2022). DCA reported destroying one anti-personnel mine during an EOD spot task in south Lebanon (email from Mouhamed Chour, DCA, 2 June 2022), however, this was not included in the EOD spot task data reported by LMAC.

181 Emails from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020; and LMAC, "Annual Report 2019", p. 7.

182 Email from Lt.-Col. Fadi Wazen, LMAC, 1 June 2022.

183 Ibid. HI reported that of the 42 anti-personnel mines it cleared in 2021, one was of an improvised nature (email from Nahed Al-Khlouf, HI, 6 August 2022).

184 LMAC, "Annual Report 2021", pp. 13 and 15; and emails from Lt.-Col. Fadi Wazen, LMAC, 1 June and 24 September 2022. There were some discrepancies between data reported by LMAC and what was reported by DCA, HI, MAG, NPA, and UNIFIL. DCA reported that it cleared a total of 55,501m² in 2021 in south Lebanon and in Mount Lebanon, with the destruction of a total of 2,557 anti-personnel mines and 15 items of UXO. The discrepancy is believed to be because DCA includes confirmation and mechanical asset data, whereas LMAC does not (emails from Mouhamed Chour, DCA, 2 June and 17 August 2022). HI reported that it cleared 67,714m² of mined area in 2021 across 18 tasks in the north, with the destruction of 42 anti-personnel mines (including one improvised mine) and 32 items of UXO (email from Nahed Al-Khlouf, HI, 6 August 2022). MAG reported that it cleared a total of 111,501m² in 2021 in the south and in north-east, with the destruction of a total of 6,823 anti-personnel mines, 3 anti-vehicle mines, and 1,259 other items of UXO (email from Hiba Ghandour, MAG, 7 April 2022). NPA reported that it cleared 25,925m² in the south in 2021, with the destruction of 3,617 anti-personnel mines and 7 UXO (email from Southern Craib, NPA, 12 April 2022). UNIFIL reported that it cleared 28,269m² in 2021, with the destruction of 4,075 anti-personnel mines and 1 UXO (email from Lt.-Col. (CHN) Dongjie Zhang, UNIFIL Force HQ, 4 August 2022).

185 Interview with Chris Chenavier, HI, Toulou, 18 April 2016.

186 Email from Nahed Al-Khlouf, HI, 6 August 2022.

187 Email from Hiba Ghandour, MAG, 7 April 2022.

188 Email from Mouhamed Chour, DCA, 2 June 2022.

In 2020, LMAC developed new guidelines and safety measures with respect to COVID-19, which allowed implementing partners to remain fully operational.¹⁸⁹ The SOP for safe behaviour continued to be applied and monitored by QA officers in 2021, but COVID-19 cases continued to result in the need for self-isolate, reducing operational output.¹⁹⁰ DCA said COVID-19 impacted its land release operations due to operations personnel being off work sick or in quarantine awaiting negative test results.¹⁹¹ HI said COVID-19 had no major effect on its survey or clearance operations in 2021, and only 15 working days were lost due to the pandemic. All HI teams were accommodated in the Toula base during working days; movements outside the base were limited to a minimum and no visitors were allowed. HI said that all precautionary measures were applied according to its internal SOP.¹⁹² According to MAG, there were 86 positive cases of COVID-19 among its deminers during 2021, resulting

in the loss of 272 working days.¹⁹³ NPA lost 17 operational days during the countrywide COVID-19 lockdown in January–February 2021. In addition, further operational days were lost due to NPA personnel testing positive to COVID-19 or precautionary isolation prior to testing following direct exposure.¹⁹⁴ According to UNIFIL's preventive measures for COVID-19, all units deployed and rotated are required to quarantine for 7 days, during which time all demining activities are suspended. In 2021, UNIFIL's Cambodian Unit had a significant number of COVID-19 infections and requested two weeks' group quarantine, during which no demining was conducted.¹⁹⁵

As in the previous year, roadblocks due to civil unrest prevented or delayed DCA teams from getting to their site on some instances in 2021, although the disruption was less than in 2020.¹⁹⁶

PROGRESS TOWARDS COMPLETION

According to Lebanon's Statement as an observer at the Fourth Review Conference of the APMBC in Oslo in November 2019, Lebanon's national mine action policy affirms its aspiration to become a State Party to the APMBC. The Minister of Defence, who also heads the LMAA, sent a letter to the Ministry of Foreign Affairs stating that the Ministry of Defence has no objections to Lebanon acceding to the Treaty. LMAC will work in the spirit of the APMBC and LMAC also asserts that it will implement the Oslo Action Plan, adopted at the Fourth Review Conference of the APMBC.¹⁹⁷ In Lebanon's National Mine Action Strategy 2020–25, the LMAA says that it works within the spirit of the APMBC and that it will continue to promote an accession to the Convention.¹⁹⁸

Clearance of mined areas was originally expected to be completed by the end of 2020, in accordance with the 2011–20 national strategy, but actual mine clearance capacity was far lower and progress against the strategy fell well behind schedule. Lebanon's new National Mine Action Strategy 2020–25 sets out annual targets for the next six years. LMAC expects Lebanon to be free from known mined areas in ten years, with the application of efficient land release methodology and subject to securing the necessary funding.¹⁹⁹ However, this looks to be very ambitious,

considering the extent of the remaining mined area (17.5km²) and annual mine clearance rates of considerably less than 1km² per year, with a total of less than 2km² of mined area cleared in the last five years (see Table 6).

It will take at least a decade for Lebanon to become mine-free. However, progress in land release is expected to be accelerated by adoption of better land release procedures in recent years. Crucially, LMAC's demonstrated commitment to enhance the use of non-technical and technical survey should help to cancel or reduce areas more efficiently.²⁰⁰

Table 6: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	0.25
2020	0.35
2019	0.48
2018	0.39
2017	0.51
Total	1.98

189 Emails from Lt.-Col. Fadi Wazen, LMAC, 22 July 2022; Sylvain Lefort, MAG, 23 June 2020; and Brig.-Gen. (ret.) Badwi El Sakkal, LAMINDA, 22 June 2020.

190 Emails from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021 and 1 June 2022.

191 Email from Mouhamed Chour, DCA, 4 April 2022.

192 Email from Nahed Al-Khlouf, HI, 6 August 2022.

193 Email from Hiba Ghandour, MAG, 7 April 2022.

194 Email from Southern Craib, NPA, 12 April 2022.

195 Lt.-Col. (CHN) Dongjie Zhang, UNIFIL Force HQ, 4 August 2022.

196 Emails from Mouhamed Chour, DCA, 4 April and 2 June 2022.

197 LMAC, Lebanon Mine Action Strategy 2020–25, signed June 2020, p. 4; and LMAC, "Plan for the Implementation and Monitoring of the LMAP Strategy (2020–2025)", p. 5.

198 LMAC, "Lebanon Mine Action Strategy 2020–2025", pp. 1 and 4.

199 Emails from Lt.-Col. Fadi Wazen, LMAC, 19 March and 22 July 2020; and 15 March 2021; LMAC, "Annual Report 2020", p. 31; and LMAC, "Plan for the Implementation and Monitoring of the LMAP Strategy (2020–2025)", p. 9.

200 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and emails from Craig McDiarmid, NPA, 17 April 2018; and Dave Wiley, MAG, 27 April 2018.

Rocky and forested terrain continued to pose a challenge to demining operations, in addition to lack of minefield records for much of the contamination (especially in the North).²⁰¹

The economic and political crises have led to hyper-inflation, currency collapse, and problems with already strict and reducing budgets. This has resulted in supplies being more expensive, fuel being harder to come by, and protests and roadblocks hampering the security situation. The impact of this is particularly challenging in respect to funding from some donors which do not fund the full cost of operations.²⁰² Funding shortfalls are significantly affecting LMAC's ability to meet the annual targets. Inflation has meant that the salaries of LMAC staff have dropped to almost 5% of their original purchasing power, significantly impacting on morale.²⁰³

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

According to LMAC, the strategic implementation plan, which will support the National Mine Action Strategy 2020–25, will address an exit strategy and long-term risk management.²⁰⁴

LMAC provided summary information on its plans regarding an exit strategy with respect to addressing residual risk after Convention on Cluster Munitions (CCM) Article 4 fulfilment,²⁰⁵ but details have yet to be provided on an exit strategy and long-term risk management strategy for mined areas.

201 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.

202 Email from Matthew Benson, DCA, 24 May 2021.

203 LMAC, "Annual Report 2021" p. 34.

204 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020.

205 LMAC, "Annual Report 2020", p. 31.

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION: UNKNOWN

NATIONAL ESTIMATE AT APRIL 2021,
INCLUDING ANTI-VEHICLE MINE
CONTAMINATION

287 KM²

AP MINE
CLEARANCE IN 2021

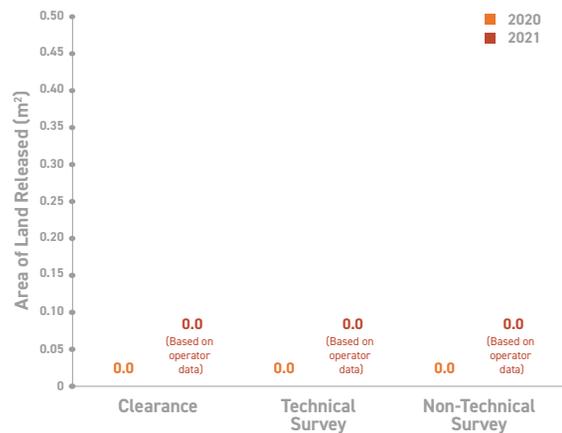
0 M²

AP MINES
DESTROYED IN 2021

0

(BASED ON OPERATOR DATA)

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- All parties to the conflict in Libya should cease the use anti-personnel mines, including these of improvised nature.
- Libya should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Libya should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Libya should conduct a national baseline survey to identify the extent of contamination from anti-personnel mines.
- Libya should ease bureaucratic hurdles to efficient importation of mine action equipment and granting of visas for international staff. Libya should expedite accreditation of mine clearance operators.
- Libya should strengthen the Libyan Mine Action Centre (LibMAC)'s leading role as a coordinator of the mine action programme in close consultation with the national and international operators.
- Libya should channel the funds and capacity building support offered by the international community to better recruit, train, and equip its national resources and enhance the safety its deminers.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- The Libyan Mine Action Centre (LibMAC)

NATIONAL OPERATORS

- Free Field Foundation – 3F) - accredited
- The Safe Trust Non-governmental organisation (NGO): (Al-Thiqa al-Am-na) - accredited
- The Communication NGO (Al-Tawa-ol) - accredited
- Libyan Peace Organisation – (accredited for non-technical survey)

INTERNATIONAL OPERATORS

- DanChurchAid (DCA)
- Danish Refugee Council Humanitarian Disarmament and Peacebuilding sector (formally known as Danish Demining Group (DDG). Hereafter referred to as DRC)
- The HALO Trust
- Humanity and Inclusion (HI)

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

There is no accurate figure for the extent of mined area in Libya. Mine contamination is a legacy of the Second World War (mainly in the east and mostly anti-vehicle mine contamination), as well as subsequent armed conflict with Egypt in 1977 (pattern minefields mapped, fenced and marked), with Chad in 1978–87, which resulted in mines being laid on Libya's borders with these two neighbours, and the Libya uprising of 2011 and subsequent armed conflicts.¹ The border with Tunisia is also believed to be affected. During Colonel Muammar Qaddafi's four decades in power, mines were emplaced around a number of locations, including military facilities and key infrastructure.

Mines were used by both the government and the opposition forces during the 2011 conflict leading to Colonel Qaddafi's overthrow. According to the Libyan Mine Action Centre (LibMAC), around 30,000–35,000 mines were laid in five regions and cities, but were "largely cleared" after the downfall of the Gaddafi regime by volunteers with previous military experience.² In the course of the Libyan conflict, the Gaddafi regime lost control over large parts of its conventional weapons arsenal. Weapons storage sites were accessible to opposition fighters, civilians, and soldiers alike. Since the end of the fighting, central control over the weapons arsenal has not been re-established and has led to widespread use and trafficking of arms.³ Since the overthrow of Qaddafi in 2011, Libya has remained mired in conflict as tribal and armed groups struggle for power.

Since February 2014, Libya's governance has been divided between two main entities: the United Nations (UN)-recognised Government of National Accord (or GNA) and the self-styled Libyan National Army (LNA), led by commander Khalifa Haftar. After a long negotiation process in 2015, a political agreement was signed in December 2015 under UN supervision. Clashes in Tripoli between rival militias escalated again in 2019, and the LNA surrounded Tripoli in January 2020 launching constant artillery and rocket attacks. In June 2020, LNA forces withdrew 600km east of Tripoli leaving behind an unknown number of improvised explosive devices (IEDs).⁴ Many of these fall within the scope of the APMBC. The fighting ended with parties to the conflict signing an agreement of "complete and permanent" ceasefire in October 2020 in Geneva under the UN auspices.⁵

In March 2021, the Tripoli-based Government of National Unity (GNU), headed by Abdelhamid Dabeida, replaced these

former eastern- and western-based authorities. However, the relationship with Haftar's LNA remained fraught. The same month, Libya's House of Representatives allied with Khalifa Haftar endorsed a second rival administration, the Government of National Stability headed by Fathi Bashagha. It is unclear where the new authority will be based and if it will operate in parallel to the GNU.⁶

According to multiple reports, fighters affiliated with the group commanded by Khalifa Haftar, and foreign fighters from Russia emplaced antipersonnel mines, including victim-activated IEDs and booby traps in Tripoli's southern suburbs as they withdrew.⁷ Human Rights Watch said that between April 2019 and June 2020, Haftar and affiliated forces, including the Wagner Group, a Russian government-linked private military security contractor, left behind "enormous" amounts of ordnance in Tripoli's southern districts. Some of these were hidden inside homes and other structures, in some cases inside furniture. They were often activated with invisible tripwires.⁸ The Independent Fact-Finding Mission on Libya, established by the UN Human Rights Council in June 2020 with a mandate to investigate violations of International Human Rights Law and International Humanitarian Law committed in the country since 2016, reported that the LNA and the Wagner group "may have violated... International Humanitarian Law obligations to minimise the indiscriminate effects of landmines and to remove them at the end of active hostilities".⁹

Danish Church Aid (DCA), which has been operating in Libya since 2010, confirmed the presence of anti-personnel tripwire mines, bounding mines, and ant-lift devices in Tripoli, and legacy IEDs in Benghazi and Sirte.¹⁰ There were no reports of new use of anti-personnel mines in Libya since the end of hostilities in October 2020.

The UN Mine Action Service (UNMAS) similarly reported that after the withdrawal of LNA forces in May 2020, explosive ordnance (booby-traps, landmines, and IEDs) was scattered across southern Tripoli. Sophisticated tactics were deployed to hinder demining efforts and target deminers, including placement of low-metal-content anti-personnel mines next to anti-vehicle mines and the use of anti-lift devices. In addition, UNMAS reported extensive use of booby-traps and victim-activated IEDs in civilian houses that served no military purpose but rather inflicted high civilian casualties.¹¹ The HALO Trust reported that it had found ML-7/8 anti-lift

1 Interview with Col. Turjoman, Director, Libyan Mine Action Centre (LibMAC), in Geneva, 7 February 2019; and "Libya: The Toxic and Explosive Legacy of Modern Conflict", Presentation by United Nations Mine Action Service (UNMAS), UN National Directors Meeting, Geneva, 12 February 2020.

2 Interview with Col. Turjoman, LibMAC, in Geneva, 7 February 2019.

3 ITF Enhancing Human Security, Annual Report 2020, at: <http://bit.ly/3t8SbcV>, p. 78; and email from Catherine Alice Smith, Programme Manager, DRC, 20 April 2021.

4 ITF Enhancing Human Security, Annual Report 2020, p. 78.

5 UN Support Mission in Libya (UNSMIL), Agreement for a complete and permanent ceasefire in Libya, Geneva, 23 October 2022, at: <https://bit.ly/3Bunnej>.

6 Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022, at: <https://bit.ly/3nkVPju>.

7 Human Rights Watch, "Libya: Landmines left after armed group withdraws", 3 June 2020, at: <http://bit.ly/2DIE5AM>; and "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022, at: <https://bit.ly/3nkVPju>.

8 Human Rights Watch, "Libya: Russia's Wagner Group Set Landmines Near Tripoli", 31 May 2022, at: <https://bit.ly/3xRfzQy>.

9 Ibid.

10 Email from Graeme Ogilvie, Programme Manager, DCA, 1 April 2022.

11 Presentation by UNMAS and LIBMAC to the 24th NDM meeting, 26 May 2021.

devices being laid underneath OZM-72 anti-personnel bounding fragmentation mines.¹² In Tripoli, there has been evidence of conventional munitions being repurposed to operate in an improvised manner as landmines (projectiles containing a Soviet MUV fuze, which are tripwire initiated).¹³

In June 2020, the President of the Anti-Personnel Mine Ban Convention (APMBC) Nineteenth Meeting of States Parties issued a press release expressing concern at reports of the use of anti-personnel mines of an improvised nature in and around Tripoli. In his November 2021 report on Libya to the UN Security Council, the Prosecutor of the International Criminal Court (ICC) said that his office continued "to gather evidence related to alleged crimes committed during the April 2019 attack on Tripoli", but did not announce the nature of these investigations.¹⁴ Amnesty International, however, has evidence that LNA-affiliated forces have laid extensive tripwire-activated anti-personnel mines and booby-traps in homes and other civilian objects.¹⁵

Multiple types of anti-personnel mines: (T-AB-1, NR-413, NR-442), were used or left behind as part of abandoned stockpiles across the country at the start of the conflict in 2011.¹⁶ Since then, Human Rights Watch has identified 10 anti-personnel mines of Soviet and Russian origin in Libya: PMN-2, OZM-72, MON-50, MON-90, MON-100, POM-2S, POM-2R, MS-3, ML-7, and ML-8. Other anti-personnel mines (GYATA-64) and anti-vehicle mines (TM-62M, TM-62P3 and TM-83) have also been reported. Four types of anti-personnel mine of Russian origin had not been previously documented in Libya. Explosive devices of an improvised nature were assembled and used in a manner intended to be detonated by

the presence, proximity, or contact of a person, meeting the definition for an anti-personnel mine.¹⁷

LibMAC told Human Rights Watch that, between May 2020 and March 2022, 130 people died and 196 were injured by mines and explosive devices across Libya, mostly in southern Tripoli. Of the total casualties, 78 (24%) were specialists in mine action, none of whom was able to return to work.¹⁸

Many suspected hazardous areas (SHAs) have not been surveyed. According to the latest updates at April 2021, national data from the LibMAC database suggested total contamination of 287km² of landmines (61km² of confirmed hazardous areas (CHAs) and 226km² of SHAs), distributed over seven localities.¹⁹ The data provided by LibMAC indicate mostly mixed contamination and are not disaggregated by contamination type. LibMAC data from 2017 indicate that the SHA of 223km² in Sirte is suspected to contain only anti-vehicle mines.²⁰

It is likely that further survey will drastically reduce these figures. Moreover, the contamination data of Sirte do not reflect the clearance that has been ongoing in 2017–20 and are therefore believed to be outdated. A non-technical survey to assess the scale of contamination that resulted from the 2019–20 conflict in southern Tripoli is said to have concluded in March 2021 but its results were not reported to Mine Action Review by LibMAC. In July 2022, LibMAC told Human Rights Watch that since 2019, landmines and other ordnance are said to have contaminated 720km² of the southern Tripoli districts alone.²¹ In the absence of systematic survey efforts, however, this figure is thought to be significantly inflated.

Table 1: Anti-personnel mined area by locality (at end 2020)²²

Locality	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHAs/CHAs	Total area (m ²)
Al Jifarah	0	0	1	5,280	1	5,280
Al Jufrah	0	0	1	408,572	1	408,572
Benghazi	16	12,382,269	4	1,564,907	20	13,947,176
Jabal Nafusa	1	0	1	604,139	2	604,139
Misratah	3	3,387,431	0	0	3	3,387,431
Sabha	2	3,990,067	0	0	2	3,990,067
Sirte	3	40,747,944	1	222,934,834	4	263,682,778
Greater Tripoli	41	654,576	14	131,990	55	786,566
Totals	66	61,162,287	22	225,649,722	88	286,812,009

12 Email from Lucy Reeve, Programme Manager, HALO Trust, 12 May 2021.

13 Email from Zita Andrassy, Programme Officer Libya, HALO Trust, 27 February 2022.

14 Statement of International Criminal Court (ICC) Prosecutor, Karim A.A. Khan QC, to the UN Security Council on the Situation in Libya, pursuant to UNSCR 1970 (2011), November 2021, at: <https://bit.ly/3vtpDyS>.

15 "Libya: shocking new evidence of retaliatory attacks on civilians", Amnesty International UK, 5 June 2020, at: <http://bit.ly/3f9WiPN>.

16 Landmine and Cluster Munition Monitor, "Libya", accessed 27 June 2022, at: <https://bit.ly/3y0blpF>.

17 Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022, at: <https://bit.ly/30rfUqS>.

18 Ibid.

19 Email from Col. Adel Elatwi, Operations, LibMAC, 22 April 2021.

20 Emails from Abdullatif Abujarida, LibMAC, 20 February and 9 March 2017.

21 Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022.

22 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

According to DCA, conventional minefields are rare in the west and central coastal area of Libya, and there has been no direct evidence of anti-personnel mines in Tripoli. According to HALO, the contamination of mines across Tripoli featured a mix of previously unseen items, and a possible distribution and laying of mines from the former Gaddafi stockpiles, such as the Belgian PRB-M3 anti-vehicle mines. There have been reports of mines causing fatalities in the west of Sirte, but no organisation has been permitted to conduct a baseline survey of mine contamination there.²³

Libya is also contaminated by cluster munition remnants (CMR) (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Libya for further information), and ongoing conflict has left quantities of other explosive remnants of war (ERW) in cities across Libya.²⁴

PROGRAMME MANAGEMENT

Mine action exists in a fragmented and occasionally violent political context. In February 2021, a new interim government was chosen following UN-sponsored talks in Geneva. In March, the GNU became the new UN-supported authority in Libya and replaced both eastern- and western- governments, although the relationship with the LNA remained fraught.²⁵

LibMAC was mandated by the Minister of Defence to coordinate mine action back in December 2011.²⁶ Operating under the UN-backed GNU, LibMAC's headquarters are in Tripoli, in the west of the country, and it also has offices in Benghazi²⁷ and Misrata.²⁸ National capacity to address explosive hazards remains largely insufficient. While the necessary managerial and coordination capacity is in place, governmental and non-governmental actors lack qualified personnel, equipment, and expertise to meet the demand for survey and clearance.²⁹

ITF Enhancing Human Security (ITF) started its capacity-building project in Libya since January 2014. It paid the salaries of 21 LibMAC employees in 2021, and covered the day-to-day costs of LibMAC.³⁰

The HALO Trust trained and accredited two technical survey teams and one explosive ordnance disposal (EOD) team in 2021. It also provided EOD Level 3 training to several non-governmental organisations (NGOs).³¹

UNMAS, which is an integral part of the UN Support Mission in Libya (UNSMIL), has largely been operating from Tunis since November 2014.³² UNMAS returned with international personnel to Libya in 2018, and since then has maintained permanent presence of critical operational and technical staff.³³ UNMAS prioritises the capacity enhancement of Libyan mine action actors, supports LibMAC in accreditation processes for mine action organisations, and facilitates coordination with international stakeholders and implementing partners.³⁴ UNMAS also acts as the mine action lead, providing non-technical coordination through information sharing, and represents the mine action sector in various fora, including the UN protection cluster and the inter-sectoral coordination group.³⁵ UNMAS and LibMAC chair monthly mine action sub-cluster working groups, with participation from mine action stakeholders and donor states.³⁶

The UNMAS mine action programme sought a budget of US\$2.58 million for the mine action sector in Libya, but, as at June 2022, the protection sector, including mine action, was facing a shortfall of 50% in funding.³⁷

23 Emails from Zita Andrassy, HALO Trust, 27 February 2022, and Graeme Ogilvie, DCA, 1 April 2022.

24 UNMAS, "Programmes: Libya", accessed 23 March 2020, at: <http://bit.ly/2WMTzTk>.

25 "Libya elections: Presidential poll postponed", BBC News, 23 December 2021, at: <https://bbc.in/39ohwez>; and Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022.

26 LibMAC website, accessed 20 March 2020, at: <http://bit.ly/2JqVr0S>.

27 Email from Jakob Donatz, Associate Programme Officer, UNMAS, 21 June 2018.

28 Email from Roman Turšič, Head of Implementation Office Libya/Afghanistan, ITF, 26 February 2017; and interview with Brig. Turjoman, LibMAC, in Geneva, 10 January 2017.

29 OCHA, Libya Humanitarian Response Plan, January 2021, p. 74–75, at: <https://bit.ly/3F9eCWU>.

30 ITF, "Annual Report 2021", pp. 107108, at: <https://bit.ly/3FeE39S>.

31 Email from Zita Andrassy, HALO Trust, 27 February 2022.

32 ²³ UNMAS, "Programmes: Libya", accessed 14 May 2022, at: <http://bit.ly/31tU1tB>.

33 Email from Samir Becirovic, UNMAS, 2 March 2022.

34 UNMAS, "Programmes: Libya", accessed 14 May 2022.

35 Email from Samir Becirovic, UNMAS, 2 March 2022.

36 Email from Samir Becirovic, UNMAS, 10 June 2022.

37 Email from Samir Becirovic, UNMAS, 2 March 2022; and the humanitarian dashboard for Libya 2022, last updated 26 June 2022, at: <https://bit.ly/3HQFQ66>.

ENVIRONMENTAL POLICIES AND ACTION

Libya does not have national mine action standards (NMAS) or a policy on environmental management.³⁸

DCA has an environmental management system and standard operational procedures (SOPs) in place. It takes into account the impacts of the destruction of ERW prior to any battle area clearance (BAC) or EOD spot task, and puts in place mitigation measures. DCA considers that the removal of ERW from farmland and topsoil that could be used in food production in itself contributes significantly to environmental preservation. This is because ERW leaks nitrates into the soil and depletes its ability to absorb methane. Removal of ERW also prevents overcultivation of land. DCA assesses that the potential damage caused by uncleared ERW leaking toxins into the soil largely outweighs the damage resulting from their demolition.³⁹

Danish Refugee Council (DRC) does not have an environmental management system, but one was planned for 2022. DRC takes into account “do-not-harm” elements in consideration of environmental impact and policy when planning its operations.⁴⁰

The HALO Trust does not have an environmental management system, but since January 2022 it has employed a global environment advisor to support progress in this regard. HALO’s work in Libya is focused on urban clearance and therefore has little impact on biodiversity and vegetation. Environmental considerations in the HALO Libya programme in the future will focus on effective use of resources, especially fossil fuels, and effective waste management. As mitigation measures, HALO provides bins and reusable water bottles to reduce litter and minimise plastic waste.⁴¹

GENDER AND DIVERSITY

LibMAC does not have a gender and diversity policy for mine action in place. LibMAC disaggregates mine action data by sex and age.⁴²

DCA’s Libya programme has an active policy of employing women into programme roles to increase their financial independence and teach them transferable skills that they may use beyond their current employment with DCA.⁴³ Gender mainstreaming and mainstreaming of marginalised groups form part of the programme’s core policies. DCA also employs all-women teams, including three explosive ordnance risk education (EORE) and two multitask teams, to be able to engage with female-headed households. DCA engages early with municipal councils, civil society organisations, community leaders and representatives of groups working for the rights of minorities. These engagements drive project design and ensure community ownership. In 2021, 39% of DCA’s employees were women. The numbers were even higher for women in operational positions (40%) and in managerial positions (55%).⁴⁴

DRC takes into consideration gender and age factors when collecting information on how contamination impacts different groups. DRC adopts a transparent and inclusive recruitment process to ensure that staff as much as possible originate from the area of operations and are representative of the local social context. DRC employed mixed gender

teams in the field in 2021. Women made up 31% of DRC employees overall in 2021: 27% of operational, and 40% of managerial staff.⁴⁵

The HALO Trust’s community liaison officers in Libya are all women who can engage with both men and women. As of writing, HALO staff were not specifically trained to work directly with children, but rather to ask parents for specific considerations for vulnerable persons under their responsibility, including children, elderly, and persons with disabilities. Data collected are disaggregated by gender and age so that representation can be targeted in a proportionate manner. HALO community liaison activities are performed at the same time as surveys, including focus group discussions when applicable, ensuring that women’s voices are also heard. HALO staff are required to complete the online “Gender and Diversity in Mine Action” training module developed by the Geneva International Centre for Humanitarian Demining (GICHD) after their recruitment. HALO, however, reported difficulty in hiring women for operational roles. Of a total of 77 national staff in 2021, 10 (13%) were women, of whom four were in managerial positions and one in an operational position.⁴⁶

38 Emails from Graeme Ogilvie, DCA, 1 April 2022; Alessandro Di Giusto, Head of Humanitarian Mine Action, DRC, 7 March 2022; and Zita Andrassy, HALO Trust, 27 February 2022.

39 Email from Graeme Ogilvie, DCA, 1 April 2022.

40 Email from Alessandro Di Giusto, DRC, 7 March 2022.

41 Email from Zita Andrassy, HALO Trust, 27 February 2022.

42 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

43 Email from Graeme Ogilvie, DCA, 20 April 2021.

44 Email from Graeme Ogilvie, DCA, 1 April 2022.

45 Email from Alessandro Di Giusto, DRC, 7 March 2022.

46 Email from Zita Andrassy, HALO Trust, 27 February 2022.

INFORMATION MANAGEMENT

LibMAC receives technical support for the national Information Management System for Mine Action (IMSMA) from the GICHD and UNMAS. With support from the GICHD, LibMAC planned to transition from IMSMA New Generation (NG) to IMSMA Core in 2020.⁴⁷ As at February 2022, HALO reported that the data transition was almost complete, and was planning to take part in a workshop organised by LibMAC in Tunis to finalise the data flow process.⁴⁸

IMSMA is accessible to clearance organisations and data collection forms are reported to be consistent and enable collection of necessary data,⁴⁹ although DRC reported that the system requires updated information, capacity building for operator staff, and easier access.⁵⁰ Operators have internal quality control (QC) systems prior to submitting data to LibMAC for further QC. HALO Trust reported that the LibMAC regularly updates the IMSMA database to a high standard.⁵¹

The IMSMA NG relies on manual data extraction, which can result in a delay between the time information is received and when it is acted upon. This is hoped to be resolved once the transition to IMSMA Core is completed.⁵²

LibMAC reports that it checks the quality of the reports, sometimes requesting modification of or elaboration on some of the information reported. The HALO Trust noted that task site visits and feedback from LibMAC were useful to strengthen the quality of the data it has submitted. The revision of data flow mechanisms should enable operators to provide more precise inputs and to increase the standard and quality of data.⁵³

PLANNING AND TASKING

There is no national mine action strategy for Libya.⁵⁴ LibMAC does, however, have a national short-term operational plan.⁵⁵ LibMAC prioritises survey and clearance operations based on humanitarian, security, and development indicators,⁵⁶ and is responsible for issuing task orders. DCA considers that LibMAC is doing its best to issue task orders in a timely and effective manner within its limited capacity and resources, and that more capacity building and funding is required to allow the Centre to become more effective.⁵⁷ According to DRC, LibMAC issues clearance and survey task dossiers in a timely fashion and prioritises tasks according to the urgency of the need.⁵⁸

DCA continues to clear ERW in support of electricity and water supply facilities, and to survey and clear schools, medical facilities, and housing so that internally displaced people (IDPs) can return safely. This approach is in line with the triple nexus approach, linking humanitarian action to development projects and contributing to stability and peace.⁵⁹ Mine action operators liaise with the municipal councils, community leaders, and security providers to build a picture of priority areas for survey and follow-on clearance.

Operators then apply for task orders through the LibMAC. Due to the small number of clearance teams and personnel in Libya, the priority is responding to call-outs, particularly from returning IDPs. Therefore, much of the clearance is reactive EOD spot tasks in order to minimise an immediate threat to life.⁶⁰

HALO Trust responds to the tasks as issued by LibMAC.⁶¹ HALO's prioritisation criteria for non-technical survey are: number of conflict events, population density, critical infrastructure, duration of active fighting in a given area, recorded mines removed, and explosive ordnance accidents. For technical survey and clearance, HALO's criteria are: access, land use, number of beneficiaries, and direct evidence of contamination.⁶²

While the above considerations are integrated in the assessment of contamination impact, survey, and community liaison activities, both DRC and HALO reported that final decisions on task prioritisation are owned by the LibMAC, which ultimately issues task orders based on its set of criteria, plans, and engagement with local authorities.⁶³

47 Email from Nicholas Torbet, HALO Trust, 14 April 2020.

48 Emails from Zita Andrassy, HALO Trust, 27 February and 19 June 2022.

49 Email from Catherine Smith, HI, 12 March 2019.

50 Email from Alessandro Di Giusto, DRC, 7 March 2022.

51 Emails from Lucy Reeve, HALO Trust, 23 April 2021; and Zita Andrassy, HALO Trust, 27 February 2022.

52 Emails from Zita Andrassy, HALO Trust, 27 February and 19 June 2022.

53 Emails from Zita Andrassy, HALO Trust, 27 February and 19 June 2022.

54 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

55 Ibid.

56 Ibid.

57 Email from Graeme Ogilvie, DCA, 1 April 2022.

58 Email from Alessandro Di Giusto, DRC, 7 March 2022.

59 Email from Graeme Ogilvie, DCA, 1 April 2022.

60 Email from Graeme Ogilvie, DCA, 20 April 2021.

61 Email from Zita Andrassy, HALO Trust, 27 February 2022.

62 Emails from Lucy Reeve, HALO Trust, 23 April 2021; and Zita Andrassy, HALO Trust, 27 February 2022.

63 Emails from Alessandro Di Giusto, DRC, 7 March 2022; and Zita Andrassy, HALO Trust, 27 February 2022.

Since 2020, HALO developed a Tripoli ERW Hazard Mapping and Information Management Project, which used open-source data collation and geolocation techniques to map potential ERW contamination along the Tripoli frontlines. The online data collection portal, linked to a live database that was shared with LibMAC and other stakeholders, was used to track historical data starting from April 2019.⁶⁴ While the project ended in January 2021, HALO continues to take internal efforts to keep track of the accidents happening in Tripoli.⁶⁵

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national mine action legislation in Libya, but national mine action standards (LibMAS) have been elaborated in Arabic and English with the support of the GICHD and UNMAS, and were approved by the GNA in August 2017. The LibMAS are available on the LibMAC website.⁶⁶ According to international clearance operators, the NMAS are aligned to the International Mine Action Standards (IMAS), reproducing it word-for-word in many parts.⁶⁷ Further, while the Arabic version of the LibMAS is largely accurate, the English version misstates the issue of liability after land release.⁶⁸ The LibMAS have not been updated since being approved in 2017.

LibMAC and The HALO Trust are collaborating on how best to establish land release principles for urban clearance. In the interim, LibMAC accepts completion reports detailing the outputs of mechanical BAC as mechanical clearance.⁶⁹

OPERATORS AND OPERATIONAL TOOLS

Table 2: Operational survey capacities deployed in 2021

Operator	NTS teams	Total NTS personnel	TS teams	Total TS personnel	Comment
3F ⁷⁰	2	6	0	0	
Libya Peace Organization ⁷¹	2	6	0	0	
HALO Trust ⁷²	5	20	0	0	Reduced to 3 teams/12 personnel by the end of 2021
DCA ⁷³	4	40	4	40	Multi-task teams (conducting both TS and clearance – also reported in Table 3)
DRC ⁷⁴	2	6	0	0	
Totals	15	78	4	40	

NTS = Non-technical survey TS = Technical survey

Table 3: Operational clearance capacities deployed in 2021⁷⁵

Operator	Manual clearance teams	Total deminers*	Dog teams (dogs and handlers)	Mechanical assets/machines
DCA	4	40	0	4
HALO Trust	2	12	0	5
Totals	6	52	0	9

* Excluding team leaders, medics, and drivers.

64 Email from Nicholas Torbet, HALO Trust, 14 April 2020.

65 Email from Zita Andrassy, HALO Trust, 27 February 2022.

66 LibMAC website, accessed 20 May 2022 at: <https://bit.ly/3ldhvx2>. Report of the Secretary-General on UNSMIL, UN doc. S/2018/140, 12 February 2018, p. 12; and UNMAS, "Programmes: Libya", accessed 14 May 2022 at: <http://bit.ly/31tU1tB>.

67 Emails from Catherine Smith, HI, 12 March 2019; and Nicholas Torbet, HALO Trust, 14 April 2020.

68 Email from Graeme Ogilvie, DCA, 1 April 2022.

69 Emails from Zita Andrassy, HALO Trust, 27 February and 19 June 2022.

70 Email from Col. Adel Elatwi, LibMAC, 22 April 2021. The data might not be up to date as at August 2022.

71 Ibid.

72 Email from Zita Andrassy, HALO Trust, 27 February 2022.

73 Email from Graeme Ogilvie, DCA, 1 April 2022.

74 Email from Alessandro Di Giusto, DRC, 7 March 2022.

75 Emails from Graeme Ogilvie, DCA, 1 April 2022; and Zita Andrassy, HALO Trust, 27 February 2022.

Mine action operations have been conducted by the army engineers, a police unit, and the Ministry of Interior's national safety authority (NSA), also known as Civil Defence.⁷⁶ Military engineers reportedly lack mine detectors and are working with basic tools.⁷⁷ The NSA is mandated to conduct EOD in civilian areas.⁷⁸ These institutions liaise with LibMAC but are not tasked or accredited by them, nor do they provide clearance reports to the Centre.⁷⁹

The national operator 3F continued to be operational in 2021, working with both DRC and UNMAS,⁸⁰ and is accredited to conduct clearance and EOD tasks.⁸¹ In 2020, LibMAC reported having accredited two additional local operators: The Safety Trust NGO (Al-Thiqa al-Amena) and the Communication NGO (Al-Tawasol).⁸² Another national operator, the Libyan Peace Organisation, was present in Libya in 2022, and is accredited for non-technical survey.⁸³

DCA is operational in Libya conducting risk education, clearing residential, commercial, education, medical, and agricultural sites of mines and ERW, and providing training in clearance, search, and EOD, to help strengthen the capacity of national authorities.⁸⁴ Now in its twelfth year of working in Libya, DCA currently has offices in Benghazi, Misrata, Sirte, and Tripoli, and is accredited to conduct clearance and EOD tasks.⁸⁵ In 2021, DCA's main clearance operations were in the south and western Tripoli, Sirte, and Benghazi. There was a significant uplift in the number of survey and clearance personnel deployed by DCA in 2021 due to increased funding. A further increase was expected in 2022 as more funds have been secured from the European Union (EU), the United Kingdom (UK), and the Danish Ministry of Foreign Affairs (MoFA).⁸⁶

According to DCA, the advice from UNMAS, LibMAC, and the national authorities has been for international operators to only report encountered IEDs for subsequent removal by the national police or army, which do not have the sufficient number of trained personnel to respond. As noted above, this resulted in terrible human losses of national deminers during the largescale uncovering of IEDs in 2020,⁸⁷ many of which were laid in sophisticated techniques to maximise harm.

DRC set up in Libya since 2017 and has three offices in Benghazi, Sabha, and Tripoli. Its offices in Misrata and Zwara were closed at the end of 2020, and its Sabha office closed on 31 December 2021, resulting in the reduction of the number

of EOD, non-technical survey, and EORE teams. DRC was planning to establish a new EOD team in Tripoli in 2022. In 2021, DRC performed EOD, non-technical survey, and EORE operations in Benghazi, and expected to conduct EOD and EORE activities in Tripoli in 2022. DRC continued to partner with 3F and is planning to invest in the partnership capacity with support to other national and local operators in the coming years.⁸⁸

The HALO Trust has been present in Libya since November 2018, and has offices in Misrata, Sirte, and Tripoli. HALO first deployed survey personnel in Tripoli in July 2020 following the cessation of fighting in southern Tripoli in the summer of that year. HALO was able to use data gathered during an information management project that mapped reports of conflict events, to prioritise areas for survey. HALO accredited one EOD team in Tripoli, but due to all international staff having to leave Libya during a period of visa blockade, the team was not deployed. HALO's clearance teams in Sirte were supported by a DCA EOD team.⁸⁹

In 2021, HALO trained and accredited two teams to conduct technical survey, in addition to one EOD team. HALO conducted non-technical, technical survey, and EOD operations in Tripoli; non-technical survey and mechanical clearance in Sirte; and delivered an EOD Level 3 training course to several NGOs, including the local NGOs, Tawasol, Safety Trust, and the Libyan Peace Organisation, the first training of its kind to take place in Libya. The HALO Trust's output in 2021 saw a decrease in non-technical survey, but a growth in technical survey capacity. This was to pivot towards clearance of hazards.⁹⁰ In 2022, HALO deployed an accredited EOD/non-technical survey team in Sirte.⁹¹

In 2021, HALO Trust introduced tripwire clearance drills to the sector in Tripoli, and continued to pioneer mechanical clearance of rubble piles in Sirte. In both locations, HALO pioneered the use of the differential global positioning system (DGPS) to increase the precision of geodata. As of writing, HALO was also trialling Libya's first hybrid thermal lance but had not yet used it operationally.⁹² HALO also trained teams to use mechanical methods to clear anti-vehicle mines from road tasks, and large loop detector to find metal anti-vehicle mines. These methods are not used by any other operators and HALO was the first organisation to train Libyan staff to use them.⁹³

76 Interview with Brig. Turjoman, LibMAC, in Geneva, 10 January 2017.

77 "Mine still claim legs and lives in Libya's Benghazi, months after war ceased", *Reuters*, 21 January 2018.

78 Email from Diek Engelbrecht, UNMAS Libya, 20 July 2013.

79 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

80 Emails from Alessandro Di Giusto, DRC, 7 March 2022; and Samir Becirovic, UNMAS, 2 March 2022.

81 Email from Graeme Ogilvie, DCA, 1 April 2022.

82 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

83 Email from Samir Becirovic, UNMAS, 10 June 2022.

84 DCA website, accessed 3 May 2021, at: <http://bit.ly/2vYatmb>.

85 Email from Graeme Ogilvie, DCA, 1 April 2022.

86 Ibid.

87 Ibid.

88 Email from Alessandro Di Giusto, DRC, 7 March 2022.

89 Emails from Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

90 Email from Zita Andrassy, HALO Trust, 27 February 2022.

91 Email from Charles Fowle, Libya Programme Manager, HALO Trust, 8 September 2022.

92 Emails from Zita Andrassy, HALO Trust, 27 February 2022; and Charles Fowle, HALO Trust, 8 September 2022.

93 Email from Zita Andrassy, HALO Trust, 27 February 2022.

Humanitarian access to Libya for survey and clearance operations remains challenging for all operators. DCA, DRC, and HALO experienced delays in the granting of multiple-entry visas, which led in the case of HALO Trust to suspension of its operations between August and October 2021.⁹⁴ Other administrative procedures such as importing equipment often lead to delays. HALO Trust, for example, saw its detectors held at customs for over six months. Additional challenges are linked to the Libyan banking regulations that make it hard to open bank accounts, access funds, or pay suppliers in local bank accounts.⁹⁵

In Libya, the provision of security is highly localised; tribe-affiliated armed groups, with oftentimes shifting allegiances, control cities and towns down to neighbourhood level. This in turn requires humanitarian actors to have a good knowledge of armed group dynamics on the one hand while liaising with many interlocutors on the other. The risk of arbitrary detention of national staff is high, either due to tribal background or due to suspected affiliation with opposing armed groups.⁹⁶ The prevalent insecurity and

shifting frontlines throughout 2021 has caused operational delays and limited access to certain locations.

According to HALO, non-technical survey in Ain Zara (Tripoli area) was difficult due to tensions in the vicinity. Sirte was entirely off-limits for international staff in 2021, and operations in Sirte were suspended between June and October 2021 due to the establishment of a new frontline in Abu Grain (west of Sirte), and the presence of fighters in and around Sirte.⁹⁷ Operators reported varying levels of disruption by the COVID-19 pandemic in 2021, ranging from minor impact for HALO and DCA, despite some positive cases among staff, to major impact in the case of DRC, leading to teams to stand down for several periods.⁹⁸

In 2021, LibMAC personnel opened 87 tasks mostly for EORE, EOD, and non-technical survey activities performed by international and national NGOs in Tripoli, Sirte, Tawargha and Benghazi. In addition, LibMAC personnel conducted 68 QC and quality assurance (QA) missions.⁹⁹

DEMINER SAFETY

International operators did not report demining accidents in 2021,¹⁰⁰ but LibMAC told Human Rights Watch that 78 deminers either died or sustained serious injuries between May 2020 and March 2022 while on duty. The novelty of many of the sophisticated explosive devices left by retreating foreign and Libyan fighters, compounded by the lack of adequate training and specialised equipment for mine clearance specialists stand behind this high causality rate. For example, a demining incident occurred while a team of demining specialists were picking up a handgun lying on a desk that had been booby-trapped and tied to a string wire. The explosion instantly killed one deminer and injuring four others.¹⁰¹

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

According to data provided by international operators, no mined area was released through non-technical survey, technical survey, or clearance in 2021, and no anti-personnel mines were destroyed.¹⁰² DRC disposed of two anti-vehicle mines during spot tasks.¹⁰³ The national authorities and/or operators have been conducting non-technical survey and EOD in 2021 as reported by the international mine action stakeholders, but the results of these surveys have not been shared by LibMAC.

According to ITF's annual report, LibMAC personnel opened 87 tasks mostly for EORE, EOD, and non-technical survey by international and local NGOs in southern Tripoli, Sirte, Tawargha, and Benghazi. In addition, LibMAC personnel conducted 68 QA and QC missions.¹⁰⁴

UNMAS reported, highly improbably, that mine action teams in Libya technically surveyed 514km² in 2021. EOD spot tasks and BAC teams removed or destroyed 13,988 explosive items.¹⁰⁵ It is not known how many of these, if at all, were anti-personnel mines.

94 Emails from Graeme Ogilvie, DCA, 1 April 2022; Alessandro Di Giusto, DRC, 7 March 2022; and Zita Andrassy, HALO Trust, 27 February 2022.

95 Emails from Zita Andrassy, HALO Trust, 27 February 2022; and Charles Fowle, HALO Trust, 9 September 2022.

96 Email from Nicholas Torbet, HALO Trust, 14 April 2020.

97 Email from Zita Andrassy, HALO Trust, 27 February 2022.

98 Emails from Alessandro Di Giusto, DRC, 7 March 2022; Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

99 ITF, "Annual Report 2021", at: <https://bit.ly/3FeE39S>, p. 107.

100 Emails from Alessandro Di Giusto, DRC, 7 March 2022; Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

101 Human Rights Watch, "Libya: Russia's Wagner Group Set Landmines Near Tripoli", 31 May 2022.

102 Emails from Alessandro Di Giusto, DRC, 7 March 2022; Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

103 Email from Alessandro Di Giusto, DRC, 7 March 2022.

104 ITF, "Annual Report 2021", at: <https://bit.ly/3FeE39S>, p. 107.

105 Email from Samir Becirovic, UNMAS, 2 March 2022.

SURVEY IN 2021

International operators did not report releasing anti-personnel mined land through survey in Libya in 2021. Non-technical survey to map new contamination in Tripoli was concluded in March 2021.¹⁰⁶ But HALO has reported that resurvey in Tripoli has been conducted in some areas, with a view to cancelling tasks rather than to identify new ones.¹⁰⁷ Many areas have been cancelled by 3F, but it was not clear whether "all relevant information sources" were consulted as per LibMAS and IMAS.

UNMAS reported, highly improbably, that mine action teams in Libya technically surveyed 514km² in 2021,¹⁰⁸ without further elaboration.

CLEARANCE IN 2021

There was no clearance of anti-personnel mined area in Libya by international operators in 2021,¹⁰⁹ but DRC destroyed two anti-vehicle mines during spot tasks.¹¹⁰ As noted above, international operators were advised by the national authorities, UNMAS, and LibMAC to report encountered IEDs for subsequent removal by the national police or army personnel.¹¹¹

UNMAS reported that EOD spot tasks and BAC teams removed or destroyed 13,988 explosive items in 2021.¹¹² It is not known how many of these, if at all, were anti-personnel mines.

PROGRESS TOWARDS COMPLETION

LibMAC describes the following challenges to implementation of mine action operations: the high level of contamination; ongoing conflict and the continued presence of Islamic State; the difficulty in convincing IDPs to delay their return until the ERW threat is addressed; security and access to priority areas; the limited ERW and EOD capacity in Libya; the vast geographical area; and limited governmental and international support.¹¹³ Security conditions continued to pose a challenge to mine action in Libya. Libya needs a major shift to move mine clearance from an ad-hoc response to a systematic development tool. Part of this process involves the strengthening of LibMAC as a mine action coordination entity in Libya, and continued efforts to capacity build and enhance its resources.

Officials from the government, the UN, and civic groups said that impediments to clearing contaminated areas included fragmented governance and insufficient coordination among government agencies and humanitarian groups. Efforts have also been hindered by the lack of a centralised data-gathering system, inadequate capacities among some deminers, and funding shortfalls for equipment and training.¹¹⁴

106 Email from Graeme Ogilvie, DCA, 20 April 2021.

107 Email from Zita Andrassy, HALO Trust, 27 February 2022.

108 Email from Samir Becirovic, UNMAS, 2 March 2022.

109 Emails from Alessandro Di Giusto, DRC, 7 March 2022; Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

110 Email from Alessandro Di Giusto, DRC, 7 March 2022.

111 Email from Graeme Ogilvie, DCA, 1 April 2022.

112 Email from Samir Becirovic, UNMAS, 2 March 2022.

113 PowerPoint presentation by Brig. Turjoman, LibMAC, UN National Programme Directors' Meeting, Geneva, 8 February 2017.

114 Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

NO CREDIBLE FIGURE

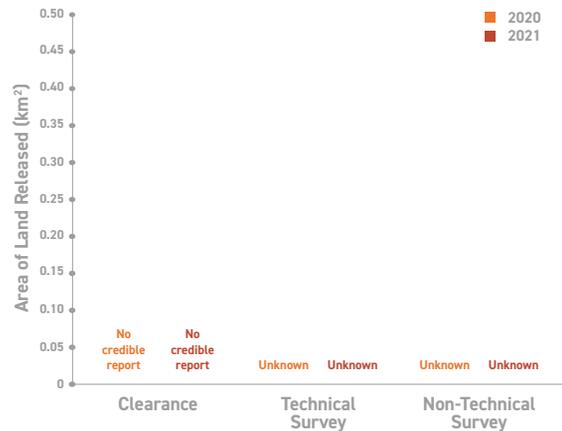
AP MINE
CLEARANCE IN 2021

**NO CREDIBLE
REPORT**

AP MINES
DESTROYED IN 2021

1,289

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Morocco should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Morocco should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Morocco should continue to submit voluntary APMBC Article 7 reports. It should provide greater detail on the extent of mine contamination and report on progress in land release according to the International Mine Action Standards (IMAS).
- Morocco should establish a timeline for completing clearance of all mined areas on territory under its jurisdiction or control.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority.
- No national mine action centre.

NATIONAL OPERATORS

- Royal Moroccan Army (RMA)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- United Nations Mission for the Referendum in the Western Sahara (MINURSO) Mine Action

UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of contamination from mines and explosive remnants of war (ERW) in Morocco, including the area under its control in Western Sahara, on the west side of the Berm,¹ is not known. In the past, Morocco declared, highly improbably, that a total of 120,000km² of area was contaminated,² although the threat is undoubtedly massive. According to the UN Mission for the Referendum in Western Sahara (MINURSO), of the 2,700km-long Berm, 1,465km is significantly contaminated with landmines and ERW on both sides.³

Morocco's contamination is mostly a result of the conflict of 1975–91 between the Royal Moroccan Army (RMA) and Polisario Front forces over Western Sahara. Morocco acknowledges that it had laid mine belts during the construction of the Berm and states that these mined areas are surveyed and mapped. Morocco has pledged to clear the mines it laid as soon as the conflict over Western Sahara is "definitely settled".⁴

Morocco reported in its latest voluntary Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report (covering 2021) that the following provinces were mine affected: Akka, Aousserd, Assa-Zag, Boujdour, Dakhla, Laayoune, Smara, Tantan, and Tata.⁵ In its Article 7 report covering 2018, Morocco had reported that 10 localities within these provinces contain mines: Bir Anzarane, Douiek, Gerret Auchfaght, Gor Lbard, Gor Zalagat, Hagounia, Idiriya, Imlili, Itgui, and Tarf Mhkinza. It claimed these contain contamination as the result of "haphazard" mine-laying across the south of Morocco by the Polisario front in 1975–91.⁶ In its last two Article 7 reports (covering 2020 and 2021), Morocco also reported suspected mine contamination in its far eastern corner bordering Algeria in the El-Melias corridor in Figuig province.⁷ It is not clear when these mines were emplaced or by whom, but media reports indicate that they were laid in the 1990s as a result of border tensions between the two neighbouring States.⁸

PROGRAMME MANAGEMENT

Morocco does not have a national mine action authority or a mine action centre. The RMA carries out demining, which, it has reported, is conducted in collaboration with MINURSO.⁹

In 2021, as in previous years, the RMA received training from the United States (US) Marines, including on demining and explosive ordnance disposal (EOD) techniques.¹⁰ In 2021, this included a train-the-trainer course so that in the future RMA will be able to train its own personnel,¹¹ and a four-week training programme on handling explosive hazards.¹²

ENVIRONMENTAL POLICIES AND ACTION

It is not known what environmental policies and practices Morocco adheres to, if any, but it has reported that "normal safety and environmental protection standards have been followed" in clearing mines and ERW.¹³

GENDER AND DIVERSITY

Morocco is not believed to have a gender policy in place for its demining operations.

1 The Berm refers to the defensive wall built by Morocco in 1982–87 to secure the north-western corner of Western Sahara. It is constituted of earthen walls some 2,700 kilometres long and three metres in height. Morocco controls the area located on the west side of the Berm.

2 Statement of Morocco, Intersessional Meetings, Geneva, 25 May 2009.

3 MINURSO website, Mine Action, accessed 28 July 2022, at: <https://bit.ly/3BmYLnM>.

4 Voluntary Article 7 Report (covering 2021), Form D.

5 Ibid.

6 Voluntary Article 7 Report (covering 2018), Form D. Idiriya is spelled "Jdiriya" in the 2018 report. From 2015, the area of Glibat Jadiane, which had been listed as contaminated in earlier years, was no longer included on the list of mined areas.

7 Voluntary Article 7 Reports (covering 2020 and 2021), Form D.

8 "Fguig, mine disposal leads to rumors of conflict on the eastern borders", *Chouf TV*, (Arabic), 20 February 2021, at: <https://bit.ly/3rIWGvO>.

9 Voluntary Article 7 Report (covering 2018), Form D.

10 AFRICOM, "U.S. Marines Continue Humanitarian Mine Action Program", 12 March 2020, at: <https://bit.ly/2TAzMDf>.

11 Defense Visual Information Service, "Humanitarian Mine Action 2021", 6 September 2021 at: <https://bit.ly/3b9KArP>.

12 US Embassies and Consulates in Morocco, "U.S. and Moroccan Armed Forces Conclude Joint Training Programs on Disaster Response and Explosive Hazards", 23 September 2021, at: <https://bit.ly/30Dd6zy>.

13 Voluntary Article 7 Report (covering 2018), Form D.

INFORMATION MANAGEMENT

It is not known which information management system is used in Morocco for recording mine action data.

PLANNING AND TASKING

It is not known how Morocco plans and prioritises its demining operations.

LAND RELEASE SYSTEM

Morocco appears to use only manual demining techniques, which is not efficient given the size and type of terrain being released.

STANDARDS AND LAND RELEASE EFFICIENCY

Morocco has not adopted national mine action legislation or standards, but has reported that “normal safety and environmental protection standards have been followed” in the clearance of mines and ERW,¹⁴ as indicated above. It has also reported that the demining activities undertaken by the RMA conform to international rules and techniques.¹⁵

OPERATORS AND OPERATIONAL TOOLS

All mine clearance in Morocco is conducted by the RMA. In June 2022, Morocco indicated that 13 demining units had been continuously deployed each year since 2007 until 28 February 2022, and that 1,161 limited interventions were undertaken between 2014 and 28 February 2022.¹⁶

Previously, in 2010, Morocco declared it had employed 10,000 deminers, although only 400 detectors were at their disposal at that time.¹⁷ This raised serious questions both about the procedures being used and the accuracy of clearance figures being reported, which are not credible. Morocco reports that demining takes places in the framework of a vast annual programme that aims to release suspected areas of contamination.¹⁸

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Morocco has not reported in detail on its release of mined areas in recent years, nor given any indication of implementing land release methodology. The figures it does provide are not credible with respect to physical clearance and should be taken as an indication of land released or declared as clear of contamination rather than land actually released by clearance.

In its voluntary Article 7 report covering 2021, Morocco reported “clearance” of a total area of 217km² with the destruction of 1,289 anti-personnel mines, 281 anti-vehicle mines, and 564 items of ERW.¹⁹ These figures are an increase on those reported in 2020 when 171km² was reported

“cleared” with 22 anti-personnel mines, 29 anti-vehicle mines, and 542 items of ERW destroyed.²⁰ Further detail has been provided about demining activities on the borders in the east of the country where, between 9 November 2020 and 5 July 2021, Morocco reported that 0.36km² of land was cleared, and that 2,931 anti-personnel mines, 262 anti-vehicle mines, and 123 items of ERW were destroyed.²¹ The high number of anti-personnel mines reported discovered and destroyed in the east of the country in the seven months from 9 November 2020 (2,391 anti-personnel mines) raises further questions given that Morocco reported 1,289 anti-personnel mines destroyed across the country throughout 2021.

¹⁴ Ibid.

¹⁵ Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (covering 2021), Form B.

¹⁶ Statement of Morocco, APMBC Intersessional meeting, Geneva, June 2022; and Information Leaflet, *Strong Commitment for Population's Safety – All Against Antipersonnel Mines and Remnants of War* (covering 1975 to 2021), Kingdom of Morocco, undated.

¹⁷ Statement of Morocco, Intersessional Meetings, Geneva, 23 June 2010.

¹⁸ CCW Amended Protocol II Article 13 Report (covering 2021), Form B.

¹⁹ Voluntary Article 7 Report (covering 2021), Form D.

²⁰ Voluntary Article 7 Report (covering 2020), Form D.

²¹ Statement of Morocco, APMBC 19th Meeting of States Parties, virtual meeting, November 2019.

In his October 2021 report to the UN Security Council on the situation in Western Sahara, the UN Secretary-General indicated that the RMA had reported the release of 145km² of land west of the Berm between 1 September 2020 and 31 August 2021, with the destruction of 1,014 items of ERW and 31 anti-personnel and anti-tank mines.²² This compares with 253km² of land west of the Berm reported by the RMA as released in the previous 12 months, with the destruction of 796 items, including 37 landmines.²³ No further details were provided. MINURSO continues to promote enhanced cooperation between the RMA and MINURSO mine action.²⁴

Morocco has reported that since 1975 and through the end of February 2022, a total of 96,818 mines were destroyed, of which 49,366 were anti-personnel mines.²⁵ Morocco reported that 47,452 anti-vehicle mines were destroyed during the same period.²⁶

Morocco initiated major demining efforts in 2007, following an increase in the number of incidents. In April 2016, Morocco reported plans to clear mines from along the Berm. The units to be deployed were reportedly those trained by the US Marines.²⁷

Morocco has stated on numerous occasions its determination to voluntarily comply with the provisions of the APMBC, including completion of stockpile destruction of anti-personnel mines and demining. It has submitted annual voluntary APMBC Article 7 reports over the past decade and attends APMBC meetings as an observer. It has not, however, indicated when it might complete mine clearance. In a statement on universalisation at the APBMC meetings in June 2022, Morocco repeated its commitment to the APBMC.²⁸ It indicated that its accession to the APBMC was a strategic objective and that its achievement had been delayed by the "artificial" conflict imposed on the Kingdom by enemies of its territorial integrity. When the conflict is finally resolved, Morocco indicated that there will be no obstacle to its adherence to the Convention.

22 Report of the Secretary-General on the situation concerning Western Sahara, UN doc. S/2021/843, 1 October 2021, para. 46.

23 Report of the Secretary-General on the situation concerning Western Sahara, UN doc. S/2020/938, 23 September 2020, para. 42.

24 Report of the Secretary-General on the situation concerning Western Sahara, UN doc. S/2021/843, 1 October 2021, para. 46.

25 Statement of Morocco, APBMC Intersessional Meetings, 22 June 2022.

26 Information Leaflet, *Strong Commitment for Population's Safety – All Against Antipersonnel Mines and Remnants of War* (covering 1975 to 2021), Kingdom of Morocco, undated.

27 "Morocco to Deploy Highly Qualified Team to Remove Sahara Landmines", *Sahara Question*, 25 March 2016, at: <http://bit.ly/2Llu9d4>.

28 Statement of Morocco, APBMC Intersessional Meetings, 22 June 2022.

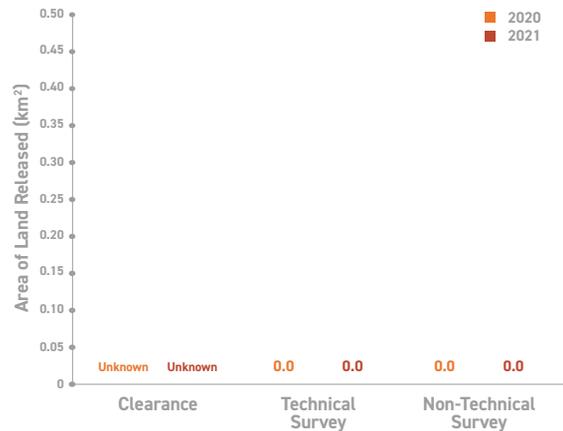
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

A military coup d'état in February 2021 and the imposition of a one-year state of emergency disrupted the work of demining organisations and halted mine action sector discussions on setting up a national mine action authority. Escalating conflict caused a higher number of civilian casualties and pushed the number of internally displaced above one million. The United Nations Children's Fund (UNICEF) led the creation of a Mine Action Area of Operations in December 2021, which provided a platform for demining operators and humanitarian organisations to coordinate activities and share information.

RECOMMENDATIONS FOR ACTION

- Myanmar should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Myanmar's armed forces and armed ethnic organisations should halt the use of anti-personnel mines, including victim-activated mines of an improvised nature.
- Pending the creation of a credible national mine action authority international donors should ensure the Mine Action Area of Responsibility is sufficiently resourced to coordinate humanitarian demining organisations at the national and sub-national level; develop centralised data collection and information management; and provide more funding for mine action non-governmental organisations (NGOs).
- Mine action NGOs and their implementing partners should develop national standards for implementing and reporting permitted activities, including community-based assessments and non-technical survey.
- Relevant authorities in Myanmar should grant permission to humanitarian mine action organisations in the country to undertake surveys to identify and mark mined areas (using conventional marking systems), particularly where returns of internally displaced persons (IDPs) are planned.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Department of Rehabilitation (DoR)

NATIONAL OPERATORS

- Tatmadaw (Army)
- Unspecified ethnic armed entities/non-state armed groups
- Unspecified non-government organisations

INTERNATIONAL OPERATORS

- Danish Refugee Council Humanitarian and Disarmament and Peacebuilding Sector (DRC)
- Danish Church Aid (DCA)
- The HALO Trust
- Humanity and Inclusion (HI)
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- UNICEF

UNDERSTANDING OF AP MINE CONTAMINATION

Myanmar is heavily mine-affected as a result of conflicts between the Tatmadaw (army) and numerous non-state armed groups (NSAGs) affiliated with ethnic minorities. The conflicts started after the nation's independence in 1948 and continue with anti-personnel mines and victim-activated improvised devices continuing to be laid by government forces and NSAGs.¹

There is no accurate estimate of the extent of mine contamination but available data shows that nine out of the fourteen states and regions are contaminated with landmines and explosive remnants of war (ERW).² Mine contamination is concentrated in the states bordering Bangladesh, China, and Thailand. Landmine casualty data are not systematically collected in Myanmar but UNICEF monitoring of mine and ERW incidents found most casualties in 2021 occurred in Shan and Kachin states in the north and east of the country, in the western state of Rakhine, and in the south-eastern Kayin and Magway states. Other states experiencing mine/ERW casualties included Bago, Chin, Kayah, Mon, Sagaing and Tanintharyi.³

The Independent International Fact-Finding Mission on Myanmar, established by the UN Human Rights Council,

reported in September 2019 that northern Myanmar is "heavily contaminated with landmines" and that the parties to the conflict, including the Tatmadaw, the Kachin Independence Army (KIA), the Restoration Council of Shan state (RCSS, formerly referred to as the Shan State Army South (SSA-S), and the Shan State Progressive Party (SSPP, formerly referred to as the Shan State Army North (SSA-N)), all continued to lay landmines and use improvised explosive devices (IEDs).⁴

Since the military coup of February 2021, the use of mines and IEDs has proliferated with the spread of resistance to military rule from People's Defence Forces. In 2021 and 2022, the Tatmadaw has been reported laying mines in to protect infrastructure such as pipelines and telecommunications towers.⁵ The Tatmadaw was also reported laying landmines "on a massive scale" in Kayah state using mainly M-14 and MM-2 anti-personnel mines that are manufactured by Myanmar's military to protect military positions and in areas from which troops were withdrawing. Troops were also reported placing mines around entrances to houses and on paths to rice fields.⁶

PROGRAMME MANAGEMENT

Myanmar has pursued a number of options for setting up a national mine action authority since 2012 but none had reached a conclusion before the military coup in February 2021. The Tatmadaw established a State Administration Council (SAC) to lead the government but as of August 2022 no mechanism had emerged for managing or coordinating mine action.

The government first set up a Myanmar Mine Action Centre under the Myanmar Peace Centre (MPC) in 2012 with support from Norwegian People's Aid (NPA), but the centre was never fully staffed. The MPC was dissolved at the end of March 2016 and replaced by a National Reconciliation and Peace Centre, which reported to the then head of government, State Counsellor Aung San Suu Kyi.⁷ In 2019 and early 2020,

1 Amnesty International, "Myanmar: Military's use of banned landmines in Kayah state amounts to war crimes", 20 July, 2022; "Myanmar: In reverse: Deteriorating Human Rights Situation, Report, January–February 2021, p. 8.

2 The Landmine and Cluster Munition Monitor, Myanmar Burma Mine Ban Policy, Last updated 12 November 2019, at: <https://bit.ly/2Trv0m>.

3 UNICEF, Myanmar Landmines/ERW Incidents Information (2021), Factsheet (covering January–December 2021), at: <https://uni.cf/3cgxhWW>.

4 "Report of the Detailed Findings of the Independent International Fact Finding Mission on Myanmar", UN doc. A/HRC/42/CRP.5, 16 September 2019, pp. 155–58.

5 See, e.g., "Myanmar junta lays landmines around Chinese-backed pipelines", *The Irrawaddy*, 21 January 2022; G. Moeller, "Myanmar military lays landmines around Telenor's telecoms towers", *ScandAsia*, 8 November 2021.

6 Amnesty International, "Myanmar: Military's use of banned landmines in Kayah State amounts to war crimes", 20 July 2022.

7 R. Fasth and P. Simon, "Mine Action in Myanmar", *Journal of Mine Action*, Issue 19.2 (July 2015).

Myanmar was making progress towards establishing an NMAA, which is needed to strengthen its humanitarian mine action programme. The government told the Fourth Anti-Personnel Mine Ban Convention (APMBC) Review Conference in November 2019 that “Myanmar will as soon as feasible establish the needed national legislation to establish a national mine action authority.”⁸

Myanmar held an international workshop on how to establish an NMAA to lead and manage a humanitarian mine action programme in Nay Pyi Taw in October 2019, attended by the Tatmadaw, humanitarian mine action non-governmental organisations (NGOs) in Myanmar, the Association of Southeast Asian Nations (ASEAN) Regional Mine Action Centre (ARMAC), the Geneva International Centre for Humanitarian Demining (GICHD), and several ambassadors.⁹ Discussions focused on which ministries would form part of a future NMAA and the mechanisms for establishing the Authority.¹⁰ An interministerial meeting on 3 January 2020, attended by 14 different ministries including the Ministry of Defence, agreed in principle to establish an NMAA.¹¹

The government then created an interministerial task force in 2020 to work towards setting up the NMAA.¹² Myanmar informed the 18th Meeting of States Parties to the APMBC in November 2020 that it had set up a Mine Action Working Group in May 2020 as “the first step towards formulating a National Strategy and Plan of Action for mine clearance”.¹³ However, momentum was lost with the onset of the COVID-19 pandemic and the resulting shift in government priorities, and was further eclipsed by government elections in November 2020.¹⁴

A Department of Rehabilitation (DoR) created in 2018 gradually took over responsibility for overseeing mine action operators and their activities. Operators found the DoR cooperative and engaged.¹⁵ As the department charged with implementing the government’s “National Strategy on Resettlement of IDP Return and Closure of IDP Camps”, it was said to be committed to acquiring approvals needed to allow humanitarian demining to begin, but it was also felt to lack the capacity needed to tackle national-level issues such as creating an NMAA and mine action legislation. In November 2020, the DoR’s Director General announced during a mine

risk working group (MRWG) meeting that it had finalised the vision and terms-of-reference of a working committee that was to be set up prior to the establishment of an NMAA and had submitted it to the President office for consideration. No concrete results emerged by the time the Tatmadaw took over the government in February 2021. Since then, operators have followed a policy of non-engagement with the DoR.¹⁶

Meetings of the MRWG also came to a halt after February 2021. The SAC expressed interest in establishing a new MRWG in April 2022 but engagement between the government and humanitarian actors has remained largely frozen and no further action had followed on the issue.¹⁷

In response to mounting conflict and casualties, UNICEF led the creation of a Mine Action Area of Responsibility (MA AoR) in December 2021 “to ensure predictable, accountable and effective responses to the threat posed by landmines and explosive remnants of war in Myanmar” and to ensure that “action on mines is at the centre of humanitarian planning and responses.”¹⁸ Demining organisations endorsed the terms of reference. The MA AoR has met monthly in 2022, attended by demining organisations, NGOs, and UN humanitarian agencies, reviewing developments, displacement trends and available data. Meetings were co-chaired by Mines Advisory Group (MAG) in the first six months with the position due to rotate every half-year between international and national organisations every six months. Sub-national coordinating bodies were set up for Rakhine state, the South East (Kayin, Tarintharyi and Mon states) and Kachin state.¹⁹

At the Fourth APMBC Review Conference in November 2019, Myanmar acknowledged that mine action “is a precondition for safe return and resettlement of internally displaced people (IDPs), and sustainable and durable solutions.” It declared that the government was “finding practical ways to move forward to closing the IDP camps using this national strategy” and that it aimed “to start humanitarian demining in non-conflict areas as a part of this camp closure strategy”.²⁰ That position and any consideration of how to put it into practice has been eclipsed by the February 2021 military coup and the subsequent intensification of conflict resulting a sharp rise in the number of IDPs.

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Myanmar in order to minimise potential harm.

8 Statement of Myanmar, Fourth APMBC Review Conference, Oslo, 25–29 November 2019.

9 Ibid.; and emails from Bekim Shala, Country Director, Mines Advisory Group (MAG), 13 April 2020; Geoff Moynan, Programme Manager, HALO Trust, 8 May 2020; and “Multi-stakeholder workshop on establishing a National Mine Action Authority in Myanmar”, ARMAC, 30 October 2019, at: <http://bit.ly/2An5L6H>.

10 Email from Bekim Shala, MAG, 13 April 2020.

11 Interview with Win Naing Tun, Department of Rehabilitation, MSWRR, Geneva, 14 February 2020; and email from Kyaw Lin Htut, Programme Manager, NPA, 3 April 2020.

12 Interview with Win Naing Tun, Department of Rehabilitation, MSWRR, Geneva, 14 February 2020; email from Hilde Jørgensen, Programme Manager – Humanitarian Mine Action, NPA, 27 May 2021.

13 Statement of Myanmar, 18MSP, Geneva 16–20 November 2020.

14 Email from Hilde Jørgensen, NPA, 27 May 2021.

15 Email from Liam Harvey, Programme Manager, DRC, 21 April 20.

16 Email from Matthew Walsh, Head of Humanitarian Response and Mine Action, DCA, 22 April 2021.

17 Email from mine action stakeholders, August 2022.

18 UNICEF Myanmar Country Office Situation Report No. 6, 5 August 2022.

19 Email from Kim Warren, Coordinator, MA AoR, 11 August 2022, zoom interview, 12 August 2022.

20 Statement of Myanmar, Fourth APMBC Review Conference, Oslo, 25–29 November 2019.

GENDER AND DIVERSITY

DanChurchAid (DCA) has had a gender and diversity policy and implementation plan in place in Myanmar. In 2020, the last year for which it provided information, women made up 60% of DCA's programme staff and 50% of managerial positions were held by women. In addition, 87% of operational staff in 2020 were women.²¹

DRC reported in 2021 that it had a gender and diversity policy and implementation plan. It also disaggregates relevant mine action data by sex and age, and has gender-balanced survey and community liaison teams to help ensure women and children in affected communities are consulted as part of its survey and community liaison activities in Myanmar. There is equal access to employment for women and men at DRC, and in 2020, the last year for which it provided information, 58% of DRC's managerial/supervisory positions were held by women.²²

The HALO Trust has a gender and diversity policy and implementation plan specific to its work in Myanmar. HALO consults all gender and age groups during community liaison, with community liaison teams gender-balanced as far as possible. HALO disaggregates relevant mine action data by gender and age.²³ There is equal access to employment for qualified women and men in HALO survey and community liaison teams in Myanmar. HALO Trust reported that 31% of its 52 personnel working in Myanmar in 2021 were women.²⁴

MAG pursues a gender and diversity policy focused on

gender-balanced community liaison teams, equal participation by women in all MAG activities, and producing gender- and age-disaggregated data.²⁵ MAG employed a majority of women in 2021 with 22 female staff, including seven in management positions, and 19 male staff. It seeks to ensure its community liaison teams are gender balanced and also to recruit staff from a variety of different ethnic groups to be able to communicate in local languages.²⁶ MAG reported that women are always consulted during surveys and to help ensure this, the organisation asks village leaders to gather a mixed group of local women and men to avoid the tendency for village leaders to only recommend local men for consultation.²⁷

NPA has a gender and diversity policy and implementation plan, and relevant mine action data are disaggregated by sex and age. NPA consults with women and children during its non-technical survey and explosive ordnance risk education (EORE) operations in Myanmar. All non-technical survey teams are at least 50% female, and teams are fluent in the local languages of the area of operations. There is equal access to employment for qualified women and men in NPA survey teams in Myanmar.²⁸ In 2021, women made up 45% of its national staff and 44% of its operations staff. The programme was led by an expatriate woman manager until October 2021 when the position was nationalised and NPA's single field supervisor was also a woman. All teams are recruited from local communities enabling communication in local languages.²⁹

INFORMATION MANAGEMENT

Myanmar does not have a centralised mine action information management database. Data collection and information management was included as one of the six main priorities of the 2018–19 MRWG strategic work plan.³⁰ It was hoped that a national database would be set up once an NMAA was established³¹ but that process stalled after the February 2021 coup.

The MA AoR ranks improving information management as a top objective and specifically creating a comprehensive mine victim information system. In the meantime, UNICEF collects victim data quarterly from open sources but the number of victims is believed to significantly exceed that recorded in available data.³²

DCA does not conduct direct non-technical survey but trains partner organisations how to do so. DCA partners maintain data in Microsoft (MS) Excel, MS Word, and Google Earth. As at April 2021, DCA had a project with a component related to information management which sought to build partners to capacity to gather, input, manage, and analyse data. The project was delayed due to the coup, but DCA was still planning to introduce Information Management System for Mine Action (IMSMA) Core to its partners, and train them on its use. DCA also intended to better coordinate with the NTSWG in 2021 to achieve this.³³

21 Email from Matthew Walsh, DCA, 22 April 2021.

22 Email from Liam Harvey, DRC, 21 April 2021.

23 Email from Julie Utting, HALO Trust, 28 September 2022.

24 Email from Julie Utting, HALO Trust, 10 May 2022.

25 Emails from Bekim Shala, MAG, 13 April 2020, and from Sofia Raineri, MAG, 8 August 2022.

26 Email from Sofia Raineri, MAG, 8 August 2022.

27 Email from Bekim Shala, MAG, 13 April 2020.

28 Email from Kyaw Lin Htut, NPA, Programme Officer, 3 April 2020.

29 Email from Kyaw Lin Htut, NPA, 22 August 2022.

30 Email from Matthew Walsh, DCA, 22 April 2021.

31 Emails from Bekim Shala, MAG, 13 April 2020; Fabrice Vandeputte, HI, 8 May 2020; Kyaw Lin Htut, NPA, 3 April 2020; and Liam Harvey, DRC, 22 May 2020; and Matthew Walsh, DCA, 22 April 2021.

32 Email from Kim Warren, MA AoR, 11 August 2022, zoom interview, 12 August 2022.

33 Email from Matthew Walsh, DCA, 22 April 2021.

DRC uses the Fulcrum information management system.³⁴ The HALO Trust's information management system is also Fulcrum, with data recorded in Microsoft Access.³⁵ MAG is using Survey123 for data collection and ArcMAP for mapping and GPS services, both provided by ArcGIS. MAG upgraded its information management systems in 2020 by switching to MAG's new global IM system which is on the ESRI platform and is called Operations Management Information Systems (OMIS).³⁶

NPA Myanmar and its partner organisations also use Survey123 in the collection of non-technical survey information and all survey data are recorded digitally, including polygon mapping directly via Survey123, with hard copy sketch maps drawn as a back-up. This enabled "live" quality control (QC) checking by NPA Myanmar's information management officer.³⁷

PLANNING AND TASKING

In the absence of a national mine action authority, Myanmar has not formulated national or state level plans for mine action.

The MA AoR drew up a strategic plan setting out general goals for the sector, including improving information management, risk education, victim assistance, improving coordination, and developing advocacy to raise the profile of humanitarian demining operators in Myanmar and attract more funding for delivery of protection services. In the first six months of 2022, MA AoR members reportedly provided training on explosive ordnance risk to approximately 150,000 people, of whom 68,434 were children.³⁸

Operators are not tasked by central authorities but liaise with local communities in their operating areas to identify tasks.³⁹ The location of armed clashes and displacement as well as results of community survey helped operators to determine priorities.⁴⁰

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Historically, Myanmar has not had national standards and therefore operators have followed International Mine Action Standards (IMAS) and their own standard operating procedures (SOPs). Operators are not permitted to conduct technical survey, clearance or explosive ordnance disposal so the focus of the mine action sector is on developing standards for permitted activities.

Tentative steps to develop national standards saw the drafting of a first national standard on marking, which was approved by the government in January 2020. A Non-technical Survey Working Group also worked on a standard for non-technical survey in 2020, led by the Mine Action Advisor from the New Zealand Embassy,⁴¹ but the group had not finalised and approved the standard by the February 2021 coup which suspended discussions on national standards.

The government agreed in 2018 that physical marking (with warning signs) and fencing should be included as part of non-technical survey⁴² but implementation has been patchy. It also approved marking of polygons, though local authorities were also involved in the approval process.⁴³ DRC was not able to mark the hazardous areas it identified in 2020 as in the previous year, but many hazardous areas were identified in 2019 along electricity-cable base structures, which were already fenced off to prevent people from entering.⁴⁴

The HALO Trust received permission in 2020 for marking of hazardous areas by authorities in both north Shan and Kayin states, provided that the village chief agrees and conducted limited marking of CHAs with warning signs in local languages.⁴⁵ MAG received permission from the government to conduct fencing/marketing operations in early 2020 and recruited technical field staff to support the activity but did not conduct any fencing or marking in 2020 due to the movement and travel restrictions that persisted throughout the year in response to the COVID-19 pandemic.⁴⁶

34 Email from Liam Harvey, DRC, 21 April 2021.

35 Email from Stephen Hall, HALO Trust, 13 April 2021.

36 Email from Bekim Shala, MAG, 13 April 2020; and Sofia Raineri, MAG, 9 June 2021.

37 Email from Hilde Jørgensen, NPA, 27 May 2021.

38 UNICEF Myanmar Country Office, Situation Report No. 6, 5 August 2022.

39 Email from Julie Utting, HALO Trust, 10 May 2022.

40 Email from Sofia Raineri, MAG, 8 August 2022.

41 Email from Liam Harvey, DRC, 21 April 2021.

42 Emails from Liam Harvey, DRC, 21 April 2021; and Matthew Walsh, DCA, 22 April 2021.

43 Emails from Bekim Shala, MAG, 16 August 2019 and 26 May 2020; and Kyaw Lin Htut, NPA, 21 August 2019.

44 Emails from Liam Harvey, DRC, 22 May 2020 and 21 April 2021.

45 Emails from Geoff Moynan, HALO Trust, 8 May 2020; and Stephen Hall, HALO Trust, 13 April 2021.

46 Emails from Sofia Raineri, MAG, 9 and 22 June 2021.

OPERATORS AND OPERATIONAL TOOLS

Five international demining organisations (DCA, DRC, The HALO Trust, MAG, and NPA) have offices in Yangon and some provincial locations. Demining organisations are not permitted to conduct technical survey, clearance and therefore concentrate non-technical survey, risk education, and community liaison.

DCA works entirely through local partner organisations in Myanmar. DCA had around 15 formal partners in 2020, the last year for which it provided information, and supported a number of other small civil society organisations (CSOs) implementing EORE and victim assistance activities.

Prior to February 2021, DCA also worked closely with the Departments of Social Welfare and Rehabilitation on EORE activities. As at April 2021, DCA hoped to be able to provide non-technical survey training and implementation support to its partner organisations, though this was contingent on the political situation.⁴⁷

DRC had planned to start non-technical survey in Kachin and Shan states in 2020 but it was prevented from proceeding, first by COVID-19 restrictions and by political-security circumstances after February 2021. DRC in partnership with national CSOs conducted community liaison and mapping activities continued throughout 2020, the last year for which it provided information, and started conducting risk education in Rakhine state.⁴⁸

The HALO Trust's Myanmar programme had a total staff of 52 in 2021, including seven risk education teams with 30 personnel, working from five locations in three of the most heavily impacted states. Visa restrictions obstruction entry of international staff resulted in remote management of the programme. In addition to a headquarters in Yangon, it had team locations established in Lashio (Shan state), Myitkyina (Kachin state) and in Hpa-an (Kayin). In 2021 it added a small

sub-location at Thandaungyi (also Kayin state) and expected to maintain this structure in 2022. HALO Trust teams are dual-trained for non-technical survey and risk education but in view of COVID-19 restrictions focused on risk education in 2021. It delivered EORE mainly through household training sessions since group sessions were not permitted, reaching more than 42,000 people. It also developed a "train-the-trainer" course for two local partners to enable them to train community-based trainers. HALO started conducting household surveys pre- and post-risk education in 2021 to gauge the impact of its risk education activities.⁴⁹

MAG had six community liaison/EORE teams working in 2021 operating initially in Kayin, Tanintharyi and through partners in Kayah and Kachin states. After February 2021 MAG expanded operations to Chin state (Mindat, Paletwa, and Thantlang) and it added additional capacity in 2022 when it also set up operations in Rakhine. With the suspension of non-technical survey following the February 2021 coup MAG has focused on risk education and community-based assessments of the mine/explosive ordnance threats conducting community interviews to develop a view on the scale of contamination.⁵⁰

NPA shifted the focus of its operations in 2021 away from non-technical survey and preparing for land release to risk education and conflict protection and preparedness in response to the deteriorating security environment. It maintained a head office in Yangon and field offices co-located with partner organisations in the Bago region and Mon State but closed its office in Kachin state. Its activities were conducted by three teams with a total of sixteen staff trained for non-technical survey, risk education, and community liaison and included staff of partner organisations.⁵¹

DEMINER SAFETY

In March 2021, a Myanmar military airstrike in Kayin state hit an office of a DCA partner organisation causing material damage and loss of equipment. The military coup has profoundly impacted DCA's operations in Myanmar in terms of security, access to funding, government relations, visas, and travel authorisations.⁵²

In response to escalating conflict in Myanmar after the February coup, The HALO Trust introduced additional emergency procedures creating a more responsive security alert and monitoring system. Daily review of security and deployment is conducted. Information is collected from a range of sources to provide a comprehensive security analysis.⁵³

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Humanitarian mine action operators did not release any areas though survey or clearance in 2021. The HALO Trust and MAG had conducted non-technical survey identifying hazardous areas in 2020 but demining operators suspended that activity after the February 2021 military coup and limited survey activity to community-based assessments. Operators were not permitted to conduct technical survey, clearance, or explosive ordnance disposal (EOD) spot tasks by either the government or ethnic minority authorities.

47 Emails from Matthew Walsh, DCA, 22 April and 29 June 2021.

48 Email from Liam Harvey, DRC, 21 April 2021.

49 Email from Julie Utting, HALO Trust, 10 May 2022.

50 Email from Sofia Raineri, MAG, 8 August 2022.

51 Email from Kyaw Lin Htut, NPA, 22 August 2022.

52 Email from Matthew Walsh, DCA, 22 April 2021.

53 Email from Julie Utting, HALO Trust, 10 May 2022.

KEY DATA

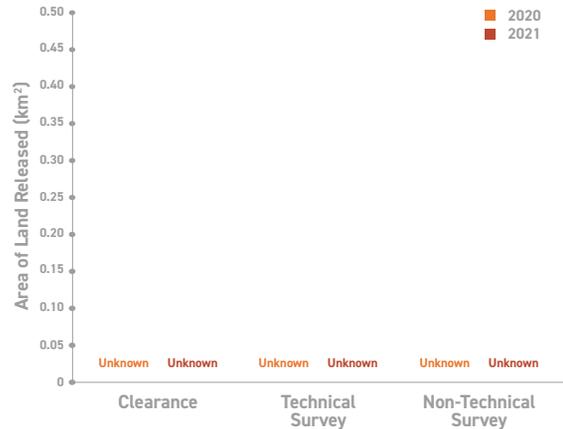
ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

(BUT VERY HEAVY)

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- North Korea should cease all use of anti-personnel mines.
- North Korea should resume mine clearance in the Demilitarised Zone (DMZ) as soon as possible and permit independent verification of clearance.
- North Korea should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- North Korea should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No functioning mine action programme

NATIONAL OPERATORS

- Korean People's Army engineers

INTERNATIONAL OPERATORS

- No functioning mine action programme

NATIONAL OPERATORS

- Korean People's Army engineers

UNDERSTANDING OF AP MINE CONTAMINATION

The extent of North Korea's mine problem is not known. North Korea admitted in 1998 that it had laid mines in the DMZ, a 1,000km² strip of land between the north and south of the peninsula believed to be one of the most densely contaminated areas in the world. Mined areas are reported to be marked and fenced but mines are also believed to have shifted as a result of flooding and landslides.¹

¹ Statement of North Korea, United Nations (UN) General Assembly, New York, 4 December 1998, UN doc. A/53/pv79, pp. 8-9; Choe Sang-Hun, "Koreas start clearing landmines at DMZ in effort to ease tensions", *New York Times*, 1 October 2018.

North Korean soldiers were also reported to have engaged in laying BBM-82 fragmentation mines along parts of its 880km-long border with China in 2020 in order to deter and prevent people from illegally leaving the country or entry by people who might bring in COVID-19. Troops reportedly sustained injuries from mine detonations as they placed mines on the two provinces' border with China.²

North and South Korea completed clearance of the Joint Security Area (of the DMZ) in Panmunjom in October 2018 under an agreement on measures to ease tensions. Additional clearance was conducted in late 2018 around Arrowhead Hill (also known as Hill 281) in Cheolwon, Gangwon province, under a pilot joint operations project to recover human remains.³ South Korea reported clearing 158 mines (not disaggregated by type) and 2,410 items of unexploded ordnance around Arrowhead Hill in 2020.⁴ In April 2022, South Korea resumed demining operations in the Baekmagoji area of the DMZ. Operations had been suspended following threat of hostile action from North Korea in the border area.⁵

PROGRAMME MANAGEMENT

North Korea has no functioning mine action programme.

In September 2018, the North Korean and South Korean Ministers of Defence signed a military agreement, the Panmunjom declaration, which mandated North Korea, South Korea, and the United Nations Command (UNC) to "remove all mines in the Joint Security Area (of the DMZ) in Panmunjom within 20 days, beginning on October 1, 2018".⁶ Diplomacy intended to improve relations between North and South Korea in 2019 did not lead to any additional action.

Following a request from North Korea to the UNC, the Korean People's Army engineers received training on use of US detectors using ground-penetrating radar for tackling box mines.⁷ US army engineers trained South Korean army engineers who in turn provided the training to the Korean People's Army.⁸

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in North Korea in order to minimise potential harm.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

No clearance or land release is known to have occurred in 2021.

South Korean officials confirmed on 22 October 2018 that clearance of the Joint Security Area in Panmunjom by North and South Korea had been completed.⁹ Officials said North Korea had notified the government it had cleared 636 mines while South Korea found none.¹⁰ At the request of the Korean People's Army, South Korean troops trained by the US Army conducted the clearance of one area on the northern side of the JSA that was heavily contaminated by box mines working with US-supplied Minehound dual purpose detectors.¹¹ North Korean forces also reportedly cleared a 1.3km-long mine belt in the Arrowhead Hill region.¹² Reviving tensions between North Korea and the United States in 2019 have held back further progress in demining.

2 Sewon Kin, "Soldiers injured as North Korea deploys landmines at Sino-Korean border to stop escapees", *Radio Free Asia*, 22 October 2020; "N. Korea lays landmines in border areas to fend off coronavirus: NIS", *Yonhap*, 3 November 2020; Lee Chae Un, "Storm Corps trooper killed in landmine explosion on border with China", *Daily NK*, 10 November 2020.

3 Song Young-moo and No Kwang Chol, "Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain", National Committee on North Korea, 19 September 2018, Annex 2, p. 7, at: <http://bit.ly/2XXbuXd>; and "Korean leaders sign agreement for North Korea to take further steps to denuclearize", *ABC News*, 20 September 2018, at: <http://abc7.ws/2XZM0bq>.

4 Jung Bitna, "Unearthed 143 remains of this year's Arrowhead Hill", *Yonhap News Agency*, 19 November 2020.

5 Email from Eum Soohong, KCBL, 3 and 11 April 2022.

6 "Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain", 19 September 2018, Annex 2, p. 7; and "Korean leaders sign agreement for North Korea to take further steps to denuclearize", *ABC News*, 20 September 2018.

7 Presentation by Col. J. P. Lloyd, Command Engineer, UNC, Side event at the National Directors' Meeting, Geneva, 11 February 2020.

8 Emails from Col. John P. Lloyd, UNC, and Maj. Mark S. Born, UNC, 14 April 2020.

9 "Koreas finish removing land mines from border village", *Associated Press*, 22 October 2018, at: <http://bit.ly/2GhPFvn>.

10 "Two Koreas Complete Mine Removal in JSA", *KBS World Radio*, 19 October 2018, at: <http://bit.ly/2XT18Kk>; "Minister: N. Korea eliminated 636 mines from Panmunjom area", *Yonhap*, 12 November 2018, at: <http://bit.ly/2Nbv2Fc>.

11 Emails from Col. John P. Lloyd, UNC, and Maj. Mark S. Born, UNC, 14 April 2020.

12 PowerPoint presentation by Maj. Gen. (ret.) Han Cheol Ki, Side event to the Intersessional Meetings, Geneva, 24 May 2019.

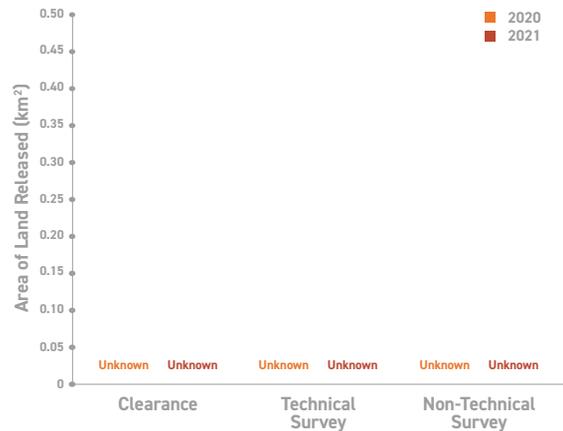
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Pakistan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Pakistan should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Pakistan should report publicly on the extent and location of anti-personnel mines and prepare a plan for their clearance and destruction.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority or centre

NATIONAL OPERATORS

- Pakistani military engineering units
- Frontier Constabulary
- Police bomb disposal squad

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

The extent of anti-personnel mine contamination in Pakistan is not known. Pakistan remains affected by mines and other explosive ordnance resulting from the Soviet occupation of Afghanistan (1979–89) and three wars with India, in 1947, 1965, and 1971. Pakistan has also laid anti-personnel mines in front of its defended location in Pakistan-administered Kashmir.¹ More recent contamination results from the continuing conflicts in areas bordering Afghanistan, including, in particular, the Federally Administered Tribal Areas (FATA).

¹ Recent Landmine Use by India and Pakistan, Human Rights Watch Backgrounder, May 2002, at: <http://bit.ly/3srXtQz>, p. 4.

In 2019, Pakistan reiterated past statements that the country “at present faces no problem of uncleared mines since no mines have been laid by [the] Pakistan Army after escalation of 2001–2002 on Pakistan’s Eastern Border”.² Previously it had elaborated that mines laid during the tensions in 2001–02 were all cleared and that no mines have since been laid.³

In 2018, Pakistan stated that non-state armed groups (NSAGs) have employed improvised explosive devices (IEDs) including mines during attacks.⁴ Pakistan again reported the use of IEDs in 2019 by NSAGs had resulted in casualties,⁵ stating also that “terrorists carried out 349 IED attacks involving use of mines as well”.⁶ The use of

improvised anti-personnel mines by NSAGs continued in 2020 in Baluchistan and Khyber Pakhtunkhwa. Use is attributed to a variety of militant groups, frequently referred to as “miscreants” in local media reports, but generally accepted to be constituent groups of the Tehrik-i-Taliban in Pakistan (TTP) and Balochi insurgent groups.⁷ In fact, according to media reports across Pakistan in 2018–21, casualties were reported from mines of an improvised nature laid by NSAGs, mines laid by troops along the Line of Control (LoC) between India and Pakistan, and from mines and other explosive hazards in South Waziristan (in an area that had been cleared and declared safe by the military).⁸

PROGRAMME MANAGEMENT

Pakistan has no formal civilian mine action programme. Pakistani military engineering units have been responsible for mine clearance in conflict zones, while the Frontier Constabulary has conducted mine clearance in contaminated areas of Baluchistan, FATA, and other conflict zones in the North-West Frontier Province. According to a media report some clearance is also done by the police’s bomb disposal squad.⁹

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Pakistan in order to minimise potential harm from clearance.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Pakistan has not submitted an Article 13 report under Amended Protocol II of the Convention on Certain Conventional Weapons (CCW), since 2020. Mine Action Review is not aware of formal survey or clearance of mined area in 2021 in Pakistan. No target date has been set for the completion of mine clearance.

According to a media report, on 15 December 2018 an unnamed senior security official said that 22 demining teams were being formed by the Pakistani Army to defuse and remove IEDs and mines in the North Waziristan district of Khyber Pakhtunkhwa and in the FATA. These deminers would be in addition to the reported 43 teams already working in the seven former tribal districts.¹⁰ In September 2019, the Pakistan Army said in a press release that it had 100 teams in the field removing landmines which it claimed were planted by TTP, and that much of the area was cleared of mines.¹¹

In a statement delivered at Fourth Review Conference of the Anti-Personnel Mine Ban Convention (APMBC) in November 2019, Pakistan said that: “The use of landmines is exclusively by the military for defence purposes”. Pakistan also acknowledged that although it was occurring at [a] “much lower scale now, Pakistan has itself been a victim of the use of landmines, including as IEDs by terrorists and non-state actors. Notwithstanding their use by terrorists. Pakistan security forces do not use mines for the maintenance of internal order and law enforcement in counter-terrorism operations.”¹² Pakistan also stated that: “Marking,

2 Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (covering 2019), Form B.

3 CCW Amended Protocol II Article 13 Report (covering 2018), Form B; and Statement of Pakistan, 16th Meeting of the States Parties to the APMBC, 18–21 December 2017.

4 CCW Amended Protocol V Article 13 Report (covering 2018), Form E.

5 CCW Amended Protocol II Article 13 Report (covering 2019), Form B.

6 Ibid., Form E.

7 *Landmine Monitor Report 2020*, at: <http://bit.ly/2Qw7lLy>, p. 14; “Balochistan: One Pakistani soldier killed in landmine blast another wounded”, *Balochwarna*, 6 April 2020, at: <http://bit.ly/3glctjV>.

8 See, e.g., “Two tribal elders killed in Orakzai Agency landmine blast”, *The Express Tribune*, 15 February 2018, at: <http://bit.ly/2KyGTMc>; “Summer brings with it landmines in Azad Kashmir”, *Pakistan Today*, 6 July 2018, at: <http://bit.ly/2Z033yN>; “Landmines killing people in Pakistan’s South Waziristan”, *Al Jazeera*, 5 February 2018, at: <http://bit.ly/33r8RAG>; “Kargil: The forgotten victims of the world’s highest war”, *BBC News*, 26 July 2019, at: <http://bbc.in/2KKibY3>; “Woman loses her leg to a landmine in South Waziristan”, *Samaa Digital*, 5 April 2019, at: <http://bit.ly/2ZDe0JQ>; “Balochistan: One Pakistani soldier killed in landmine blast another wounded”, *Balochwarna*, 6 April 2020, at: <http://bit.ly/3glctjV>; “UNICEF deeply concerned by death and injury of children due to landmine and grenade explosions in Pakistan”, 6 June 2021, at: <https://uni.cf/3xQnRID>.

9 “Landmines recovered from Bajaur college”, *DAWN*, at: <http://bit.ly/2Qy2Lfy>.

10 “Pakistan: IEDs and Continuous Haemorrhage – Analysis”, *Eurasia Review*, 24 July 2019, at: <http://bit.ly/31xt1qW>.

11 “People Affected by Landmines were Provided free treatment and training by Pak Army 2019”, *Pakistan Defence*, 19 September 2019, at: <http://bit.ly/3x6FjXW>.

12 Statement of Pakistan, Fourth APMBC Review Conference, Oslo, 29 November 2019.

fencing and monitoring of mined areas are common ways through which effective exclusion is accomplished by the Pakistan army.¹³

In 2019, Pakistan reported a total of 187 attacks causing casualties due to IEDs "all over the country", but did not disaggregate the type of IED or specify the proportion that were victim-activated.¹⁴

In January 2020, the media reported clearance of 26 anti-personnel mines planted by unknown groups in a rural college in Khar Tehsil of Bajaur District in Khyber Pakhtunkhwa, near the border with Afghanistan.¹⁵

In June 2021, it was reported by the media that security forces had completely cleared the Malakand and Bajaur districts of explosives, including landmines, while clearance operations in other districts of the FATA were in progress with more than 80 teams operating. Security forces had reportedly cleared 13km² in Mohmand; 8km² in Khyber; 5km² in Orakzai; 4km² in Kurram; 4km² in North Waziristan; and 15km² in South Waziristan tribal district.¹⁶

13 Statement of Pakistan, 17th Meeting of States Parties to the APMB, Geneva, 26 November 2018.

14 CCW Amended Protocol II Article 13 Report (covering 2019), Form B.

15 "Landmines recovered from Bajaur college", *DAWN*, at: <http://bit.ly/2Qy2LfY>.

16 "Large area in ex-Fata yet to be de-mined", *DAWN*, at: <https://bit.ly/30dJ4TP>.

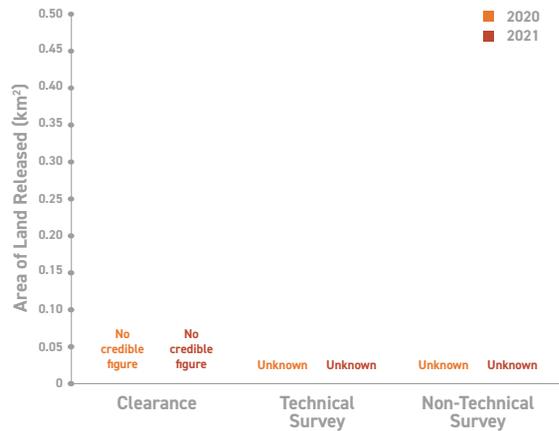
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021
NO CREDIBLE FIGURE

AP MINES DESTROYED IN 2021
NOT REPORTED

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Russia should cease laying anti-personnel mines in Ukraine and accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Russia should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.

DEMINEING CAPACITY

MANAGEMENT CAPACITY*

- No national mine action authority.
- No formal civilian mine action programme.
- The International Mine Action Centre of the Armed Forces of the Russian Federation (IMAC), formerly known as the International Demining Action Centre. IMAC is a specialist training base and co-ordinates Russia's international mine action. It is not a mine action centre as the term is generally understood in mine action.

INTERNATIONAL OPERATORS

- None

NATIONAL OPERATORS*

- Military units of the Engineering Troops of the Armed Forces of the Russian Federation.
- Military Engineers of the Airborne Forces.
- Federal Ministry of Defence Engineers.
- Demining brigades of the Ministry of Internal Affairs.
- Ministry of Emergency Situations (MES) specialised demining units (EMERCOM Demining and the "Leader" Center for Special Tasks).

OTHER ACTORS

- None

* IMAC, the Military Units of the Engineering Troops of the Armed Forces of the Russian Federation and the Military Engineers of the Airborne Forces are referred to in publicly available sources dated 2021. Other information in this table is based on information from earlier years. It is not known if it remains accurate.

UNDERSTANDING OF AP MINE CONTAMINATION

There is no accurate estimate of the extent of mine contamination but Russia remains contaminated with mines and explosive remnants of war (ERW) as a result of the Second World War, the two Chechen wars (1994–96 and 1999–2009), and armed conflicts in the Caucasian republics of Dagestan, Ingushetia, and Kabardino-Balkaria.

Anti-personnel and anti-vehicle mines were used extensively in the two major conflicts in Chechnya. Estimates of the extent of contamination vary greatly because no systematic effort has been undertaken to assess the scope or impact of the problem.¹ In 2010, Russia's deputy prime minister and presidential special envoy to the Caucasus, Aleksandr Khloponin, claimed that mines affected 14km² of land and posed a major obstacle to development.² In contrast, Chechen officials and human rights organisations have previously estimated that 245km² of land was mined, including 165km² of farmland and 73km² of woodland.³

In January 2017, a commander in the Russian Armed Forces reportedly told press agency Interfax that more than 100km² of land remained to be cleared in Chechnya, and a further 20km² in neighbouring Ingushetia.⁴ According to the online media report, areas cleared to date had nearly all been in lowland Chechnya and remaining mined area is in more mountainous terrain, complicating demining efforts.⁵

According to online media reports, clearance in Chechnya and Ingushetia started in 2012, with most of the explosive devices destroyed resulting from the two Chechen wars.⁶ In 2021 Russia's Ministry of Defence (MoD) stated that Russia had planned to clear approximately 160km² of agricultural and forest land, but that over the course of nine years, military personnel had exceeded this, surveying approximately 240km² and discovering and destroying more than 41,000 explosive items (mines, shells, grenades, and other ammunition), as well as improvised explosive devices (IEDs). It is not clear how much of this 240km² represents land contaminated with anti-personnel mines.⁷

USE OF MINES IN UKRAINE SINCE 2014

In the most recent conflict in Ukraine, Russia has made very widespread use of anti-personnel and anti-vehicle mines.⁸ In the past, reports of minefields emplaced to demarcate border areas after Russia's annexation of the Crimea in 2014 appeared to have concerned either "phony minefields"⁹ or areas containing trip-flares. Trip-flares are not covered by the Anti-Personnel Mine Ban Convention (APMBC). On 7 March 2014, Ukrainian media reported that the Russian military had laid mines around the main gas line into Crimea.¹⁰

PROGRAMME MANAGEMENT

There is no formal civilian mine action programme in Russia and no national mine action authority. Mine clearance is carried out by Military units of the Engineering Troops of the Armed Forces of the Russian Federation,¹¹ the Military Engineers of the Airborne Forces,¹² Federal Ministry of Defence engineers, demining brigades of the Ministry of Internal Affairs, and by the Ministry of Emergency Situations (MES), through its specialised demining units (EMERCOM Demining and the "Leader" Center for Special Tasks).¹³

1 UNMAS, "Portfolio of Mine Action Projects 2009", New York, 2008, p. 284.

2 "Medvedev emphasizes vision of Chechnya's future with personal visit", *Russia Today*, 14 June 2010, at: <https://bit.ly/33H4BgO>.

3 "MoE sappers to demine arable land in Chechnya", *Caucasian Knot*, 3 April 2009; "In Chechnya MES deminers destroyed 25 explosive devices", *Caucasian Knot*, 5 October 2009; and "Human rights activists: 25,000 hectares of Chechen territory are still mined", *Caucasian Knot*, 7 May 2008.

4 "Landmine threat in Chechnya still prevalent", *OC Media*, 23 January 2017, at: <https://bit.ly/33HxfOT>.

5 Ibid.

6 "Land Without Mines", *RGRU news*, 2 June 2020, at: <https://bit.ly/3gcKM93>; "Chechnya. Russian mines continue to kill people", *Caucasus Realities*, 19 December 2019, (Russian), at: <https://bit.ly/3vaMXyd>; "Sappers of the Southern Military District neutralized more than 2 thousand explosive objects on the territory of Chechnya and Ingushetia", *TAC*, 27 November 2019, at: <https://bit.ly/3iBuisH>.

7 "Sappers of the Southern Military District completed demining work on the territory of Chechnya", *Ministry of Defence of the Russian Federation*, at: <https://bit.ly/3QdfQEO>.

8 "Russians booby-trap 'safe corridor' in Ukraine with landmines: report", *New York Post*, 7 March 2022, at: <https://bit.ly/3wkW2rT>; "Ukraine: Russia Uses Banned Antipersonnel Landmines", *Human Rights Watch*, 29 March 2022, at: <https://bit.ly/3CiVpTg>; "Russia using banned 'jumping' landmines in Ukraine", *The Telegraph*, 30 March 2022, at: <https://bit.ly/3dNKp6t>; "Russia 'using banned landmines' in north-eastern Ukraine", *The Times*, 30 March 2022, at: <https://bit.ly/3R1mvCO>; "Russia urged to stop using land mines in its war in Ukraine", *ABC News*, 5 April 2022, at: <https://abcn.ws/3K9VNW3>; "Russia likely using Soviet-era landmines in Ukraine, say U.K. officials", *The Washington Times*, 8 August 2022, at: <https://bit.ly/3AdfsA4>.

9 Convention on Certain Conventional Weapons (CCW) Amended Protocol II defines a phoney minefield as "an area free of mines that simulates a minefield. The term 'minefield' includes phoney minefields." Art. 2(8), CCW Amended Protocol II.

10 ICBL, "Reports of Russian landmine use in Crimea requires immediate response", Geneva, 10 March 2014, at: <http://bit.ly/20XjAzL>.

11 CCW Protocol V Article 10 Report (covering 2021), Form A.

12 "Military engineers of the Airborne Forces neutralized more than 15 thousand explosive objects in 2021", *Ministry of Defence of the Russian Federation*, at: <https://bit.ly/3SfbDCT>.

13 See, e.g., "It is planned to establish special groups for demining of lands within MES", *Caucasian Knot*, 23 July 2009; and "Autumn demining is completed in Chechnya", *Vesti Kavkaza*, 28 October 2009.

Russia reported that its armed forces established an International Demining Action Centre in 2014. The Centre serves as a base for specialist training in detection and clearance of explosive devices, demining, and operation of mobile robotic tools, and does not function as a mine action centre (MAC) as the term is generally understood in mine action.¹⁴ In 2021, Russia referred instead to its International Mine Action Centre (IMAC) and reported that this centre, along with the Office of the General of the Engineering Troops, convened a Fourth International Demining Conference, attended by participants from 24 countries. Conference topics included training, search techniques, personal protective equipment, and robotics.¹⁵

In 2020, EMERCOM reported that annually it clears about 40,000 items of ordnance remaining from the Second World War in Russia. The bulk of the items found are said to be unexploded bombs, artillery shells, grenades, and landmines.¹⁶

In 2021, Russia reported that 1,608 military personnel were involved in explosive ordnance clearance, including 292 officers, 38 survey teams, 464 automobile technician units, and 27 engineering technician units.¹⁷ This represents a decrease in capacity deployed compared to 2020, when 1,989 military personnel, 57 survey personnel, 522 machine operators, and 42 engineers were involved in clearance operations in the Russian Federation.¹⁸

The Commonwealth of Independent States (CIS), of which Russia is a member, has reported that, on 24 June 2022, following a meeting of the Council of Defence Ministers of the CIS countries, that Russian Defence Minister, Sergei Shoigu, had said that a joint unit of humanitarian demining will be created in the CIS. No timeline for this was given.¹⁹

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Russia in order to minimise potential harm from clearance.

INFORMATION MANAGEMENT AND REPORTING

Russia records information on the use of explosive ordnance at the headquarters of military units, with annual reports submitted to the Office of the Chief of Engineering Troops of the Armed Forces of the Russian Federation.²⁰

Russia submits Convention on Certain Conventional Weapons (CCW) Protocol II Article 13 reports and Protocol V Article 10 reports annually.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

In 2021, mine clearance was carried out in Chechnya and Ingushetia, as well in areas where military operations were conducted during the Second World War.²¹ Russia reported that Ministry of Defence forces cleared just over 175km² of mined area on Russian Federation territory in 2021, with 123,683 items of unexploded ordnance (UXO) found and destroyed.²² The reported amount of land released through clearance decreased compared to 2020, when Russia reported clearing 261km² of mined area on Russian Federation territory, with 105,678 items of UXO found and destroyed,²³ again mainly in Chechnya and Ingushetia.²⁴ None of the figures is credible for the extent of clearance alone.

Over 70% of reported clearance in 2021 (125.8km²) took place in the Western Military District. A further 27.1km² was cleared in unspecified locations by military units directly subordinate to the General of the engineering troops, as well as 13.2km² in the Eastern Military District, 5km² in the Central Military District, and 4km² in the Southern Military District.²⁵

14 CCW Protocol V Article 10 Report, Form B, 31 March 2015; and meeting with Andrey Grebenshchikov, First Secretary, Department for Non-Proliferation and Arms Control, Russian Ministry of Foreign Affairs, in Geneva, 9 April 2015.

15 CCW Protocol II Article 13 Report (covering 2021), Form E.

16 "About 40 thousand explosive objects from the time of the Great Patriotic War are annually destroyed by the pyrotechnic units of the Ministry of Emergencies of Russia", *EMERCOM media news*, 8 May 2020, at: <https://bit.ly/3wsuLlr>.

17 CCW Protocol II Article 13 Report (covering 2021), Form B.

18 CCW Protocol II Article 13 Report (covering 2020), Form B.

19 "Russian Defense Minister Sergei Shoigu said that a joint unit of humanitarian demining will be created in the CIS", *Commonwealth of Independent States*, 27 June 2022, at: <https://bit.ly/3b1ulgn>.

20 CCW Protocol V Article 10 Report (covering 2021), Form A.

21 *Ibid.*, Form F.

22 CCW Protocol II Article 13 Report (covering 2021), Form B; and Protocol V Article 10 Report (covering 2021), Form A.

23 CCW Protocol II Article 13 Report (covering 2020), Form B.

24 CCW Protocol V Article 10 Report (covering 2020), Form F.

25 CCW Protocol V Article 10 Report (covering 2021), Form A.

While the focus of clearance in 2020 was in Chechnya, Ingushetia, and areas where military operations were conducted during the Second World War, clearance operations also took place on training grounds, former arsenals, ammunition warehouses of the Northern Fleet,²⁶ areas designated for construction by the MoD and Russian Federation, and areas designated for holding events for the International Army Games.²⁷

In Chechnya specifically, one MoD news article stated that demining operations were carried out on agricultural and forestry lands in the Achkhoy-Martanovsky district, clearing 3km² and destroying more than 700 munitions using mechanical assets and mine detection dogs.²⁸ Another Russian MoD news article describes how, in November 2021, Deminer Paratroopers from the Pskov Guards Airborne Assault Unit discovered an anti-personnel minefield left by the Second World War, while clearing the area of the Sebezhsy district in the north-west of the country, disposing of 800 mines from the area.²⁹

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Russia has not provided information on whether it has a plan in place for dealing with any residual contamination following completion of clearance of known mined areas.

26 "The mission of the Northern Fleet is to defend Russia's far north-western Arctic region surrounding the Kola Peninsula", *GlobalSecurity.org* at: <https://bit.ly/3JqQxi>.

27 CCW Protocol V Article 10 Report (covering 2021), Form G.

28 Sappers of the Southern Military District completed demining work on the territory of Chechnya", Russian Ministry of Defence, at: <https://bit.ly/3QdfQE0>.

29 "Military engineers of the Airborne Forces neutralized more than 15 thousand explosive objects in 2021", *Ministry of Defence of the Russian Federation*, at: <https://bit.ly/3SfbDCt>.

SOUTH KOREA



CLEARING THE MINES 2022

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

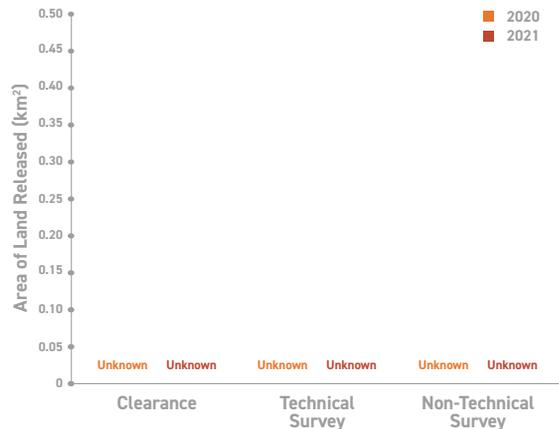
NATIONAL ESTIMATE

128km²

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- The Republic of Korea (South Korea) should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- South Korea should establish a national mine action authority to assume responsibility for planning and implementing mine clearance.
- South Korea should enact long-considered legislation permitting mine clearance by accredited civilian demining organisations.
- South Korea should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Ministry of National Defence

NATIONAL OPERATORS

- Army engineers

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- United Nations Command (UNC)

UNDERSTANDING OF AP MINE CONTAMINATION

The Demilitarised Zone (DMZ) and the Civilian Control Zone (CCZ), immediately adjoining the southern boundary of the DMZ, remain among the most heavily mined areas in the world due to extensive mine-laying during the Korean War and in the 1960s, in 1978, and in 1988.

The Army's Joint Chiefs of Staff disclosed in October 2020 that South Korea had 1,308 confirmed hazardous areas (CHA) affecting a little over 128km² (see Table 1), 8% more than the area of contamination identified by the National Defence Committee in a 2020 report.¹

1 Yoo Hyun-min, "828,000 landmines buried nationwide...59,000 even south of the Civilian Control Line", *Yonhap News Agency*, 9 October 2020.

Table 1: Confirmed hazardous areas (CHAs) in South Korea (at October 2020)²

	Total	Controlled Protection Zones		Restricted Protection Zones	Rear area
		DMZ	CCZ		
No. of sites	1,308	786	433	22	67
Area (m ²)	128,160,000	10,030,000	114,780,000	2,470,000	880,000
No. of mines	828,000	380,000	389,000	50,000	9,000

Contamination data were largely unchanged from previous years. A report presented to a side event at the 2019 Anti-Personnel Mine Ban Convention (APMBC) Intersessional Meetings also recorded 1,308 mined areas containing an estimated 828,000 mines.³ Information provided by the Army's Joint Chiefs of Staff in 2018, also showed 380,000 of these mines were emplaced in 786 sites within the DMZ.⁴ Mined areas in the DMZ include 771 emplaced minefields which are mapped and 15 undocumented mined areas covering a total of 10.03 km². CCZ contamination includes 257 defined mined areas and 176 undocumented sites covering a total of 114.79km².⁵

The Ministry of National Defence previously reported that it had emplaced some 53,000 M14 anti-personnel mines around 37 rear air defence bases between 1960 and 1980 and in demining operations conducted between 1998 and 2007 it had cleared around 50,000 of these mines. However, floods, landslides and changes in topography were believed to have caused mines to move and some 3,000 mines remained to be found and destroyed.⁶

PROGRAMME MANAGEMENT

The southern half of the Demilitarized Zone is controlled by South Korea but under the Armistice Agreement the area between the Demarcation Line and the Southern Line Limit is under the jurisdiction of the United Nations Command (UNC) and any mine clearance activities are conducted with UNC approval.

Mine action in the Civilian Control Zone (between the SLL and the Civilian Control Line) and the rest of South Korea is overseen by the Ministry of National Defence and conducted exclusively by South Korean army engineers.

There is no national mine action authority or mine action centre in South Korea and only the South Korean army is permitted to conduct clearance. Government ministries have discussed creation of a mine action authority but as of April 2021 had not decided whether or not to proceed and the idea reportedly remains in its infancy.⁷ South Korea's Ministry of Defence submitted a bill to parliament in 2013 that would allow civilian organisations to remove mines laid during the Korean War.⁸ As at April 2021, the National Assembly had not passed the bill. General Robert Abrams, Commander of US forces and the UNC, has reportedly explored the possibility of bringing in international non-governmental organisations as advisers.⁹

A document submitted by the Joint Chiefs of Staff to the National Assembly in 2020 identifying obstacles to mine action pointed to the absence of an institutional framework and the lack of a legal basis for mine clearance which can only be conducted with the consent of land owners. The memo said existing demining capacity was overburdened and recommended expanding capacity from one brigade to two or three brigades. It also called for quality assurance and post-clearance analysis.¹⁰

The Ministry of National Defence announced in 2019 that it had embarked on a three-year programme to complete the survey and clearance of rear areas by October 2021. The proposal called for expanding demining capacity from six teams with 200 personnel to 31 teams with 1,200 personnel. It also called for investment in upgrading detectors to detect plastic mines and in mechanical assets.¹¹ The extent to which the Army has progressed in implementing the plan remains unclear. A Joint Chiefs of Staff memo to the National Assembly reported an increase in the budget for mine clearance from KRW 180 million (approximately US\$161,000) in 2018 to KRW 330 million in 2019 and KRW 8.2 billion (US\$7.3 million) in 2020.¹²

2 Ibid.

3 PowerPoint presentation by Maj.-Gen. Han Cheol Ki (ret.), Side event to the APMBC Intersessional Meetings, Geneva, 24 May 2019.

4 South Korea Joint Chiefs of Staff (ROK JCS), cited in "Mine Action in the Korean Peninsula", unpublished paper by Eum Soohong, member, Korean Campaign to Ban Landmines, September 2019.

5 United Nations Command (UNC) South Korea PowerPoint presentation for Geneva International Centre for Humanitarian Demining (GICHD) side event to the UN National Directors' Meeting, Geneva, 11 February 2020.

6 Ministry of National Defence press release, 16 October 2019.

7 Interview with Cho Jai Kook, Coordinator, Korea Campaign to Ban Landmines, and Eum Soohong, KCBL, in Geneva, 13 February 2020.

8 "S. Korea pushes to allow civilians to remove land mines", *Yonhap*, 14 November 2013.

9 Presentation by Col. J. P. Lloyd, UNC, GICHD side-event to the UN National Directors' Meeting, Geneva, 11 February 2020.

10 Memo from the Engineering Department, Joint Chiefs of Staff, to the National Assembly (unofficial translation by Eum Soohong, KCBL), October 2020.

11 Ministry of National Defence press release, 16 October 2019.

12 Memo from the Engineering Department, Joint Chiefs of Staff, to the National Assembly (unofficial translation by Eum Soohong, KCBL), October 2020.

In February 2022, 334 Korean non-governmental organisations (NGOs) demanded that demining of rear areas should be on the agenda during the presidential election and called for the ministry in charge of mine removal to be transferred from the Ministry of National Defence to the Ministry of Public Administration and Security, which is the ministry in charge of national disasters and public safety. In addition, there were calls for the application of the International Mine Action Standards (IMAS) to mine clearance; public disclosure of information on the 37 minefields in the rear areas; the development of a

comprehensive plan of mine clearance; the establishment of a mine clearance committee reporting directly to the President; and the enactment of a Law on Mine Clearance.¹³ Several municipalities also called for demining in the rear regions and legislation on mine action with the adoption of resolutions on mine action following accidents in those areas.¹⁴

The Army was reported in February 2021 to have launched a two-week course training deminers to standards that for the first time are IMAS-compatible. The Army reportedly planned to train 500 people on the course during 2021.¹⁵

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in South Korea in order to minimise potential harm.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

South Korea reported clearing 158 mines (not disaggregated by type) and 2,410 items of unexploded ordnance in the course of operations to exhume remains of Korean War casualties around Arrowhead Hill in the DMZ in 2020. North Korea did not conduct clearance in the DMZ as provided for in the September 2018 Panmunjom Declaration.¹⁶ In April 2022, South Korea resumed operations to exhume remains of Korean War casualties and conducted demining in the Baekmagoji area of the DMZ. Operations had been suspended following threat of hostile actions from North Korea in the border area.¹⁷

According to online media, the Army said in February 2021 that it planned to conduct mine clearance in 42 areas covering 630,000m² by November 2021. The areas targeted for clearance included 36 rear air-defence sites south of the CCZ.¹⁸

13 Jin-yong Cho, "Removal of rear mines such as in Naju and Boseong urged to be adopted as 'the presidential election task'", *Jnilbo*, 16 February 2022, at: <https://bit.ly/3Qjju9D>.

14 See: "Goyang City Council: Necessary to revise the Special Act on Support for Victims of Landmine Explosion", *Newsis*, 21 January 2022, at: <https://bit.ly/3xBudvd>; "Gimpo city council calls for realistic compensation for victims of landmine accident in Han River estuary", *Siminilbo*, 20 January 2022, at: <https://bit.ly/3zZUtCr>; "Yeoncheon County Council, Resolution Calling for Enactment and Revision of Landmine-Related Laws", *Yonhap*, 15 February 2022, at: <https://bit.ly/3MZS516>.

15 Choi Han-young, "The first military to meet international standards and train mine removal experts", *Kookbang*, 5 February 2021.

16 Jung Bitna, "Unearthed 143 remains of this year's Arrowhead Bill", *Yonhap News Agency*, 19 November 2020.

17 Emails from Eum Soohong, KCBL, 3 and 11 April 2022.

18 Maeng Soo-yeol, "Civil control line, public works, rear air defense camp mine removal operation", *Kookbang*, 1 April 2021.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

BUT AT LEAST IN THE NORTH-EAST

17.75 KM²

AP MINE CLEARANCE IN 2021

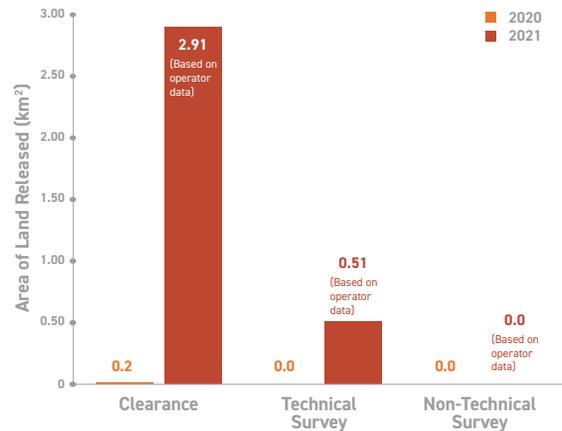
2.91 KM²

AP MINES DESTROYED IN 2021

191

(INCLUDING 4 DESTROYED IN SPOT TASKS) OF THE 191 ANTI-PERSONNEL MINES, 177 WERE OF AN IMPROVISED NATURE (BASED ON OPERATOR DATA).

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

Humanitarian needs resulting from anti-personnel mine contamination remain very high against a backdrop of an underfunded and fragmented mine action programme. The United Nations Mine Action Service (UNMAS) has taken on the role of coordinating international mine action across Syria. Several actors, including international non-government organisations (NGOs), are present in areas not controlled by the government. In government-controlled areas, however, there is a critical lack of qualified clearance operators with only one international operator, the Armenian Centre for Humanitarian Demining and Expertise (ACHDE), accredited in 2020. In late December 2021, Norwegian People's Aid (NPA) signed a memorandum of understanding (MoU) with the Syrian government on the establishment of a mine action programme, and as at September 2022, was yet to be accredited for survey and clearance in Syria.

RECOMMENDATIONS FOR ACTION

- Syria should undertake never again to use anti-personnel mines and accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Syria should clear mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Syria should undertake a baseline survey of anti-personnel mine contamination in areas over which it has effective control.
- Syria should adopt national mine action standards (NMAS) that are in line with the International Mine Action Standards (IMAS).
- Syria should create the necessary structures to oversee an efficient mine action programme, namely, a national mine action centre (NMAC) and a national mine action authority (NMAA). The process should be underpinned by the adoption of mine action legislation and a multiyear strategic plan.
- Syria and the other parties present in the country should allow mine action operators to move freely across areas under their control and ensure their safety.
- A centralised mine action information management (IM) database should be established. All mine action operators in Syria should ensure that survey and clearance data are recorded and safeguarded in a digital format and in accordance with the IMAS.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- The interministerial Mine Action Coordination Committee (headed by the Minister of Foreign Affairs)

NATIONAL OPERATORS

- Engineering Unit of the Syrian Army
- The Syria Civil Defence (SCD), or the White Helmets
- Roj Mine Control Organization (RMCO)
- iMFAD (based in Türkiye (formerly known as Turkey))

INTERNATIONAL OPERATORS

- The Armenian Centre for Humanitarian Demining and Expertise (ACHDE), operating in government-controlled areas.
- DanChurchAid (DCA), operating in the north-east
- Mines Advisory Group (MAG), operating in the north-east
- The HALO Trust, operating in the north-west

OTHER ACTORS

- Norwegian People's Aid (NPA), established in Damascus (December 2021)
- United Nations Mine Action Service (UNMAS), operating from Damascus

UNDERSTANDING OF AP MINE CONTAMINATION

Syria is heavily contaminated by mines and mines of an improvised nature used extensively by parties to the country's decade-old conflict. It also has mined areas left by a succession of Arab-Israeli wars since 1948. The Syrian government reportedly laid mines along borders with Türkiye (formerly known as Turkey) and Lebanon in 2012 and Turkish authorities subsequently claimed that between 613,000 and 715,000 mines had been planted along the Turkish-Syrian border, making clear they were not emplaced by Turkish forces.¹ Between mid 2020 and October 2021, the Landmine Monitor did not document or confirm any use of anti-personnel mines by the Syrian government or Russian forces participating in joint military operations in Syria, but reported unconfirmed allegations of new anti-personnel mine use by non-State armed groups (NSAGs).²

The full extent of anti-personnel mine contamination is unknown. To date, there has been no comprehensive countrywide survey to assess the contamination as access remains restricted by the ongoing conflict, the volatile situation, and the fragmented state of security. Yet, several localised community assessments and surveys consistently reveal large-scale contamination from anti-personnel mines and explosive remnants of war (ERW) as well as limited anti-vehicle mine contamination. Massive improvised explosive ordnance contamination, including landmines, has been found in areas liberated from Islamic State and its affiliated groups that controlled large swathes of north-east Syria until their defeat in 2018–19. The Syrian Observatory for Human Rights documented in 2021 the death of 300 civilians, including 28 women and 138 children, as a result of explosions of improvised explosive devices (IEDs) and

landmines.³ In 2021, Islamic State forces reportedly planted IEDs and landmines in the Syrian Democratic Forces (SDF)-controlled areas in the north and north-east of Syria.⁴

Rebel forces which subjected the towns of Foua and Kfraya to years of siege are said to have left hundreds of mines in surrounding fields as well as individual explosive devices in many homes.⁵ In Raqqa, where 80% of the city has been destroyed, the ground was littered with rubble mixed with ERW and booby traps left behind by the belligerent parties.⁶ From Raqqa, former capital of the self-proclaimed Islamic State caliphate, to Al-Hassakeh governorate in the north-east, and south to Deir Ezzor and Barchuz (the last remaining Islamic State stronghold overrun in May 2019), retreating Islamic States forces left huge numbers of mines of an improvised nature and other improvised devices. Humanity and Inclusion (HI) reported in May 2022 that contamination by IEDs, landmines, and other types of explosive ordnance (EO) continued to spread in Syria in 2021–22 as a result of the ongoing hostilities and criminal activities. Landmines, IEDs, and other ordnance were placed to impede military advances and deny access to the civilian population.⁷

According to the Syria Humanitarian Needs Overview (HNO), EO contamination affects one third of populated communities. Areas that experienced intense hostilities, including Aleppo, Daraa, Deir Ezzor, Idlib, Raqqa, and Rural Damascus, were found to be particularly hard hit.⁸ In 2020, the UN recorded an average of 76 explosions per day, equating to an explosion every 20 minutes.⁹ The extent of contamination disaggregated by type of device is not known. In 2021, the Office of the UN High Commissioner for Human Rights (OHCHR)

1 Human Rights Watch, "Syria: Army planting banned landmines", 13 March 2012, at: <http://bit.ly/2Ybz9rK>; "Thousands of landmines planted along Turkish-Syrian border", *Middle East Monitor*, 21 November 2013, at: <https://bit.ly/2Mt7efE>.

2 *Landmine Monitor Report 2021*, at: <https://bit.ly/3ybM7VD>, p. 16.

3 Syrian Observatory for Human Rights, "SOHR 2021 Booklet", 2 January 2022, at: <https://bit.ly/3PFM1x4>, p. 1.

4 *Ibid.*, p. 84.

5 "Inside Foua: A Shi'a town in the eye of the Syrian storm", *Middle East Eye*, 19 August 2018.

6 HI, "Syria: it will take at least two generations to rebuild", 25 February 2021, at: <https://bit.ly/3fPFoaF>.

7 Humanity and Inclusion, "Explosive ordnance in Syria: impact and required action", May 2022, at <https://bit.ly/3zCLJRK>, p. 5.

8 UN Office for the Coordination of Humanitarian Affairs (OCHA), Syria Humanitarian Needs Overview, March 2021, at: <https://bit.ly/3yu8Tar>, p. 10; and Syria Humanitarian Needs Overview, February 2022, at: <https://bit.ly/3RrcHmz>, p. 6.

9 UN Office for the Coordination of Humanitarian Affairs (OCHA), Syria Humanitarian Needs Overview, March 2021, at: <https://bit.ly/3yu8Tar>, p. 10;

documented 1,874 civilian casualties as a result of airstrikes, ground-based shelling, and armed clashes in north-west Syria, as well as EO incidents, including these involving IEDs and landmines. Most of these incidents occurred in Aleppo, Idlib, Raqqa, and Deir Ezzor governorates.¹⁰ Contamination is most frequently reported on agricultural land, on roads, on private property, as well as in and around schools, hospitals, and other public infrastructure.¹¹

The HALO Trust conducted an EO community contamination impact assessment in north-west Syria (in Aleppo and Idlib governorates) between 2018 and 2020. The assessment confirmed EO contamination in over 400 communities (equating to 41% of those assessed),¹² with 73% of affected communities reporting agricultural land was blocked, and 48% impeded from accessing housing.¹³ Landmines and IEDs combined accounted for only 4% of total contamination, submunitions accounted for 36%, while the remaining contamination was caused by a mixture of other unexploded ordnance (UXO).¹⁴ This assessment by HALO also revealed 113 suspected minefields (89 in northern Aleppo and 24 in Idlib) and 38 suspected IED fields (34 in northern Aleppo and 4 in Idlib). The types of identified mines and IEDs were not known

as data was collected in a rapid survey assessment without conducting full non-technical survey.¹⁵

The International Committee of the Red Cross (ICRC) and the Syrian Arab Red Crescent (SARC) also conducted a joint mine risk needs assessment of 573 communities in Al-Hassakeh, Aleppo, Daraa, Deir Ezzor, Hama, Homs, Idlib, Quneitra, and Sweida governorates. According to the assessment, 530 (92%) of the assessed communities reported the presence of ERW. Of the assessed communities, 57% reported the presence of anti-personnel mines, 46% of cluster munition remnants (CMR), and 25% of other explosive ordnance.¹⁶

Mines Advisory Group (MAG) has been conducting surveys across several governorates in the north-east of Syria since 2016. To date, MAG has registered approximately 64.92km² of mined area across a total of 830 suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs), which include areas contaminated with very large numbers of mines of an improvised nature. As at the end of 2021, MAG had released 72% of the area, leaving 17.75km² requiring further survey and clearance (see Table 1).¹⁷

Table 1: Anti-personnel mined area in north-east Syria surveyed by MAG (at end 2021)¹⁸

Governorate	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Aleppo	12	455,525	10	177,324	22	632,849
Al-Hassakeh	31	7,674,686	20	1,420,533	51	9,095,219
Deir Ezzor	7	161,310	4	627,000	11	788,310
Raqqa	77	5,370,103	70	1,863,491	147	7,233,594
Totals	127	13,661,624	104	4,088,348	231	17,749,972

Working from the Syrian capital, Damascus, UNMAS continued an explosive ordnance assessment team (EOAT) survey in Rural Damascus (South) that it had started in August 2020.¹⁹ The assessment locations were identified by UNMAS in line with the UN Humanitarian Response Plan (HRP) priorities and with the approval of the Syrian government. At the end of 2021, the EOAT surveyed 10km² in four locations in Daraya (Rural Damascus governorate), of which around 6km² were confirmed as hazardous. The EOAT also surveyed residential buildings in Yarmouk camp in Rural Damascus. Of the 423 buildings assessed, 88 were confirmed as contaminated. The EOAT survey was planned to continue throughout 2022.²⁰

The Syrian Civil Defence (SCD), better known as the White Helmets, did not record any mine or IED contamination through non-technical survey in the north-west of Syria 2021.²¹

Syria also has significant contamination from CMR and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Syria for further information).

10 Syria Humanitarian Needs Overview, February 2022, p. 14.

11 Ibid., p. 60.

12 The HALO Trust, "Syria, A Hidden Emergency", at: <https://bit.ly/3fD4w4x>, p. 3.

13 Ibid., p. 10.

14 Ibid., p. 7.

15 Email from Mairi Cunningham, Programme Manager, HALO Trust, 7 June 2021.

16 ICRC and SARC, Mine Risk Needs Assessment and Education, PowerPoint presentation to the 24th NDM, 25 May 2021, slides 7–8, at: <https://bit.ly/3zxKRRk>.

17 Email from Fabrice Martin, Country Director, MAG, 9 March 2022.

18 Ibid.

19 Syria Humanitarian Needs Overview, March 2021, at: <https://bit.ly/3vzUXwp>, p. 10.

20 Emails from UNMAS, 30 June 2021; and Francesca Chiaudani, Mine Action Coordinator, UNMAS, 31 March 2022.

21 Email from Michael Edwards, Explosive Hazard Operations Manager, SCD, 5 March 2022.

PROGRAMME MANAGEMENT

There is no national mine action authority (NMAA) in Syria. In government-controlled areas, an inter-ministerial National Mine Action Coordination Committee is said to have been formed by a presidential decree in 2019 and is chaired by the Minister of Foreign Affairs, Dr Faisal Mikdad.²² The Ministry of Foreign Affairs (MoFA) assigned a focal point for all liaison with UNMAS on mine action. UNMAS has been told that the committee meets on an ad-hoc basis as needed.²³

Mine action in Syria is coordinated by three response mechanisms:

- The Damascus-based Mine Action Sub-Cluster (MASC) coordinated by UNMAS;
- the north-west MASC co-chaired by UNMAS and The HALO Trust; and
- the north-east Mine Action Working Group (MAWG), which sits under the protection working group in the NGO forum-led response and is coordinated by iMMAP.²⁴

Coordinators of the three structures organise monthly meetings with the respective mine action actors.²⁵ In addition to the MAWG, in 2021, the Humanitarian Affairs Office (HAO) created a north-east Syria Mine Action Centre Office (NESMAO) to coordinate mine action activities.²⁶

In north-east Syria, a mine action centre (MAC), which was later named as NESMAO, was created in January 2021²⁷ by the HAO of the SDF. The NESMAO largely supports and facilitates mine action activities but does not maintain an updated database or task operators.²⁸

UNMAS continues to represent the mine action area of responsibility within the UN-led coordination mechanism for Syria, as well as supporting the hub-based coordination mechanisms. UNMAS provides technical expertise and support to the humanitarian clusters, sectors, and mine action partners. UNMAS has been encouraging safer programming for humanitarian workers, training security focal points in risk awareness, and integrating risk education into the programming of different humanitarian clusters and sectors to expand the operational scope and reach the people most in need.²⁹

Given the lack of critical national mine action structures, UNMAS liaises with the National Mine Action Coordination Committee chaired by the Syrian MoFA and accredits clearance operators on a *de facto* basis. UNMAS does not provide capacity-building support to the national authorities, but, as a mine action coordination body in 2020, UNMAS drafted national technical standards and guidelines for mine action and has provided them to the Syrian government for consideration.³⁰

The Damascus-based MASC meets on average once a month. The meetings are attended by UN agencies, the SARC, the ICRC, and other national and international organisations that deliver mine action activities.³¹

The north-east MAWG meets on a monthly and (otherwise) an ad hoc basis, whenever required. Coordination meetings were attended regularly by MAG, HI, DanChurchAid (DCA), ITF Enhancing Human Security (ITF) among others. The working group mainly discussed the coordination of explosive ordnance mine risk education (EORE), the sharing of detailed non-technical survey reports, and feedback on MoUs.³²

MAG reported the fragile security situation as a main challenge to an efficient mine action in the north-east. The border closure with Iraq impacted movement of staff and supplies critical for operations. Further, the lack of available trauma medical care within an hour's reach of its mine action operations has restricted MAG's ability to expand its work to other affected areas. The occasional lack of ownership documents of land and property is a concern that occasionally leads to disputes over clearance. MAG did not provide any capacity development in the north-east in 2021, but has secured funding for this purpose for 2022.³³

In the north-west of the country, mine action is coordinated by the MASC cross-border response from Gaziantep (Türkiye-based response) and is co-chaired by The HALO Trust and UNMAS. Some 25 partners attend its monthly meetings. HALO and its partners coordinate and receive approvals from the local Turkish authorities for its work across the border with Türkiye.³⁴ HALO reported generally good coordination with the local authorities when it comes to access and security, but the range of mine action activities has been limited and varied due to the complexities of the operating context.³⁵

22 Information provided on condition of anonymity.

23 Emails from UNMAS, 30 June 2021 and 31 March 2022.

24 Ibid.

25 iMMAP, Coordination Support to Humanitarian Mine Action, 2020, at: <https://bit.ly/3yGh9nQ>; and emails from Mairi Cunningham, HALO Trust, 7 and 17 June 2021; and UNMAS, 30 June 2021.

26 Email from Fabrice Martin, MAG, 9 March 2022.

27 Email from MAG, 24 May 2021.

28 Information provided on condition of anonymity.

29 Email from UNMAS, 31 March 2022.

30 Information provided on condition of anonymity.

31 Email from UNMAS, 22 September 2022.

32 Email from Fabrice Martin, MAG, 9 March 2022.

33 Ibid.

34 Emails from Mairi Cunningham, HALO Trust, 7 and 17 June 2021; and Damian O'Brien, Programme Manager, HALO Trust, 1 March 2022.

35 Email from Damian O'Brien, HALO Trust, 1 March 2022.

The monthly MASC coordination meetings include many organisations that are not operationally involved in mine action beyond risk education. According to SCD, limited funding and access along with difficulties in importing equipment constitute the main challenges to mine action operators in north-west Syria. SCD was able to secure funding for 2021 and already has sufficient stocks of equipment required to carry out its activities. However, other organisations have limited options for importing equipment and there is a continued decrease in available funding due to donor fatigue.³⁶

UNMAS was seeking US\$34 million for its mine action programme in Syria through to the end of 2022, but as at the end of 2021, the programme was facing a shortfall of US\$25.3 million.³⁷ In a statement to the 24th International Meeting of Mine Action National Directors and UN Advisors (24th NDM) in May 2021, Syria appealed to the international community to boost its financial support to UNMAS so the UN could expand its operation in Syria, provide equipment to the existing qualified national resources, and encourage international NGOs to step in and help Syria clear mines.³⁸

ENVIRONMENTAL POLICIES AND ACTION

The HALO Trust's environmental policy has been established by executive management at its headquarters. In line with this policy, HALO's activities seek to minimise negative environmental impacts wherever possible and enhance positive impacts in pursuit of improved lives and livelihoods. HALO complies with the international mine action standards (IMAS) to ensure that activities are conducted with appropriate measures in place to minimise environmental damage, and respect national laws and local needs. HALO has also established an Environment and Conservation Cross-Cutting Network to provide continued guidance on how environmental impacts can be reduced.

MAG's community liaison standing operating procedures (SOPs) include consultations with affected communities about the use of mechanical assets and the timing of clearance, to minimise impact on the environment, agricultural land, or other local activities, including consultations on water use, rubbish disposal, land erosion, and burning of vegetation.

UNMAS reports that it takes into consideration the impacts of assessing and removing EO on the landscape, for instance, when the removal of vegetation is a necessary precondition for the successful implementation of operations. As UNMAS is a secretariat entity, it globally refers to the environment strategy of the UN Department of Field Support (DFS). UNMAS also benefits from the United Nations Office for Project Services (UNOPS) environmental policies, of which the 2018–2021 strategic plan explicitly mentions "environmental respect" and "environmental impact". As such, UNMAS's partnership with implementing partners is governed by guidelines that refer to environmental requirements for task implementation.

GENDER AND DIVERSITY

The HALO Trust mainstreams gender, diversity and inclusion in its programme, and disaggregates all mine action data by sex and age. As part of its community liaison activities, HALO holds separate focus group sessions with women and children with the attendance of appropriate staff. HALO provides equal opportunities and encourages applications regardless of gender, race, religion, or ethnic background and is committed to increasing women's participation at all levels of the organisation and ensuring that its activities benefit women, girls, boys, and men equally. In 2021, women made up 41% of HALO's total number of employees, 23% of its managerial positions, and 32% of operational positions.³⁹

MAG has an institutional gender and diversity policy and implementation plan. MAG's community liaison, survey, and clearance activities take gender into account during the planning and implementation phases. These activities are guided by MAG's own SOPs and those of IMAS, and MAG has mixed gender community liaison teams that speak the local languages. All mine action data are disaggregated by sex and age.⁴⁰ In 2021, women made up 20% of MAG's total number of employees, 50% of its community liaison officers, and 26% of

the organisation's operational positions. MAG's national mine action strategy and annual work plans integrate gender and diversity on a programme and beneficiary levels. Guided by its SOPs, MAG consults with women, children, ethnic, and other minority groups in all its activities, and ensures these groups are consulted separately to identify different needs.⁴¹

SCD says it has a gender and a diversity strategy in place. Yet, in 2021, SCD's clearance and survey teams were exclusively male. SCD reports that it is actively working to improve the gender balance of the survey teams in order to ensure that all the members of the community, regardless of gender and age, are involved in information gathering. SCD was training 12 female volunteers on non-technical survey and was planning to deploy them with the survey teams in June 2022. About 9% of SCD's total employees are female, and 9% of managerial and operational positions are filled by women.

Teams are trained to gather information from a variety of sources and to interview and liaise with all segments within a community, including those from ethnic and minority groups. The names, gender, and age of each focal point and

³⁶ Email from Michael Edwards, SCD, 5 March 2022.

³⁷ Email from Francesca Chiaudani, UNMAS, 31 March 2022.

³⁸ Statement of Syria, 24th NDM Meeting, 25–27 May 2021, p. 3.

³⁹ Emails from Mairi Cunningham, HALO Trust, 7 June 2021; and Damian O'Brien, HALO Trust, 1 March 2022.

⁴⁰ Email from MAG, 24 May 2021.

⁴¹ Email from Fabrice Martin, MAG, 9 March 2022.

interviewee are recorded as part of the survey reporting process and are reviewed by the management team to ensure that the process remains as inclusive as possible. SCD volunteers are recruited from the very communities they serve and thus reflect the various ethnic and minority groups which reside in their area of operations. SCD reported that it has procedures and policies in place to ensure that individuals do not face discrimination due to their ethnicity, religion, or sex.⁴²

UNMAS has a gender and diversity strategy, and gender and diversity considerations are addressed in implementation of activities. During survey and liaison activities, UNMAS teams usually consult with community focal points or representatives from communities and interact with women and children leaving in close vicinity to the working sites.⁴³

UNMAS's risk education teams are fully gender balanced, and its clearance contractor, the ACHDE, has integrated gender

and diversity elements in its work. UNMAS reports that recruiting qualified females for technical roles at national level continues to be a challenge, but it continues to reach out to a diverse pool of applicants and create positive working conditions that enable women's participation. A diverse set of indicators, including sex and age of victims and beneficiaries, are used to evaluate prioritisation. As at March 2022, 40% of UNMAS Syria employees are women, with women in 30% of the employees in managerial or supervisory positions, and 26% of those in operational positions. UNMAS has deployed to communities with ethnic and minority groups (Druze in Sweida for instance), and engaged with all community members to gather feedback.⁴⁴

UNMAS's context analysis appeared to indicate that ethnic/minority groups are not affected by EO contamination differently, but rather that all population groups are vulnerable, regardless of ethnicity.⁴⁵

INFORMATION MANAGEMENT AND REPORTING

The HALO Trust uses the Information Management System for Mine Action (IMSMA) data collection forms and regularly reports to the north-west MASC and the Office of the UN High Commissioner for Refugees (UNHCR) in the UNHCR-led Gaziantep coordination response. HALO uses mobile-data collection tools and preserves data in Excel and Microsoft PowerBI databases.⁴⁶ In 2021, HALO sought to refine its quality assurance (QA) mechanisms through stronger integration of field teams using Kobo software for mobile data collection.⁴⁷

MAG uses the online server, SharePoint, to preserve its mine action data. MAG also continued sharing data with iMMAP and the protection sector, which can also preserve its mine action data if required.⁴⁸ MAG conducted multiple checks across all activities in 2021 in order to uphold data quality. MAG Syria is also in the process of establishing a global IM system, which was not possible before.⁴⁹

iMMAP provides technical IM services to the MAWG in north-east Syria through mobile data collection, geographic information systems (GIS), and maps of explosive hazard contamination, survey, and clearance progress. iMMAP also supports the north-east HAO in setting up its NESMAO. As at May 2021, the NESMAO did not have the capacity to manage an IMSMA database on its own. SCD uses Survey123

for data collection and IMSMA Core for data keeping and management,⁵⁰ while DCA uses Survey123.⁵¹

Despite concerted efforts to establish a centralised database representing the whole of Syria, SCD reported that its survey and clearance data continue not to be accepted in the north-west MASC mine action database and the 4W⁵² reporting mechanism. This is reportedly because SCD's application to join the protection coordination cluster had not yet been granted, with membership of the cluster a pre-condition for active membership in the MASC. SCD remains ready to provide data to the MASC, which it was unable to do under an observer status.⁵³ It is of course important that all relevant data on EO contamination, survey efforts, and clearance operations are captured in a central IM database.

To ensure or improve the quality of data in its mine action database in 2021, SCD continued to employ a multistage data verification system as part of its QA process. All activity reports were checked by three different individuals, at increasing levels of seniority, as part of SCD's operational oversight. Improvements and modifications are made to SCD's data collection and IM systems, as and when dictated by operational or donor requirements.⁵⁴

42 Emails from Michael Edwards, SCD, 5 March and 15 June 2022.

43 Email from UNMAS, 31 March 2022.

44 Ibid.

45 Ibid.

46 Emails from Mairi Cunningham, HALO Trust, 7 June 2021; and Damian O'Brien, HALO Trust, 1 March 2022.

47 Email from Damian O'Brien, HALO Trust, 1 March 2022.

48 Email from Fabrice Martin, MAG 9 March 2022.

49 Emails from MAG, 24 May 2021; and Fabrice Martin, MAG 9 March 2022.

50 Emails from Michael Edwards, SCD, 7 May 2021 and 5 March 2022.

51 Email from Lene Rasmussen, DCA, 13 April 2021.

52 The 4W is an Excel-based reporting matrix that feeds into the UN HRP. The term 4W stands for Who (which operator) is doing What, Where, and When. It is used as both a coordination and planning tool.

53 Email from Michael Edwards, SCD, 5 March 2022.

54 Ibid.

In 2021, UNMAS completed the installation of IMSMA Core as the national mine action IM system in Damascus, although it continues to have another IMSMA database outside of Damascus for reasons of data confidentiality.⁵⁵ UNMAS manages the database, collating EO data from partners

across Syria in a central database. Since its accreditation in 2020, the ACHDE has been providing monthly reports on areas worked and items found to UNMAS for entry into the IMSMA.⁵⁶ It is believed, however, that clearance by Syrian and Russian forces goes largely unreported.

PLANNING AND TASKING

Syria does not have a national mine action strategic plan. Mine action is fragmented and has a long way to develop into a coherent national response. Different actors have set different priorities for survey and clearance as dictated by the circumstances and the authorities under which they operate.

In the north-west, The HALO Trust uses data collected from its EO community contamination assessment survey to identify high-priority communities for explosive ordnance disposal (EOD), focusing on removing contamination that prevents access to basic services or livelihood resources. HALO Trust engages with communities where it conducts EOD to obtain their informed consent and considers requests from the local authorities for future interventions.⁵⁷

In the north-east, the mine action working group, with the support of iMMAP, participates in determining areas of operations as there is no tasking system in place. MAG's community liaison teams identify hazardous areas through non-technical surveys. They subsequently complete a clearance prioritisation matrix to assess the impact of EO contamination on communities and to provide data for the technical operations, including information on direct and indirect beneficiaries, infrastructure, natural resources, land use, and land ownership.⁵⁸ The NESMAO proposed to establish a clearance prioritisation system based on the priorities of civilian authorities in the north-east, which remained under discussion as of writing.⁵⁹

SCD prioritises tasks based upon a number of factors which ultimately determine the level of risk to the community. These factors include the type of item, its location (whether close to inhabited buildings or blocking vital infrastructure), the number of items, as well as logistical information, such as the location of the task relative to the clearance team, and whether there are multiple tasks within the same area. Following an assessment of these factors, tasks that are deemed to pose the highest risk to the community are prioritised. At present, the number of tasks identified through survey does not yet exceed the operational capacity of the clearance teams, meaning that once items are identified they are cleared within one or two days, thus reducing the need to prioritise.⁶⁰

UNMAS planned survey and clearance tasks in 2021 based on the agreed list of priority locations that it had discussed with partners and the Government of Syria. UNMAS also follows its own internal country programme strategy and annual work plans, which are done in consultation with its partners. Tasks are prioritised and selected based on a set of criteria that include the severity of humanitarian needs, the presence of humanitarian partners, delivery of humanitarian activities, internally displaced person (IDP) flows, and historic data on explosive incidents.⁶¹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There are no formal NMAS in Syria, but in 2020, UNMAS drafted NMAS and associated guidelines and submitted them to the Syrian government for its review and approval. Despite having received informal positive feedback, no official response had been given on the proposed NMAS as at April 2022. The NMAS will be reviewed annually to address new challenges and ensure the employment of best practices.

Due to the lack of NMAS, most of the operators work to their own SOPs. For example, DCA works in accordance with its global SOPs which derive from IMAS, and applies best practice guidelines from the Geneva International Centre for Humanitarian Demining (GICHD). DCA also offers guidance and advocates best practices to the NESMAO in the north-east of Syria. HALO increased its efforts to refine its QA mechanisms through stronger integration of field teams using Kobo software for mobile data collection. SCD teams also operate according to IMAS for clearance, survey, and risk education.

⁵⁵ Email from UNMAS, 31 March 2022.

⁵⁶ Emails from UNMAS, 30 June 2021.

⁵⁷ Emails from Mairi Cunningham, HALO Trust, 7 June 2021; and Damian O'Brien, HALO Trust, 1 March 2022.

⁵⁸ Emails from MAG, 24 May 2021; and Fabrice Martin, MAG, 9 March 2022.

⁵⁹ Email from Fabrice Martin, MAG, 9 March 2022.

⁶⁰ Email from Michael Edwards, SCD, 5 March 2022.

⁶¹ Email from Francesca Chiaudani, UNMAS, 31 March 2022.

MAG offered support to the NESMAO to develop NMAS. Such support would include an external consultant to develop mine action standards and overall capacity building, including on quality management (QM). MAG Syria continues to work to its own established SOPs which are in line with IMAS. MAG's own SOPs were updated in December 2021. The updates were designed to align with MAG's new Global Technical Standards.

OPERATORS AND OPERATIONAL TOOLS

Mine action in Syria has been conducted by a wide range of organisations, largely determined by the circumstances and forces controlling the region at a given time. In areas under government control these have included mainly Russian and Syrian military engineers and civil defence organisations.⁶²

DCA has been present in Syria since 2015. Due to the frequent shifts and outbreaks of violence, its Syria country offices have closed and reopened several times. Its staff were relocated to Türkiye, Iraq, and then back to Syria in 2020. As at May 2021, and due purely to issues of access, DCA's operations were confined to the parts of north-east Syria not controlled by the government.⁶³ Updates on DCA's operations in 2021 were not provided to Mine Action Review.

The HALO Trust, which has been present in Syria since 2016, is operational in the north-west of Syria in the opposition-controlled territories of Idlib and northern Aleppo. HALO conducted EOD, risk education, and victim assistance in 2021 in partnership with the following local NGOs: Shafak for risk education; iMFAD for EOD and risk education; and "Hand in Hand for aid and development" for victim assistance, in addition to implementing risk education directly. HALO's operational capacity in 2021 comprised one EOD team (iMFAD), six risk education teams (HALO Trust and iMFAD), and two victim assistance case teams (HALO). In 2022, HALO deployed two non-technical survey teams in Idlib and the western Aleppo countryside and subsequently began EOD operations in the same areas. Negotiations to conduct non-technical survey and resume EOD in northern Aleppo were ongoing as at September 2022.⁶⁴

MAG operated from Shaddadi, Markada, and Al-Hasakeh subdistricts in Al-Hassakeh governorate in north-east Syria, conducting survey, risk education, and clearance in Al-Hassakeh, Deir Ezzor, and Raqqa governorates. In the first quarter of 2021, MAG partnered with two NGOs for risk education and community focal point (CFP) training in Deir Ezzor and Aleppo governorates: Action for Humanity (formerly known as Syria Relief) and Bahar. In 2021, as in the previous year, MAG deployed 10 community liaison teams who conduct non-technical survey, in addition to three mine action teams, and two multi-task teams for technical survey and clearance.⁶⁵

MAG was unable to set-up a training centre and a second line mechanical workshop as planned for in 2021, but hoped to do so in 2022.⁶⁶ In 2022, MAG had planned to upscale its community liaison capacity including work with partner organisations in eastern Aleppo and Deir Ezzor, but it was not able to take this forward. However, MAG continued deploying 10 community liaison teams in each of Al-Hasakeh and Raqqa governorates as planned.⁶⁷ The COVID-19 pandemic caused operational delays due to reduced numbers of risk education beneficiaries, quarantine, and isolation measures.⁶⁸

In 2022, MAG had planned to upscale its community liaison capacity including work with partner organisations in Eastern Aleppo and Deir-Ez-Zor, but it was not able to take this forward. However, MAG is deploying its own community liaison capacity in Hasakeh and Raqqa as planned, with 10 teams in each governorate.⁶⁹ For technical survey and clearance, MAG was planning to deploy six mine action teams, four multi-task teams, and two mechanical survey teams. MAG was unable to set-up a training centre and a second line mechanical workshop as planned for in 2021, but hoped to do so in 2022. The COVID-19 pandemic caused operational delays due to reduced numbers of risk education beneficiaries, quarantine, and isolation measures.⁷⁰

On 21 December 2021, NPA negotiated an MoU with the Syrian government for the establishment of a humanitarian mine action programme in Syria. In 2022, NPA will start the operational phase primarily focusing on survey and clearance of areas as identified under the UN Humanitarian Response Plan and Humanitarian Needs Overview. Initial capacity of three gender-balanced multi-skilled clearance teams and three non-technical survey teams, funded by the Norwegian Ministry of Foreign Affairs, will initially focus on the Yarmouk camp in the outskirts of the capital Damascus. They were expected to be operational during the last quarter of 2022. As at September 2022, NPA was awaiting the completion of training of its field teams before requesting accreditation by UNMAS.⁷¹

A small national organisation, Roj Mine Control Organization (RMCO), was established in 2016, and was conducting clearance in north-east Syria but reportedly sustained heavy casualties among its deminers attempting clearance of improvised devices.⁷² As at July 2021, RMCO was still operational and was being trained on EOD by the United States (US) forces.⁷³

62 "Russian military boosts qualified Syrian sappers to demine war-ravaged country", *TASS*, 9 January 2018.

63 Email from Lene Rasmussen, DCA, 13 April 2021.

64 Email from Damian O'Brien, HALO Trust, 29 September 2022.

65 Ibid.

66 Email from Fabrice Martin, MAG, 9 March 2022.

67 Email from Roxana Bobolicu, MAG, 29 September 2022.

68 Email from Fabrice Martin, MAG, 9 March 2022.

69 Email from Roxana Bobolicu, MAG, 29 September 2022.

70 Email from Fabrice Martin, MAG, 9 March 2022.

71 Emails from Claus Nielsen, Programme Manager, NPA, 9 and 27 September 2022.

72 S. Kajjo, "Landmine removal crucial in post-IS Syria", *Voice of America*, 3 April 2019; and interview with operators, Erbil, Iraq, May 2019.

73 This information is provided under the condition of anonymity.

SCD has been conducting clearance in the north-west of Syria since March 2016.⁷⁴ The SCD was operational in Aleppo, Hama, and Idlib governorates (in the north and north-west of the country),⁷⁵ and continued to conduct surface level battle area clearance (BAC), non-technical survey, EORE, and single item disposal. SCD encounters items that are predominantly CMR, but its teams also dispose of anti-personnel mines when they are encountered. SCD's operational capacity in 2021 was six non-technical survey and six clearance teams. All SCD teams are trained to deliver risk education.⁷⁶

UNMAS signed an MoU with the Syrian government in July 2018. After meeting the then Deputy Foreign Minister, Faisal Mikdad in Damascus in October 2019, UNMAS Director Agnes Marcaillou reported the government had agreed to the involvement of international demining organisations. They would be registered by the government and coordinated by UNMAS.⁷⁷

UNMAS reported the lack of qualified in-country operators as one of the major challenges to progress in mine action. This led UNMAS to hire its own UN personnel to conduct the EO assessment survey in the interim, which normally would be conducted through implementing partners.⁷⁸ To facilitate access for clearance operators, UNMAS conducted a global pre-qualification exercise for Syria. Ten mine clearance operators from a wide range of countries were pre-qualified to participate in UNMAS procurement for clearance operations.⁷⁹ As at September 2022, only the ACHDE had been accredited by UNMAS for conducting mine action activities in government-controlled areas. Another

group, The Social, Humanitarian, Economical Intervention for Local Development (SHEILD) Association, was undergoing the process of accreditation and only had desk accreditation.⁸⁰ SHEILD's Mine Action Unit, operating through its Damascus office and in cooperation with the SARC, began to conduct preliminary field visits to conduct non-technical survey in several regions in Ghouta area and Yarmouk camp.⁸¹

In late 2019, UNMAS identified 50 locations in Rural Damascus, Daraa, and Homs for survey and clearance operations. All areas were classified as level three or above on the humanitarian response plan and protection sector severity scale. In February 2020, UNMAS shared the list of these 50 recommended areas/sub-districts with the Syrian government for its acceptance and granting access for the EO assessment. Among the 50 locations, it was jointly agreed with government of Syria to start the assessment in eight locations of high humanitarian priority, also taking into consideration access and logistics questions in Rural Damascus and Homs.⁸² In December 2021, UNMAS started a pilot clearance project of the priority area of western Ghouta, in the outskirts of the capital Damascus.⁸³

At the end of 2021, UNMAS's operational capacity was two EO assessment teams, which consisted of seven technical survey personnel and two non-technical survey personnel. The ACHDE deployed two clearance teams of 12 deminers, in addition to two BAC teams. UNMAS opened a sub-office in Aleppo in 2021. UNMAS hoped to scale up clearance and survey activities in 2022, but this remained contingent on funding and operational capacity.⁸⁴

DEMINER SAFETY

SCD suffered one non-fatal accident in 2021, in which one assistant team leader was injured while disposing of an AO-2.5RT submunition. The operator received fragmentation injuries, which required hospital treatment. As at June 2022, the injured person had fully recovered and rejoined his team. An independent investigation of the incident was conducted and a refresher training provided to all teams.

Syrian state media reported in November 2021, that seven deminers of the Syrian army engineering units were killed and five injured while "dismantling" mines in the al-Qusour neighbourhood of Deir Ezzor governorate (north-east).⁸⁵

74 Email from Michael Edwards, SCD, 15 June 2022; and Mayday Rescue, "Syria Civil Defence, Explosive Hazard Mitigation Project Overview, Nov 2015–Mar 2018", 1 March 2018.

75 SCD worked in the following districts of north-west Syria in 2021, A'zaz, Afrin, Al'bab, Jebel Saman (Aleppo governorate), Al Ma'ra, Ariha, Harim, Idlib, Jisr-Ash-Shugur (Idlib governorate), and in As-Suqaylabiyah (Hama governorate); email from Michael Edwards, SCD, 5 March 2022.

76 Email from Michael Edwards, SCD, 5 March 2022.

77 Statement by Agnes Marcaillou, Director, UNMAS, to the UN Security Council, 24 October 2019.

78 Email from UNMAS, 30 July 2021.

79 The ten operators originate from Afghanistan, Croatia, Denmark, Norway, Russia, Switzerland, Ukraine, and the United Arab Emirates.

80 Email from UNMAS, 31 March and 22 September 2022.

81 SHEILD website, accessed on 1 July 2022, at: <https://bit.ly/3nyDVKd>.

82 Statement of Syria to the 24th NDM Meeting, 25–27 May 2021, p. 2.

83 Email from UNMAS, 31 March 2022.

84 Ibid.

85 "Seven members of engineering units martyred while dismantling mines in Deir Ezzor", *Syrian Arab News Agency (SANA)*, 22 November 2021, at: <https://bit.ly/3Bq98Hw>.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Syria's continuing instability prevented progress towards a coordinated national programme of mine action. Comprehensive information on outcomes of survey and clearance in any area was unavailable.

MAG reduced 508,519m² of anti-personnel mined area through technical survey in Al-Hassakeh in 2021. MAG also cleared 2.91km² of anti-personnel mine contamination in the same governorate in 2021. In total, 189 anti-personnel mines were destroyed, of which 177 were of an improvised nature and two were destroyed in spot tasks. Two areas of 0.68km² suspected of contamination that were cleared in 2021 proved to contain no anti-personnel mines. MAG substantially increased its clearance outputs in 2021 from 18,736m² in 2020 as it only reopened its programme in Syria in the last month of 2020, while was operational throughout the twelve months of 2021.⁸⁶

SCD teams located and disposed of two anti-personnel mines in 2021, which were abandoned ordnance in Idlib governorate without indication that a subsurface mine threat existed in the area.⁸⁷

In its statement as an observer to the 18th Meeting of States Parties (18MSP) of the Anti-Personnel Mine Ban Convention (APMBC), Syria stated that "the unilateral sanctions inflicted on the Syrian people pose challenges for the Syrian government to provide the financial, technical and logistical resources [required to clear the mines]". The statement called for an "unpoliticised" financial and technical assistance to the mine action sector in Syria, without pre-conditions and in coordination with the Syrian government.⁸⁸

⁸⁶ Email from Fabrice Martin, MAG, 9 March 2022.

⁸⁷ Email from Michael Edwards, SCD, 5 March 2022.

⁸⁸ Statement of Syria, APMBC 18MSP, Geneva, 16–20 October 2020.

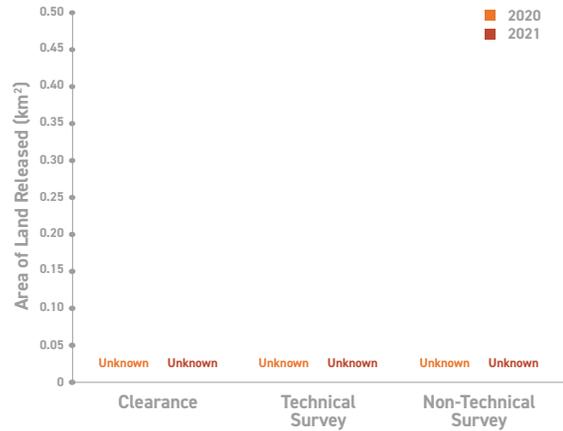
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021
UNKNOWN

AP MINES DESTROYED IN 2021
UNKNOWN

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- Uzbekistan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Uzbekistan should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Uzbekistan should detail the extent of its mine contamination and clearance operations.

DEMINING CAPACITY

MANAGEMENT CAPACITY*

- Uzbekistan has no functioning mine action programme.

NATIONAL OPERATORS

- Army Engineers

INTERNATIONAL OPERATORS

- None

OTHER ACTORS*

- None

* This is based on information from earlier years. It is not known if the information remains accurate.

UNDERSTANDING OF AP MINE CONTAMINATION

Uzbek forces have laid mines along Uzbekistan's international borders at various times, including on its border with Afghanistan in 1998, with Kyrgyzstan in 1999, and with Tajikistan in 2000. While Tajikistan and Uzbekistan settled most of their 1,283km-long border dispute following the collapse of the Soviet Union, certain areas have not yet been delineated and therefore the exact location of mined areas is not known.¹ In 2010, the Secretary-General of the United Nations (UN), Ban Ki-moon, criticised as "unacceptable" Uzbekistan's emplacing of mines along parts of its border that have not been delineated.²

1 Email from Muhabbat Ibrohimzoda, Director, Tajikistan National Mine Action Centre (TNMAC), 25 April 2018.

2 "Ban calls Uzbekistan land mines 'unacceptable'", *The Hindu*, 6 April 2010, at: <http://bit.ly/2Z3WYgN>.

Soviet troops also laid mines on the Uzbek-Afghan border. Uzbekistan had reportedly cleared 95% of the minefields along the Tajik border by the end of 2007 in demining operations conducted by Uzbek army deminers in cooperation with Tajik border troops.³ The clearance, however, has not been verified by independent organisations, and, as at 2018, civilian casualties were still being reported on the Uzbek-Tajik border.⁴

In 2018, Uzbekistan and Tajikistan agreed to set up a joint commission to investigate mined areas along the Uzbek-Tajik border.⁵ As at June 2022, Uzbekistan had not made any information on progress public. Tajikistan also had still to report on any follow-up action but reiterated that it "will continue to provide updates on the development of cooperation with regard to land release along the Tajik-Uzbek border in Article 7 reports and to the Meetings of the States Parties".⁶

The first State visit of the President of Uzbekistan to Tajikistan in March 2018 saw several agreements signed between the two countries, including one on demarcation of the separate regions of the Tajik-Uzbek border. According to online media, during the visit the leaders of the two States agreed that their common border would be cleared of landmines by the end of 2019.⁷ Online media sources reported that by October 2018 demining along the border had started,⁸ and that the Tajikistan National Mine Action Centre (TNMAC) and the Tajik Ministry of Defence (MoD) "got acquainted" with mine maps before starting clearance. The size of the mined areas was not publicly shared, but unofficial reports indicated it was 9.5km².⁹ Mine clearance along the border, conducted by Uzbekistan, was reportedly completed by January 2020,¹⁰ following which the Uzbek and Tajik authorities progressed from delimiting their border to demarcating it.¹¹

Online sources from 2021 indicated that a "joint Tajik-Uzbek commission for delimitation and demarcation of the mutual border" was still active and that working groups met in August 2021 in Dushanbe and in the Uzbek city of Namangan in November 2021,¹² following discussions in May of the same year.¹³ Mine Action Review has not been able to source further information about any progress made by this joint commission.

In 2005, media reports cited Kyrgyz officials in Batken province as saying Kyrgyz border guards had checked previously mined areas of the border around the settlements of Ak-Turpak, Chonkara, and Otukchu, which had been cleared by Uzbek deminers, and confirmed that they were free of contamination.¹⁴ In March 2021, the prime ministers of Kyrgyzstan and Uzbekistan reached an agreement to end all territorial disputes between the two countries. The agreement entails land swaps and facilitation of movement between the two countries. According to online media reports, the Kyrgyz head of security services, Kamchybek Tashiyev, announced that "issues around the Kyrgyz-Uzbek border have been resolved 100 percent" and that "there is not a single patch of disputed territory left".¹⁵ However, other sources suggested that, in April 2021, just a month later, Mr Tashiyev had told residents of some disputed areas in Kyrgyzstan's southern provinces that the agreement was "not completely a done deal".¹⁶ It has also been reported that the agreement was not ratified after Kyrgyz citizens voiced dissatisfaction over terms concerning use of a reservoir.¹⁷

Uzbekistan has not reported plans to clear mines laid on its 150km border with Afghanistan.

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- 3 Email from Jonmahmad Rajabov, Director, Tajikistan Mine Action Centre (TMAC), 16 February 2009; Tajikistan Anti-Personnel Mine Ban Convention Article 7 Report, "General situation", 3 February 2008, p. 3; and "Uzbekistan started demining on Tajik border", *Spy.kz*, 23 October 2007.
 - 4 "Demining the Tajik-Uzbek Border: What have we learned from the Tajik experience?", *The Journal of Conventional Weapons Destruction*, November 2018, at: <https://bit.ly/3q7lixw>.
 - 5 Tajikistan's 2019 Article 5 deadline Extension Request, p. 16.
 - 6 Email from Muhabbat Ibrohimzoda, TNMAC, 19 June 2022.
 - 7 "Uzbekistan reportedly completes demining work on Tajik border", *The Diplomat*, 10 January 2020; and "Uzbekistan completes demining of its border with Tajikistan", *Asia Plus*, 3 January 2020 at: <https://bit.ly/3Bpu0Pd>.
 - 8 "Putting an end to 20 years of death along the Tajik-Uzbek Border", *RFERL*, 13 October 2018; and "Report: Tajik-Uzbek Border Cleared of Mines", *RFERL*, 6 January 2020.
 - 9 "Demining of Tajik-Uzbek border began", *Regnum*, 9 October 2018, (Russian), at: <https://bit.ly/3vx2WXP>; "Tajikistan and Uzbekistan start demining their common border", *Sputnik Tajikistan*, 9 October 2018, (Russian), at: <https://bit.ly/3gAJm8I>; and "Dushanbe and Tashkent begin demining Tajik-Uzbek border", *Radio Ozodi*, 8 October 2018, (Russian), at: <https://bit.ly/3xAPzHv>.
 - 10 "Uzbekistan reportedly completes demining work on Tajik border", *The Diplomat*, 10 January 2020; "Uzbekistan, Tajikistan to finalise border demarcation", *Azernews*, 7 January 2020; and "Uzbekistan completes demining of border with Tajikistan, say officials", *Central Asia News*, 4 February 2020.
 - 11 "Uzbekistan reportedly completes demining work on Tajik border", *The Diplomat*, 10 January 2020; and "Uzbekistan, Tajikistan to finalise border demarcation", *Azernews*, 7 January 2020.
 - 12 Tajik-Uzbek border delimitation and demarcation commission meets in Uzbekistan", *Asia Plus*, 30 November 2021, at: <https://bit.ly/3zDDNzJ>.
 - 13 "Uzbekistan and Tajikistan discuss demarcation of state border", *KUN.UZ News*, 22 May 2021, at: <https://bit.ly/3iSbky7>.
 - 14 "Kyrgyzstan-Tajikistan: Landmine threat along Uzbek border removed", *IRIN*, at: www.irinnews.org.
 - 15 "Kyrgyzstan, Uzbekistan sign deal to end border disputes", *Euroasianet*, 26 March 2021, at: <https://bit.ly/3vD5QKA>.
 - 16 "No Issues Remain? Not So Fast. Kyrgyz-Uzbek Border Disputes Don't Appear To Be Decided", *Radio Free Europe*, 2 April 2021, at: <https://bit.ly/3zrFrEK>.
 - 17 "Kyrgyzstan reports deaths after Uzbek border troops open fire", *Aljazeera*, 6 May 2022, at: <https://bit.ly/3zuh4pT>.

PROGRAMME MANAGEMENT

There is no functioning mine action programme in Uzbekistan.

In March 2021, Russia and Uzbekistan were reportedly considering bilateral cooperation in mine action clearance and training of Uzbek military personnel at the Russian Mine Action Centre.¹⁸

The Commonwealth of Independent States (CIS), of which Uzbekistan is a member, reported that on 24 June 2022, following a meeting of the Council of Defence Ministers of the CIS countries, that Russian Defence Minister, Sergei Shoigu, had said that a joint unit of humanitarian demining would be created in the CIS. No timeline for this was given.¹⁹ Uzbekistan have not shared any information on this with Mine Action Review and it is not known if Uzbekistan have been involved in these discussions.

ENVIRONMENTAL POLICIES AND ACTION

It is not known how, if at all, the environment is taken into consideration during planning and tasking of survey and clearance of mines in Uzbekistan in order to minimise potential harm from clearance.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

There are no detailed reports of survey or clearance output in 2021. According to online media sources in January 2020, mine clearance on the Uzbek side of the border with Tajikistan was completed.²⁰ Mine clearance was said to have been carried out exclusively by Uzbekistan and assistance from Tajikistan was refused, as the clearance conducted was exclusively on Uzbek territory.²¹

18 "Uzbekistan, Russia looking at joint training of bomb disposal specialists", *Tass* (Russian News Agency), 30 March 2021, at: <https://bit.ly/3gDKjfn>.

19 "Russian Defense Minister Sergei Shoigu said that a joint unit of humanitarian demining will be created in the CIS", *Commonwealth of Independent States*, 27 June 2022, at: <https://bit.ly/3b1ulgn>.

20 "Uzbekistan reportedly completes demining work on Tajik border", *The Diplomat*, 10 January 2020.

21 *Ibid.*

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

(BUT NOT BELIEVED TO BE HEAVY)

AP MINE CLEARANCE IN 2021

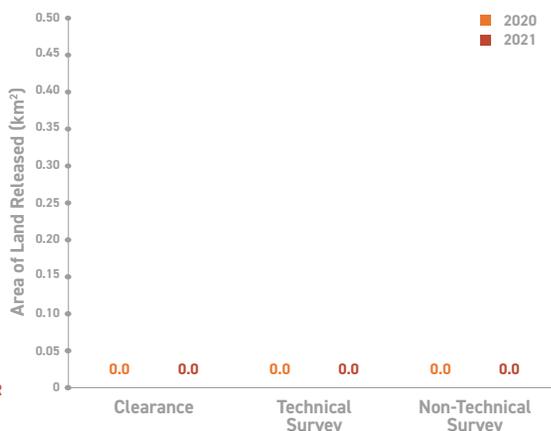
0 M²

AP MINES DESTROYED IN 2021

121

(BASED ON QTMAC AND OPERATOR DATA, INCLUDES 116 DESTROYED DURING EOD CALL-OUTS)

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

In 2021, the Vietnam National Mine Action Centre (VNMAC) continued its efforts to strengthen coordination of humanitarian mine action in Vietnam. The Prime Minister office presented a progress report on the first ten years of the 15 year (2010–25) Program 504 national strategy in February 2022. In addition to the forward planning section laid out in the progress report, a five-year National Mine Action Plan (2021–25) has also been drafted but not yet promulgated. In 2021, for the first time, VNMAC also produced an annual operations report outlining the results of the international organisation’s survey and clearance operations.

Circular 129 was approved in 2021 establishing the structure and systems for quality management (QM). In July 2022, VNMAC approved new regulations for a national information management system, setting up the framework for establishing information management structures to include all 63 provinces and 7 military regions of Vietnam. The National Technical Regulations (QCVNs), which have been revised, were approved in September 2022.

These are significant steps forward in VNMAC assuming the coordination role delegated to it in Decree 18 and Guiding Circular 195, which came into force in early 2020.

VNMAC’s main focus remains on survey and clearance of explosive ordnance contamination (mainly explosive remnants of war, ERW), and not on releasing mined areas which are prevalent along Vietnam’s borders.

RECOMMENDATIONS FOR ACTION

- Vietnam should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Vietnam should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Vietnam should approve VNMAC’s five-year work plan (2021–25), which corresponds to implementation of the National Mine Action Plan for 2010–25 (Program 504).
- Vietnam should publish a detailed assessment of remaining mined areas.
- Vietnam should publish annual reports on its progress in survey and clearance of mined areas, including on the results of demining by all operators.

- The revision of National Mine Action Standards (TCVNs), in line with IMAS, should be completed as soon as possible and should address action to tackle anti-personnel mine contamination distinct from battle area clearance (BAC).
- Items of explosive ordnance discovered and destroyed, should be clearly and accurately recorded, including distinguishing anti-personnel mines from anti-vehicle mines.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Vietnam National Mine Action Centre (VNMAC)
- Quang Tri Mine Action Centre (QTMAC)

NATIONAL OPERATORS

- Ministry of Defence

INTERNATIONAL OPERATORS

- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)
- PeaceTrees Vietnam (PTVN)

OTHER ACTORS

- Association of Southeast Asian Nations (ASEAN) Regional Mine Action Centre (ARMAC)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Golden West Humanitarian Foundation (Golden West)
- International Committee of the Red Cross (ICRC)
- United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

The full extent of mined area in Vietnam is unknown. A Landmine Impact Survey published in 2018 reported the presence of anti-personnel mines in 26 of 63 cities and provinces but gave no further details.¹ According to VNMAC, the total area still contaminated with bombs, mines, and explosive ordnance in Vietnam in 2021 is more than 57,000km², which accounts for more than 17% of Vietnam's land surface.² Mine contamination, however, only makes up a small proportion of the total explosive ordnance (EO) contamination, with cluster munition remnants (CMR) and other ERW making up the vast majority.

Most mines were left by conflicts in the 1970s with neighbouring Cambodia and China, and affect areas close to its borders with those countries.³ Clearance had been reported by Vietnam along its northern border with China

in the 1990s and since 2004, but mined areas further inland are believed to persist.⁴ It was reported in 2013 by Vietnam's Military Engineering Command that clearance had been completed in areas bordering Cambodia.⁵ Many ports and river deltas were mined extensively during the armed conflict with the United States and were not completely cleared when it ended. A number of sea mines have been found on the coast.⁶ Some mines have also been found around former US military installations.⁷

Vietnam has one of the world's most extensive remaining contamination from cluster munition remnants (CMR) and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Vietnam for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

VNMAC was established in 2014 by Prime Ministerial decree to strengthen the direction of mine action and provide a focal point for mine action operations,⁸ although management and operations continued to depend largely on the Armed Forces.

Vietnam's mine action programme has undergone significant restructuring, following the Decree on the Management and Implementation of Mine Action Activities (Decree No. 18), which entered into effect on 20 March 2019 and subsequent approval of a Guiding Circular (Guiding Circular No. 195) which came into effect in February 2020.⁹ Under Decree 18, the Ministry of National Defence (MoD) continues to be the lead authority for the national mine action programme, in coordination with other relevant ministries and sectors.¹⁰ VNMAC will, under the direction of the Prime Minister and management of the MoD, "monitor, coordinate and implement mine action tasks".¹¹

1 VNMAC, "Report on Explosive Remnants of War Contamination in Vietnam, Based on the Explosive Remnants of War Contamination Survey and Mapping - Phase 1", provided by Vietnam National Mine Action Centre (VNMAC) 19 April 2018, p. 38.

2 Email from Tim Horner, Senior Technical Advisor, Norwegian People's Aid (NPA), on behalf of Mr Phuc, Director, VNMAC, 6 April 2021.

3 Interview with Sr. Col. Phan Duc Tuan, Deputy Commander, Military Engineering Command, People's Army of Vietnam (PAVN), in Geneva, 30 June 2011.

4 Information provided by Sr. Col. Phan Duc Tuan, PAVN, in email from Vietnam Veterans of America Foundation (VVAFA), Hanoi, 24 September 2012; and in interview in Geneva, 30 June 2011.

5 Interview with Sr. Col. Nguyen Thanh Ban, Head of Bomb and Mine

Department, Engineering Command, Hanoi, 18 June 2013.

6 Landmine Action, *Explosive Remnants of War and Mines Other than Anti-personnel Mines*, London, March 2005, p. 181.

7 Ibid.

8 Prime Ministerial Decree (No. 738 of 2013) on the management and implementation of mine action activities, Hanoi, April 2018.

9 Emails from Jan Erik Støa, Country Director, NPA, 6 April 2020; and Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021.

10 Decree on Implementation and Management of Mine Action, No.18/2019/ND-CP, 1 February 2019.

11 Draft Decree on the management and implementation of mine action activities, Hanoi, April 2018.

The Decree and Guiding Circular has, since 2020, given VNMAC a clear mandate, roles, and responsibilities as the national coordinating entity for mine action operations, and this has further established the legal basis for revision and updating of the national regulations (QCVNs) and standards (TCVNs). The QCVN's were approved in September 2022. The TCVNs had yet to be approved as at time of writing.¹² VNMAC now has authority over mine action data, which it is beginning to exercise by requiring all provinces to collect and report data to the VNMAC Information Management Unit (IMU) on a quarterly basis,¹³ which is a legal requirement following approval of the IM regulation in July 2022.¹⁴ The adoption of the legal framework also paves the way for provincial authorities to be recognised as having a key role in the reporting system between operators and VNMAC.¹⁵

VNMAC is nationally funded, and implementation of the National Mine Action Programme (Programme 504) is funded by both state and international funding.¹⁶ According to VNMAC, the government has provided support for mine action, including i) establishment of coordinating agencies and associations to support all levels of mine action activities; ii) completion of a legal system, mechanism and policies, which create a legal basis for post-war demining activities (the MoD cooperates with other ministries to develop Circulars guiding QCVNs, TCVNs, and standing operating procedure (SOP) on quality management (QM), survey, and clearance and related issues); iii) facilitation of activities to develop the management and administration capacity, and the survey and clearance capacity, of demining organisations; iv) formation of a national QM system for survey and clearance in accordance international standards; and v) formation of an information management system.¹⁷

VNMAC's involvement in coordination meetings, such as the Landmine Working Group (LWG, renamed in 2022 the Mine Action Working Group (MAWG)), has increased in recent years. The LWG, which is currently co-chaired by Mines Advisory Group (MAG) and the United Nations Development Programme (UNDP), is a platform for all mine action stakeholders in Vietnam to meet regularly to share and discuss updates that impact the sector. Due to restrictions caused by the COVID-19 pandemic, only one LWG meeting took place in 2021, although several other technical meetings requested by VNMAC did also take place. The focus of the

LWG in 2021 was on following up on the revision of the QCVNs and TCVNs, and on the Information Management System regulation.¹⁸

Despite constraints posed by COVID-19, VNMAC has shown an increased understanding of their role, including a greater willingness to discuss ideas and challenges with international operators.¹⁹ However, VNMAC still operates within the limits of the MoD which is very regulated, so there is still room for improved transparency and efficiency.²⁰ There is a well-established process for granting work permits and visas to international mine action staff and for procurement of demining equipment, although the importation of equipment can be lengthy, depending on the nature of the items.²¹

VNMAC now produces a twice-yearly mine action calendar and operations report covering the activities and results of all NGOs and the UNDP in Vietnam.²² In 2021, a biannual report was produced for the first half of the year, followed by an annual report covering the whole of 2021. This is the first time an annual operations report has been published by VNMAC. While the report included data from NGOs, it did not include military clearance data or commercial clearance.²³ The IM regulations approved in July 2022 stipulate that all provinces must report to VNMAC quarterly and VNMAC must produce an annual report in the first quarter of each year.

MAG, Norwegian People's Aid (NPA), PeaceTrees Vietnam (PTVN), the Geneva International Centre for Humanitarian Demining (GICHD), Golden West Humanitarian Foundation (Golden West), and UNDP all provide capacity development support in Vietnam (see Mine Action Review's *Clearing Cluster Munition Remnants 2022* report on Vietnam for more details).

Vietnam has shown increasing engagement with the international mine action sector over recent years. It was a non-permanent member of the UN Security Council for 2020–21, during which it played an active role in emphasising the importance of mine action being an integral part of the UN peace and security agenda.²⁴ In April 2021, Vietnam convened and chaired the Security Council open debate on "Mine Action and Sustaining Peace".²⁵

12 Email from Tim Horner, NPA, 7 September 2022.

13 Email from Kimberley McCosker, Project Manager, NPA, 13 May 2021.

14 Email from Tim Horner, NPA, 7 September 2022.

15 Email from Kimberley McCosker, NPA, 13 May 2021.

16 Email from Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021.

17 Email from Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021.

18 Emails from Kimberley McCosker, NPA, 21 April 2022; Valentina Stivanello, Country Director, MAG, 29 April 2022; and Phạm Hoàng Hà, Country Director, PTVN, 9 May 2022.

19 Email from Kimberley McCosker, NPA, 21 April 2022.

20 Ibid.

21 Email from Jan Erik Støa, NPA, 6 April 2020.

22 Emails from Jan Erik Støa, NPA, 6 April 2020; and Helene Kuperman, Country Director, MAG, 23 June 2020.

23 Emails from Kimberley McCosker, NPA, 21 April 2022; Valentina Stivanello, MAG, 29 April 2022; and Phạm Hoàng Hà, PTVN, 9 May 2022.

24 Email from Phạm Hoàng Hà, PTVN, 9 May 2022.

25 Ibid.

ENVIRONMENTAL POLICIES AND ACTION

Currently VNMAC does not have a TCVN or policy on environmental management. However, VNMAC reportedly planned to develop a TCVN on environmental management in 2022 and to discuss it within the LWG.²⁶ As a precursor to this, the UNDP Senior Technical Advisor had prepared two expert lectures to deliver to VNMAC in 2022, one on IMAS 07.13 and a second on climate change and mine action.²⁷

MAG reported having an environmental SOP in place, which is followed throughout the survey and clearance process, in the absence of national guidelines.²⁸

NPA has a comprehensive environmental management system in place in Vietnam, including a policy, local implementation plan, and SOP. NPA also reported having an emissions monitoring dashboard that it expected to be finalised and implemented in 2023.²⁹ Tasking of NPA operations is the responsibility of provincial authorities, so site selection is out of NPA's responsibility. However, NPA is developing an operational environment assessment globally, which seeks to identify environmental impacts of its operations at task

level. NPA Vietnam is currently trialling this, but it is a work in progress and will not be fully implemented by NPA's teams until it undergoes further revision and testing during 2022. NPA provided environmental training to all operational personnel in May 2022, including considerations they can make at task level to protect the environment. NPA's SOP is in line with IMAS, which provides basic recommendations on environmental protection.

PTVN has an environmental policy which it applies to its all its operations, including during planning, clearance, and post-clearance community development programme and projects. Furthermore, PTVN supports best practices and methodology to minimise potential harm to the environment from demining operations, including by implementing processes for reducing environmental impact across the organisation by applying various solutions for prevention of pollution, waste reduction, and recycling to minimise one-time use of supplies in field operations (for example, by using rechargeable batteries in operations).³⁰

GENDER AND DIVERSITY

According to VNMAC, the goal of gender equality has been recognised in the Constitution of Vietnam since 1946, and is clearly stipulated in subsequent amendments and supplements to the Constitution. Most recently, the 2013 Constitution stipulated that "male and female citizens are equal in all aspects". The policy is to ensure the rights and opportunities for gender equality and that gender discrimination is prohibited.³¹

In 2006, the Law on Gender Equality was enacted to achieve the goal of eliminating gender discrimination. Other legislation related to gender policy includes Decision No. 2351/QĐ-TTg dated 24 December 2010 of the Prime Minister approving the National Strategy on gender equality for the period 2011–2020 with seven goals and 22 specific targets in areas of governance, economics, labour/employment, education and training, health care, culture, information, family, and state management capacity building on gender equality; and Decision No. 515/QĐ-TTg dated 31 March 2016 of the Prime Minister approving the project to implement measures to ensure gender equality for female civil servants

in the 2016–2020 period.³² It was not known if there is a replacement to the strategy for 2021 onwards.

At VNMAC, 22% of employees are female, with women in more than 20% of management, supervisory, and executive positions.³³ VNMAC said that women's participation in survey and clearance activities is limited due to the nature of the work and due to the fact that the majority of participants are from the military forces. For other activities, projects have encouraged the participation of civil society agencies and organisations to help ensure a higher proportion of women. Local partners such as the Provincial Military Commission, the Department of Education and Training, and the Red Cross are required to take gender into account in their training events and activities, to ensure increased female participation.³⁴

In the international non-governmental organisation (INGO) operational report for 2021, an annual report produced for the first time, VNMAC provided INGO data on their staff, explosive ordnance risk education (EORE) beneficiaries, and victim assistance disaggregated by sex and age.³⁵

26 Emails from Kimberley McCosker, NPA, 21 April 2022; Valentina Stivanello, MAG, 29 April 2022; Phạm Hoàng Hà, PTVN, 9 May 2022.

27 Email from Kimberley McCosker, NPA, 21 April 2022.

28 Email from Valentina Stivanello, MAG, 29 April 2022.

29 Emails from Kimberley McCosker, NPA, 21 April 2022; and Jan Erik Støa, NPA, 29 September 2022.

30 Email from Phạm Hoàng Hà, PTVN, 9 May 2022.

31 Email from Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021 (Clauses 1 and 3, Article 26 of the 2013 Constitution).

32 Email from Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021.

33 Ibid.

34 Ibid.

35 VNMAC, Annual 2021 INGO Operations Report, March 2022.

International operators MAG, NPA, and PTVN all report having organisational gender and diversity policies and state that they consult both women and children during community liaison activities with male and female members of community liaison/survey teams. They say they provide equal opportunities during the recruitment process and are working towards gender-balanced employment. For more information see Mine Action Review's latest *Clearing Cluster Munition Remnants* report for Vietnam.

INFORMATION MANAGEMENT AND REPORTING

Decree 18 and Guiding Circular 195 make VNMAC responsible for the national information management system. The IM regulations approved in July 2022 elaborate details of the responsibilities of each stakeholder, including the reporting, collection, and provision of data on mines and ERW. VNMAC uses the IMSMA, however the full IMSMA database is not yet accessible to mine action operators. VNMAC still operates a request-based process and data distribution requires approval in accordance with the IM regulations. Operators received a biannual report from VNMAC, containing summary data for Q1 and Q2 2021 and a completed annual report, which included NGO, but not military or commercial company data.³⁶

VNMAC has made significant improvements in the system for collection of data and information management capacity nationwide, but sought continued international assistance.³⁷ The national database process is being implemented as part of the information management project, overseen by the US State Department's Bureau of Political-Military Affairs (PM/WRA) Information Management Advisor to VNMAC. The national database structure now exists and the inputting of available data is ongoing. Two representatives from each of the 63 provinces and 7 regions were trained and given a laptop with IMSMA during the last quarter of 2021 and first quarter of 2022. The provinces shall now report to VNMAC, following approval of the IM regulations in July 2022. There were several different data sets and systems that evolved in the past. All data sets have now been standardised and combined into one IMSMA system which is operational and well managed in VNMAC. This was completed in August 2022 after many months of work and now the focus is on sending each province all their relevant data followed by regular synchronisation in accordance with the IM regulations.³⁸

NPA is working with the VNMAC IMU at national level to collect and collate information from across Vietnam and give transparent access to available data. Throughout 2019 and 2020, VNMAC's IMU worked to input historical data stored on other databases, including available data from the provinces. However, it is still unclear what data the provinces are holding that have not yet been delivered to VNMAC.³⁹ In Q1 2021, significant effort was made to continue to collect and migrate all historic data into the national IMSMA database. As at August 2022, VNMAC have entered all paper records shared by the Provincial Military Commands – approximately 70% of all historic data. Furthermore, VNMAC (with the support of the IM advisory team) have entered Landmine Impact Survey (LIS) data for 42 provinces (66% of all provinces) and have digitised maps of 42 provinces (74%) for use in ArcGIS.⁴⁰

In 2021, NPA capacity development personnel supported VNMAC to develop regulations for a national Information Management System. Following a consultative review process using the LWG, these regulations were finalised by VNMAC and approved in August 2022. The IM regulations have now established a system for reporting all provincial mine action data into the national IMSMA database held by VNMAC, using standardised IMSMA forms. NPA also supported VNMAC to provide training to provincial and regional military commands on the use of the national Information Management System, including standardised forms, and provided 70 laptops to ensure every province and region is adequately equipped to report mine action data.⁴¹

PLANNING AND TASKING

Decision 504, approved by the Prime Minister in April 2010, set out a National Mine Action Plan for 2010–25. The plan, which covers mines, CMR, and other ERW, aimed to “mobilize domestic and international resources in making efforts to minimize and finally create impact-free environment for social economic development.” It called for clearance of 8,000km² of ERW between 2016 and 2025.⁴²

36 Emails from Kimberley McCosker, NPA, 21 May 2022; Jan Erik Støa, NPA, 29 September 2022; and Valentina Stivanello, MAG, 29 April 2022.

37 Email from Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021.

38 Email from Tim Horner, NPA, 7 September 2022.

39 Emails from Kimberley McCosker, NPA, 8 April 2021; and Helene Kuperman, MAG, 31 March 2021.

40 Email from Kimberley McCosker, NPA, 21 April 2022.

41 Email from Kimberley McCosker, NPA, 21 April 2022.

42 Prime Minister, “Decision on Approval of the National Mine Action Plan Period 2010–2025”, Hanoi, 21 April 2010.

During the national conference to review the achievement of Program 504 in February 2022 in Hanoi, VNMAC shared the 10-year report on the progress and achievements of Vietnam on mine action (i.e. survey, explosive ordnance disposal (EOD), clearance, risk education and victim assistance).⁴³ VNMAC also shared the five-year National Mine Action Plan (2021–25), which has been developed to implement the final period of the current National Mine Action plan. The plan, which was elaborated by the government without input from NGOs or other members of the LWG, also seeks to develop and implement the technical survey of “zoning areas” confirmed as contaminated by mines and ERW, as the basis for strategic planning.⁴⁴ As at June 2022, the five-year plan had yet to be formally released and was still undergoing Prime Ministerial review regarding two final issues concerning the budget and capacity for implementation of the plan.⁴⁵ There was an annual work plan in place for 2022.⁴⁶

VNMAC has said that its mission for the period 2021–25 includes objectives to complete the organisational structure and legal framework and policies; ensure effective mine action management; foster international cooperation to mobilise necessary resources; complete the information management system for mine action nationwide; and implement survey and clearance activities over 5,000km², with priority in heavily contaminated areas.⁴⁷

There is currently no national prioritisation system in place for clearance of CMR, other ERW, and mines. For details on explosive ordnance prioritisation at the provincial level, please see Mine Action Review *Clearing Cluster Munition Remnants* report for Vietnam.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Vietnam has both QCVNs, which use the formulation “shall” and are legally binding regulations similar in content to SOPs, and the standards (TCVNs), which use the formulation “should” and are considered optional by VNMAC.⁴⁸

VNMAC made significant progress in recent years to review and update the QCVNs to help bring them into line with IMAS.⁴⁹ The former QCVNs and existing TCVNs were drafted more with the MoD in mind, used terminology inconsistently, and chapters contradicted themselves.⁵⁰ INGOs welcomed the inclusiveness of the revision process,⁵¹ which involved the establishment of four working groups, co-chaired by VNMAC, and extensive consultation with operators and international organisations, including the GICHD.⁵² The revised QCVNs were approved in September 2022.⁵³ Revision of the TCVNs has been completed after significant input from the LWG and other stakeholders. As at writing, the revised TCVNs were awaiting approval by the relevant authorities.⁵⁴

Circular 195 was approved and promulgated in October 2021 and covers the whole QM system. In addition, the Quang Tri Mine Action Centre (QTMAC) developed a field-orientated QM SOP which was approved by the Provincial Authority in July 2022, for use in Quang Tri province.⁵⁵ Corresponding legal documents (Circulars) related to the QM SOPs, and to the revised non-technical survey, technical survey, and clearance SOP, were approved in October 2021.⁵⁶

The QCVNs and TCVNs cover anti-personnel mine operations under the heading mines/ERW clearance, but both documents lack clarity with respect to addressing mined areas, as distinct from battle areas.

43 Emails from Valentina Stivanello, MAG, 29 April 2022; and Phạm Hoàng Hà, PTVN, 9 May 2022.

44 Emails from Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021; Valentina Stivanello, MAG, 29 April and 20 June 2022; and Kimberley McCosker, NPA, 22 June 2022.

45 Interview with Mr Phuc, VNMAC, Geneva, 23 June 2022.

46 Email from Kimberley McCosker, NPA, 21 April 2022.

47 Email from Doan Thi Hong Hai, Capacity Development Project Officer, NPA, on behalf of Mr Phuc, VNMAC, 3 June 2022.

48 Email from Resad Junuzagic, NPA, 6 May 2019.

49 Email from Kimberley McCosker, NPA, 8 April 2021; and Helene Kuperman, MAG, 31 March 2021.

50 Emails from Resad Junuzagic, NPA, 6 May 2019; Jan Erik Støa, NPA, 6 April 2020; and Helene Kuperman, MAG, 10 April 2020.

51 Email from Kimberley McCosker, NPA, 8 April 2021.

52 Emails from Kimberley McCosker, NPA, 8 April 2021 and 21 April 2022; Valentina Stivanello, MAG, 29 April 2022; GICHD, 24 April 2022; and Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021.

53 Email from Tim Horner, NPA, 7 September 2022.

54 Email from Tim Horner, NPA, 12 September 2022.

55 Emails from Kimberley McCosker, NPA, 8 April 2021; and Tim Horner, NPA, 7 September 2022.

56 Email from Kimberley McCosker, NPA, 21 April 2022.

OPERATORS AND OPERATIONAL TOOLS

Most clearance in Vietnam is conducted by the Army Engineering Corps and military-owned commercial companies. Outside the central provinces, the current strength and deployment of military-related demining is unknown.

Vietnamese officials have previously reported that it had 250 BAC and mine clearance teams nationally. Vietnam reportedly has more than 70 military-owned companies undertaking clearance related to infrastructure and commercial and development projects.⁵⁷ Survey and clearance by the Engineering Commands in 2020 increased compared to the previous year. VNMAC expected a further increase in survey and clearance capacity for socio-economic projects in 2021.⁵⁸ Under the KV-MAP project, 36 clearance teams were deployed in 2021 to conduct ERW clearance (including CMR) in Quang Binh province.⁵⁹

Beginning in 2016, Golden West began a programme training Provincial Military Commands in Ha Tinh, Quang Binh and Quang Tri provinces to conduct EOD operations to an IMAS standard.⁶⁰ In 2021, this programme still continued in Quang Tri province.

International operators active in 2021 included: MAG, working in Quang Binh and Quang Tri provinces; NPA, working in Quang Binh, Quang Tri, and Thua Thien Hue provinces; and PTVN, who have been working in Quang Tri province since 1995 and now also in Quang Binh.⁶¹ The NGO then known as Danish Demining Group (DDG) ceased its survey and clearance operations in Vietnam (Quang Nam province) in January 2020, due to lack of funding.⁶² Survey and clearance by the NGO operators are currently addressing contamination from CMR and other ERW, and not anti-personnel mines. For further details on survey and clearance capacity of humanitarian operators, please see Mine Action Review *Clearing Cluster Munition Remnants* report for Vietnam.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

SURVEY IN 2021

MAG, NPA, and PTVN did not survey any mined area in 2021.⁶³

For the first time, VNMAC produced an annual INGO operational report for 2021. The data were broadly consistent with data provided by INGOs to Mine Action Review. According to the annual report, non-technical survey was completed in 169 villages in 2021, with 57.87km² technically surveyed; 81.82km² of confirmed hazardous areas (CHAs) established; nearly 37.25km² of agricultural and development land cleared (in addition to over 34.84km² of "other" land); and a total of 68 bombs, 14,962 submunitions, and 25,930 other items of UXO (and mines) were destroyed.⁶⁴ The survey and clearance in 2021 was, however, focused on areas with CMR and other ERW, rather than on suspected mined areas.

CLEARANCE IN 2021

VNMAC reported clearing 59.17km² of land contaminated by all explosive ordnance (not only CMR-contaminated area) in 2021, with the destruction of 7,997 submunitions, 22,867 other items of ERW, 11 anti-personnel mines, and 67 bombs.⁶⁵ It is not known what proportion of the total area cleared was mined area, as the amount of area cleared of anti-personnel mines was not disaggregated from area cleared of CMR and other ERW, but it is likely to be very small.

INGO clearance operators are not currently operating in the areas close to Vietnam's borders, where many of the mined areas are located. MAG, NPA, and PTVN did not clear any mined area in 2021, and of the three organisations only PTVN encountered mines during its CMR operations, during which it destroyed three anti-personnel mines in Quang Tri province.⁶⁶ MAG and NPA did, however, destroy anti-personnel mines during EOD call-outs in 2021, during which MAG destroyed five anti-personnel mines in Quang Binh province⁶⁷ and NPA destroyed twelve anti-personnel mines in Quang Tri province.⁶⁸

57 Interview with Sr. Col. Nguyen Thanh Ban, Engineering Command, Hanoi, 18 June 2013; email from Executive Office of the National Steering Committee, 6 August 2012; and interviews with mine action stakeholders, Hanoi, 16–20 April 2018; and email from Lee Moroney, Golden West Humanitarian Foundation, 22 June 2019.

58 Email from Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021.

59 Email from Havard Bach, Consultant, UNDP, 27 May 2022.

60 Email from Mark Lasley, Golden West Humanitarian Foundation, 16 June 2021.

61 Emails from Kimberley McCosker, NPA, 21 April 2022; Valentina Stivanello, MAG, 29 April 2022; and Phạm Hoàng Hà, PTVN, 9 May 2022.

62 Email from Søren Adser Sørensen, Programme Specialist, DDG, 5 May 2020.

63 Emails from Valentina Stivanello, MAG, 29 April 2022; Kimberley McCosker, NPA, 21 April 2022; and Phạm Hoàng Hà, PTVN, 11 May 2021.

64 VNMAC, Annual 2021 INGO Operations Report, March 2022.

65 Email from Doan Thi Hong Hai, NPA, on behalf of Mr Phuc, VNMAC, 3 June 2022.

66 Email from Phạm Hoàng Hà, PTVN, 17 September 2022.

67 Email from Valentina Stivanello, MAG, 29 April 2022; and VNMAC, "Summary of humanitarian mine action activities in Quang Binh, Quang Tri, Thua Thien Hue, Da Nang and Quang Nam provinces (reporting period: January 1 to December 31, 2021)", undated.

68 Emails from Dinh Ngoc Vu, Vice Director, Quang Tri Mine Action Centre (QTMAC), 13 September 2022; and Kimberley McCosker, NPA, 13 September 2022.

According to data from the QTMAC in Quang Tri province, a total of 116 landmines were destroyed in Quang Tri province in 2021, of which 37 were anti-personnel mines and type/model of the other 79 mines was unknown. Of the total 116 landmines destroyed in Quang Tri, 3 were destroyed by PTVN and 12 by NPA (as already mentioned above), and the remaining 101 landmines were destroyed by Provincial Military Commands during EOD spot-tasks.⁶⁹

Vietnam has not set a deadline for completion of anti-personnel mine clearance. In its national mine action plan for 2010 to 2025 it called for the clearance of 8,000km² of explosive ordnance from 2016 to 2025⁷⁰ but did not specify how much of this, if any, should be mined area.

The adoption of Decree 18 and Guiding Circular 195 is enabling VNMAC to put in place systems and practices to

coordinate and strengthen mine action in Vietnam, bringing national standards relating to survey and clearance operations in line with IMAS, and establishing a national information management database.

VNMAC reported that the COVID-19 pandemic has had a major impact on all aspects of operations, including survey and clearance efforts. Challenges posed by the pandemic include the organisation and deployment of the field personnel according to the regulations of the Government and each locality in implementing the activity/project; the organisation of COVID-19 prevention measures and the work of ensuring personnel, equipment, and logistics for performing tasks; and challenges posed in implementation of mine action projects in partnership with international partners, as only online meetings have been possible.⁷¹

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

The GICHD has been supporting VNMAC, NPA, and UNDP in the review of the current legislative and normative framework, with a focus on residual risk management. In 2021, the support expanded to conduct training course on residual risk management, site safety, and long-term risk management (LTRM) framework (tools and protocols).⁷² Implementation of the trial of the LTRM framework to help identify the elements of a residual state and manage residual risk according to best practice, will start once COVID-19 related restrictions enable GICHD staff to travel to Vietnam. As a preparatory step, the GICHD and the VNMAC, with the support of UNDP and NPA, have worked on an assessment of the current residual risk management capacity and the required or desired capacities that VNMAC needs to manage residual contamination. A final report has been compiled jointly by the GICHD and VNMAC, and as at April 2022 was waiting government approval.⁷³

Golden West believes that the Provincial Military Commands provide a long-term capacity to respond to residual ERW regardless of external funding or support. Golden West is building a Vietnamese capacity to continue EOD operations in a safe and effective manner as long as the threat to the public exists.⁷⁴ Golden West has worked with VNMAC to improve their technical EOD skills and to support formal training by the United States DOD by providing continuity and field mentoring to inculcate trained skills into everyday operations. With US funding, Golden West has provided equipment and training to BOMICEN (Technology Centre for Bomb and Mine Disposal Engineering Command), an advisory agency under the Vietnamese Ministry of Defence and Engineering Command.⁷⁵

Golden West is also training PTVN EOD teams, funded by PTVN, to help develop their training capability, ensuring long-term success. From this process, one IMAS EOD level 2 training course was conducted by a PTNV trainer for PTVN technicians (deminers) in 2021, under supervision from Golden West and followed by mentoring.⁷⁶ PTVN instructors regularly work with Golden West and VNMAC, enhancing training skills and building a lasting capability.⁷⁷

69 Email from Dinh Ngoc Vu, QTMAC, 13 September 2022.

70 Prime Minister, "Decision on Approval of the National Mine Action Plan Period 2010-2025", Hanoi, 21 April 2010.

71 Emails from Tim Horner on behalf of Mr Phuc, VNMAC, 6 April 2021; and Doan Thi Hong Hai, NPA, on behalf of Mr Phuc, VNMAC, 3 June 2022.

72 Email from GICHD, 16 June 2021.

73 Email from GICHD, 24 April 2022.

74 Email from Mark Lasley, Golden West Humanitarian Foundation, 16 June 2021.

75 Ibid.

76 Email from Phạm Hoàng Hà, PTVN, 9 May 2022.

77 Email from Mark Lasley, Golden West Humanitarian Foundation, 16 June 2021.

OTHER AREAS

The background consists of several overlapping, semi-transparent geometric shapes in various shades of orange and red. The shapes are primarily triangles and quadrilaterals, creating a layered, abstract composition. The colors range from a deep, dark red to a bright, light orange. The overall effect is a modern, minimalist aesthetic.

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

NATIONAL ESTIMATE

1.19 km²

AP MINE CLEARANCE IN 2021

0.10 km²

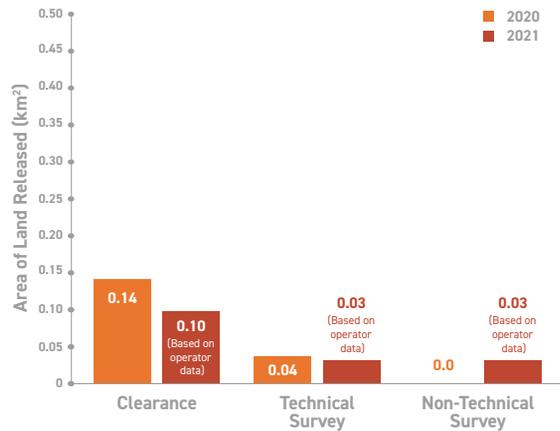
(OPERATOR DATA)

AP MINES DESTROYED IN 2021

72

(INCLUDING 69 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- While formal accession to the Anti-Personnel Mine Ban Convention (APMBC) is not currently possible for Kosovo, as it is not yet recognised as a State by the depository to the Convention, Kosovo should submit a letter to the United Nations (UN) Secretary-General stating that it intends to fully comply, on a voluntary basis, with the APMBC.
- Kosovo should review its decision not to submit a voluntary Article 7 report on an annual basis, and should report accurately on progress in line with its Mine Action Strategy for 2019–24.
- The Kosovo Mine Action Centre (KMAC) should seek to complete clearance by the end of 2024, in line with the objectives in its latest five-year strategy.
- National Mine Action Standards (NMAS) need to be updated in accordance with the International Mine Action Standards (IMAS), in particular on land release, to enhance the efficiency of demining operations.
- Data in the national Information Management System for Mine Action (IMSMA) should be reviewed regularly against operator data to ensure it is accurate and up to date.
- A specific resource mobilisation strategy should be developed as a matter of urgency.

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- Kosovo Mine Action Centre (KMAC)

NATIONAL OPERATORS

- Kosovo Security Force (KSF)

INTERNATIONAL OPERATORS

- The HALO Trust
- Norwegian People's Aid (NPA)
- Kosovo Force (KFOR), a NATO-led International Peace Keeping Force

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

Kosovo is contaminated by mines, cluster munition remnants (CMR), and other explosive remnants of war (ERW), primarily as a result of the conflict between the Federal Republic of Yugoslavia (FRY) and the Kosovo Liberation Army (KLA) in the late 1990s, and between Yugoslavia and North Atlantic Treaty Organisation (NATO) member states in 1999.¹

As at the end of 2021, the Kosovo Mine Action Centre (KMAC) reported that 30 confirmed mined areas remained, covering almost 1.19km² (see Table 1). This is a slight decrease on the 32 confirmed mined areas covering almost 1.25km² in 2020 (including four confirmed hazardous areas (CHAs) totalling 425,000m², which contain a mix of mines and cluster munitions remnants (CMR), according to KMAC).² In The HALO Trust database, three CHAs totalling 360,000m² contain a mix of mines and CMR: two within Gjakove district and one

in Prizren district. These cover 160,000m² and 200,000m², respectively. HALO has also identified a suspected hazardous area (SHA) in Prizren district covering 20,000m² that KMAC does not include in its reporting.³

In total, four CHAs of previously unknown anti-personnel mine contamination were identified in 2021. One covering 10,000m² was reported by KMAC and was added to the database.⁴ The other three were reported by The HALO Trust, whose teams recorded them while conducting non-technical survey. Covering a total of 16,577m², they are located in the district of Gjakove (in Rastavicë village), and the district of Ferizaj (in Biqec and Caralevë villages).⁵ According to HALO Trust, the reports on the three new CHAs were submitted to KMAC to be added to the database.⁶ It is not, however, clear whether these are included in KMAC's reporting for 2021.

Table 1: Anti-personnel mined area by district (at end 2021) (KMAC data)⁷

District	CHAs	Area (m ²)	SHAs that may contain anti-personnel mines	Area (m ²)
N/R	26	764,616	0	0
N/R	4	425,000	0	0
Totals	30	1,189,616	0	0

N/R = Not reported

The last detailed survey of contamination in Kosovo was in 2013, in the course of which The HALO Trust and KMAC systematically conducted community surveys across most of the districts and confirmed 130 hazardous areas: 79 mined areas covering an estimated 2.76km² and 51 cluster munition strikes covering an estimated 7.63km².⁸ As of August 2022, NPA did not have information on the presence of anti-personnel mine contamination in ethnic Serb areas in the district of Mitrovica in the north of Kosovo: Leposavic, Mitrovica North Zubin Potok, and Zvečan municipalities.⁹ KMAC confirmed that there are no mined areas in the northern municipalities of Kosovo.¹⁰

KMAC believes the current baseline of contamination to be reasonably accurate, evidence-based, and complete, but said there may still be reports by locals in the future of previously unknown areas suspected to be contaminated by mines.¹¹ The baseline of mine contamination at the end of 2020 cannot be reconciled with the baseline, survey, and clearance data reported by KMAC at the end of 2021. The discrepancy could be reported figures for contamination, cancellation through non-technical survey, and clearance for The HALO Trust in KMAC's database differing from those reported by the operator to Mine Action Review.¹²

The HALO Trust also believed that Kosovo's current baseline reflects a relatively accurate picture of the remaining contamination but suggested that it would benefit from a critical review and further assessment of the 2013 survey data. This would inform future targeting of survey and clearance, with a view to completing land release by the target date of 2024.¹³

- 1 See UN Mission in Kosovo (UNMIK), "UNMIK OKPCC EOD Management Section Annual Report 2005", Pristina, 18 January 2006, p. 2; and International Committee of the Red Cross (ICRC), *Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo*, Rev'd Edn, Geneva, June 2001, at: <https://bit.ly/331PWfG>, pp. 6 and 15.
- 2 Email from Ahmet Sallova, Head, KMAC, 29 April 2021.
- 3 Email from Wilko Dirks, Acting Programme Manager, HALO Trust, 19 July 2022.
- 4 Email from Ahmet Sallova, KMAC, 24 May 2022.
- 5 Email from Wilko Dirks, HALO Trust, 19 July 2022.
- 6 Email from Megan Dwyer, then Programme Manager, HALO Trust, 2 June 2022.
- 7 Email from Ahmet Sallova, KMAC, 24 May 2022.
- 8 HALO Trust, "Action on cluster munitions in Kosovo", Side event, First Convention on Cluster Munitions (CCM) Review Conference, Dubrovnik, 10 September 2015.
- 9 Email from Vanja Sikirica, Country Director, Norwegian People's Aid (NPA) Kosovo, 6 August 2022.
- 10 Email from Ahmet Sallova, KMAC, 23 August 2022.
- 11 Email from Ahmet Sallova, KMAC, 24 May 2022.
- 12 Emails from Megan Dwyer, HALO Trust, 2 June 2022; and Wilko Dirks, HALO Trust, 19 July 2022.
- 13 Email from Megan Dwyer, HALO Trust, 23 April 2021.

To conduct the review, The HALO Trust, through the 2021–22 non-technical mines survey project expected to reduce land no longer considered dangerous, allowing scarce resources to focus on clearing CHAs. In April 2021, HALO deployed two non-technical survey teams, which conducted 47 of 57 resurveys of minefields and cluster munition strike areas in their area of operations and 49 out of 81 explosive ordnance disposal (EOD) call-outs (nine additional EOD tasks were conducted by KMAC during the year). The 10 remaining resurveys and 32 surveys were due to be completed by the end of September 2022.¹⁴

In HALO Trust's area of operations, 27 CHAs containing anti-personnel mines and 3 containing a mixture of anti-personnel mines and CMR have been identified covering 1,196,454m², along with 1 SHA covering 20,000m² (see Table 2).¹⁵

Table 2: Anti-personnel mined area by district (at end 2021) (HALO Trust data)

District	CHAs with anti-personnel mines only	Area (m ²)	CHAs with anti-personnel mines and CMR	Area of CHA (m ²)	SHAs that may contain anti-personnel mines	Area (m ²)
Ferizaj	5	94,318	0	0	0	0
Gjakove	17	602,213	2	160,000	0	0
Gjilan	2	59,616	0	0	0	0
Prizren	3	80,307	1	200,000	1	20,000
Totals	27	836,454	3	360,000	1	20,000

Both anti-personnel and anti-vehicle mines were used during the conflict, in fixed-pattern minefields as well as more randomly in "nuisance" minefields.¹⁶ The UN claimed in 2002 that "the problems associated with landmines, cluster munitions and other items of unexploded ordnance [UXO] in Kosovo have been virtually eliminated",¹⁷ but further investigation revealed that considerably more contamination remained to be addressed than had been indicated.¹⁸

In addition to contamination from mines, Kosovo is contaminated with CMR (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Kosovo for further information) as well as other ERW. Kosovo Force (KFOR) and Kosovo Security Force (KSF) EOD teams regularly dispose of ERW in response to information provided by the public and demining organisations.¹⁹

PROGRAMME MANAGEMENT

In January 2011, the EOD Coordination Management Section became KMAC, responsible for managing survey and clearance of mines and ERW throughout Kosovo. KMAC prepares an annual work plan in cooperation with international demining non-governmental organisations (NGOs) and coordinates their operations along with the national demining teams of the KSF. It also coordinates survey, quality assurance, risk education, public information, and victim assistance activities.²⁰ KMAC's role and responsibilities as head of the national mine action programme under the auspices of the Ministry of Defence were established and institutionalised by Kosovo's 2012 Law on Humanitarian Demining.²¹

Kosovo's mine action programme is fully nationally owned, with a strong, longstanding commitment from the government, and benefits from a dedicated team of permanent national staff.²² In 2021, KMAC had five staff: a Director, a Senior Quality Assurance (QA) Officer, a QA Inspector, a Mine Risk Education (MRE) Officer, and a Public Information Officer.²³ NGO operators in Kosovo report a constructive and proactive working relationship with KMAC.

In 2021, the Kosovo government provided €995,000 in financial support to KMAC, and to the KSF for mine and CMR clearance.²⁴ Kosovo's mine action strategy for 2019–24 sets out the objective of intensifying resource mobilisation efforts in order to gain greater financial stability.²⁵ In 2019, KMAC had identified funding and logistical support as the two primary areas where it could most benefit from assistance from international donors and mine action operators.²⁶ While a specific resource mobilisation

14 Email from Megan Dwyer, HALO Trust, 2 June 2022.

15 Email from Wilko Dirks, HALO Trust, 19 July 2022.

16 ICRC, *Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo*, June 2001, p. 15.

17 "UNMIK Mine Action Programme Annual Report – 2001", Mine Action Coordination Cell, Pristina, undated but 2002, p. 1.

18 HALO Trust, "Failing the Kosovars: The Hidden Impact and Threat from ERW", Report, 15 December 2006, p. 1.

19 Email from Ahmet Sallova, KMAC, 1 August 2012.

20 ICRC, *Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo*, June 2001, p. 15.

21 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3; and email from Ahmet Sallova, KMAC, 24 May 2022.

22 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 5–6.

23 Email from Ahmet Sallova, KMAC, 28 April 2021.

24 Email from Ahmet Sallova, KMAC, 24 May 2022.

25 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 14.

26 Email from Ahmet Sallova, KMAC, 30 April 2019.

strategy does not exist, operators have reported that coordinated approaches with KMAC were made to potential donors such as the United States and the European Union (EU).²⁷

The HALO Trust reported that the funding provided by the Swiss Government in 2020 finalised in 2021. A three-year grant from the EU specifically for mine clearance which would support four teams²⁸ was awaiting approval from the Kosovo Assembly, a new requirement in HALO's understanding. As of July 2022, no further funding had been secured for mine clearance in 2022 or beyond.²⁹

Although there is no in-country platform for dialogue among all mine action stakeholders, in September 2022, a mid-term review of the latest five-year strategy was due to take place, supported by the Geneva International Centre for Humanitarian Demining (GICHD).³⁰

ENVIRONMENTAL POLICIES AND ACTION

According to KMAC, the environment is always taken into consideration in the planning and tasking of survey or clearance of anti-personnel mines. In addition, the existing national mine action standards (NMA) were to be updated in accordance with IMAS 07.13 at some point during 2022.³¹

There are no specific standing operating procedures (SOPs) for environmental management, but HALO's head office is working on creating policies and environmental SOPs which will be implemented across all HALO programmes when they are ready. HALO Trust in Kosovo was working on developing local SOPs.³²

GENDER AND DIVERSITY

Kosovo's Mine Action Strategy 2019–2024 reflects the commitment of the mine action programme to ensure that gender is considered in the planning, implementation, and monitoring of all mine action projects, with a view to promoting equality and quality.³³ The Strategy stipulates that all mine action activities and assistance must reflect the needs of different ages and gender in a targeted and non-discriminatory manner, and that mine action and community liaison data are also to be collected and systematically disaggregated according to sex and age.³⁴

Both KMAC and KSF have gender policies in place. KMAC reported that the KSF's gender policy aims to facilitate the consultation of all groups affected by mines and ERW, expressly women and children. Within KMAC, one of its five staff (the Risk Education Officer) is a woman. A total of 5% of KSF staff employed in operational mine action roles were women, but none is in a managerial or supervisory position.³⁵

Kosovo's mine action strategy recognises the barriers that exist against equal employment in Kosovo society, including significant differences in employment levels between men and women, despite the number of men and women of working age being broadly similar. The Strategy notes that, as at 2019, more than four-fifths of women of working age were not employed in Kosovo's labour market, and less than one in eight has been employed annually over the past five years. The primary reasons given for female unemployment

are child- and family-care obligations, which traditionally in Kosovo society fall on women.

The Strategy notes the efforts of mine action operators to overcome these challenges and barriers to employment, such as through childcare and parental leave, and gender-sensitive recruitment practices that encourage women to apply for positions traditionally seen as jobs for men. It further recalls the importance of employment of not only multi-gender, but also multi-ethnic survey and clearance teams, and the particular benefits of recruitment in areas affected by high unemployment and poverty.³⁶

In 2018, The HALO Trust developed a gender policy in consultation with the Kosovo Women's Network, an advocacy network of more than 140 member organisations, including women's organisations of all ethnic backgrounds from throughout Kosovo. The policy aims both at increasing the recruitment of women, as well as retention of existing female employees.³⁷ In 2019, HALO further developed this policy to include provision for increased family leave and child-care allowances for those taking care of children, in order to remove barriers to women's employment. Through the Dutch government, HALO Trust contracted the Gender and Mine Action Programme (GMAP, a part of the GICHD) to conduct gender sensitivity and leadership training in July 2019 to more than 20 managers across HALO globally, with a view to addressing issues of unconscious bias and lack of inclusion.³⁸

27 Email from Terje Eldøen, NPA, 25 April 2019.

28 Email from Megan Dwyer, HALO Trust, 2 June 2022.

29 Email from Wilko Dirks, HALO Trust, 19 July 2022.

30 Emails from Megan Dwyer, HALO Trust, 11 May 2022; and Vanja Sikirica, NPA Kosovo, 1 June 2022.

31 Email from Ahmet Sallova, KMAC, 24 May 2022.

32 Email from Megan Dwyer, HALO Trust, 11 May 2022.

33 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 8.

34 Ibid.

35 Email from Ahmet Sallova, KMAC, 24 May 2022.

36 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 8–9.

37 Email from Olivia Meader, HALO Trust, 22 May 2020.

38 Ibid.

In 2021, HALO Trust continued to implement their Gender and Diversity Policy and conducted an annual refresher training for management, support and operational staff. HALO continues to ensure that as many as possible of household members are consulted during pre- and post-clearance surveys. It stated that it continues to ensure inclusion of women, children, and ethnic minorities in community liaison (CL) activities; there is always a female CL Officer supporting the non-technical survey teams, and senior management staff who are fluent in relevant languages are deployed for CL activities.³⁹

New funding in 2021 provided new job opportunities. By the end of 2021, women's employment in the organisation increased from 17% (in 2020) to 24%, with three women in operational management roles and two in support management roles. HALO Trust expected to promote more women to assistant team leader and team leader roles. In 2021, 4% of managerial/supervisory positions were filled by women; in operations 20% of the positions were held by women.⁴⁰ If funding for mine clearance is not approved by Kosovo's Assembly, it will affect promotional opportunities for staff, in particular for women to move into senior management roles.⁴¹

According to KMAC, Kosovo's baseline of anti-personnel mine contamination has been established through inclusive consultation with women, girls, boys, and men, including, where relevant, from minority groups.⁴²

INFORMATION MANAGEMENT AND REPORTING

KMAC uses the Information Management System for Mine Action (IMSMA) New Generation version for its national mine action database. Data disaggregate between mines, CMR, and other ERW.⁴³ The HALO Trust was positive in their assessment of the quality and accessibility of data in the database and of KMAC's information management system in general. HALO reports that data collection forms are consistent and enable collection of the necessary data which is added to the database. The database, which is held and maintained by KMAC, is checked in comparison to HALO's about once every quarter. Once a task is completed, or when KMAC agrees and signs off on a re-survey or survey conducted by a non-technical survey team, the data is fed into IMSMA.⁴⁴ Nonetheless, the land release data reported to Mine Action Review by the clearance operator and by KMAC in 2021 contained numerous discrepancies.

According to its most recent mine action strategy, KMAC intended, as a means to show its commitment to the APMBC, to submit voluntary Article 7 transparency reports on an annual basis.⁴⁵ In disappointing news, KMAC subsequently advised Mine Action Review that Kosovo would only start submitting Article 7 reports when it becomes a member of the UN.⁴⁶

PLANNING AND TASKING

The GICHD supported the development of Kosovo's new Mine Action Strategy for 2019–24, bringing together a wide range of national and international stakeholders in a strategy stakeholder workshop in Pristina in October 2018. The strategy, formally approved in January 2019 and launched by the Ministry of Kosovo Security Services on 4 April 2019, has three goals:

- Mine/ERW threats managed and reduced
- Communication and awareness raising
- Management of residual contamination.

The strategy declares that all known mined and CMR-contaminated areas will be addressed by the end of 2024, leaving only residual contamination to be managed accordingly. It contains annual projections for anti-personnel mine clearance, including:

- All high priority anti-personnel mine tasks (8 as at October 2018) will be cleared by the end of 2020
- All medium-priority anti-personnel mine tasks (25 as at October 2018) will be cleared by 2022
- All low-priority anti-personnel mine tasks (15 as at October 2018) will be completed by 2024.⁴⁷

39 Email from Megan Dwyer, HALO Trust, 17 May 2022.

40 Ibid.

41 Email from Wilko Dirks, HALO Trust, 19 July 2022.

42 Email from Ahmet Sallova, KMAC, 16 April 2020.

43 Emails from Ahmet Sallova, KMAC, 30 April 2019; Vanja Sikirica, NPA Kosovo, 30 June 2022; and telephone interview, 1 July 2022; and email from Wilko Dirks, HALO Trust, 19 July 2022.

44 Email from Megan Dwyer, Programme Manager, HALO Trust, 11 May 2022.

45 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 13.

46 Email from Ahmet Sallova, KMAC, 24 May 2022.

47 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 12.

Updates on clearance progress of high and medium priority areas were not made available, but as of 31 December 2021, KMAC reported that six high-priority tasks had been completed.⁴⁸ HALO Trust reported that as a result of the non-technical survey project, four more high-priority tasks have been added. It is expected that further reclassification of priority areas will occur in the future.⁴⁹

The strategy is explicitly based on a number of assumptions, including that the necessary funding will be secured and that no new mined or CMR-contaminated areas are identified. It notes, however, that "so far each year 3–4 different affected areas have been reported" and that should this trend continue, capacity and progress will need to be reassessed with regards to the 2024 deadline.⁵⁰

As per the strategy, KMAC will develop annual operational work plans to implement the strategy's goals.⁵¹ KMAC has already requested an external mid-term review of the strategy in 2022, to evaluate progress and make any adaptations according to contextual changes, if this is required. The GICHD was due to conduct the review in September 2022. Thereafter, new plans will be set to achieve the goals of the Strategy.⁵²

In 2019, KMAC confirmed that it had developed annual operational work plans to target anti-personnel mined areas, according to impact-based criteria, including risk reduction, development priorities, and poverty reduction, along with the findings of a nationwide baseline socio-economic impact assessment carried out in 2018 by KMAC, with the support of The HALO Trust.⁵³ In 2021, KMAC planned for clearance to start on nine mined areas,⁵⁴ but this was delayed for three months due to the COVID-19 pandemic.⁵⁵ The mine action strategy for 2019–24 is also said to align with the objectives of Kosovo's National Development Strategy 2016–2021.⁵⁶

In 2019, The HALO Trust developed a new prioritisation system that considers the "community profile" for a task. This system draws on several factors, such as accident history, quantity of evidence provided, frequency of current land use, socio-economic status, planned land use, government development plans, and demographics. All information is collected from government and public data as well as from extensive community survey.⁵⁷ This prioritisation system continued to be implemented throughout 2021. New prioritisation information was added during 2021 and early 2022 through the non-technical survey project by providing an individual rank for prioritisation based on set parameters.⁵⁸

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

National mine action standards for land release are in place in Kosovo, which, according to KMAC, reflect the IMAS.⁵⁹ However, The HALO Trust disputes this, in particular on the basis that the NMAS include outdated land release procedures.

KMAC was planning, at some point during 2022, to update existing NMAS to reflect the new IMAS.⁶⁰

A 2014 evaluation of Kosovo's mine action programme, conducted on behalf of the International Trust Fund (ITF) Enhancing Human Security, concluded that increased capacity and improvements to land release methodology and equipment would be necessary for Kosovo to complete clearance by 2024. Since the 2014 evaluation, significant improvements have been made to the mine action programme, including the introduction of Handheld Standoff Mine Detection System (HSTAMID) detectors by The HALO Trust, which have enhanced operational productivity.⁶¹

OPERATORS AND OPERATIONAL TOOLS

In 2021, Kosovo's national mine action programme's capacity consisted of two international operators, The HALO Trust and the Norwegian People's Aid (NPA), and a national operator, the KSF. However, NPA did not conduct survey or clearance of anti-personnel mined areas in 2021 nor 2020, solely focusing on tackling CMR.⁶² The KSF also provided a round-the-clock EOD emergency response. KFOR, a NATO-led international peacekeeping force, also supports the KSF and Kosovo Police with EOD response and organises mine and ERW demolitions in Mitrovica and the north of Kosovo.⁶³ The demining season is from the end of March to the end of November due to weather conditions.⁶⁴

48 Email from Ahmet Sallova, KMAC, 24 May 2022.

49 Emails from Megan Dwyer, HALO Trust, 2 June 2022; and Wilko Dirks, HALO Trust, 19 July 2022.

50 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 9–10.

51 Ibid.

52 Ibid., p. 16; and email from Ahmet Sallova, KMAC, 24 May 2022.

53 Emails from Ahmet Sallova, KMAC, 30 April 2019; and Tom Welling, HALO Trust, 7 May 2018.

54 Email from Ahmet Sallova, KMAC, 16 April 2020.

55 Email from Ahmet Sallova, KMAC, 28 April 2021.

56 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 1.

57 Email from Olivia Meader, HALO Trust, 22 May 2020.

58 Email from Megan Dwyer, HALO Trust, 2 June 2022.

59 Email from Ahmet Sallova, KMAC, 16 April 2020.

HALO Trust's operational personnel are cross-trained for mine clearance and battle area clearance (BAC) and can move readily between these activities. In 2021, HALO deployed two teams with eight personnel in total for the new non-technical survey project, which will continue operating through 2022. In addition, HALO deployed one team with fourteen deminers for mine clearance tasks which operated until the end of 2021.⁶⁵ In 2020, HALO had deployed, on average, 24 deminers across 3 clearance teams. For 2021, it represents a decrease in capacity of 58% in the number of deminers and 60% in the

number of teams. HALO Trust's clearance capacity decrease coincides with the end of contracts with donors in 2021 and the resultant reduction in funding, after which HALO only had funds available for BAC.⁶⁶

KSF, as in 2020, operated two manual clearance teams in 2021 totalling 20 deminers, and expected capacity to remain the same in 2022.⁶⁷ KFOR supports the KSF and Kosovo Police as noted above.⁶⁸

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

KMAC reported a total of 0.17km² of anti-personnel mined area released only through clearance in 2021.⁶⁹ The land release data from KMAC are inconsistent with the data reported by The HALO Trust with regards to cancellation through non-technical survey, reduction through technical survey, area cleared, and the number of mines found (see Tables 3, 4, and 6). HALO Trust has been unable to explain the discrepancies⁷⁰ and KMAC has been unwilling to do so. Mine Action Review has therefore taken the survey and clearance figures reported directly by HALO, along with KSF clearance data reported by KMAC, which together conclude that a total of 0.16km² of mined areas was released in 2021: 0.10km² cleared (see Table 6), 0.03km² reduced (see Table 4), and 0.03km² cancelled (see Table 3).⁷¹

In 2021, one CHA covering 10,000m² was reported by KMAC and was added to the database.⁷² Three new CHAs were reported by the HALO Trust, with a total estimated area of 16,577m².⁷³ According to HALO Trust, the reports on the three new CHAs were submitted to KMAC⁷⁴ but it is not known whether they are included in KMAC's reporting for 2021.

SURVEY IN 2021

According to KMAC there was no land cancellation through non-technical survey or reduction through technical survey by any of the operators in 2021.⁷⁵ Nonetheless, for 2021, HALO Trust reported cancelling through non-technical survey 30,086m² in Gjakove district through the non-technical survey project (see Table 3).⁷⁶ In addition, HALO also reported reduction through technical survey of 33,100m², through the use of breaching lanes in polygons during clearance tasks (see Table 4).⁷⁷

In 2020, a total of 44,751m² was reduced through technical survey by HALO Trust.⁷⁸ The absence of technical survey by HALO in 2021 is attributed to the decision to concentrate on the non-technical survey project.⁷⁹

Table 3: Cancellation through non-technical survey in 2021 (HALO Trust data)

District	Operator	Area cancelled (m ²)
Gjakove	HALO Trust	30,086
Total		30,086

Table 4: Reduction through non-technical survey in 2021 (HALO Trust data)

District	Operator	Area reduced (m ²)
Gjakove	HALO Trust	33,100
Total		33,100

60 Email from Ahmet Sallova, KMAC, 24 May 2022.

61 Emails from Olivia Meader, HALO Trust, 1 May 2019; and Terje Eldøen, NPA, 25 April 2019.

62 Email from Vanja Sikirica, NPA Kosovo, 20 May 2022; and telephone interview, 1 July 2022.

63 Email from Ahmet Sallova, KMAC, 28 April 2021.

64 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.

65 Email from Megan Dwyer, HALO Trust, 2 June 2022.

66 Ibid.

67 Email from Ahmet Sallova, KMAC, 24 May 2022.

68 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 4; and interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.

69 Email from Ahmet Sallova, KMAC, 24 May 2022.

70 Email from Wilko Dirks, HALO Trust, 19 July 2022.

71 Emails from Ahmet Sallova, KMAC, 24 May 2022; and Megan Dwyer, HALO Trust, 2 June 2022.

72 Email from Ahmet Sallova, KMAC, 24 May 2022.

73 Email from Wilko Dirks, HALO Trust, 19 July 2022.

74 Email from Megan Dwyer, HALO Trust, 2 June 2022.

75 Email from Ahmet Sallova, KMAC, 24 May 2022.

76 Emails from Megan Dwyer, HALO Trust, 2 June 2022; and Wilko Dirks, HALO Trust, 19 July 2022.

77 Email from Wilko Dirks, HALO Trust, 19 July 2022.

78 Email from Megan Dwyer, HALO Trust, 23 April 2021.

79 Email from Wilko Dirks, HALO Trust, 19 July 2022.

CLEARANCE IN 2021

In 2021, according to KMAC, a total area of almost 0.17km² of anti-personnel mined area was cleared, with seven anti-personnel mines and three items of UXO destroyed (see Table 4).⁸⁰ This was a slight increase in area cleared compared to figures reported for 2020, when almost 0.14km² of anti-personnel mined area was cleared, with 7 anti-personnel mines and 2 items of UXO found and destroyed.⁸¹

Table 5: Mine clearance in 2021 (KMAC data)⁸²

District	Operator	Area cleared (m ²)	AP mines destroyed	UXO destroyed during mine clearance
N/R	KSF	61,012	3	2
N/R	HALO Trust	105,857	4	1
Totals		166,869	7	3

N/R = Not reported

HALO Trust, however, only reported anti-personnel mine clearance of 69,258m² in Gjakove district for 2021, where no anti-personnel mines were found, only one item of UXO. The area was initially expected to contain anti-personnel mines according to the 2013 survey.⁸³

Table 6: Clearance of anti-personnel mines in 2021 (based on KSF data reported by KMAC and HALO Trust data reported by HALO)

District	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed during mine clearance
N/R	KSF	61,012	3	0	2
Gjakove	HALO Trust	36,158	0	0	1
Totals		97,170	3	0	3

A further 69 anti-personnel mines and 1 anti-vehicle mine were destroyed by the KSF in EOD response tasks in 2021.⁸⁴ As Kosovo has strict national procedures for the management of explosives, the KSF, with support from KFOR in northern Kosovo, carries out the destruction of mines, CMR, and other ERW found by The HALO Trust and NPA.⁸⁵

Compared to the previous year, in 2021, The HALO Trust saw a decrease of the overall area cleared as a result of reducing teams and deminers numbers due to a decline in funding. However, HALO considers that in 2021 its productivity increased due to clearance in minefields without the confirmation of a mine threat, where HALO was able to reduce the size of over inflated polygons during targeted clearance by use of breaching lanes.⁸⁶

PROGRESS TOWARDS COMPLETION

Kosovo cannot formally adhere to the APMBBC as it is not recognised as a State by the depository of the Convention and therefore does not have a specific clearance deadline under Article 5. Nonetheless, it has obligations under international human rights law to clear anti-personnel mines as soon as possible.

Kosovo's Mine Action Strategy 2019–24, which aims to complete mine and CMR clearance by the end of 2024, states this will only be achievable if sustained funding is secured.⁸⁷ Specific concerns are elaborated in the strategy about the need to upgrade old equipment, including vehicles to proceed without unnecessary stand-downs or costly repairs.⁸⁸ Moreover, less than 1km² of anti-personnel mined area has been cleared in the last five years (see Table 7).

80 Email from Ahmet Sallova, KMAC, 24 May 2022.

81 Emails from Olivia Meader, HALO Trust, 22 May and 23 June 2020; and Ahmet Sallova, KMAC, 16 April and 16 July 2020.

82 Email from Ahmet Sallova, KMAC, 24 May 2022.

83 Emails from Megan Dwyer, HALO Trust, 2 June 2022; and Wilko Dirks, HALO Trust, 19 July 2022.

84 Email from Ahmet Sallova, KMAC, 24 May 2022.

85 Interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.

86 Email from Wilko Dirks, HALO Trust, 19 July 2022.

87 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 6.

88 Ibid.

Table 7: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km ²)
2021	0.10
2020	0.14
2019	0.27
2018	0.22
2017	0.23
Total	0.96

HALO Trust is currently finalising non-technical survey and resurvey and will have a better idea of remaining contamination by the end of 2022. HALO would require increased capacity to complete mine clearance by the end of 2024. However, the grant by the EU for four clearance teams was still pending approval from the Kosovo Assembly as of writing while funding for mine clearance was non-existent for 2022 and beyond.⁸⁹ HALO has also highlighted the importance of applying efficient land release methodologies and updating the NMAS on land release, as well as finalising the resurvey project.⁹⁰

Accurate and up-to-date information from the Kosovo authorities on remaining contamination and land release; updated NMAS and IMSMA; and a revised Mine Action Strategy and annual plans, based on the results of non-technical survey project, as well as coordinated mobilisation efforts, would better inform donors of the mine action situation in Kosovo. Clearance capacity needs to be sustained and further increased over the revised strategy period in order to meet the 2024 target date. According to HALO and based on the current funding situation, the 2024 target will not be reached.⁹¹

In 2021, while the impact of COVID-19 decreased, several cases occurred among HALO Trust staff, which sometimes required isolation of team members and increased health prevention measures. This led in turn to a reduction of working time, as well as fleet issues due to social distancing requirements, which had minor impact on operations and team outputs.⁹²

Assuming the target is met (which Kosovo is not on track to achieve), completion of mine clearance in 2024 would be more than 25 years after the end of the conflict between the FRY forces and NATO and more than 20 years after the UN claimed that clearance was largely complete.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

According to Kosovo's Mine Action Strategy 2019–24, a separate national strategy on the management of residual contamination will be developed by KMAC by 2023, in collaboration with other national actors. This will clarify roles and responsibilities in order to manage what is expected to be a long-term residual contamination problem.⁹³

89 Email from Megan Dwyer, HALO Trust, 2 June 2022.

90 Ibid.

91 Ibid.

92 Ibid.

93 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 15.

NAGORNO-KARABAKH

MINE ACTION REVIEW

CLEARING THE MINES 2022

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

11,035_{M²*}

AP MINE CLEARANCE IN 2021

12,559_{M²*}

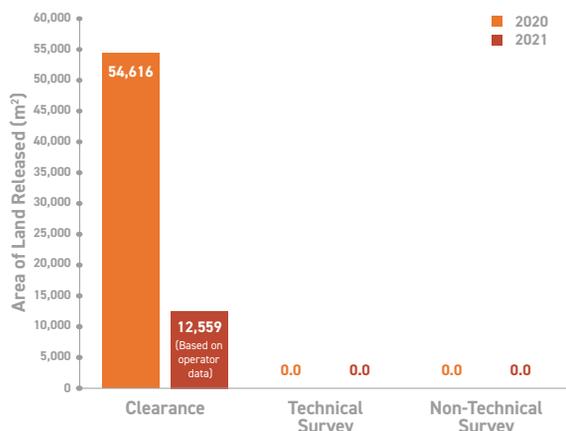
*MINED AREA CONTAINING BOTH ANTI-PERSONNEL MINES AND ANTI-VEHICLE MINES

AP MINES DESTROYED IN 2021

4

(3 DESTROYED IN SPOT TASKS) (BASED ON OPERATOR DATA)

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

A six-week armed conflict between Armenia and Azerbaijan over the Nagorno-Karabakh region in September–November 2020 ended with Azerbaijan regaining control over most of its internationally recognised territories, including about a third of Nagorno-Karabakh.¹ Estimates of the extent of the province's mine contamination had risen sharply in 2019 and 2020 but fell dramatically in 2021 following the conflict as most of the mined areas transferred back to Azerbaijan's control. In parallel, The HALO Trust's priorities switched from landmine survey and clearance to addressing the threat posed by cluster munition remnants (CMR) resulting from the conflict. HALO Trust cleared one mined area in Nagorno-Karabakh in 2021, which contained both anti-personnel mine and anti-vehicle mines.

RECOMMENDATIONS FOR ACTION

- The Nagorno-Karabakh authorities should make a commitment to respect the Anti-Personnel Mine Ban Convention (APMBC).
- The Nagorno-Karabakh authorities should commit to never use anti-personnel mines.
- Nagorno-Karabakh should clear or ensure the clearance of anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Nagorno-Karabakh should expedite the creation of a mine action authority to enhance coordination between stakeholders and develop a comprehensive mine action database.

1 T. De Waal, "Unfinished Business in the Armenia-Azerbaijan Conflict", Carnegie Europe, 11 February 2021, at: <https://bit.ly/3PFvARz>.

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- The Nagorno-Karabakh de facto Authorities

NATIONAL OPERATORS

- The Nagorno-Karabakh Emergency Service
- The Nagorno-Karabakh Armed Forces
- Centre for Humanitarian Demining (CHD) FUND

INTERNATIONAL OPERATORS

- The HALO Trust

OTHER ACTORS

- Russian peacekeeping forces

UNDERSTANDING OF AP MINE CONTAMINATION

Estimates of Nagorno-Karabakh's mine contamination rose sharply as a result of survey conducted by The HALO Trust in 2019 and 2020. In 2019, the estimate more than doubled to 7.75km², and in 2020 it rose a further 22% to 9.48km² after HALO Trust identified a further 58 mined areas.² However, as a result of the conflict between Armenia and Azerbaijan in 2020, territory under the control of the de facto authorities in Nagorno-Karabakh decreased by about one third.³ As at April 2022, HALO Trust reported just one confirmed hazardous area (CHA) of 11,035m²⁴ in territory remaining under the control of the local authorities, in Martakert.⁵

Table 1: Mined area in areas of Nagorno-Karabakh not under the control of Azerbaijan (at April 2022)⁶

District	CHAs containing AP/AV mines (mixed minefields)	Area (m ²)
Martakert	1	11,035
Totals	1	11,035

AP = anti-personnel AV = anti-vehicle

Most of the additional hazardous areas identified in 2019 and 2020 were in the north-eastern Martakert area bordering Azerbaijan, with smaller additions in Hadrut and Askeran, all pre-dating the 2020 conflict. Azerbaijan reported that pro-Karabakh forces laid mines in that conflict as they retreated before its advancing forces and a large amount of landmine contamination recorded prior to the 2020 conflict is now in areas under Azerbaijani control.⁷

Historically, all regions of Nagorno-Karabakh have been affected by mines and unexploded submunitions as a result of the 1988–94 conflict between Armenia and Azerbaijan

and subsequent hostilities. Mines were laid by both the Azeri and pro-Karabakh forces during the war in the 1990s, with a relatively high proportion of anti-vehicle mines being used in some regions.⁸ The mines were of Soviet design and manufacture, and due to the nature of the conflict certain areas were mined several times.⁹ Nagorno-Karabakh's armed forces said they laid additional anti-personnel mines along the Armenian-Azerbaijani Line of Contact (LoC) in 2013, both east and north of disputed territory.¹⁰ Unconfirmed reports suggest more mines were laid after the so-called "four-day war" in April 2016.

PROGRAMME MANAGEMENT

Nagorno-Karabakh does not have a national mine action centre. Nagorno-Karabakh's security chief, Major-General Vitaly Balasanyan, set up a working group in early 2021 to coordinate clearance of explosive remnants of war (ERW). The working group meets weekly with participation from the Rescue Service and humanitarian mine clearance organisations.¹¹ In August 2021, by presidential decree, the group became the "Mine Action Coordination Council" (also known as the Mine Action Council), with high-level representation from the authorities, Centre for Humanitarian Demining (CHD) FUND (a national non-governmental organisation funded by the authorities in Nagorno-Karabakh), and The HALO Trust.¹²

2 Email from Miles Hawthorn, Programme Manager, HALO Trust, 18 April 2021.

3 T. de Waal, "Unfinished Business in the Armenia-Azerbaijan Conflict", Carnegie Europe, 11 February 2021.

4 Email from Miles Hawthorn, HALO Trust, 5 May 2022.

5 Ibid.

6 Email from Miles Hawthorn, HALO Trust, 18 April 2021.

7 See, e.g., R. Rehimov, "Karabakh: Azerbaijani civilian killed by landmine blast", *Anadolu Agency*, 14 December 2020.

8 United States Agency for International Development (USAID), "De-mining Needs Assessment in Nagorno-Karabakh", September 2013, p. 2.

9 HALO Trust, "Our role in Nagorno-Karabakh: History", accessed 20 July 2019 at: <http://bit.ly/2Zyu1KZ>.

10 L. Musayelian, "Karabakh Enhances Defense Capabilities", *Asbarez*, Stepanakert, 26 July 2013, at: <https://bit.ly/30l03ew>.

11 Email from Miles Hawthorn, HALO Trust, 20 May 2021.

12 Email from Fiona Kilpatrick-Cooper, Head of Region – Europe (South Caucasus), HALO Trust, 6 May 2022.

The HALO Trust established the Nagorno-Karabakh Mine Action Centre (NKMAC) in 2000 but the project did not attract local support and stalled.¹³ Discussions on the issue with Nagorno-Karabakh's Ministry of Foreign Affairs continued in 2019 and 2020 as well as with the State Emergency Services and the Ministry of Agriculture but did not lead to any decision.¹⁴ A mine action coordination committee responsible for liaising between the local authorities and The HALO Trust ended in 2018.¹⁵ The HALO Trust held discussions with authorities on establishing a mine action centre in 2019 and 2020 but these did not reach a conclusion.¹⁶

The Nagorno-Karabakh authorities do not provide HALO Trust with funding to clear affected areas.¹⁷

ENVIRONMENTAL POLICIES AND ACTION

The HALO Trust does not have programme-level environmental management standard operating procedures (SOPs) for Nagorno-Karabakh, but does adhere to organisational SOPs set at its headquarters. There is a new "Global Environment and Nature Conservation" lead in post at The HALO Trust and the programme expected to have a local SOP in place in 2022.¹⁸ In line with its commitment to protecting the environment, when conducting explosive ordnance disposal (EOD), HALO ensures that safe land is not contaminated by explosive kick-outs, and that all scrap metal is cleared and disposed of appropriately.¹⁹

GENDER AND DIVERSITY

HALO's Nagorno-Karabakh programme follows the organisation's gender and diversity policies, providing equal access to employment for women and engaging them in management and operational roles.²⁰ Overall, 14% of HALO Trust staff in Nagorno-Karabakh in 2021 were women. Women were in 14% of supervisory positions and 9% of field operations positions.²¹ HALO's most senior national staff member in Nagorno-Karabakh is a woman,²² and women have been employed in both survey and clearance. HALO Trust appointed the first woman for non-technical survey in 2019, and by 2021 all HALO survey teams included at least one woman.²³

All groups affected by anti-personnel mines, including women and children, are said to be consulted during survey and community liaison activities. Relevant mine action data are disaggregated by sex and age.²⁴

INFORMATION MANAGEMENT AND REPORTING

Nagorno-Karabakh does not have a mine action information management system. The HALO Trust operates its own database.²⁵ In 2020, HALO switched to an online server (cloud system) that it refers to as the Global Operations Information Management System (GO-IMS).

No central mechanism exists for systematic sharing of data on mine clearance, underscoring the value of a mine action authority. There is, however, the working group noted above, known as the Mine Action Council. This group comprises The HALO Trust, the local Rescue Service, and CHD FUND, the military, and peacekeepers. The Council meets weekly to facilitate information and data sharing, and discuss security and other safety issues. The emergency services share information on EOD call-outs and advance notice of demolitions.²⁶ In general, while the mine action authorities in Nagorno-Karabakh share some information about landmine contamination, survey and clearance, more detail is required to conform to recognised international standards.²⁷

13 Emails from Andrew Moore, HALO Trust, 28 June 2013; and Asqanaz Hambardzumyan, Field Officer, HALO Trust, 26 April 2019.

14 Emails from Rob Syfret, HALO Trust, 13 May and 4 September 2020; and Miles Hawthorn, HALO Trust, 18 April 2021.

15 Emails from Andrew Moore, HALO Trust, 26 May 2016; and Asqanaz Hambardzumyan, HALO Trust, 26 April 2019.

16 Email from Rob Syfret, HALO Trust, 13 May 2020.

17 Email from Miles Hawthorn, HALO Trust, 5 May 2022.

18 Ibid.

19 Ibid.

20 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

21 Email from Miles Hawthorn, HALO Trust, 18 April 2021.

22 Email from Miles Hawthorn, HALO Trust, 5 May 2022.

23 Emails from Rob Syfret, HALO Trust, 7 May 2020; and Miles Hawthorn, HALO Trust, 29 July 2021.

24 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

25 Email from Rob Syfret, HALO Trust, 7 May 2020.

26 Email from Rob Syfret, HALO Trust, 13 May 2020.

27 Email from Miles Hawthorn, HALO Trust, 5 May 2022.

PLANNING AND TASKING

There is no national mine action strategy currently in place in Nagorno-Karabakh.²⁸

Prior to the outbreak of the conflict in September 2020, HALO Trust focused activities on survey and clearance of mined areas in line with donor wishes. Starting in 2019, HALO embarked on a countrywide survey of mine contamination.²⁹ After the 2020 conflict, HALO Trust put the mine survey on hold and has given priority to survey and clearance of CMR and other unexploded ordnance (UXO) resulting from the war as well as conducting spot-task EOD.³⁰

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Nagorno-Karabakh has no local mine action standards. The HALO Trust follows its internal SOPs and in 2020 it updated its SOPs for battle area clearance (BAC) to address the threat from urban contamination.³¹

OPERATORS AND OPERATIONAL TOOLS

Since it started working in Nagorno-Karabakh in 2000, HALO Trust has been and remains the main organisation conducting land release. Clearance is conducted mostly in the summer months between May and October. The HALO Trust's overall staff numbers have fluctuated in recent years, falling from 159 at the start of 2020 to 137 by September after support from USAID ended in April 2020. In February 2021, HALO recruited new staff, bringing the total complement to 155, increasing the number of survey teams from five to seven and the number of clearance teams from eight to ten.³² By the end of 2021, HALO Trust employed a total of 135 staff in Nagorno-Karabakh.³³ It still had seven non-technical survey teams with a total of 28 personnel, but the number of operational clearance teams had fallen back to eight, with a total of 56 personnel.³⁴ An overall decrease in the number of survey and clearance personnel from March to December 2021 was due to staff who had been displaced and others leaving for Armenia or Russia, as well as decreased funding. The number of non-technical survey staff was likely to drop again in 2022 due to the reduced amount of survey outstanding and less funding.³⁵

The Nagorno-Karabakh Emergency Service, formerly known as the Rescue Service, conducts EOD spot tasks and has reportedly conducted some BAC. The HALO Trust works very closely with the Rescue Service and has provided many of its staff with EOD and clearance training.³⁶ One Nagorno-Karabakh army unit conducts limited demining.³⁷

Russian peacekeepers have conducted some area clearance and spot EOD since the conflict. The units have not shared details of clearance operations but coordinated with HALO Trust on carrying out demolitions.³⁸

A new local mine clearance organisation, HAK (now CHD FUND), was established in 2020, initially with one clearance team. In 2020, it was mainly focused on getting established and learning about contamination and seemingly conducted few operations. In 2020, The HALO Trust provided CHD FUND with information and equipment, including detectors and personal protective equipment (PPE),³⁹ while in 2021, it provided EOD training (Level 1) to two CHD FUND staff.⁴⁰

The HALO Trust started working with Minehound detectors in 2020 following trials the previous year that had showed the detector increased clearance rates by around 10%. This figure was expected to rise further with experience.⁴¹ However by 2021, with the reduction in mined area in Nagorno-Karabakh as a result of Azerbaijan taking back control of most of the mine-contaminated land in late 2020, and HALO Trust's consequent focus away from landmines to CMR clearance, HALO was no longer using Minehound detectors.⁴²

COVID-19 had limited impact on mine clearance operations in 2021 as there was only one four-person mine clearance team working during the year.

28 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

29 Email from Miles Hawthorn, HALO Trust, 18 April 2021.

30 Email from Miles Hawthorn, HALO Trust, 5 May 2022.

31 Emails from Rob Syfret, HALO Trust, 7 May 2020; and Miles Hawthorn, HALO Trust, 18 April 2021.

32 Emails from Rob Syfret, HALO Trust, 7 May 2020; and Miles Hawthorn, HALO Trust, 18 April and 20 May 2021.

33 Email from Fiona Kilpatrick-Cooper, HALO Trust, 6 May 2022.

34 Email from Miles Hawthorn, HALO Trust, 5 May 2022.

35 Ibid.

36 Email from Asqanaz Hambardzumyan, HALO Trust, 26 April 2019.

37 Ibid.

38 Email from Miles Hawthorn, HALO Trust, 18 April 2021.

39 Ibid.

40 Email from Fiona Kilpatrick-Cooper, HALO Trust, 13 June 2022.

41 Emails from Miles Hawthorn, HALO Trust, 18 April 2021; and Rob Syfret, HALO Trust, 13 May 2020.

42 Email from Fiona Kilpatrick-Cooper, HALO Trust, 10 July 2022.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

In 2021, the HALO Trust programme changed its priorities to surveying CMR contamination and clearing other ERW, focusing on the destruction of unexploded submunitions.⁴³ It cleared only one confirmed mined area during the year, covering 12,559m² which contained both anti-personnel and anti-vehicle mines. This is significant reduction on the 54,616m² of anti-personnel mined area released through clearance in 2020, prior to the six-week armed conflict between Armenia and Azerbaijan during which Azerbaijan regained part of Nagorno-Karabakh.

In November 2021, the Russian Ministry of Defence reported that its peacekeepers had cleared approximately 26km² in Nagorno-Karabakh in the year to date, including farmland. Specialists from its engineering units are reported to have discovered and neutralized more than 26,000 items of explosive ordnance and to have checked 2,000 buildings and social infrastructure, including gas pipelines, communication lines, roads to schools, hospitals, and religious sites. The types of devices destroyed and the locations of clearance were not specified.⁴⁴

SURVEY IN 2021

HALO Trust did not reduce or cancel any mined areas through survey in 2021, but did confirm 11,035m² of mined area containing both anti-personnel and anti-vehicle mines, following a tractor accident in January 2021 caused by an anti-vehicle mine which resulted in the death of the driver. This is in contrast to 2020 when The HALO Trust continued with the nationwide survey started in 2019, and identified 58 confirmed hazardous areas (CHA) totalling 1,146,026m² (40 CHAs totalling 935,065m² containing anti-personnel mines and mixed anti-personnel and anti-vehicle mines, and 18 CHAs totalling 210,961m² containing only anti-vehicle mines) and 20 suspected hazardous areas (SHAs) affecting 490,699m² (17 SHAs totalling 446,998m² containing anti-personnel mines and mixed anti-personnel and anti-vehicle mines and 3 SHAs totalling 43,701m² containing only anti-vehicle mines),⁴⁵ prior to the outbreak of the conflict in September 2020.

CLEARANCE IN 2021

As indicated above, in 2021, HALO Trust cleared 12,559m² of mined area in Martakert with the destruction of a one anti-personnel mine, one anti-vehicle mine, one item of UXO, and two items of abandoned explosive ordnance (AXO) (see Table 2). A further three anti-personnel mines and two anti-vehicle mines were destroyed by HALO Trust during EOD spot tasks.

Table 2: Clearance of anti-personnel mined area in 2021⁴⁶

District	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO and AXO destroyed during mine clearance
Martakert	HALO	12,559	1	1	3 (1 item of UXO and 2 items of AXO)
			*3	*2	N/A
Totals		12,559	4	3	3

* EOD spot tasks

43 Email from Miles Hawthorn, HALO Trust, 18 April 2021.

44 Ministry of Defence of the Russian Federation, "Russian sappers clear about 2,600 hectares of Nagorno Karabakh territory", 10 November 2021, at: <https://bit.ly/3o14at4>.

45 Email from David Crawford, Programme Manager, Nagorno Karabakh, 29 September 2022.

46 Email from Miles Hawthorn, HALO Trust, 5 May 2022.

WESTERN SAHARA



CLEARING THE MINES 2022

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: HEAVY

MINE ACTION REVIEW ESTIMATE

50km²

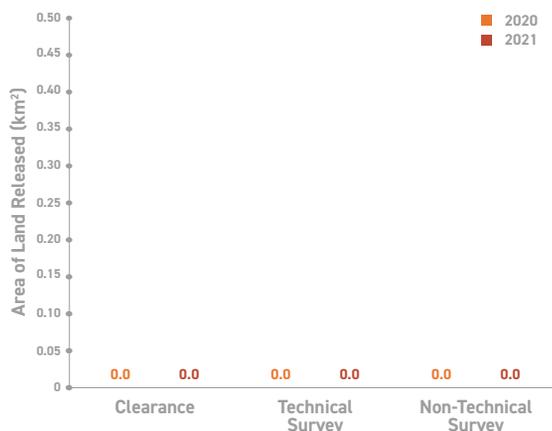
AP MINE
CLEARANCE IN 2021

0M²

AP MINES
DESTROYED IN 2021

0

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- The Saharawi Arab Democratic Republic should reaffirm its written commitment to respect and implement the Anti-Personnel Mine Ban Convention (APMBC), including clearance of all anti-personnel mines east of the Berm, consonant with its international human rights obligations. This commitment should include the annual submission of a voluntary Article 7 report.
- The Saharawi Mine Action Coordination Office (SMACO) should revise its strategy to include a more realistic date for completion of clearance of anti-personnel mines with annual survey and clearance targets, and a detailed budget.
- Greater support should be provided to SMACO to enable it to continue to coordinate mine action in Western Sahara, east of the Berm and ensure that capacity development efforts are not lost.
- Mine action in Western Sahara must not become forgotten or overlooked by the international mine action community. Support must still be given to address remaining mine, cluster munition, and other explosive remnants of war (ERW) contamination.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Saharawi Mine Action Coordination Office (SMACO) [Western Sahara, east of the Berm]
- Royal Moroccan Army [Western Sahara, west of the Berm]

NATIONAL OPERATORS

- Royal Moroccan Army

INTERNATIONAL OPERATORS

- SafeLane Global
- Danish Refugee Council (DRC)'s Humanitarian Disarmament and Peacebuilding department

OTHER ACTORS

- United Nations Mine Action Service (UNMAS) Western Sahara

UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of mine contamination across Western Sahara is not known, although the areas along the Berm¹ are thought to contain some of the densest mine contamination in the world.² The contamination is a result of fighting in previous decades between the Royal Moroccan Army (RMA) and the Popular Front for the Liberation of Saguia el Hamra and Rio de Oro (Polisario Front) forces.

According to the United Nations Mine Action Service (UNMAS), the primary mine threat in Western Sahara east of the Berm, excluding both the Berm itself, restricted areas, and the buffer strip, is from anti-vehicle mines rather than anti-personnel mines; cluster munition remnants (CMR) are

also a major hazard.³ As at end 2021, no areas suspected or confirmed to contain *solely* anti-personnel mines remained to the east of the Berm. Most mine contamination identified during ongoing and historical clearance efforts was from anti-vehicle mines though some areas previously thought to contain only anti-vehicle mines were found to also contain anti-personnel mines following non-technical survey conducted in the Agwanit Area of Responsibility.⁴

At the end of 2021, land in Western Sahara to the east of the Berm contained a total of 25 areas confirmed or suspected to contain mixed anti-personnel and anti-vehicle mine contamination covering a total of 212km² (see Table 1).⁵

Table 1: Mined area east of the Berm (at end 2021)⁶

Type of contamination	CHAs	Area (km ²)	SHAs	Area (km ²)	Total CHAs and SHAs	Total area (km ²)
AP/AV mines	15	86.06	10	125.66	25	211.72
Totals	15	86.06	10	125.66	25	211.72

AP = Anti-personnel AV = Anti-vehicle CHA = Confirmed hazardous area SHA = Suspected hazardous area

Both the north and south of Western Sahara are known or suspected to contain anti-personnel mines, with the 25 areas covering an estimated total size of 212km² remaining at the end of 2021, as set out in Table 2.⁷ From 2020, the number of confirmed hazardous areas (CHAs) and suspected hazardous areas (SHAs) has remained the same while there has been a reduction in the area of CHAs by 3.99km² and a small reduction in the area of SHAs by 0.3km², which equates to an overall reduction in the estimated extent of contamination of 4.29km². This decrease is due to data cleaning and a more accurate mapping system used by the Information Management System for Mine Action (IMSMA) Core.⁸

Table 2: Mined area containing anti-personnel mines by province east of the Berm (at end 2021)⁹

Province	CHAs	Area (km ²)	SHAs	Area (km ²)	Total CHAs and SHAs	Total area (km ²)
North Region	5	0.27	3	4.11	8	4.38
South Region	10	85.79	7	121.55	17	207.34
Totals	15	86.06	10	125.66	25	211.72

In September 2018, UNMAS reported that following non-technical survey efforts, east of the Berm, 10 of the then 27 mined areas remained, covering an estimated total of almost 120km². These areas, which are located within the 5km-wide buffer strip, are not accessible for clearance.¹⁰ Clearance of the buffer strip of mines and explosive remnants of war (ERW) is not foreseen in the UN Mission for the Referendum in Western Sahara (MINURSO) Military Agreements No. 2 (with the Polisario Front) and No. 3 (with the RMA). This, according to the UN, considerably limits the ability of MINURSO military observers to patrol and verify developments.¹¹ No survey or clearance of the buffer strip was conducted during 2021.¹²

1 A 2,700km-long defensive wall, the Berm was built during the conflict, dividing control of the territory between Morocco on the west and the Polisario Front on the east. The Berm is 12 times the length of the erstwhile Berlin Wall and second in length today only to the Great Wall of China.

2 See UN Mine Action Service (UNMAS), "About UNMAS in Western Sahara", updated May 2015, at: <http://bit.ly/2MEmsjN>; and Action on Armed Violence (AOAV), "Making life safer for the people of Western Sahara", London, August 2011.

3 Email from Graeme Abernethy, UNMAS, 1 March 2018.

4 Emails from Leon Louw, Programme Manager, UNMAS, 30 March 2021; Edwin Faigmane, Programme Officer, UNMAS, 18 June 2020; Robert Thompson, Chief of Operations, UNMAS, 31 July 2019; Graeme Abernethy, UNMAS, 1 March 2018; and Virginie Auger, UNMAS, 29 March 2017.

5 Email from Edwin Faigmane, UNMAS, 21 March 2022.

6 Ibid.

7 Ibid.

8 Emails from Leon Louw, UNMAS, 30 March 2021; and Edwin Faigmane, UNMAS, 24 May 2022.

9 Ibid.

10 Email from Graeme Abernethy, UNMAS, 14 September 2018. The buffer strip is an area 5km wide east of the Berm. MINURSO, "Ceasefire Monitoring Overview", undated but accessed 1 June 2016, at: <http://bit.ly/2Yxg1nv>.

11 "Report of the Secretary-General on the situation concerning Western Sahara", UN doc. S/2017/307, 10 April 2017, p. 8; and email from Edwin Faigmane, UNMAS, 6 August 2020.

12 Email from Leon Louw, UNMAS, 4 February 2022.

UNMAS reported that no previously unrecorded anti-personnel mine contamination was added to Western Sahara's information management database in 2021.¹³

The RMA controls territory to the west of the Berm where it has been conducting large-scale demining. According to UNMAS, the RMA cooperates with the MINURSO mine action component and submits regular monthly reports of its activities in the Territory, west of the Berm, helping to build a clearer understanding of the mine and ERW threat across Western Sahara.¹⁴

Western Sahara also has a significant problem from CMR and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants 2022* report on Western Sahara for further information).¹⁵

PROGRAMME MANAGEMENT

UNMAS Western Sahara, formerly the MINURSO Mine Action Coordination Centre (MACC), facilitates MINURSO monitoring of the ceasefire and ensures the safe passage of UN personnel. On 29 October 2021, MINURSO's mandate was extended for an additional 12 months until 31 October 2022 under UN Security Council Resolution 2602. UNMAS Western Sahara serves as the UN focal point for mine action activities within the MINURSO area of operations. Its contracted teams work in areas east of the Berm only. The RMA conducts its own demining in areas west of the Berm. In 2013–14, the Polisario Front, with UN support, established SMACO, which is responsible for coordinating mine action activities in Western Sahara east of the Berm, excluding the buffer strip.¹⁶

In 2021, UNMAS Western Sahara provided SMACO with a US\$26,497 grant to cover some of its operating expenses. SMACO has reported to UNMAS that it has also received some funding from the International Committee of the Red Cross (ICRC). UNMAS has advocated that SMACO and the Sahrawi authorities provide their own funding to support SMACO activities. SMACO, which also receives ongoing capacity development support from UNMAS Western Sahara, is being supported to develop a resource mobilisation plan.¹⁷

UNMAS Western Sahara receives funding from the UN assessed budget for land release activities in the area east of the Berm. It received US\$3.03 million for the period 1 July 2021 to 30 June 2022.¹⁸

ENVIRONMENTAL POLICIES AND ACTION

Although there is no formal environmental policy in place, UNMAS Western Sahara has reported that environmental impact is considered as part of the tasking process and implementation plan in order to minimise potential harm from demining activities.¹⁹

GENDER AND DIVERSITY

UNMAS has reported that gender policies are implemented in accordance with UNMAS, the UN Office for Project Services (UNOPS), and MINURSO guidelines, as well as with direction from the Polisario Front.²⁰ UNMAS has a gender strategy as part of its overall country strategy.²¹ UNMAS also reported that gender has been mainstreamed into Western Sahara's national mine action work plans and the SMACO 2019–23 mine action strategy.²² During survey, efforts are made to consider the needs of men, women, girls, and boys to ensure more effective and efficient operations, despite challenges presented by conducting survey activities targeting Bedouin populations.²³

UNMAS reported there is equal access to employment for qualified women and men in survey and clearance teams in Western Sahara, east of the Berm, including for managerial level/supervisory positions. In 2021, 20% (one of five) of staff in SMACO were women in managerial/supervisory positions while in SafeLane Global (UNMAS's contractor) 14% of managerial staff (one of seven) and 4% of survey and clearance teams (one of twenty-four) were women.²⁴ Through SMACO, UNMAS also supports the Sahrawi Mine Action Women's Team (SMAWT), an all-female organisation working on risk education in Rabouni and the five Sahrawi refugee camps. All national deminers, both male and female, are Sahrawi.²⁵

13 Ibid.

14 Emails from Leon Louw, UNMAS, 4 February 2022; Graeme Abernethy, UNMAS, 14 September 2018; Edwin Faigmane, UNMAS, 18 June 2020; and UNMAS, "2017 Portfolio of Mine Action Projects: MINURSO".

15 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017, and email, 17 May 2016.

16 Response to questionnaire by Sarah Holland, UNMAS, 24 February 2014, and email, 25 February 2014; and email from Edwin Faigmane, UNMAS, 6 August 2020.

17 Emails from Leon Louw, UNMAS, 4 February 2022; and Edwin Faigmane, UNMAS, 21 March 2022.

18 Emails from Leon Louw, UNMAS, 4 February 2022; and Edwin Faigmane, UNMAS, 24 May 2022.

19 Email from Leon Louw, UNMAS, 4 February 2022.

20 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.

21 Email from Leon Louw, UNMAS, 30 March 2021.

22 Email from Edwin Faigmane, UNMAS, 18 June 2020.

23 Emails from El Hadji Mamadou Kebe, Norwegian People's Aid (NPA), 4 May 2019 and 14 March 2018.

24 Email from Leon Louw, UNMAS, 4 February 2022.

25 Email from Leon Louw, UNMAS, 30 March 2021.

INFORMATION MANAGEMENT AND REPORTING

According to UNMAS, the IMSMA database for Western Sahara, east of the Berm, improved as a result of an ongoing data audit initiated at the end of 2015.²⁶ The Geneva International Centre for Humanitarian Demining (GICHD) has also provided ongoing support to correct database errors, and an upgrade to the latest database software version, IMSMA Core, was scheduled to take place in August 2019.²⁷ This did not occur and was further delayed due to the COVID-19 lockdown, but as at February 2022 the migration was complete and personnel were undergoing refresher training before a full switch to IMSMA Core.²⁸

PLANNING AND TASKING

In 2019, SMACO developed its strategy for mine action in Western Sahara, east of the Berm, covering 2019–23 (in line with the global UN Mine Action Strategy 2019–2023). In order to achieve a Western Sahara free of the impact of mines and ERW, SMACO has established the following timed objectives:

- to implement efficient and effective communication with national and international organisations by 2019
- to establish an effective mechanism for data collection of accidents and victims which will be shared with partners according to the SMACO Data Protection Policy by 2019
- to establish sustainable and constant funding of SMACO by 2020
- to ensure availability of human resources to comprehensively manage mine action by 2020
- to fully implement a professional management structure within SMACO by 2021
- to create a discussion platform (think tank) for a national victim rights protection policy by 2022
- to establish a national employment policy for mine action activities by 2023.²⁹

As at February 2022, SMACO had developed a form for accident and victim data collection in Western Sahara, east of the Berm and victims, following a series of workshops with stakeholders, which had been approved by the Sahrawi Ministry of Defence. The resultant form is available in both Arabic and English. A mine action work plan was in place for UNMAS in 2021, developed by UNMAS Western Sahara, in support of MINURSO's mandate.³⁰ The other objectives have still to be realised.

UNMAS Western Sahara mine action activities continue to support MINURSO's mandate.³¹ UNMAS and SMACO identify priorities for clearance of both minefields and cluster munition strikes east of the Berm in conjunction with MINURSO. Priorities are identified based on humanitarian needs for the safety and freedom of movement of local populations, while UNMAS Western Sahara facilitates the ceasefire and ensures the safe passage of UN personnel.³²

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Local mine action standards were developed and finalised in 2016 by UNMAS, together with SMACO, and in coordination with mine action partners. A first annual review of the standards was completed in November 2018 with a review board consisting of representatives from UNMAS, SMACO, and implementing partners. No significant changes were made, and UNMAS reported in June 2019 that translation of the standards into Arabic had been completed and shared with SMACO.³³ UNMAS reported that the standards are reviewed annually but that no updates were made in 2021.³⁴ As part of their national standards, SMACO require that all implementation plans consider environmental impact.³⁵

An external quality management system was in place from 2018 and implemented by UNMAS and SMACO to the east of the Berm.³⁶

26 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.

27 Email from Robert Thompson, UNMAS, 31 May 2019.

28 Email from Leon Louw, UNMAS, 4 February 2022.

29 SMACO "Strategic Plan 2019–2023", at: <http://bit.ly/38jaGm2>; and email from Robert Thompson, UNMAS, 31 July 2019.

30 Email from Leon Louw, UNMAS, 4 February 2022.

31 Email from Edwin Faigmane, UNMAS, 18 June 2020.

32 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018; and Edwin Faigmane, UNMAS, 6 August 2020.

33 Emails from Robert Thompson, UNMAS, 29 April 2019; and Dandan Xu, UNMAS, 28 June 2019.

34 Email from Leon Louw, UNMAS, 4 February 2022.

35 Email from Edwin Faigmane, UNMAS, 18 June 2020.

36 Emails from Robert Thompson, UNMAS, 29 April 2019; and Edwin Faigmane, UNMAS, 28 July 2020.

OPERATORS AND OPERATIONAL TOOLS

Table 3: Operational clearance capacities deployed in 2021³⁷

Operator	Manual teams	Total deminers*	Dog teams	Mechanical assets	Comments
SafeLane Global (for UNMAS Western Sahara)	1	10	0	0	Decrease from 2020
Totals	1	10	0	0	

* Excluding team leaders, medics, and drivers.

SafeLane Global (formerly Dynasafe MineTech Limited, DML) was the implementing operator for UNMAS Western Sahara in 2021. During 2021, due to COVID-19 restrictions, 75% of personnel were stood down. The teams were scaled up after the restrictions were lifted but were still operating at 50% capacity due to the conflict. No changes to capacity were expected in 2022.³⁸

Danish Refugee Council (DRC)'s Humanitarian Disarmament and Peacebuilding sector did not conduct any survey or clearance in Western Sahara in 2021. During 2021, DRC was planning to deploy teams to conduct non-technical survey in Western Sahara east of the Berm, but was unable to do so due to restrictions from COVID-19 and the renewal of conflict between the RMA and the Polisario Front. As at February 2022, with the border between Algeria and Western Sahara opened again, and DRC was seeking funding to be able to reinstate non-technical survey. None had been secured as of writing.³⁹

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

No survey or clearance of mined area was conducted in 2021 or in 2020. According to UNMAS, the absence of survey and clearance during the two years was due to the partial suspension of clearance operations in accordance with COVID-19 protocols as well as the ending of the three-decade-long ceasefire between Morocco and Polisario in November 2020. This led to the suspension of survey and clearance operations due to Polisario's refusal to approve them. This meant that only the explosive ordnance disposal (EOD) response team were on standby for emergency EOD and route verification tasks.⁴⁰

PROGRESS TOWARDS COMPLETION

Western Sahara is not a State Party to the APMBC and cannot adhere as the Saharawi Arab Democratic Republic is not recognised as a State by the UN Secretary-General. In June 2014, however, the Saharawi Arab Democratic Republic submitted a voluntary APMBC Article 7 transparency report to the UN "as a sign of the support of the Saharawi State for the goals of the Treaty".⁴¹

In SMACO's new mine action strategy 2019–23, the vision is for Western Sahara to be free of the impact of mines and ERW by 2023.⁴² No land release took place during 2020 or 2021 as operations were restricted by both COVID-19 and the resurgence of conflict. Western Sahara will not meet its 2023 completion date, which should now be revised along with the timed objectives in SMACO's Strategic Plan 2019–2023. As at May 2022, UNMAS were in the process of obtaining permission to restart clearance operations in safe areas.⁴³ In support of this, there is a need for increased resources and capacity at SMACO.

37 Email from Leon Louw, UNMAS, 4 February 2022.

38 Emails from Leon Louw, UNMAS, 30 March 2021 and 4 February 2022.

39 Email from Catherine Smith, Regional Coordinator, DRC, 1 February 2022.

40 Email from Leon Louw, UNMAS, 30 March 2021; and UN Country Level Survey for the Monitoring & Evaluation Mechanism of the United Nations Mine Action Strategy 2019 – 2023.

41 "SADR initiative welcomed by Maputo Conference on Mine Ban", *Sahara Press Service*, 2 July 2014, at: <http://bit.ly/2GE1JqW>.

42 SMACO "Strategic Plan 2019–2023", at: <http://bit.ly/38jaGm2>.

43 Email from Edwin Faigmane, UNMAS, 24 May 2022.

ANNEX

The background of the page is composed of several overlapping, angular shapes in various shades of orange and red. The colors range from a deep, dark red to a bright, light orange. The shapes are layered, creating a sense of depth and movement. The overall composition is abstract and modern.

ANNEX 1: ARTICLE 5 OF THE ANTI-PERSONNEL MINE BAN CONVENTION

ARTICLE 5: DESTRUCTION OF ANTI-PERSONNEL MINES IN MINED AREAS

1. Each State Party undertakes to destroy or ensure the destruction of all anti-personnel mines in mined areas under its jurisdiction or control, as soon as possible but not later than ten years after the entry into force of this Convention for that State Party.
2. Each State Party shall make every effort to identify all areas under its jurisdiction or control in which anti-personnel mines are known or suspected to be emplaced and shall ensure as soon as possible that all anti-personnel mines in mined areas under its jurisdiction or control are perimeter-marked, monitored and protected by fencing or other means, to ensure the effective exclusion of civilians, until all anti-personnel mines contained therein have been destroyed. The marking shall at least be to the standards set out in the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices, as amended on 3 May 1996, annexed to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects.
3. If a State Party believes that it will be unable to destroy or ensure the destruction of all anti-personnel mines referred to in paragraph 1 within that time period, it may submit a request to a Meeting of the States Parties or a Review Conference for an extension of the deadline for completing the destruction of such anti-personnel mines, for a period of up to ten years.
4. Each request shall contain:
 - a) The duration of the proposed extension;
 - b) A detailed explanation of the reasons for the proposed extension, including:
 - (i) The preparation and status of work conducted under national demining programmes;
 - (ii) The financial and technical means available to the State Party for the destruction of all the anti-personnel mines; and
 - (iii) Circumstances which impede the ability of the State Party to destroy all the anti-personnel mines in mined areas;
 - c) The humanitarian, social, economic, and environmental implications of the extension; and
 - d) Any other information relevant to the request for the proposed extension.
5. The Meeting of the States Parties or the Review Conference shall, taking into consideration the factors contained in paragraph 4, assess the request and decide by a majority of votes of States Parties present and voting whether to grant the request for an extension period.
6. Such an extension may be renewed upon the submission of a new request in accordance with paragraphs 3, 4 and 5 of this Article. In requesting a further extension period a State Party shall submit relevant additional information on what has been undertaken in the previous extension period pursuant to this Article.

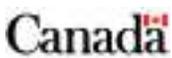
ABBREVIATIONS AND ACRONYMS

The background of the page is composed of several overlapping, semi-transparent geometric shapes in various shades of orange and red. These shapes create a dynamic, layered effect, with some appearing as broad diagonal bands and others as more complex, angular polygons. The overall aesthetic is modern and minimalist.

ABBREVIATIONS AND ACRONYMS

AIM	Abandoned Improvised Mines (Afghanistan)	LIS	Landmine Impact Survey
AP	Anti-personnel	MAG	Mines Advisory Group
APMBC	1997 Anti-Personnel Mine Ban Convention	MDD	Mine detection dog
AV	Anti-vehicle	MoU	Memorandum of Understanding
AXO	Abandoned explosive ordnance	MRE	Mine risk education
BAC	Battle area clearance	NATO	North Atlantic Treaty Organization
BiH	Bosnia and Herzegovina	NGO	Non-governmental organisation
CCM	2008 Convention on Cluster Munitions	NMAS	National Mines Action Standards
CHA	Confirmed hazardous area	NPA	Norwegian People's Aid
CMR	Cluster munition remnants	NSAG	Non-state armed group
DCA	DanChurch Aid	OAP	Oslo Action Plan
DDG	Danish Demining Group	OAS	Organization of American States
EO	Explosive ordnance	OSCE	Organization for Security and Co-operation in Europe
EOD	Explosive ordnance disposal	PPE	Personal protective equipment
EORE	Explosive ordnance risk education	QA	Quality assurance
ERW	Explosive remnants of war	QC	Quality control
EU	European Union	QM	Quality management
FSD	Swiss Foundation for Mine Action	SHA	Suspected hazardous area
GICHD	Geneva International Centre for Humanitarian Demining	SOP	Standing (or standard) operating procedure
GIS	Geographic information system	TWG	Technical working group
HI	Humanity and Inclusion	UN	United Nations
ICRC	International Committee of the Red Cross	UNDP	United Nations Development Programme
IED	Improvised explosive device	UNICEF	United Nations Children's Fund
IMAS	International Mine Action Standards	UNMAS	United Nations Mine Action Service
IMSMA	Information Management System for Mine Action	UXO	Unexploded ordnance
IP	Implementing partner	VA	Victim assistance
ITF	International Trust Fund (ITF) Enhancing Human Security	VTF	Voluntary Trust Fund (United Nations)

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