MINE ACTION REVIEW

CLEARING THE MINES 2021

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

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

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- *Global contamination from anti-personnel mines*

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KEY FINDINGS

- **In 2020**, a global total of more than **153.4 square kilometres of mined area** was cleared of anti-personnel mines, with the destruction of almost 173,000 anti-personnel mines and more than 16,000 anti-vehicle mines. This represents a 17% increase on 131.0km^2 cleared in 2019,[1] and the highest worldwide total since 2015. It is a particularly impressive achievement against the backdrop of the continuing COVID-19 pandemic and associated restrictions.

- Two States Parties to the 1997 Anti-Personnel Mine Ban Convention (APMBC)—**Chile and the United Kingdom—declared fulfilment of their Article 5 clearance obligations** in the course of 2020. Argentina has not yet accepted the declaration of fulfilment by the United Kingdom, which pertains to the Falkland Islands/Malvinas over which both States claim sovereignty. But to the extent that all mined areas have been cleared on the islands, Argentina is considered also to be no longer mine-affected.

  Mauritania, which had previously declared fulfilment of its Article 5 obligations in 2018, reported newly discovered mined areas under its jurisdiction or control in 2020. In May 2021, **Guinea-Bissau**, which had declared completion of mine clearance in 2012, similarly 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).[2] **Mauritania** was removed from this list in 2020 and **Guinea-Bissau** was removed in 2021 as both have reported newly discovered mined areas under their jurisdiction or control. Both States have formally requested a new Article 5 deadline.

- As of 1 October 2021, **56 States and 3 other areas** (territories not recognised as States) **were contaminated with anti-personnel mines.**[3]

  Of the 56 affected States around the world, 34 are party to the APMBC. As at 1 October 2021, **four of these States Parties (Cameroon, Eritrea, Guinea-Bissau, and Mali) did not have a legal Article 5 deadline in force** even though each has ongoing survey and clearance obligations under the Convention.

  In the cases of **Cameroon** and **Mali**, these obligations result from new use of anti-personnel mines of an improvised nature by non-State armed groups on their territory. In the case of **Eritrea**, States Parties should address a critical violation of Article 5 by mandating a fact-finding mission to the country with a view to supporting Eritrea's swift return to compliance. Eritrea's Article 5 deadline expired on 31 December 2020 and it has not submitted a request for an extension. Cameroon, Eritrea, and Mali must all request an extension to their previously expired deadlines and submit Article 7 reports detailing the contamination. They must elaborate plans to clear all anti-personnel mines, including those of an improvised nature, as soon as possible.

  In August 2021, **Guinea-Bissau** requested a new Article 5 deadline of 31 December 2022, which was being considered at the Nineteenth Meeting of States Parties in November 2021.

- 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 100km^2 of land), while **heavy contamination** (covering more than 20km^2) **exists in Angola, Bosnia and Herzegovina (BiH), Thailand, Turkey, and Yemen.** In other affected States Parties, the extent of anti-personnel mine contamination is medium or light.

- The largest clearance output was reported for Cambodia, which recorded almost 50km^2 of clearance in 2020, according to information provided by the Cambodian Mine Action and Victim Assistance Authority (CMAA). Close behind was Croatia, which also achieved clearance of almost 50km^2 of mined area during the year. In Afghanistan, recorded clearance dropped by 13% but was still more than 24km^2. The greatest number of mines destroyed in 2020 in a single country (43,157) was in Sri Lanka followed by Zimbabwe (26,911). Some 98% of global anti-personnel mine clearance in 2020 was in States Parties to the APMBC. Of the 11 States that cleared 1km^2 or more of mined area, only Israel was a State not party to the APMBC.

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1 The 2019 total may be an underreporting of global clearance, as the Cambodian Mine Action and Victim Assistance Authority (CMAA) subsequently reported in 2021 significantly increased annual clearance data for Cambodia for 2019. However, the amended 2019 CMAA data looks likely to also contain significant anti-vehicle mine clearance.

2 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 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.

3 **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**, **Turkey**, **Ukraine**, Uzbekistan, Vietnam, *Western Sahara*, **Yemen**, and **Zimbabwe**. States Parties to the APMBC are in bold. Other areas are in italics.

- The extent of implementation of Article 5 clearance obligations varies widely between States Parties. **Of the 34 mine-affected States Parties as at October 2021, only two were firmly on track to meet their respective treaty deadlines: Oman** (February 2025) and **Sri Lanka** (June 2028), with **Zimbabwe** also likely to meet its deadline (end 2025). In addition, despite failing to clear any mined area in 2020, **Peru** was still just on track to meet its end-2024 deadline. It was unclear whether **Chad, Croatia**, and **BiH** would complete clearance by their extended Article 5 deadlines of January 2025, March 2026, and March 2027, respectively.

  The other 27 States Parties were either not clearly on track to fulfil Article 5 in time or were in violation of their obligations under the Convention. No clearance was recorded or reported for 2020 in 11 States Parties: Cameroon, Cyprus, Ecuador, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Peru, and Senegal; as well as in Guinea-Bissau, which only reported discovering previously unknown mined areas in 2021. **Both Eritrea and Senegal are in breach of their clearance obligations under Article 5 of the APMBC** having made altogether inadequate progress in clearing mined areas under their jurisdiction or control. There is also significant concern about the political will in DR Congo to fulfil its Article 5 obligations.

- As at 1 October 2021, Five mine-affected States Parties – **Cameroon, Eritrea, Mali, Niger**, and **Nigeria** – have failed to provide information on implementation of their Article 5 obligations, through their Article 7 transparency reports, for two or more consecutive years. Reporting under Article 7 is a legal obligation under the Convention. As per Action number 49 of the Oslo Action Plan, "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."

- **In Mine Action Review's assessment of national mine action performance in 2020**, Chile, the United Kingdom, and Zimbabwe were all rated Very Good. Both Chile and the United Kingdom fulfilled their Article 5 clearance obligations during the year. Angola, Cambodia, Sri Lanka, and Thailand were all rated Good. Afghanistan, BiH, Colombia, Croatia, Iraq, Mauritania, Oman, Peru, Serbia, South Sudan, Sudan, Tajikistan, and Turkey were all ranked as Average. Chad, DR Congo, Ecuador, Ethiopia, Somalia, Ukraine, and Yemen were all rated Poor. Eritrea, Niger, and Senegal were all ranked as Very Poor. The greatest improvement in programme performance in 2020 was registered in Colombia, Oman, and Thailand. The greatest drops in programme performance compared to 2019 were registered in BiH, Ethiopia, and Peru.

- We encourage readers to also refer to Mine Action Review's ***Guide to the Oslo Action Plan and results of 2021 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.

- **Environmental considerations are also becoming increasingly important in mine action** as they are across all sectors.

OVERVIEW

SUMMARY OF PROGRESS

As of 1 October 2021, 56 States and 3 other areas (territories not recognised as States) were contaminated with anti-personnel mines. Two States Parties to the 1997 Anti-Personnel Mine Ban Convention (APMBC)—Chile and the United Kingdom—declared fulfilment of their Article 5 clearance obligations in the course of 2020. Argentina has not yet accepted the declaration of fulfilment by the United Kingdom, which pertains to the Falkland Islands/Malvinas over which both States claim sovereignty. But to the extent that all mined areas have been cleared on the islands, Argentina is considered also to be no longer mine-affected. Mauritania, which had previously declared fulfilment of its Article 5 obligations in 2018, reported newly discovered mined areas under its jurisdiction or control in 2020. In May 2021, Guinea-Bissau, which had declared completion of mine clearance in 2012, similarly reported that it had discovered previously unrecorded mined areas on its territory.

Global clearance of mined areas in 2020 totalled almost 153.4km^2, a 17% increase on the 131.0km^2 cleared in 2019,[1] and the highest worldwide total since 2015. This is a remarkable achievement given the impact of the COVID-19 pandemic and associated restrictions. Clearance operations and explosive ordnance disposal (EOD) in 2020 destroyed a combined total of almost 173,000 anti-personnel mines and more than 16,000 anti-vehicle mines.

Of the 56 affected States around the world, 34 are party to the APMBC. As at 1 October 2021, four of these States Parties (Cameroon, Eritrea, Guinea-Bissau, and Mali) did not have a legal Article 5 deadline in force even though each has ongoing survey and clearance obligations under the Convention. In the cases of Cameroon and Mali, these obligations result from new use of anti-personnel mines of an improvised nature by non-State armed groups on their territory. Indeed, emplacement of mines by armed groups across the Sahel is of growing concern.

In the case of Eritrea, States Parties should address a critical violation of Article 5 by mandating a fact-finding mission to the country with a view to supporting Eritrea's swift return to compliance. 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 APMBC.

Cameroon, Eritrea, and Mali must all request an extension to their previously expired deadlines and submit Article 7 reports detailing the contamination. They must elaborate plans to clear all anti-personnel mines, including those of an improvised nature, as soon as possible. In August 2021, Guinea-Bissau requested a new Article 5 deadline of 31 December 2022, which was being considered at the Nineteenth Meeting of States Parties in November 2021, with a pledge to submit a further follow-on extension before the end of March 2022.

Together with Eritrea, Senegal was in breach of its clearance obligations under the Convention as at October 2021. Both States have made altogether inadequate progress in clearing mined areas under their jurisdiction or control. Unjustified delays in clearing anti-personnel mines, especially but not only around military bases, borders, or other "sensitive areas", in particular during armed conflict constitutes prohibited use under Article 1 of the APMBC. In this regard, Senegal has acknowledged, after claiming for several years that all of its military bases had been cleared, that anti-personnel mines remained between one of its military cantonments and a non-State armed group with which it is engaged 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.[2] Taking operational advantage of existing mined areas in armed conflict, even when laid by another party, constitutes prohibited use of anti-personnel mines.[3] Senegal must therefore clear the mined area in question without delay to ensure it is in compliance with the Convention.

GLOBAL MINE CONTAMINATION

As at 1 October 2021, 56 States and 3 other areas (territories that are not internationally recognised as States) were contaminated by anti-personnel mines, as listed in Table 1. Asia (including the Middle East) is the most affected continent, 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.

1 The 2019 total may be an underreporting of global clearance, as the Cambodian Mine Action and Victim Assistance Authority (CMAA) subsequently reported in 2021 significantly increased annual clearance data for Cambodia for 2019. However, the amended 2019 CMAA data looks likely to also contain significant anti-vehicle mine clearance.

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

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

Africa is the second most affected region with 19 States and Western Sahara (the Sahrawi Arab Democratic Republic) remaining contaminated with anti-personnel mines. Angola, Cameroon, Chad, 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 other area Western Sahara.

In addition, State Party Burkina Faso may also be contaminated by victim-activated improvised explosive devices (IEDs) which meet the definition of an anti-personnel mine under the APMBC. The UN Mine Action Service (UNMAS) deployed to Burkina Faso in September 2019. As of June 2021, the majority of explosive accidents had occurred "along roads".[4] Casualty data reported by the media suggest that the munitions are activated by vehicles rather than people. This includes "charettes" – two-wheeled carts used by families fleeing the fighting to transport children and goods.[5] Thus, migrant or displaced populations were at particular risk.

In continental Europe, 10 States along with Kosovo and Nagorno-Karabakh are still mine-affected. The seven States Parties are: Bosnia and Herzegovina (BiH), Croatia, Cyprus, Serbia, 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.

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,[6] 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.[7]

Table 1: Mine-affected States and other areas (at 1 October 2021)

States Parties		States not party		Other areas
Afghanistan	Niger	Armenia	Pakistan	Kosovo
Angola	Nigeria	Azerbaijan	Russia	Nagorno-Karabakh
BiH	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	Turkey	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.

4 UNMAS, "Burkina Faso", last updated June 2021, at: https://bit.ly/3fpBYMz.

5 See, e.g., "14 dead in a bus explosion caused by an IED", *Le Point Afrique*, 5 January 2020, at: https://bit.ly/3k0p8ph; "Burkina Faso: 8 civilians killed in an ambush of Sahel (press release)", *Anadol Agency*, 19 February 2021, at: https://bit.ly/3AODwYx; "Burkina: two women killed by an IED", *Monde Afrique*, 24 February 2021, at: https://bit.ly/2VUqev1; and "Burkina: three persons killed by an IED", *Le Figaro*, 5 July 2021, at: https://bit.ly/3B3f6Lh.

6 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/3AJ4Ibc; Reuters, "Venezuela dice que dos militares mueren por mina antipersona cerca de frontera con Colombia", 2 April 2021, at: https://reut.rs/3sl7Reg.

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

Table 2 below summarises what is known or reasonably believed about the extent of contamination in affected States Parties. It is therefore an assessment by Mine Action Review of the extent of anti-personnel mine contamination based on available evidence, as opposed to the claims of governments or mine action programmes, some of which do not stand up to scrutiny.

Table 2: Extent of anti-personnel mined areas in affected APMBC States Parties (at 1 October 2021)

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

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

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 – see Mine Action Review's separate publication, *Guide to the Oslo Action Plan and results of 2021 monitoring: survey and clearance*, for detail on those States Parties which have yet to establish an accurate baseline of contamination. Once a national baseline has been established, release by non-technical and technical survey is a critical focus. Such surveys serve to confirm (or discredit) specific areas that contain mine contamination on the basis of evidence and significantly reduce the size of polygons from exaggerated estimates.

Clearing suspected mined areas without also employing survey continues to occur with respect to far too many mined areas that prove not to contain anti-personnel mines (or any other explosive ordnance). In Angola, for example, operators cleared more than 0.55km^2 of mined area but found no mines (or any other explosive items). This constitutes almost one third of total clearance for the year. In Colombia, The HALO Trust cleared 37 areas in 2020 totalling 86,414m^2 but found no mines.[8] According to Colombia's 2020 Article 5 deadline extension request, the high proportion of clearance conducted on areas without mine contamination was in part due to the high perception of risk from anti-personnel mines by affected communities.[9] In accordance with good practice in land release, clearance should only occur on land where firm evidence exists that contamination is present.

8 Emails from Caterina Weller, DRC, 5 May 2021; and Richard Scott, HALO Trust, 14 May 2021.

9 Colombia 2020 Article 5 deadline Extension Request, p. 67.

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, continue to be laid by non-state armed groups, including in Afghanistan, Colombia, Nigeria, Yemen, several countries in the Sahel, and elsewhere. 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 fall within the jurisdiction or control of a State Party, all of the Convention's provisions apply.

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 more conventionally manufactured landmines.[10] 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).[11] Reporting guidelines that encompass improvised anti-personnel mines have also been adopted under the IMAS.[12]

STATES THAT HAVE COMPLETED MINE CLEARANCE SINCE 1997

Since the adoption of the APMBC in 1997, clearance has been completed in 33 States (see Table 3), 32 of which are party to the Convention, as well as State not party Nepal and one other area (Taiwan). In 2020, Chile and the United Kingdom became the latest States Parties to report the fulfilment of their Article 5 clearance obligations. Chile made a formal declaration of its completion by video to the Eighteenth Meeting of States Parties in November 2020. In a statement at the Meeting, the United Kingdom said it would shortly submit a voluntary declaration of completion.[13] Argentina should also be in a position to confirm fulfilment of its Article 5 clearance obligations, once it has satisfied itself that the United Kingdom has released all mined areas on the Falkland Islands/Malvinas.

Mauritania was removed from this list in 2020 and Guinea-Bissau was removed in 2021 as both have reported newly discovered mined areas under their jurisdiction or control. Both States have formally requested a new Article 5 deadline. Venezuela remains on the list as there is no confirmation of new anti-personnel mine contamination.

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

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[14]	Swaziland	

* States Parties not listed on the APMBC 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 APMBC and/or have not made a formal declaration of fulfilment of their clearance obligations under the Convention. ** State not party to the APMBC.

10 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.

11 IMAS 09.31: "Improvised Explosive Device Disposal", First Edition, February 2019, at: https://bit.ly/37eGI2P.

12 IMAS 05:10: "Information Management for Mine Action", Second Edition, Last amended 1 February 2020, at: http://bit.ly/3bRGIaP.

13 Statement of the United Kingdom on Article 5 implementation, APMBC 18MSP, 16–20 November 2020.

14 Mozambique has four very small suspected mined areas that remain underwater.

MINE CLEARANCE IN 2020

Total global clearance in 2020 was almost 153.4km^2, with the destruction of almost 173,000 anti-personnel mines and more than 16,000 anti-vehicle mines. This represents a 17% increase on 131.0km^2 cleared in 2019,[15] and the highest worldwide total since 2015. It is a particularly impressive achievement against the backdrop of the continuing COVID-19 pandemic and associated restrictions.

The largest clearance output was reported for Cambodia, which recorded almost 50km^2 of clearance in 2020, according to information provided by the Cambodian Mine Action and Victim Assistance Authority (CMAA). Close behind was Croatia, which also achieved clearance of almost 50km^2 of mined area during the year. In Afghanistan, recorded clearance dropped by 13% but was still more than 24km^2. The greatest number of mines destroyed in 2020 in a single country (43,157) was in Sri Lanka followed by Zimbabwe (26,911). Some 98% of global anti-personnel mine clearance in 2020 was in States Parties to the APMBC. Of the 11 States that cleared 1km^2 or more of mined area, only Israel was a State not party to the APMBC.

Table 4: Anti-personnel mine clearance in 2020

States Parties	Area cleared in 2020 (km^2)	Anti-personnel mines destroyed in 2020*	Comparison to 2019 clearance (+/- km^2)	Comments
Afghanistan	24.24	5,159	- 3.77	
Angola	1.77	510	+ 0.19	
BiH	0.53	1,342	- 0.01	
Cambodia	49.99	17,957	+ 29.05**	**In 2021, the CMMA retrospectively amended the 2019 clearance output to 45.62km^2, due to the delay in clearance operator data being reported to the CMAA, validated, and entered into IMSMA. However, the amended 2019 CMAA data looks likely to also contain significant anti-vehicle mine clearance.
Cameroon	0	0	0	
Chad	0.21	39	- 0.21	
Chile	0.71	12,526	+ 0.15	Completed mine clearance in February 2020.
Colombia	1.08	196	+ 0.29	
Croatia	49.66	5,154	+ 10.50	
Cyprus	0	0	0	
DR Congo	0.01	0	0	
Ecuador	0	0	0	
Eritrea	0	0	0	
Ethiopia	0	0	-1.76	
Guinea-Bissau	0	0	0	
Iraq	7.70	9,024	- 8.00	
Mali	0	0	0	
Mauritania	0	0	0	
Niger	0	0	- 0.01	
Nigeria	0	0	0	
Oman	0.23	0	+ 0.10	
Palestine	0.02	515	+ 0.01	
Peru	0	0	- 0.08	
Senegal	0	0	0	
Serbia	0.27	0	- 0.34	
Somalia	2.32	172	+ 0.50	

15 The 2019 total may be an underreporting of global clearance, as the CMAA subsequently reported in 2021 significantly increased annual clearance data for Cambodia for 2019. However, the amended 2019 CMAA data looks likely to also contain significant anti-vehicle mine clearance data.

Table 4 continued

South Sudan	0.71	244	- 0.29	
Sri Lanka	4.59	43,157	+ 1.65	
Sudan	0.35	42	- 0.52	
Tajikistan	0.67	5,336	+ 0.13	
Thailand	0.92	9,355	+ 0.82	
Turkey	0.14	9,781	- 0.53	
Ukraine	0.83	5	+ 0.13	
United Kingdom	0.18	432	- 3.43	Completed mine clearance in November 2020.
Yemen	**1.00	923	No change	**Estimated figure for clearance.
Zimbabwe	2.41	26,911	- 0.35	
Sub-totals (States Parties)	**150.54**	**148,780**		
States not party and other areas	**Area cleared in 2020 (km^2)**	**Anti-personnel mines destroyed in 2020***	**Comparison to 2019 clearance (+/- km^2)**	**Comments**
Azerbaijan	0.10	5,669	- 0.91	
Georgia	0.75	248	+ 0.34	
Israel	1.46	800	+ 0.88	
Kosovo	0.14	12	- 0.13	
Lebanon	0.35	16,234	- 0.13	
Nagorno Karabakh	0.05	13	- 0.15	
All other States not party and other areas[16]	0.00	1,183	- 1.76	
Sub-totals (States not party and other areas)	**2.85**	**24,159**		
Grand Totals	**153.39**	**172,939**		

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

Density of mines cleared per square kilometre varied widely. While this does, of course, relate primarily to the density of minelaying, in certain instances it is also a reflection of the quality of survey. In Ukraine, for instance, only five anti-personnel mines were found during clearance of more than 800,000m^2. Many of the areas cleared contained no mines, using precious resources that could be better directed elsewhere. In Sri Lanka, an average of some 9,400 anti-personnel mines were found for each square kilometre of clearance.

16 Armenia, China, Cuba, Egypt, India, Iran, Kyrgyzstan, Lao PDR, Libya, Morocco, Myanmar, North Korea, Pakistan, Russia, South Korea, Syria, Uzbekistan, Vietnam, and Western Sahara.

CLEARANCE DEADLINES AND PROGRESS IN ARTICLE 5 IMPLEMENTATION

The extent of implementation of Article 5 clearance obligations varies widely between States Parties. Of the 34 mine-affected States Parties as at October 2021, only two were firmly on track to meet their respective treaty deadlines: Oman (February 2025) and Sri Lanka (June 2028), with Zimbabwe also likely to meet its deadline (end 2025). In addition, despite failing to clear any mined area in 2020, Peru was still just on track to meet its end-2024 deadline. It was unclear whether Chad, Croatia, and BiH would complete clearance by their extended Article 5 deadlines of January 2025, March 2026, and March 2027, respectively.

The other 27 States Parties were either not clearly on track to fulfil Article 5 in time or were in violation of their obligations under the Convention. No clearance was recorded or reported for 2020 in 11 States Parties: Cameroon, Cyprus, Ecuador, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Peru, and Senegal; as well as in Guinea-Bissau, which only reported discovering previously unknown mined areas in 2021. This is an unacceptably high level of failure. As noted above, both Eritrea and Senegal are in breach of their clearance obligations under Article 5 of the APMBC. There is also significant concern about the political will in DR Congo to fulfil its Article 5 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.

Table 5: Progress in implementing APMBC Article 5 obligations

State Party	Article 5 Deadline	Status of progress	Implementation priorities
Afghanistan	1 March 2023	Not on track	Halt all use of anti-personnel mines, including those of an improvised nature, support and maintain the mine action programme; and facilitate unimpeded access for demining operators to all mined areas.
Angola	31 December 2025	Not on track	Ensure application of land release principles to reduce clearance of uncontaminated areas.
BiH	1 March 2027	Unclear whether on track	Ensure application 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.
Cambodia	31 December 2025	Not on track	Conclude a bilateral cooperation agreement with Thailand that would enable survey and clearance of all mined areas along the shared border and increase quality assurance to help ensure all survey is evidence based.
Cameroon	1 March 2013	In violation. Needs to request extension to Article 5 deadline and to submit 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 from humanitarian demining organisations for survey and clearance.
Chad	1 January 2025	Unclear whether on track	Set out clear plans detailing priority areas to be targeted for non-technical survey and ensure demining assets are deployed only to clear areas with known mine contamination.
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 the 2018 Article 5 deadline extension request and conduct survey to confirm mine contamination before embarking on full clearance of an area.
Cyprus	1 July 2022	No – Article 5 deadline extension requested to 1 July 2025	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.

Table 5 continued

State Party	Article 5 Deadline	Status of progress	Implementation priorities
DR Congo	1 June 2022	No – Article 5 deadline extension requested to 31 December 2025	Elaborate annual work plans and conduct the long-delayed survey of Aru in Ituri province and Dungu in Haut-Uele province.
Ecuador	31 December 2022	Not on track	Clarify the extent of remaining contamination and prepare a plan for completion of clearance.
Eritrea	31 December 2020	In serious violation	Submit an Article 5 extension request, initiate clearance, and re-engage with the Convention machinery.
Ethiopia	31 December 2025	Not on track	Elaborate an updated work plan, with revised estimates of contamination, annual survey and clearance targets, and a detailed budget.
Guinea-Bissau	1 January 2012	Extension requested to 31 December 2022	Ensure funding and capacity to survey and, if necessary clear, suspected mined areas.
Iraq	1 February 2028	Not on track	Update the national mine action strategy with detailed proposals for survey and clearance and ensure that its national mine action authority has the requisite legal authority, funding, equipment, and trained staff.
Mali	1 March 2009	In violation. Needs to request extension to Article 5 deadline and to submit 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, initiate clearance, and set up a national mine action centre with UN support to coordinate the humanitarian response to mine contamination.
Mauritania	31 January 2022	No – Article 5 deadline extension requested to 31 December 2026	Proceed swiftly to mobilise funds and operational support, and then initiate survey and clearance of all mined areas within its jurisdiction or control.
Niger	31 December 2024	Not on track	Elaborate a detailed work plan for survey and clearance by its latest Article 5 deadline and seek and facilitate engagement of international demining organisations.
Nigeria	31 December 2021	No – Article 5 deadline extension requested to 31 December 2025	Establish a national mine action authority to set policy and coordinate implementation of a national mine action strategy.
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.
Palestine	1 June 2028	Not on track	Mobilise the resources needed 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 land release methodologies.
Senegal	1 March 2026	Not on track	Immediately clear the minefield around its military cantonment in the village of Djirak and, as soon as possible, complete non-technical survey to establish a comprehensive baseline of contamination.
Serbia	1 March 2023	Not on track	Survey the contamination discovered in 2019 in order to determine the size of the mined area and mobilise the necessary resources to release all remaining mined area in line with the work plan.
Somalia	1 October 2022	No – Article 5 deadline extension requested to 1 October 2027	Elaborate a new multiyear national mine action strategic plan and associated annual work plans.

Table 5 continued

State Party	Article 5 Deadline	Status of progress	Implementation priorities
South Sudan	9 July 2026	Not on track	Develop an updated work plan through to 2026 considering the impact of the COVID-19 outbreak and security-related access restrictions, matched with a detailed budget and resource mobilisation plan.
Sri Lanka	1 June 2028	On track	Adopt, without further delay, the revised national mine action standards and ensure the national mine action database is accurate and up to date.
Sudan	1 April 2023	Not on track	Apply and report accurately on land release while basing decisions to clear land on evidence-based survey.
Tajikistan	31 December 2025	Not on track	Establish a survey working group to expedite survey in order to reach a clear national baseline estimate of mine contamination.
Thailand	31 October 2023	Not on track	Conclude a bilateral cooperation agreement with Cambodia that would enable survey and clearance of all mined areas along the shared border and improve local priority setting.
Turkey	1 March 2022	No – interim Article 5 deadline extension requested to 31 December 2025	Accelerate the pace of clearance, which has been unacceptably low. Plan, implement, and report on mine clearance in areas controlled by Turkish forces in northern Cyprus and northern Syria.
Ukraine	1 December 2023	Not on track	Establish a functioning national mine action authority and undertake a baseline survey of anti-personnel mine contamination in areas that can be safely accessed.
Yemen	1 March 2023 (Interim deadline for survey)	Not on track	Develop a national mine action strategy with clear targets for survey and clearance of mines and ensure Project Masam reports on demining activities.
Zimbabwe	31 December 2025	Just on track	Review procedures for missed-mine drills (executed where gaps in the pattern minefield are found) to ensure more efficient clearance.

As of 1 October 2021, only Oman, Palestine, Somalia, 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 2021, the Nineteenth Meeting of States Parties (19MSP) would decide whether to grant further extensions to Cyprus, DR Congo, Nigeria, Somalia, and Turkey. A request for a new Article 5 deadline was also submitted by Guinea-Bissau and Mauritania, for consideration at 19MSP. As of writing, Cameroon, Eritrea, and Mali each needed to submit and be granted an extension to return to compliance with the APMBC.

Five mine-affected States Parties – Cameroon, Eritrea, Mali, Niger, and Nigeria – have failed to provide information on implementation of their Article 5 obligations, through their Article 7 transparency reports, for two or more consecutive years. Reporting under Article 7 is a legal obligation under the Convention. As per Action number 49 of the Oslo Action Plan, "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."

PROGRAMME PERFORMANCE IN MINE-AFFECTED STATES PARTIES

To help affected States Parties and their partners focus their capacity building and technical assistance efforts on areas of weakness, and to improve the efficiency and effectiveness of survey and clearance programmes, a performance scoring system is used by Mine Action Review. 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 2020, 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. Text box 7 outlines the seven programme performance criteria and key factors affecting scoring in detail.

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 2020 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 4 obligations as efficiently as possible.

In 2020, Chile, the United Kingdom, and Zimbabwe were all rated Very Good. Both Chile and the United Kingdom fulfilled their Article 5 clearance obligations during the year. Angola, Cambodia, Sri Lanka, and Thailand were all rated Good. Afghanistan, BiH, Colombia, Croatia, Iraq, Mauritania, Oman, Peru, Serbia, South Sudan, Sudan, Tajikistan, and Turkey were all ranked as Average. Chad, DR Congo, Ecuador, Ethiopia, Somalia, Ukraine, and Yemen were all rated Poor. Eritrea, Niger, and Senegal were all ranked as Very Poor. The greatest improvement in programme performance in 2020 was registered in Colombia, Oman, and Thailand. The greatest drops in programme performance compared to 2019 were registered in BiH, Ethiopia, and Peru. The scores for 2020 are set out in Table 6.

Seven States Parties were not ranked: Argentina, Cyprus, and Palestine (not assessed due to issues related to jurisdiction or control of mined areas); Guinea-Bissau (not assessed due to the fact it only reported the new discovery of mine contamination in 2021); and Cameroon, Mali, and Nigeria (not assessed due to insufficient information available for performance in 2020).

Table 6: Programme Performance in Affected States Parties in 2020

State Party	Performance Rating in 2020	Score in 2020	Change from 2019 Score
Afghanistan	Average	6.9	- 0.1
Angola	Good	7.1	+ 0.1
BiH	Average	5.4	- 0.5
Cambodia	Good	7.0	No change
Chad	Poor	4.3	- 0.2
Chile	Very Good	8.2	+ 0.1
Colombia	Average	5.3	+ 0.7
Croatia	Average	6.5	+ 0.2
DR Congo	Poor	4.7	- 0.4
Ecuador	Poor	4.3	- 0.2
Eritrea	Very Poor	2.4	- 0.3
Ethiopia	Poor	4.3	- 0.9
Iraq	Average	5.5	+ 0.4
Mauritania	Average	5.2	Not scored in 2019
Niger	Very Poor	3.9	- 0.2
Oman	Average	5.9	+ 0.6
Peru	Average	5.1	- 0.5
Senegal	Very Poor	3.8	No change
Serbia	Average	5.7	- 0.4
Somalia	Poor	4.4	- 0.2
South Sudan	Average	6.9	+ 0.1
Sri Lanka	Good	7.0	No change
Sudan	Average	6.5	No change
Tajikistan	Average	6.2	- 0.1
Thailand	Good	7.7	+ 0.6
Turkey	Average	6.0	- 0.3
Ukraine	Poor	4.0	+ 0.1
United Kingdom	Very Good	8.2	+ 0.3
Yemen	Poor	4.4	+ 0.4
Zimbabwe	Very Good	8.0	No change

Table 7: Mine Action Review Criteria to Assess National Programme Performance of States Parties to the Anti-Personnel Mine Ban Convention

Criterion	Key Factors Affecting Scoring
UNDERSTANDING OF AP MINE CONTAMINATION (20% of overall score)	■ Has a national baseline of AP 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 area areas disaggregated from areas with other types of explosive ordnance (e.g. other explosive remnants of war (ERW) or 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)	■ 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)	■ 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?

Criterion	Key Factors Affecting Scoring
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	■ 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?
PLANNING AND TASKING (10% of overall score)	■ 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?
LAND RELEASE SYSTEM (20% of overall score)	■ 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?
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	■ 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 realistic based on existing capacity? ■ Is the target date sufficiently ambitious? ■ What were the outputs of survey and clearance of mined area in 2020, 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 concrete progress, especially in promoting gender equality, was again recorded in 2020. Examples of some of the positive developments are included below, but for additional information please see the "Gender and Diversity" section of the individual reports for each State Party.

In Afghanistan, among other positive developments, the Directorate of Mine Action Coordination (DMAC) appointed a new Gender and Diversity Manager in October 2020. By the end of the year, the new incumbent had reviewed the gender and diversity content of DMAC's internal policy documents and guidelines, provided training for the gender focal points of implementing partners as well as training on non-technical survey for male and female staff of DMAC and its implementing partners. A technical working group on gender and diversity meets regularly with implementing partners to promote implementation. How the return of the Taliban regime will affect this progress remains to be seen.

Cambodia has in place a Gender Mainstreaming in Mine Action Plan (GMAP) 2018–22, which is embedded in both its National Mine Action Strategy and associated implementation plans. In 2020, training was provided to Mine Action Planning Units (MAPUs) and quality management team staff on the new guidelines for gender mainstreaming, as well as on implementation of the GMAP and on data disaggregated by sex and age. In Iraq, the Directorate of Mine Action (DMA) has adopted the first Gender Unit Action Plan. The DMA has also engaged with clearance organisations to strengthen gender and diversity in mine action. Operators are slowly increasing the number of women employees and have also expanded the roles performed by female staff beyond office support tasks. In Chad, MAG's single female deminer was also the first woman in Chad to attain an explosive ordnance disposal (EOD) Level 3 certification. She is employed as a team leader.

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). In Angola, while gender and diversity are included as a cross-cutting issue in the new national mine action strategy, no outcomes or targets related to gender or diversity are set forth in the associated work plan. In Croatia, the Civil Protection Directorate does not compile or disclose data regarding commercial demining companies. However, the proportion of women employed at Civil Protection Directorate – CROMAC is low. In Colombia, a woman heads the national mine action authority and women make up 63% of the total staff dedicated to mine action. But among deminers, this figure drops to only 4%.

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.[17] 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. In Kosovo, the national mine action strategy specifically notes 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 poor socio-economic conditions. In Somalia, clearance operators take into consideration clan affiliation 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. 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. In Zimbabwe in 2020, APOPO recruited from the minority Shangani ethnic group who live in mine-affected communities.[18] While welcome, the paucity of concrete examples shows just how far programmes and operators have to go in making diversity an integral part of their work.

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

18 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

ENVIRONMENTAL CONSIDERATIONS

The importance of environmental consideration is also becoming increasingly prominent in mine action as it is across all sectors. In Cambodia, for instance, a national mine action standard on the environment was finalised and, as of writing, was awaiting approval by the CMAA.

International Mine Action Standard (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.[19]

To help focus attention and bring greater clarity to the topic, Mine Action Review is publishing a separate Policy Brief which will outline the key environmental impacts of landmine and cluster munition remnant contamination and land release operations, the relevant regulatory frameworks and treaty commitments, and the importance of environmental management. The Policy Brief 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.

OUTLOOK

As things stand, very few States Parties are likely to 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. These were DR Congo, Oman, and Zimbabwe. If programme performance improved, however, Chad, Croatia, Ecuador, Guinea-Bissau, Niger, Peru, Serbia, Sri Lanka, Sudan, Tajikistan, and Thailand could also be cleared of anti-personnel mines within the Maputo target. The Fifth Review Conference of the APMBC will be held in 2024. It 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, and Turkey. Such an agenda is ambitious, but it is also achievable.

We encourage readers to also refer to Mine Action Review's *Guide to the Oslo Action Plan and results of 2021 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 Taliban's newly gained status as the Government of Afghanistan should not lead international donors to retreat from support for mine action in one of the world's most mine-affected States and most effective national programmes. It should become a focal point of international engagement leveraging support to achieve an end to the use of improvised mines and unfettered access for demining teams to all parts of the country. In the past, Taliban forces have enabled mine action to proceed. It must do so in the future. Should Taliban forces continue to lay anti-personnel mines, however, this will constitute a serious violation of the APMBC for which the Afghan government will bear responsibility under international law.

In 2020, the overwhelming majority of mine action programmes did not allow the COVID-19 pandemic to overrun survey and clearance operations, which is an accomplishment in itself. The springboard of 2020, which continued into 2021, must be used to accelerate clearance over the next four years through to the 2025 political commitment. In mine-affected States around the world, more than ever safe access to land and its resources will be needed to alleviate poverty and enable social and economic development.

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

STATES PARTIES

AFGHANISTAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

187 KM²

AP MINE CLEARANCE IN 2020

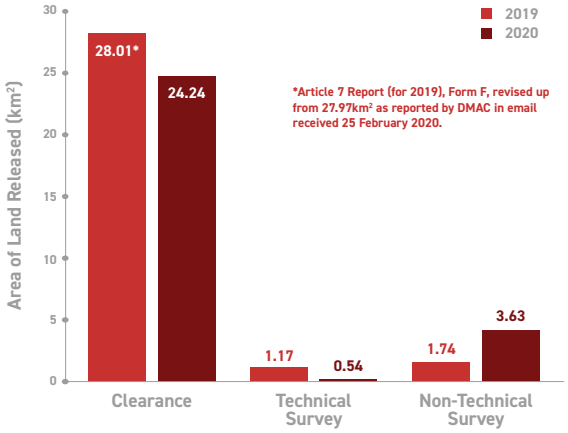
24.24 KM²

AP MINES DESTROYED IN 2020

5,159

(INCLUDING 288 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

The amount of land released through clearance dropped more than 13% in 2020, the second successive annual drop. Clearance of abandoned anti-personnel mines of an improvised nature (AIM) increased but remained at a low level and was conducted by only one operator in 2020. Training and development of AIM survey and clearance standing operating procedures for other implementing partners (IPs) in 2020 laid the groundwork for accelerated clearance in 2021 despite security sensitivities.

The Directorate of Mine Action Coordination (DMAC) drafted a new strategic plan for 2021–2026 and stated that it would request a second extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline of March 2023. Escalating conflict did not prevent IPs from operating in areas of insecurity but slowed access, increased interruptions from kinetic engagements, and exposed operators to increased security threats. An attack by armed actors on HALO Trust in June 2021 killed 11 staff and wounded 15 others.

RECOMMENDATIONS FOR ACTION

- **Afghanistan's government should increase financial support for humanitarian mine action.**
- **DMAC should develop long-term plans identifying the structure and capacity needed to tackle residual risk from conventional (pre-2001) anti-personnel mines.**
- **DMAC should address the concerns of implementing partners over delays in uploading operating results on to the national information management database.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	7	Afghanistan has a good, but still incomplete, knowledge of pre-2001 anti-personnel mine contamination and continues to add significant amounts of previously unrecorded mined area to the database. However, there is only rudimentary knowledge of the extent of post-2001 contamination, including mines of an improvised nature, which may now pose the greater threat to civilians and has reportedly increased as a result of heavy use of improvised mines by the Taliban in 2021 prior to their becoming the de facto State authority.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	The Mine Action Programme of Afghanistan (MAPA) completed its transition to national management in 2018 but DMAC salaries are largely donor funded and the government has not yet made a significant financial contribution to the programme. A modest payment pledged in 2019 was received in 2020 and followed by a further pledge of government funding for clearance.
GENDER AND DIVERSITY (10% of overall score)	7	6	DMAC seeks the mainstreaming of gender and diversity in its 2021–2026 strategic plan and it sets out a detailed agenda in its annual work plan. Practice in implementing partners lags behind formal commitment to the goals while custom in deeply conservative Afghan society limits the extent of women's recruitment, particularly in operations. Two female demining teams who operated in Bamyan for DDG were taken over by a national operator, OMAR, and reassigned to battle area tasks in the same province.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	8	8	DMAC has an Information Management System for Mine Action (IMSMA) New Generation database that provides a range of reports and extensive disaggregated information. DMAC continues to work with the Geneva International Centre for Humanitarian Demining (GICHD) preparing to upgrade to IMSMA Core and to adopt new mobile data-gathering technologies. Operators say DMAC's data entry can be slow. Afghanistan routinely submits comprehensive Article 7 transparency reports, though is often late in doing so. National operators are not proactive in reporting on their operations.
PLANNING AND TASKING (10% of overall score)	8	8	Afghanistan produced a comprehensive extension request in 2012 and although funding shortfalls and insecurity mean that the MAPA will not achieve its objectives DMAC produces annual work plans in consultation with operators that seek to address emerging challenges.
LAND RELEASE SYSTEM (20% of overall score)	6	6	The MAPA has national mine action standards in Dari and English that are subject to regular review. In 2019, it became the first country to introduce national standards for clearance of mines of an improvised nature and, after review, amended the standard in 2020. Land release is achieved almost entirely by full clearance and DMAC consulted the GICHD with a view to increasing operational efficiency.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	7	The MAPA has released an average of more than 25km^2 a year through clearance over the last five years and largely maintained that level in 2020 despite financial, public health, and security challenges.
Average Score	**6.9**	**7.0**	**Overall Programme Performance: AVERAGE**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Afghanistan National Disaster Management Authority
- 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 2020, but only Assad Brothers Demining reported active in anti-personnel mine clearance

INTERNATIONAL OPERATORS

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

OTHER ACTORS

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

UNDERSTANDING OF AP MINE CONTAMINATION

Afghanistan reported contamination by conventional and improvised anti-personnel mines amounting to 187km^2 at the end of 2020 (see Table 1).[1] This was almost 10% less than a year earlier but still kept it among the world's most heavily mine-affected countries and the figure does not even capture the full extent of the national mine threat.

Anti-personnel mines are known or suspected to affect 32 of Afghanistan's 34 provinces.[2] Moreover, escalating conflict in 2021 as Afghanistan faced the withdrawal of United States (US) and other international forces and the return of the Taliban regime appeared to have resulted in extensive mine use, adding further to the problem.[3]

Most of Afghanistan's known 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 so-called "legacy" mines dating from before 2001 amounted to nearly 153km^2 at the end of 2020, with big concentrations in the central and north-eastern areas of the country (see Table 2). However, the full extent of legacy mined areas may be significantly greater.

DMAC reported that at the end of 2020 some 66 of Afghanistan's 400 districts have not yet been subjected to any non-technical survey as a result of insecurity and access problems.[4] DMAC has also acknowledged that some areas previously cleared have been re-contaminated with improvised mines and explosive remnants of war as a result of continuing conflict.[5] Survey in Afghanistan also continues to find previously unrecorded areas of contamination and in 2020, DMAC added 185 areas affected by legacy anti-personnel and mixed anti-personnel/anti-vehicle mines to the database, which covered a total of nearly 13km^2. Only 11 of these areas, covering 0.8km^2, were identified as the result of recent conflict.[6]

Moreover, Afghanistan still has only a rudimentary assessment of the extent of the areas affected by mines of an improvised nature. These mines are identified by the United Nations as one of the biggest threats to civilians, and one that is still growing. The UN warned in August 2021 that Taliban forces were laying large numbers of improvised mines in the offensive that followed the withdrawal of US and foreign forces.[7] Victim-activated pressure-plate devices inflicted 35% more civilian casualties in 2020 than they did the year before. Improvised mines placed on roads caused the most recorded casualties, including devices triggered by the weight of a child, which Afghanistan has duly recognised as anti-personnel mines.[8] The UN reported that improvised mines, "nearly all" of them emplaced by the Taliban, killed 216 people and injured 238 in the first six month of 2021, an increase of 42 per cent over the same period of 2020 and the highest level of casualties in a six-month period since it started keeping records.[9]

As at the end of 2020, Afghanistan had identified a total of 34.5km^2 of confirmed and suspected improvised mined areas, more than two-thirds of which was in the fiercely contested southern region (see Table 3).[10] But DMAC has also estimated that, in reality, abandoned improvised mines (AIM) affect 103km^2.[11] (In a May 2019 assessment, Afghanistan had estimated that an area of 465km^2 might be affected.[12]) It is believed that improvised mines are "the greatest challenge faced by the mine action sector in Afghanistan today."[13]

Table 1: Mine contamination by contamination type, as at the end of 2020[14]

Type of contamination	CHAs	Area (m^2)	SHAs	Area (m^2)	Total area (m^2)
Anti-personnel mines	1,645	126,201,063	135	26,624,987	152,826,050
Improvised AP mines	428	22,254,408	54	12,227,044	34,481,452
AP mine totals	**2,073**	**148,455,471**	**189**	**38,852,031**	**187,307,502**
AV mines	991	181,170,687	234	94,921,043	276,091,730
Totals	**3,064**	**329,626,158**	**423**	**133,773,074**	**463,399,232**

AP = Anti-personnel AV = Anti-vehicle CHAs = Confirmed hazardous areas SHAs = Suspected hazardous areas

Table 2: Anti-personnel mine contamination by region (end-2020)[15]

Region	Confirmed areas	Area confirmed (m^2)	Suspected areas	Area suspected (m^2)	Total area (m^2)
Central	420	30,523,926	33	4,642,463	35,166,389
East	155	13,141,858	5	534,900	13,676,758
North	214	8,981,804	0	0	8,981,804
North East	562	35,919,511	12	8,682,246	44,601,757
South	77	9,432,448	54	8,315,270	17,747,718
South East	108	10,217,533	20	4,137,651	14,355,184
West	109	17,983,983	11	312,457	18,296,440
Totals	**1,645**	**126,201,063**	**135**	**26,624,987**	**152,826,050**

Table 3: Improvised mine contamination by region (31 December 2020)[16]

Region	Confirmed areas	Area confirmed (m^2)	Suspected areas	Area suspected (m^2)	Total area (m^2)
Central	7	800,197	0	0	800,197
East	203	6,494,576	20	549,907	7,044,483
North	28	1,200,764	3	50,188	1,250,952
North East	24	946,708	8	100,236	1,046,944
South	157	12,410,321	23	11,526,713	23,937,034
South East	2	31,603	0	0	31,603
West	7	370,239	0	0	370,239
Totals	**428**	**22,254,408**	**54**	**12,227,044**	**34,481,452**

Afghanistan also records large areas of "Initial Hazardous Areas" which are suspected hazards that have not yet been subjected to non-technical survey. At the end of 2020, DMAC estimated the total area of these areas at almost 240km^2, including 35 anti-personnel mined areas affecting 0.95km^2 and a further 114 AIM hazards covering 57.33km^2. The remainder was accounted for by anti-vehicle mine hazards (47.63km^2) and ERW hazards affecting 133.66km^2.[17]

In addition to the challenge from anti-personnel mines, Afghanistan contends with 1,225 areas known or suspected to be affected by anti-vehicle mines, which cover 276km^2, and even bigger areas contaminated by ERW. The intervention of the US-led coalition in late 2001 added considerable quantities of unexploded ordnance (UXO) to this problem. Continuing conflict between the Afghan government and the Taliban and other armed groups continues to add new contamination.[18] DMAC reported total mine and ERW contamination of 1,593km^2 remaining at the end of 2020, of which ERW accounted for 974km^2, including North Atlantic Treaty Organization (NATO) firing ranges covering 667km^2.[19]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Mine Action Programme of Afghanistan (MAPA), originally established in 1989, is led by DMAC, which comes under the Afghanistan National Disaster Management Authority. By the end of 2020 it employed a total of 5,910 people, of whom DMAC reported that 4,700 were deployed in the field. For 2021, an expected increase in funding through the Voluntary Trust Fund (VTF) might, it said, support a corresponding increase in mine action personnel.[20]

DMAC fulfils the role of a national mine action centre. From its headquarters in Kabul and seven regional offices, DMAC manages and coordinates the work of national and international IPs, providing strategic planning and annual work plans. It also sets priorities and standards, accredits operators, conducts quality assurance (QA) and quality control (QC), manages the mine action database, and conducts resource mobilisation. It coordinates closely with operators through technical working groups that address planning and priority setting, survey, mechanical clearance, risk education, and victim assistance.[21] In 2018, it set up a separate technical working group to deal with AIMs.[22]

The MAPA is nationally managed but remains largely dependent on international finance. Since 2012, it has transitioned from being a project of the UN Mine Action Service (UNMAS) to national management, a process formally completed with the transfer of the last positions from UNMAS to DMAC in June 2018. The government paid the salaries of 15 of DMAC's total staff of 155 people in 2020. The remainder were funded by UNMAS (93 people), the ITF (26), the New Zealand Defence Forces (15), and the United States (6).[23]

In 2020, the Afghan government made its first financial contribution to humanitarian mine action operations, providing AFN20 million (approx. US$250,000) for a clearance project in Khost province. DMAC expected additional government funding to become available in 2021.[24] It annual plan for Afghan year 1400 (April 2021–March 2022) requested funding of $5 million from the government for demining projects.[25]

UNMAS supported DMAC in 2020, providing funding of US$7.1 million through the VTF, down from US$17.4 million provided the previous year. UNMAS noted that donors delivered the funding previously committed, but new funding was limited, reflecting the priority given to the COVID-19 response. Funding went to six IPs for survey, clearance, and the delivery of risk education. UNMAS operated in 2020 with 32 national and 3 international staff providing technical advice, training, and capacity building. It expected to add three more international and one further national staff in 2021. UNMAS also reports conducting advocacy at a political level for humanitarian mine action with armed non-state actors, including the Taliban, and in the field at community level to facilitate access for survey and clearance.[26]

Norwegian People's Aid (NPA) provided third-party monitoring of all mine action and conventional weapons disposal projects funded by the US Department of State, working with 18 staff, of whom six were international staff. In 2020, it monitored a total of 21 grants worth approximately US$13 million to nine organisations, including 14 grants for mine clearance and 1 for non-technical survey. The grants did not include survey or clearance of CMR hazards.[27]

GENDER AND DIVERSITY

The MAPA, which has had a policy on gender in mine action since 2014, set gender mainstreaming as one of four goals in its 2016–20 strategic plan. It states that "achievable targets, reflecting prevailing circumstances and conditions, will be adopted to support and encourage progress wherever possible."[28] Afghanistan's request for an extension to its Convention on Cluster Munitions (CCM) Article 4 clearance deadline noted that "the ongoing conflict, political issues and uncertain peace process in Afghanistan has major implications for women's workforce participation in different areas of Afghanistan."[29]

Progress in the prevailing circumstances has continued at a modest pace. DMAC's 155 staff included in early 2021 one woman employed as a human resources assistant and three women had been hired as interns for the gender and diversity, information management, and risk education departments. In MAPA's workforce, the number of women employees had increased from 170 towards the end of 2019 to 212 in the last quarter of 2020.[30]

After leaving the position vacant for some months, DMAC appointed a new gender and diversity manager in October 2020. By the end of the year, the new incumbent had reviewed the gender and diversity content of DMAC's internal policy documents and guidelines and provided training for the gender focal points of IPs as well as on non-technical survey for male and female staff of DMAC and IPs.[31] DMAC reported that all vacancy announcements are now gender sensitive; that a woman is present in all recruitment panels; and that women candidates' scores are automatically accorded extra points, in line with Afghan labour law. It also reported having a human resources manual that recognises rights of female employees, including maternity leave and reduced working hours for pregnant women.[32] DMAC operates a hotline taking calls from affected communities which it said also allows interests of minorities to be considered.[33]

DMAC reported that six national implementing partners all now have a dedicated gender and diversity officer. UNMAS reported it recruited gender mainstreaming officers for five of them in 2020 who were working in conjunction with DMAC and UNMAS on reviewing their gender standards and training. They were also responsible for ensuring implementing partner projects engaged with women and addressed the specific needs of women, girls, men and boys.[34] In 2020, the GICHD provided training on non-technical survey and reported that at least two operators had plans in 2021 to deploy paired teams to conduct non-technical survey.[35] Some IPs employ women in operational as well as administrative roles but deploying women in field operations in particular remains challenging in Afghanistan's deeply conservative society. Danish Demining Group (DDG), now known as Danish Refugee Council Humanitarian Disarmament and Peacebuilding Sector, operated with female deminers for the first time in 2018 in Bamyan province, and were not operational in 2020.[36]

A technical working group on gender and diversity meets regularly with implementing partners to promote implementation.[37] DMAC's review of IP project proposals also ensures gender issues are considered in operational planning. It operates a hotline taking calls from affected communities, which it said also allows interests of minorities to be considered.[38]

The gender strategy and Afghanistan's national mine action standards (AMAS) for community liaison underscore the importance of including women and girls as well as boys and men in non-technical survey, and pre- and post-clearance impact assessments and for equal access to employment for women. The strategy called for implementing partners to identify forums in which to access under-represented groups, including women and girls, and to ensure data collection and reporting was disaggregated for gender and age.[39] The AMAS also refer to the importance of consulting representatives of different groups, such as tribal and religious leaders.[40] Risk education teams are required to include a female and male trainer.[41]

INFORMATION MANAGEMENT AND REPORTING

DMAC is preparing to upgrade its national database from the present New Generation version to IMSMA Core but says the process of cleaning up data to be uploaded into the new system will not be completed until 2023,[42] two years beyond the previously expected completion date.[43] In the meantime, DMAC, working in collaboration with the Geneva International Centre for Humanitarian Demining (GICHD), brought into service in 2020 the Mine Action Reporting System (MARS), a digital tool for improving data collection in the field. MARS will initially be used for post-demining impact assessments and quality management but will later cover all survey and clearance activities as well.[44]

Afghanistan submits comprehensive Article 7 reports annually and DMAC's information department produces a range of monthly, quarterly, and annual reports as well as reports on request and maps.[45] DMAC also holds monthly data-coordination meetings which IPs said had resulted in improvements, but complained that entry of survey and clearance data continued to be slow because of a shortage of trained information management staff in DMAC.

PLANNING AND TASKING

Afghanistan has worked with the support of the GICHD to develop a new strategic plan for Afghan years 1400–1404 (April 2021–March 2026), but as of June 2021 was still finalising the document. The plan sets out five strategic goals:[46]

- Innovative and gender and diversity-sensitive land release, risk education, and weapons and ammunition destruction to promote behavioural change and ensure safe access to land;
- Rights-based gender and diversity-sensitive inclusive services and equal opportunities are promoted and made accessible to EO victims;
- Mine action is integrated and aligned into relevant sustainable development frameworks and interventions, contributing to the fulfilment of Afghanistan's Sustainable Development Goals (SDGs);
- Women and other marginalised groups are included and empowered within the MAPA through effective gender and diversity mainstreaming; and
- Effective advocacy and coordination at national and international levels increase recognition and support to mine action as an enabler of humanitarian response, sustainable development, and peace and security.

DMAC also issues annual work plans that set detailed targets towards general goals. The plan for year 1400 (April 2021–March 2022) called for clearance of 330km^2, including 114km^2 of areas affected by anti-personnel mines, AIM, and mixed anti-personnel and anti-vehicle mines, subject to availability of funding. But DMAC said the MAPA only had confirmed funding for clearance of 46km^2, including anti-personnel mined areas totalling 15.63km^2, AIM-affected areas totalling 0.14km^2, and mixed mined area of 2.08km^2.[47] The MAPA had confirmed funding of $18.3 million from the United States, $13.2 million from the VTF, and $14.4 million from 11 other donors.[48]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The MAPA has comprehensive national mine action standards that are compliant with International Mine Action Standards and which DMAC reviews annually and amends in consultation with IPs. The persistently high percentage of land released through full clearance–averaging 78% between 2018 and 2020–has called into question the efficiency of the MAPA's survey and land release practices.

A GICHD assessment in 2019 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.[49]

MAPA survey is in a process of transition. Under Afghanistan's Article 5 deadline extension plan, the MAPA embarked on a Mine/ERW Impact Free Community Survey (MEIFCS), aiming to complete non-technical survey of all districts. It suspended the MEIFICS programme in 2019 because of funding constraints and because most remaining districts requiring survey were in areas that are hard to access due to insecurity.[50] In 2020, non-technical survey was mainly conducted by IP quick-response teams focusing on central, eastern, north-eastern, and southern regions, aiming to record contamination by both improvised and "legacy" mines.[51] The MAPA operational plan for 1400 (2021–2022) identified 26 districts earmarked for non-technical survey, and to try to mitigate the problems of negotiating access, it assigned all non-technical survey to a single IP, MCPA.[52]

The GICHD noted in a 2019 capacity assessment that DMAC is "proactive in introducing new AMAS as and when needed" but noted that it had not updated them regularly. It noted that most of the AMAS were developed between 2011 and 2013 and some chapters needed to be reviewed and updated to promote greater efficiency.[53] DMAC and the GICHD are due to review land release standards and are expected to undertake revisions to strengthen non-technical survey and increase operational efficiency but DMAC acknowledged no changes were made to the AMAS in 2020.[54]

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.[55]

In 2021, Afghanistan completed the digital databasing of the AMAS, using the mineaction.net application, the first country to do so. The national standards were then linked digitally to the IMAS database, providing a "smart" updating arrangement to support DMAC's operations and promote long-term national ownership and sustainability.[56]

In 2017, DMAC introduced a national standard for environmental protection in mine action (AMAS 07.06), setting policy and 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.[57]

OPERATORS AND OPERATIONAL TOOLS

Afghanistan had 40 humanitarian and commercial companies engaged in mine action in 2020 of which 31 were accredited for survey and clearance and the remainder for victim assistance, explosive ordnance risk reduction, and monitoring.[58]

Survey and clearance of landmines is conducted mostly by six national and three international organisations. The national IPs active in 2020 were AREA, ATC, DAFA, MCPA, MDC, and OMAR. A seventh national humanitarian IP, the Justice and Peace Organisation (JAPO), received DMAC accreditation in January 2021 to conduct non-technical and technical survey, manual and mechanical mine clearance, battle area clearance, and explosive ordnance risk education. As of June 2021 JAPO had not conducted any operations.[59]

MCPA, employed a total staff of 624 in 2020, operating 38 manual clearance teams with 532 personnel along with nine non-technical survey teams with 47 staff, and seven mechanical teams employing 28 staff. In 2021, with DMAC having given MCPA the lead role in survey, it expected to conduct non-technical survey in 14 provinces. MCPA had also received training for 24 experienced staff on survey and clearance of abandoned improvised mines and was preparing to engage in these activities.[60] Other national IPs contacted by Mine Action Review did not respond to requests for information.

DDG/DRC operated with slightly less capacity in 2020 than the previous year but still deployed 18 manual clearance teams with 180 deminers and four survey teams with 20 personnel, working in the northern Balk province and central areas. DRC capacity also included two mechanical teams and 24 explosive ordnance disposal (EOD) teams with a total of 53 operators.[61]

The Swiss Foundation for Mine Action (FSD) continued conducting survey and clearance in northern Badakshan province, an area which it accesses from neighbouring Tajikistan and that is contaminated mainly with Soviet-era butterfly mines. In 2020, FSD worked with much the same capacity as the previous year but reconfigured its contingent into four manual clearance teams with a total of 40 deminers supported by two non-technical survey teams. In 2021, it expected to add one more clearance team.[62]

The HALO Trust is much the biggest operator in Afghanistan employing 2,770 people in 2020, including 2,292 in operations. These were conducted by 59 manual demining teams with 1,681 staff, as well as two survey/EOD teams, 25 mechanical teams with 149 staff, and additional weapons and ammunition disposal capacity. HALO Trust was the only IP conducting survey and clearance of AIMs in 2020, with 24 teams totalling 85 personnel dedicated to this operation. These teams were split into 21 quick response teams and 4 bilateral survey/EOD teams. Some of HALO's demining capacity was deployed in four-person quick response teams with a minimum of one team in each of Afghanistan's seven regions and larger numbers of teams according to local needs. The teams were tasked in a process of consultation between DMAC and HALO Trust.[63]

Demining and AIM clearance teams work with ground-penetrating-radar (GPR) detectors which have proved efficient in detecting low-metal devices and avoiding metal clutter, thereby contributing to better productivity. These include Minehound detectors funded by the US Night Vision and Electronic Sensors Directorate, and man-portable Scorpion detectors. HALO also uses tractors fitted with rotary mine-combs, which are an efficient tool particularly for clearing anti-vehicle mines that are sparsely distributed over large areas. The organisation also uses a STORM severe-terrain excavator with independent axles that can cope with steep-sloping terrain and reach into gullies, and a tractor-mounted Harrow magnet used on battle area tasks. HALO also started using solar panels at its headquarters and another main base in line with broader environmental management goals of reducing its energy footprint.[64]

DEMINER SAFETY

The MAPA reported one demining casualty in 2020 which resulted from an accident clearing an anti-personnel mine and was identified as a deminer's non-compliance with procedures.

Deteriorating security continued to pose the main threat to deminers. IPs experienced 12 major security incidents in 2020 in which one MAPA employee was killed and three injured. IPs also face constant demands for payment of "tax". A total of 18 MAPA personnel were abducted but later released after negotiations through community outreach channels. IP's faced intimidation and also lost equipment. The MAPA was unable to conduct a number of planned projects in Baghlan, Farah, Herat, Kandahar, and Kunar provinces, although it also gained access for the first time to Nuristan province and returned to Faryab for the first time in a decade.[65]

An attack on HALO Trust's camp in Baghlan province in June 2021 in which 11 deminers were killed and 15 injured represented the worst ever recorded violence against HALO Trust and the mine action community in Afghanistan. Islamic State in 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.[66]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Afghanistan's Article 7 reports show it released a total of 37km^2 in 2020, compared with 196km^2 in 2019. Those totals, however, include cancellation of big areas of "initial hazardous areas": 8.7km^2 in 2020 and 167km^2 in 2019.[67] This represents land that was identified as possibly contaminated by abandoned improvised mines (AIM) in a preliminary assessment but never subjected to non-technical survey and therefore not recorded as suspected hazardous areas. A narrower assessment of mine action outcomes based on release of confirmed and suspected hazardous areas shows that Afghanistan released 28.4km^2 through survey and clearance in 2020 (24.24km^2 through clearance; 0.54km^2 reduced through technical survey; and 3.63km^2 cancelled through non-technical survey), compared with almost 30.6km^2 in 2019, a drop of 7%. Discrepancies between official data and results reported by operators, particularly in relation to non-technical survey, left uncertainty over the precise outputs achieved.

Measures to counter the COVID-19 pandemic affected delivery of risk education but appear to have had little impact on other mine action in 2020.[68] HALO Trust, the biggest operator said small numbers of deminers were forced to isolate at certain times but it had not experienced widespread outbreaks and the overall impact of mitigation measures was "minimal".[69]

OUTLOOK

The Taliban takeover of Kabul on 15 August 2021 and uncertainty over the operation of the new government did not halt the work of the mine action sector. In early September 2021, HALO Trust had 1,400 deminers deployed and active in five provinces, including Helmand and Kandahar in the south; Nangahar in the east; Parwan in the centre; and Samangan in the north. Operations included clearance of abandoned improvised mines, mainly in Nangahar, as well as "legacy" mines and unexploded ordnance. In areas where HALO Trust previously had permission to conduct clearance, local authorities have generally wanted demining to continue. Taliban authorities in northern Kunduz province had reportedly submitted a request to DMAC for it to provide demining capacity. The HALO Trust expects there will be increased demand for survey, risk education, and demining to support and protect displaced populations, assist access for humanitarian aid, and prevent further heavy casualties resulting from use of improvised mines and other explosive ordnance. HALO Trust has found international donors supportive.[70]

SURVEY IN 2020

Afghanistan reported cancelling a total of 12.32km^2 through non-technical survey in 2020, initially recording 7.08km^2 as area affected by conventional anti-personnel mines (see Table 4) and 5.24km^2 as AIM-contaminated areas.[71] Afghanistan's subsequent Article 7 report, however, recorded cancellation of 3.63km^2 of anti-personnel and AIM mined area. The remaining 8.69km^2 consisted of "initial hazardous areas", representing areas that had been identified as probably contaminated by AIM in a preliminary assessment but never subjected to non-technical survey.[72]

HALO Trust reported cancelling a total of 4.68km^2, including 1.6km^2 of conventional anti-personnel mines, largely in western Farah province, along with 3.08km^2 of areas affected by AIMs in Helmand, Nangahar, Faryab and Kunduz provinces. HALO Trust noted that in many areas survey is hampered by the amount of time that has lapsed since contamination occurred, sparse population, the lack of mine maps or marking, and the sporadic way mines were placed, making it difficult to prove the absence of mines and that areas can be cancelled.[73] Official data also did not include a small amount of cancellation (5,121m^2) reported by DDG/DRC.[74]

Access to areas under the control of armed groups has posed an increasing challenge to survey requiring a greater focus on liaison with communities and locally influential personalities. DMAC said it planned to trial a different approach to non-technical survey, assigning one operator to conduct two or three pilot projects in 2021 with a view to having it take on all non-technical survey in 2022.[75]

DMAC reported that only 0.54km^2 was reduced through technical survey in 2020, half the amount reduced in 2019. Most of it was conducted by ATC in Faryab province where operators had access for the first time in a decade in 2020. DMAC recorded reduction of 34,530m^2 by HALO Trust in two provinces in 2020 (see Table 5) but HALO reported it reduced 114,329m^2 in four provinces.[76]

Table 4: Cancellation of "legacy" mined areas through non-technical survey in 2020 (including cancellation of "initial hazardous areas") (as reported by DMAC)[77]

Operator	Province	Area cancelled (m^2)
ATC	Faryab, Sari Pul	483,571
FSD	Badakhshan	20,855
HALO	Farah, Faryab, Herat, Jawzjan, Kabul, Khost, Kunduz, Maydan Wardak, Parwan	6,397,677
MCPA	Balkh, Kunduz	161,500
OMAR	Kapisa	15,000
Total		**7,078,603**

Table 5: Reduction through technical survey in 2020 (as reported by DMAC)[78]

Operator	Province	Area reduced (m^2)
ATC	Faryab, Kunar	344,226
DAFA	Baghlan, Khost, Paktia	32,503
DDG	Balkh	34,709
HALO	Balkh, Panjshir	34,530
MCPA	Zabul	35,720
OMAR	Kapisa, Logar	56,395
Total		**538,083**

CLEARANCE IN 2020

Afghanistan released a total of 24.24km² through clearance in 2020,[79] including 23.83km² of area contaminated by conventional anti-personnel mines, 13% less than the previous year, and with 70% completed by just two IPs, HALO Trust and DAFA (see Table 6). A further 0.41km² of cleared mined area contained abandoned anti-personnel mines of an improvised nature (AIMs). The number of anti-personnel mines destroyed also dropped sharply from 7,801 in 2019 to 5,159 in 2020, of which 4,716 were destroyed in clearance operations.[80] This continued a downward trend of recent years as IPs worked on minefields in increasingly remote areas and difficult terrain. Only eight clearance tasks covering an aggregate of 76,312m² yielded no mines.[81]

The downturn reflected a number of factors. DDG/DRC cleared one-fifth of the mined area it tackled in 2019, shifting its focus in 2020 to battle area clearance.[82] Pandemic restrictions also slowed some operations, although HALO Trust said it had minimal impact and only a few isolated cases of deminers affected by COVID-19.[83] Insecurity also contributed to slower rates of progress, putting a premium on intensive contact with local communities. DMAC reported all IPs received training in access negotiations in 2020 to try to expand access to hard-to-reach areas.[84] IPs were still able to work in areas of conflict but had more frequent interruptions from outbreaks of fighting close to clearance tasks that forced teams to temporarily halt operations.[85]

Afghanistan saw significant progress in dealing with improvised mines, albeit with clearance still on a limited scale (see Table 7). In 2020, HALO Trust remained the only IP conducting clearance of AIM, but Afghanistan reported clearance of 369,655m² affected by AIM, compared with just under 85,000m² in 2019, and destruction of 142 AIM, up from 21 AIM in 2019.[86] HALO Trust reported that it cleared less area and fewer devices.[87]

DMAC expected the pace of AIM clearance to accelerate in 2021 as more IPs deployed capacity to deal with the threat. HALO put five manual clearance teams, four mechanical teams, and ten non-technical survey teams onto AIM survey and clearance in 2020 and planned to increase this capacity in 2021. It also collaborated with Artios Global in providing training in AIM survey and clearance for other IPs from July to September 2020 to help broaden the sector response.[88] DDG expected to engage in AIM clearance in the second half of 2021.[89] DMAC reported that ATC, DAFA, MCPA and OMAR now have staff trained for AIM clearance, and that it has approved the AIM clearance SOPs of seven IPs.[90]

Table 6: Clearance of pre-2001 anti-personnel mined areas in 2020 (as reported by DMAC)[91]

Operator	Area cleared (m²)	AP mines destroyed	AV mines destroyed
ADC	249,069	23	0
Area	68,304	10	0
ATC	1,722,257	78	0
DAFA	8,119,986	513	14
DDG[92]	358,140	120	0
FSD	136,484	628	0
HALO Trust[93]	8,735,944	3,105	0
MCPA	48,010	0	0
OMAR	3,245,623	168	15
SDC	24,462	1	0
TDC	1,121,603	70	0
Totals	**23,829,882**	**4,716**	**29**

Table 7: Clearance of abandoned improvised mines by HALO Trust in 2020[94]

Region/Province / District	Areas cleared	Area cleared (m²)	Improvised AP mines destroyed
East: Nangarhar/Deh Bala/Acheen	5	127,332	55
South: Helmand/Nad Ali/Lashkar Gah	11	242,323	74
Totals	**16**	**369,655**	**129**

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR AFGHANISTAN: 1 MARCH 2003

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2013

↓

FIRST EXTENSION REQUEST DEADLINE (10-YEARS): 1 MARCH 2023

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

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.

Afghanistan will not meet this deadline and has already indicated that it will seek a second deadline extension in 2022.[95] In its first extension request submitted in 2012, Afghanistan set out milestones for completing clearance of all anti-personnel mine contamination estimated at 185.5km^2 as well as all anti-vehicle mine and ERW contamination, but this was based on receiving international donor assistance of $619 million. Since then, Afghanistan has continued to discover previously unrecorded anti-personnel mined areas and faced extensive contamination by improvised mines for which no provision was made in the extension request. In addition to its mine threat, Afghanistan has had to address UXO contamination on more than 1,200km^2 of NATO firing ranges.[96] At the same time, it also faced a sharp drop in donor funding, deteriorating security impeding access to hazardous areas and slower clearance rates.

At the end of 2020 Afghanistan had well over 187km^2 of conventional and improvised mine contamination remaining. The MAPA work plan for 2021–22 set a nominal target of clearing 330km^2 of mines and ERW but by March 2021 had confirmed funding of US$32 million, or only a quarter of the $129 million required, and aimed instead to clear a total of 46km^2. That included less than 18km^2 of areas affected by AP mines, improvised mines or mixed mined areas, a significant drop on clearance rates in the last five years (see Table 8).[97]

Table 8: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	24.24
2019[98]	28.01
2018	30.90
2017	28.12
2016	27.12
Total	**138.39**

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Afghanistan looked set to release a five-year plan in 2021 that would provide a sense of the direction it will pursue in its extension request. Looking beyond plans for clearance, DMAC is also reportedly discussing with the GICHD how to transition to a more reactive operating model once the bulk of clearance is complete and what capacity will be retained to tackle residual mine contamination.

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2 Article 7 Report (for 2020), Form C.
3 See e.g. S. George, "Afghan war enters more brutal phase as U.S. troops begin pull-out", *Washington Post*, 3 June 2021.
4 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
5 Article 7 Report (for 2020), Form F, p. 20.
6 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
7 Statement by Michelle Bachelet, UN High Commissioner for Human Rights, Geneva, 10 August 2021.
8 UN Assistance Mission in Afghanistan (UNAMA), *Protection of Civilians in Armed Conflict Annual Report 2020*, February 2021, pp. 16, 48–49. UNAMA recorded 878 civilian casualties from pressure-plate-activated mines of an improvised nature: 488 killed and 390 injured.
9 UN Assistance Mission in Afghanistan (UNAMA), *Protection of Civilians in Armed Conflict, mid-year update*, 1 January to 30 June 2021, p. 7.
10 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
11 MAPA Fast Facts, 3rd Quarter 1399 (October–December 2020), DMAC, undated but 2021.
12 Statement of Afghanistan, APMBC Intersessional Meetings, Geneva, 23 May 2019.
13 Article 7 Report (for 2020), p. 3.
14 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021; Article 7 Report (for 2020), Form C.
15 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021..
16 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
17 Article 7 Report (for 2020), Form C, p. 9; email from Akbar Oriakhil, DMAC, 21 June 20201.
18 See, e.g., reports that armed opposition groups mined the highway linking Kabul and Ghazni during fighting in August 2018: "Intense fighting as Taliban presses to take Afghan city", *Reuters*, 12 August 2018.
19 MAPA Fast Facts, Quarterly Update for 3rd Quarter Afghan year 1399 (October-December 2020).
20 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
21 Ibid.
22 Email from Abdul Qudos Ziaee, DMAC, 3 April 2019.
23 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
24 Ibid.
25 MAPA Operational Annual Work Plan Annual Plan 1400, (First Version), April 2021, p. 8.
26 Email from Sohaila Hashemi, Communications and Advocacy Officer, UNMAS, 22 April 2021.
27 Emails from Mats Hektor, Senior Technical Advisor, NPA, 7 and 19 April 2021.
28 DMAC, "National Mine Action Strategic Plan 1395–1399 (2016–2020), State Ministry for Disaster Management and Humanitarian Affairs, undated but 2016, p. 17.
29 2021 CCM Article 4 deadline Extension Request, p. 4.
30 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
31 Ibid.
32 Ibid.
33 Email from Fazel Rahman, DMAC, 25 February 2020.
34 Email from Sohaila Hahsemi, Communications and Advocacy Officer, UNMAS, 22 April 2021.
35 Email from Arianna Calza Bini, GICHD, 27 July 2021.
36 Email from Daniel Bertoli, Head of Programme – Afghanistan, DDG, 14 April 2021.
37 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
38 Email from Fazel Rahman, Project Manager Operations, DMAC, 25 February 2020.
39 DMAC, "Gender mainstreaming strategy of the Mine Action Programme of Afghanistan", undated but 2013, pp. 3–9.
40 Geneva International Centre for Humanitarian Demining (GICHD), Integrated Capacity Assessment Report, 5 July 2019 (draft), p. 17.
41 Email from Fazel Rahman, DMAC, 25 February 2020.
42 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.
43 Emails from Fazel Rahman, DMAC, 25 February and 28 April 2020.
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45 GICHD, Integrated Capacity Assessment Report, 5 July 2019 (draft), p. 16.

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

47 MAPA Operational Annual Work Plan Annual Plan 1400, (First Version), April 2021, p. 19.

48 Ibid, Annex A.

49 GICHD, Integrated Capacity Assessment Report, 5 July 2019 (draft), pp. 7–9, 28.

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51 Ibid.

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

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

55 Afghanistan Mine Action Standards, AMAS 06.10, March 2019, p. 5; Article 7 Report (for 2020), Form F, p. 15.

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

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59 Ibid.

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61 Email from Daniel Bertoli, DRC, 14 April 2021.

62 Email from Din Mohammad Nickwah, Country Director, FSD, 17 March 2021.

63 Email from Farid Homayoun, HALO Trust, 3 May 2021.

64 Ibid.

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66 Video statement by James Cowan, Chief Executive, HALO Trust, 9 June 2021; 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 Najim Rahim and Mike 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.

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70 Telephone interview with Calvin Ruysen, Head of Region – Afghanistan, Middle East, North Africa, HALO Trust, 6 September 2021.

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

73 Email from Farid Homayoun, HALO Trust, 3 May 2021.

74 Email from Daniel Bertoli, DRC, 14 April 2021.

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

76 Emails from Mohammad Akbar Oriakhil, DMAC, 17 March 2021; and Farid Homayoun, HALO Trust, 3 May 2021.

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

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

79 Article 7 Report (covering 2020), Form F, p. 14.

80 Article 7 Report (covering 2020), Form F; email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021.

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

82 Email from Daniel Bertoli, DDG/DRC, 14 April 2021.

83 Email from Farid Homayoun, HALO Trust, 3 May 2021.

84 Article 7 Report (for 2020), Form F, p. 21.

85 Emails from Mohammad Akbar Oriakhil, DMAC, 17 March 2021, and Farid Homayoun, HALO Trust, 3 May 2021.

86 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021; Article 7 Report (for 2020).

87 Email from Farid Homayoun, HALO Trust, 3 May 2021.

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89 Email from Daniel Bertoli, DDG/DRC, 14 April 2021.

90 Email from Mohammad Akbar Oriakhil, DMAC, 17 March 2021; MAPA Operational Annual Work Plan Annual Plan 1400, (First Version), April 2021, p. ii.

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

92 DDG/DRC reported clearance of 293,514m^2 in 2020 resulting in destruction of 97 AP mines.

93 HALO Trust reported clearance of 8,118,643m^2 in 2020 resulting in destruction of 2,885 AP mines.

94 Email from Mohammad Akbar Oriakhil, DMAC, 21 June 2021.

95 See for example MAPA Operational Annual Work Plan Annual Plan 1400, (First Version), April 2021, p. i: "Afghanistan will certainly request another extension in 2022."

96 Article 7 Report (for 2020), Form C, p. 9.

97 MAPA Operational Annual Work Plan Annual Plan 1400, (First Version), April 2021, pp. 9, 18.

98 Article 7 Report (for 2019), Form F, revised up from 27.97km^2 reported by DMAC in email received 25 February 2020.

ANGOLA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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 2020

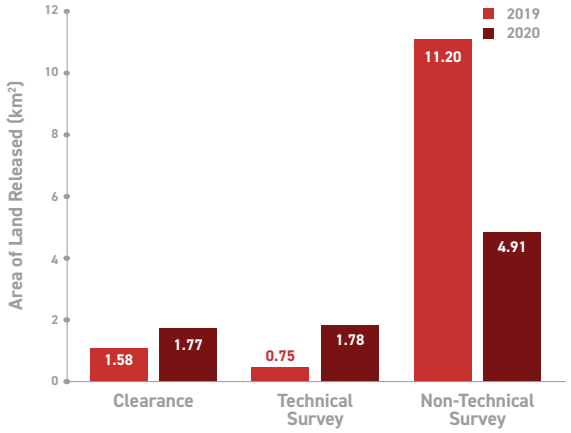
1.77KM²

AP MINES DESTROYED IN 2020

510

(84 DESTROYED DURING SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Anti-personnel mine survey and clearance operations continued in Angola during 2020, albeit restricted by the COVID-19 pandemic. Although Angola did not meet its land release targets for the year, there was a small increase in clearance output in 2020 compared to the previous year. Continued improvements to Angola's mine action infrastructure were also delayed by the pandemic and it is expected that 2021 will bring a number of developments including the restructuring of the national authority, changing the National Intersectoral Commission on Demining and Humanitarian Assistance (CNIDAH) 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 finalise its resource mobilisation strategy increasing 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 update the accompanying Article 5 Implementation Work Plan to include measurable gender and diversity targets.**
- **Angola should formally approve its National Mine Action Standards (NMAS).**
- **Angola should accelerate the integration of mine action data from the Executive Commission for Demining (CED) into the CNIDAH national database.**
- **The Government of Angola should mobilise financial resources for CNIDAH's quality management capacity to allow it to function effectively across provinces.**
- **Angola should ensure that no taxes are imposed on equipment imported by international operators to carry out mine action operations.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	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)	6	6	CNIDAH is in the process of changing its legal status from a commission to a national agency and it is expected that this will resolve the 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 due to be approved in 2020 but, as at July 2021, was still under review.
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 work plan.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	8	7	Improvements continued to be made to the national database in 2020 to maintain data quality. It was planned that CED tasks would be integrated into the database as of 2020 but the data continues to be excluded as their land release methods are not IMAS compliant.
PLANNING AND TASKING (10% of overall score)	7	7	Angola's new National Mine Action Strategy 2020–2025 and accompanying Article 5 Implementation Work Plan 2020–2025 have 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.
LAND RELEASE SYSTEM (20% of overall score)	6	6	Nine national mine action standards (NMAS) have been drafted and reviewed by operators and it was expected they would be officially approved in June 2021. Quality management continues to be a challenge for CNIDAH due to a lack of financial resources. In 2020, training and quality assurance (QA) and quality control (QC) activities took place across nine provinces.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	8	Overall land release output fell in 2020 due to decreased survey, although clearance output increased slightly despite the challenges posed by COVID-19. Angola did not meet its land release target for the year and at current demining capacity it is estimated that completion of clearance could take ten years, far exceeding its current Article 5 deadline of end 2025. During 2020, Angola held sensitisation workshops in three provinces nearing completion to advance their understanding of residual risk in support of the residual management strategy, now developed.
Average Score	**7.1**	**7.0**	**Overall Programme Performance: GOOD**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- CNIDAH (Comissão Nacional Intersectorial de Desminagem e Assistência Humanitária)
- Executive Commission for Demining (Comissão Executiva de Desminagem, CED)

NATIONAL OPERATORS

- National Demining Institute (Instituto Nacional de Desminagem, INAD)
- Angolan Armed Forces
- Military Office of the President
- Police Border Guard (under the CED)
- The Association of Mine Professionals (APACOMINAS)(NGO)

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 2020, according to CNIDAH, a total of 1,033 anti-personnel mined areas with an estimated size of 84.4km^2 remained to be addressed in 17 provinces (see Table 1). This includes just under 81.6km^2 across 964 confirmed hazardous areas (CHAs) and just over 2.8km^2 across 69 suspected hazardous areas (SHAs).[1]

Table 1: Anti-personnel mined area by province (at end 2020) [2]

Province	CHAs	Area (m^2)	SHAs	Area (m^2)	Total Area (m^2)
Bengo	55	3,440,820	0	0	3,440,820
Benguela	46	2,510,771	0	0	2,510,77
Bié	102	5,444,864	0	0	5,444,864
Cabinda	27	1,230,321	0	0	1,230,321
Huambo[3]	1	12,890	0	0	12,890
Huila	17	3,339,594	0	0	3,339,594
Kuando Kubango	226	17,795,504	0	0	17,795,504
Kunene	33	2,575,367	0	0	2,575,367
Kwanza Norte	18	3,231,821	0	0	3,231,821
Kwanza Sul	120	9,436,804	2	413,999	9,850,803
Luanda	9	1,121,211	0	0	1,121,211
Lunda Norte	48	1,755,897	9	121,268	1,877,165
Lunda Sul	46	7,569,410	20	1,095,145	8,664,555
Moxico	187	10,879,952	38	1,196,996	12,076,948
Namibe	2	155,100	0	0	155,100
Uige	10	1,259,277	0	0	1,259,277
Zaire	17	9,823,000	0	0	9,823,000
Totals	**964**	**81,582,603**	**69**	**2,827,408**	**84,410,011**

This is a 3.6km^2 reduction in the overall amount of anti-personnel mined area from the just over 88km^2 reported at the end of 2019.[4] In addition, a total of 1.27km^2 of anti-personnel mine and anti-vehicle contamination was added to the database in 2020 from new surveys across the country. Of this, NPA identified and recorded one new CHA in the Kwanza Norte province of 184,000m^2, HALO Trust discovered 18 areas totalling 520,262m^2, MAG identified eight new areas totalling 64,850m^2, and APOPO identified 497,000m^2.[5]

In 2019, non-technical survey of all 18 provinces across the country was completed, ensuring that previously inflated mined areas have now been redefined or cancelled. CNIDAH, The HALO Trust, Mines Advisory Group (MAG), and Norwegian People's Aid (NPA) all agree that Angola now has its most accurate baseline of anti-personnel mine contamination ever.[6] However, NPA emphasised the need to continue evidence-based survey, in order to provide more accurate information on the type of contamination and to increase further the number of CHAs.[7] Indeed, in 2020 a total of 6.7km^2 was released other than by clearance.

In the Article 5 Implementation Work Plan 2020–2025, CNIDAH 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, CNIDAH 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.[8] No verification of areas cleared under CED auspices took place in 2020.[9]

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.[10]

Overall, Angola's progress in land cancelled and reduced through the re-survey has resulted in huge land release, with nearly 150km^2 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 is likely to be far less cancellation from now on. Most of the remaining contamination is expected to be dealt with through clearance and technical survey according to CNIDAH.[11]

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, Kuando Kubango, and Moxico. In addition to its anti-personnel mine contamination, CNIDAH reported that at the end of 2020 Angola had 1.02km^2 of anti-vehicle mine contamination.[12] 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.[13]

Many minefields contain a mix of anti-personnel and anti-vehicle mines. Operators have also reported finding anti-personnel mines being used as triggers for larger devices linked with detonating cords and being reinforced with other explosive ordnance such as projectiles and rocket-propelled grenades.[14]

Angola also has a significant problem of explosive remnants of war (ERW), especially unexploded ordnance (UXO), and what appears to be very limited, if any, contamination from cluster munition remnants (see Mine Action Review's *Clearing Cluster Munition Remnants 2021* report on Angola for further information).[15]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Angola's mine action programme is managed by the newly established National Mine Action Agency (ANAM). ANAM is a government agency formerly known as CNIDAH, which served as the national mine action authority and reported to the Council of Ministers. CNIDAH received approval in April 2021 to change its legal status from a commission to a national agency to further strengthen coordination mechanisms and information sharing between the different national bodies.[16]

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).[17] This has made it difficult for Angola to describe in detail and with any degree of accuracy the extent of land released over the years as the CED operators are not accredited by CNIDAH, nor are their activities quality assured in line with International Mine Action Standards (IMAS).[18] This has resulted in limited oversight of where the CED-coordinated operations are conducted, the kind of activities that are implemented, and the results achieved.[19]

In 2019, CNIDAH re-established mine action and donor coordination meetings with all partners, operators, and key donors every four months.[20] This was reduced to two meetings in 2020 both of which were held without donors due to COVID-19. In 2021, it is planned that the meetings will resume with donors in attendance as it has been helpful for donors to understand the day to day challenges and achievements of operators.[21]

The HALO Trust, NPA, MAG, and APOPO have all reported being consulted in key decision-making processes by the national authorities through participation at these meetings and other channels.[22] For example, it was reported that all operators participated actively in the elaboration of Angola's National Mine Action Strategy 2020–2025 and Article 5 Implementation Work Plan 2020–2025.[23]

NPA is supporting CNIDAH to develop its capacity to better manage the national mine action programme, including in key areas such as information and quality management.[24] This 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 will continue until the end of 2021.[25] The focus of the past two years for the project has been to put management systems in place and the relevant documentation and the next stage of the project will focus on implementation.[26] During 2020, the Geneva International Centre for Humanitarian Demining (GICHD) continued to provide support to CNIDAH for strategic planning. However, no field visits or workshops took place due to COVID-19.[27]

International mine action operators continue to report lengthy bureaucratic obstacles in securing visas for expatriate personnel, with processing times of four to twelve months, which was further compounded by COVID-19.[28] There have been some changes to the tariffs on importation of demining equipment, with HALO Trust reporting that as of April 2021, tax exemptions have been applied to demining equipment although this does not apply to vehicles.[29]

Angola's mine action programme has faced critical challenges in securing financial resources in recent years. In Angola's Article 5 Implementation Work Plan 2020–2025, based on an estimate of remaining contamination of 92.41km^2, clearance is budgeted to cost US$286 million through to completion by 2025. The Angolan government has committed to clear all roads in the country through its budgetary allocations for the CED. This would leave 90.08km^2 of clearance and a budget projection of $279 million.[30] Funding has been secured for national and international operators in 2020 but, as at June 2021, Angola still needed to secure approximately $166 million to complete clearance of the remaining mine contamination in the country.[31]

The Angolan government allocated approximately $15.7 million to support mine action in 2020 and similar support is expected annually until 2025.[32] These funds are split between CNIDAH, the CED, and INAD to cover salaries and administrative overheads and to support the clearance infrastructure across the country.[33] Additionally, the government has committed to fund The HALO Trust in a $60 million, five-year project to release more than 15km^2 across 153 minefields in Kuando Kubango province, with $20 million paid out in 2020. 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.[34]

In 2019, a draft resource mobilisation strategy was developed and, as at July 2021, was still under review.[35] 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.[36] In 2018, Angola participated in the Anti-Personnel Mine Ban Convention (APMBC) individualised approach following which donor support was increased with funding provided by Belgium, Japan, Norway, the United Kingdom, and the United States along with private sector funding from, for example, British Petroleum (BP).[37]

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.[38] However, while the Strategy pledges that Angola's mine action programme will ensure that gender and diversity considerations are taken into consideration in the planning, implementation, and monitoring of all mine action projects, it does not say how this will be done. In Angola's updated Article 5 Implementation Work Plan 2020–2025 it 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.[39] However, there are no specific targets in place or measurable outcomes.

International non-governmental organisation (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.[40] Operators employ Angolan nationals from all ethnic groups who are able to communicate in local languages as well as Portuguese.[41] Pre- and post-clearance household surveys allow The HALO Trust to obtain the perspective of diverse groups within the local communities about the obstacles they face due to mine contamination, as well as determining the main areas of relevant impact for women, men, boys, and girls.[42]

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 as well as men and do not contain requirements that unnecessarily discourage female applicants or preclude their employment.[43] 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.[44] During survey MAG consults with local government, community leaders and male and female representatives from the community to assess their needs and prioritise accordingly. For example, prioritising areas for clearance allow access to water sources for drinking, cooking, and farming is important as fetching water is traditionally a task for women and girls.[45]

All operators and CNIDAH have reported taking into consideration gender balance in the hiring of staff in mine action operations, ensuring that a mix of male and female staff were employed in operational roles in the field including in survey and community liaison teams, as well as in managerial positions.[46]

In 2020, CNIDAH's total workforce was 35% female with 30% of ten managerial positions occupied by women but only two women working in operational roles.[47] At the HALO Trust 33% of operational roles were held by women; at NPA the figure was 15%; at MAG, 32%; and at APOPO, 33% of the 12 deminers were women. Both HALO Trust and MAG increased the proportion of women working in operational roles from 2019 to 2020 with MAG reporting a 10% increase towards its goal of gender balance. While in managerial positions at The HALO Trust 12% were women, the figure was 13% at NPA, and it was 2% at MAG, with no women in managerial or supervisory positions at APOPO in Angola.[48]

INFORMATION MANAGEMENT AND REPORTING

CNIDAH manages a national Information Management System for Mine Action (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.[49] In previous years, Angola's mine action programme suffered from significant problems with information management, in particular the poor quality of the CNIDAH national database. As noted above, since 2018 an NPA Capacity Development Adviser has been embedded in the CNIDAH team 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.[50] Throughout 2020, database cleaning and updating took place to maintain data quality.[51] Operators have reported that data collection forms are consistent and enable collection of the necessary data.[52]

According to the National Mine Action Strategy 2020–2025, all CED-coordinated tasks will be reported to CNIDAH, disaggregated by survey and clearance, as of 2020.[53] However, as at March 2021, CED data continues to be excluded from the database as their land release methods are not IMAS-compliant and they were largely non-operational during 2020.[54]

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 APMBC meetings.

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 2021, the strategy has yet to be formally approved by the government of Angola but once adjustments are made to align it with the mandate of the newly created government agency ANAM it will be signed off by the office of the presidency.[55]

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 will be trained within the first quarter of 2021.[56] As at June 2021, 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, CNIDAH will take the lead in developing a communications plan on the completion process by the middle of 2021, to facilitate effective information sharing.[57]

The Article 5 implementation Work Plan 2020–2025 contains annual land release targets, and projected milestones for Huambo, Malange, and Namibe provinces and on the standardisation of road contamination, establishment of comprehensive national mine action standards and a national residual contamination management plan.[58] In 2020, the majority of land release was planned to take place in Kuando Kubango, Kwanza Norte, Kwanza Sul, Lunda Sul, Moxico, Uige, and Zaire, with a land release target of 17.2km^2.[59] The COVID-19 outbreak led to the suspension of survey and clearance operations during March and April 2020, following the declaration of a national state of emergency.

At the end of April, CNIDAH authorised operators to resume demining activities at 50% capacity with operators resuming work at full capacity from July 2020. In October 2020, domestic flights resumed on a limited basis. Throughout the year there were also delays on the importation of equipment and machinery parts and restrictions when moving between provinces which caused delays to operations. Although Angola did not come close to meeting its land release target for the year, despite the challenges it did manage to release 8.46km^2.[60] 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.

Table 2: Annual targets for release of mined area in 2021–25[61]

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 are inadequate, and that the effective implementation of the work plan depends heavily on these processes being strengthened.[62] 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.[63] Guidelines for a new tasking and prioritisation system have been developed, which was planned to be finalised and adopted during 2020 following a round table with operators, but this was postponed due to COVID-19. By July 2021, this had been implemented and the new tasking and prioritisation system had been adopted.[64]

A key feature of the new system is that provinces are assigned to operators giving them responsibility over that province and making it easier for CNIDAH to monitor their operations.[65] As part of the system a multi-year (2021–25) Tasking Master Plan (TMP) provides a comprehensive list of all hazardous areas that have been registered in the national database, with the Annual Task List (ATL) providing annual list of the tasks that will be cleared and by which operator.[66]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no specific national mine action legislation in Angola.[67]

While NMAS are in place in Angola, they are not up to date and are not IMAS-compliant. This has resulted in a lack of standardisation for activities, and consequently, operators have been relying on their own standing operating procedures.[68] With support of NPA's capacity development project, initially three IMAS-compliant standards on information management, quality management, and post-land-release documentation were developed with an additional seven standards identified as a minimum requirement for Angola. Nine NMAS have been drafted and reviewed by operators, which were expected to be officially approved in June 2021,[69] but as of writing had not yet occurred. An NMAS Review Board, chaired by CNIDAH and with representation from every operator, has been established to oversee all aspects of standards. A Technical Working Group has also been set up to advise the Review Board.[70]

CNIDAH is responsible for undertaking external quality assurance (QA) and quality control (QC) of mine action activities, including QC of all completed tasks prior to handover of land to beneficiaries. However, CNIDAH lacks the financial resources to mobilise its quality management capacity across provinces, which has resulted in very limited QA and significant delays in QC on completed tasks. This has also impacted negatively on handover procedures, with significant delays at the provincial levels.[71]

CNIDAH has relied on operators to fund its transport and, sometimes, even provide accommodation and per diem. This allowed CNIDAH to produce completion reports and remove completed tasks from the IMSMA database.[72] In 2020, through the FCDO-funded Capacity Development Project, NPA provided both on-the-job and applied training to CNIDAH QA and QC officers.[73] A total of 89 QA and QC activities were conducted during 2020 by CNIDAH monitoring teams across nine provinces.[74]

It has been agreed that CNIDAH will receive funding to conduct QA and QC as part of The HALO Trust five-year demining project in Kuando Kubango province.[75]

OPERATORS AND OPERATIONAL TOOLS

Four international NGOs conducted demining for humanitarian purposes in Angola in 2020: APOPO, The HALO Trust, MAG, and NPA. APACOMINAS, the only national operator, was also operational in 2020.[76]

The CED's four operators—the Armed Forces, the Military Office of the President, INAD, and the Police Border Guard—were not operational across Angola in 2020 due to a reduction in government funding but they did undertake some commercial verification type tasks.[77]

MAG, NPA, and the HALO Trust all increased their operational capacity from 2019 to 2020 thanks to increased funding. HALO Trust also has two non-technical survey teams totalling seven personnel and one technical survey team of three personnel. In APOPO and MAG clearance personnel also conduct non-technical survey and technical survey in the areas that they work. NPA has two non-technical survey personnel and clearance teams also conduct technical survey. MAG, NPA, HALO, and APOPO all expect to increase their operational capacity during 2021.[78] NPA is planning to introduce six mine detection dogs (MDDs) into its operations during the second half of 2021 and is conducting a three-month MDD handler training course which will also include selected CNIDAH QA/QC officers. The introduction of MDDs means that NPA will be deploying the full toolbox in Angola.[79]

Table 3: Operational clearance capacities deployed in 2020[80]

Operator	Manual teams	Total deminers*	Animal detection capacity	Machines**	Comments
APOPO	1	6	6 handlers, 12 rats	0	No change from 2019
HALO Trust	36	288	0	1	Increase by 50 deminers from 2019
APACOMINAS	3	25	0	2	Newly operational in 2020
NPA	6	56	0	4	Triple capacity from 2019
MAG	7	77	0	5	Increase by 40 deminers from 2019
Totals	**53**	**452**	**6 handlers, 12 rats**	**12**	

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

DEMINER SAFETY

The HALO Trust reported that one deminer was injured by an R2M2 anti-personnel mine during clearance operations in 2020. The accident was initially investigated by HALO Trust and the site was then visited by CNIDAH which conducted its own assessment. Preliminary findings indicate a breach in SOPs by the deminer with an accident report shared by the HALO Trust with other operators in August 2021.[81]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of almost 8.5km^2 of mined area was released in 2020: almost 1.8km^2 through clearance, just over 1.8km^2 through technical survey, and 4.9km^2 through non-technical survey.[82]

SURVEY IN 2020

CNIDAH reported that international operators released a total of just under 6.69km^2 through survey in 2020: cancelling 4.9km^2 through non-technical survey (see Table 4) and reducing 1.78km^2 through technical survey (see Table 5).[83] This represents an overall 44% decrease on the 11.95km^2 released by survey in 2019.[84] This decrease was due to the fall in cancellation by non-technical survey as area reduced by technical survey increased from 2019 to 2020.

CLEARANCE IN 2020

According to CNIDAH, operators cleared a total of 1.77km^2 of mined area in 2020, destroying in the process 426 anti-personnel mines (three of which were mines of an improvised nature), 87 anti-vehicle mines, and 802 items of ERW (see Table 6 for details).[85] This is a 13% increase on the 1.56km^2 of mined area cleared in 2019.[86] However, the number of square metres cleared for every anti-personnel mine found has also increased significantly: from 811m^2 per mine in 2019 to 4,166m^2 per mine in 2020.

In addition, 84 anti-personnel mines were destroyed during spot tasks: 9 by NPA, 17 by the HALO Trust, and 58 by MAG.[87]

Table 4: Cancellation through non-technical survey in 2020[88]

Province	Operator	Area cancelled (m^2)
Moxico	MAG	27,339
Kwanza Norte	NPA	3,802,846
Uíge	NPA	236,770
Uíge	APOPO	131,728
Bié	HALO Trust	122,032
Kuando Kubango	HALO Trust	587,629
Total		**4,908,344**

Table 5: Reduction through technical survey in 2020[89]

Province	Operator	Area reduced (m^2)
Kwanza Norte	NPA	540,555
Uíge	NPA	328,008
Kwanza Sul	APOPO	47,877
Uíge	APOPO	347,761
Benguela	HALO Trust	33,810
Kuando Kubango	HALO Trust	241,739
Kwanza Sul	HALO Trust	81,087
Moxico	MAG	50,843
Kwanza Sul	APACOMINAS	109,700
Total		**1,781,380**

Table 6: Mine clearance in 2020[90]

Province	Operator	Area cleared (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
Kwanza Sul	APACOMINAS	183,300	17	0	64
Kwanza Norte	NPA	16,789	11	0	72
Uíge	NPA	41,598	30	2	19
Uíge	APOPO	3,567	2	1	21
Benguela	HALO Trust	201,741	70	0	66
Bié	HALO Trust	170,724	81	0	44
Kuando Kubango	HALO Trust	276,747	120	54	18
Kwanza Sul	HALO Trust	53,205	33	0	27
Moxico	MAG	827,149	62	30	471
Totals		**1,774,820**	**426**	**87**	**802**

AP = Anti-personnel AV = Anti-vehicle

There was an overall reduction in land release productivity in 2020 compared to 2019. This was due to a large reduction in cancellation by non-technical survey, which is to be expected as Angola now has a much more accurate estimate of overall anti-personnel mine contamination. Clearance and technical survey output increased slightly from 2019, despite the restrictions due to the COVID-19 pandemic.

APOPO reported that it doubled its operational productivity in 2020 due to a reduction in operational downtime which resulted from APOPO's increased independence as an operator and improved logistics.[91] NPA increased the area it reduced by technical survey by more than 100%, while reducing its area cleared by more than 40%, by continuing to deploy the evidence approach established in 2019 with increased operational capacity.[92] The HALO Trust reported that the reduction in the amount of mined areas cancelled, reduced and cleared in 2020 was due to the COVID-19 pandemic and resultant two-month stand-down.[93] MAG increased clearance output in 2020 and reported a decrease in cancellation by non-technical survey and reduction by technical survey.[94] MAG reported that it had invested heavily in machines and that efficiency had improved in certain respects in 2020.[95]

As at June 2021, all known mined areas in Huambo province had been released. Four provinces (Uige, Kwanza Norte, Malange, and Namibe) 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.[96] 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 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 CNIDAH's residual contamination strategy (see Planning for residual risk after completion).[97]

Completion of the remaining three minefields in Namibe province as operators have yet to be deployed, however, it is expected that clearance will be completed no later than December 2022. Completion of Uige and Kwanza Norte provinces are also expected by the end of 2022.[98]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR ANGOLA: 1 JANUARY 2003

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 JANUARY 2013

↓

FIRST EXTENDED DEADLINE (5-YEAR EXTENSION): 1 JANUARY 2018

↓

SECOND EXTENDED DEADLINE (8-YEAR EXTENSION): 31 DECEMBER 2025

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC (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 not on track to meet this deadline.

Angola was 8.7km^2 under its Article 5 work plan target for land release of 17.2km^2 in 2020.[99] Based on contamination figures provided as at June 2021, Angola will need to release nearly 17.1km^2 of anti-personnel mined area in 2021 and 2022, going down to nearly 15.7km^2 in 2023, 14.3km^2 in 2024, and 7.8km^2 in 2025 to meet its Article 5 deadline.[100] Although COVID-19 led to reduced land release output in 2020, it was expected that annual land release would drop due to the completion of nationwide re-survey. This means that land release is expected to mainly result from clearance and technical survey rather than large amounts of cancellation through non-technical survey.[101]

Table 7: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	1.8
2019	1.6
2018	1.0
2017	1.2
2016	4.1
Total	**9.7**

With these considerations, and the current demining capacity in the country, CNIDAH have stated that it will 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.[102] While funding has increased in Angola in recent years, as at May 2021, Angola still had a funding shortfall of $200 million for the period through to the end of 2025.[103]

CNIDAH has reported that the completed re-survey has meant that demining resources are more likely to be deployed for clearance and technical survey on land that is actually contaminated and that CNIDAH will continue to impress upon all operators the importance of applying proper land release principles to reduce clearance of uncontaminated areas.[104] In 2020, APOPO cleared two CHAs in Uige province totalling 363,400m^2 with no mines found.[105] The HALO Trust cleared ten areas totalling 184,551m^2 which proved to contain no anti-personnel mines.[106] MAG cleared three minefields totalling 26,431m^2 which contained no anti-personnel mines but only one mined area of 4,940m^2 contained no explosive items while the other two areas contained a total of only three items of UXO.[107] NPA conducted clearance and technical survey of two mined areas measuring 151,765m^2 which proved to contain no anti-personnel mines, although approximately 4% of this area was cleared and the rest was reduced through technical survey.[108]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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 but, as at June 2021, CNIDAH reported that a residual management strategy had been developed and was planned to be completed by August 2021.[109] CNIDAH 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 during 2020 held meetings with the political leadership in Luanda, Malange, and Namibe provinces to sensitise them to the terms of the treaty, set out their roles within the declaration process, and sought to allay any fears about job losses within demining. CNIDAH planned to hold these sensitisation workshops in all 18 provinces by the end of 2021.[110]

There were also targets for Angola to have a trained national capacity that can efficiently address residual contamination by the first quarter of 2021 but this has been delayed until after the completion of the residual management strategy.[111]

1 Email from Robert Iga Afedra, Capacity Development Advisor, NPA, on behalf of CNIDAH, 22 March 2021.

2 Email from Robert Iga Afedra, NPA, on behalf of CNIDAH, 22 March 2021; Article 7 Report (for 2020), Form C.

3 This CHA in Huambo was cleared in 2015 but was only officially confirmed as cleared in 2021.

4 Email from Robert Iga Afedra NPA, on behalf of CNIDAH, 1 April 2020.

5 Emails from Robert Iga Afedra, NPA, on behalf of CNIDAH, 28 May 2021; and Miroslav Pisarević, Country Director, NPA, 5 April 2021; Jeanette Dijkstra, Country Director, MAG, 27 April 2021; and Rob Syfret, Programme Manager, HALO Trust, 26 April 2021.

6 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 Miroslav Pisarević, NPA, 28 March 2020.

7 Email from Miroslav Pisarević, NPA, 28 March 2020.

8 Article 5 Implementation Work Plan 2020–2025, p. 6.

9 Telephone interview with Robert Iga Afedra, NPA, 22 February 2021.

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

11 CNIDAH, Article 5 Implementation Work Plan 2020–2025, November 2019, p. 4.

12 Comprising 934,525m^2 across 89 CHAs and 84,235m^2 across 21 SHAs. Article 7 Report (for 2020), Form C.

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

14 Emails from Jeanette Dijkstra, MAG, 27 April 2021 and Rob Syfret, HALO Trust, 26 April 2021.

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

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

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

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

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

20 Emails from Robert Iga Afedra (on behalf of CNIDAH), 1 April 2020; and Miroslav Pisarević, NPA, 28 March 2020.

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

22 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.

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

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

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

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

27 Email from GICHD, 30 April 2021.

28 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.

29 Email from Rob Syfret, HALO Trust, 26 April 2021.

30 CNIDAH, Article 5 Implementation Work Plan 2020–2025, November 2019, p. 7.

31 CNIDAH, Updated Article 5 Implementation Work Plan 2020–2025, p. 7.

32 CNIDAH, Article 5 Implementation Work Plan 2020–2025, November 2019, p. 6; and email from Miroslav Pisarević, NPA, 5 April 2021.

33 Emails from Robert Iga Afedra (on behalf of CNIDAH), 1 April 2020; and Miroslav Pisarević, NPA, 5 April 2021.

34 Emails from Ralph Legg, HALO Trust, 30 March 2020; and Rob Syfret, HALO Trust, 26 April 2021.

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

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

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

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

39 ANAM, Updated Article 5 Implementation Work Plan 2020–2025, pp. 11–12.

40 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

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

42 Email from Rob Syfret, HALO Trust, 26 April 2021.

43 Email from Rob Syfret, HALO Trust, 26 April 2021.

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

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

46 Email from Jeanette Dijkstra, MAG, 27 April 2021.

47 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; and Robert Iga Afedra, NPA, on behalf of CNIDAH, 22 March 2021.

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

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

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

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

52 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.

53 Angola National Mine Action Strategy 2020–2025, pp. 18–22.

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

55 Emails from GICHD, 30 April 2021; and Robert Iga Afedra, NPA, on behalf of CNIDAH, 28 May 2021.

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

57 Ibid., pp. 29–31.

58 CNIDAH, Article 5 Implementation Work Plan 2020–2025, November 2019, p. 8.

59 Ibid., p. 11.

60 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; Article 7 Report (for 2020), Form C.

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

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

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

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

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

66 CNIDAH, Minefield Tasking, Planning, and Prioritisation Guideline, 2021.

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

68 Ibid.

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

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

71 Angola National Mine Action Strategy 2020–2025, pp. 11–12.

72 Emails from Ralph Legg, HALO, 21 May 2019; Shadreck Njamba, MAG, 22 May 2019; Joaquim da Costa, NPA, 6 May 2019; and Ashley Fitzpatrick, Programme Manager, APOPO Zimbabwe, 27 July 2019.

73 Telephone interview with Robert Iga Afedra, NPA, 22 February 2021.

74 Article 7 Report (for 2020), Form J.

75 Telephone interview with Robert Iga Afedra, NPA, 22 February 2021.

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

77 Telephone interview with Robert Iga Afedra, NPA, 22 February 2021.

78 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.

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

80 Email from Robert Iga Afedra, NPA, on behalf of CNIDAH, 22 March 2021; Rob Syfret, HALO Trust, 26 April 2021

81 Emails from Rob Syfret, HALO Trust, 26 April and 6 August 2021.

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

83 Ibid.; and emails from Manuel João Agostinho, APOPO, 22 March 2021; and Miroslav Pisarević, NPA, 5 April 2021.

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

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

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

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

88 Article 7 Report (for 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.

89 Article 7 Report (for 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.

90 Article 7 Report (for 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.

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

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

93 Email from Rob Syfret, HALO Trust, 26 April 2021.

94 Email from Jeanette Dijkstra, MAG, 27 April 2021.

95 Email from Jeanette Dijkstra, MAG, 17 August 2021.

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

97 CNIDAH, Updated Article 5 Implementation Work Plan 2020–2025, p. 10.

98 Ibid.

99 CNIDAH, "Detailed work plan for the implementation of Article 5 of the Convention (2019-2025)", Annex 1.

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

101 CNIDAH, Article 5 Implementation Work Plan 2020–2025, November 2019, p. 11.

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

103 Article 7 Report (for 2020), Form J.

104 Article 7 Report (for 2019), Form J.

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

106 Email from Rob Syfret, HALO Trust, 26 April 2021.

107 Email from Jeanette Dijkstra, MAG, 27 April 2021.

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

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

110 Telephone interview with Robert Iga Afedra, NPA, 22 February 2021; and Article 7 Report (for 2020), Form J.

111 Angola National Mine Action Strategy 2020–2025, pp. 27–29; and email from Robert Iga Afedra, NPA, 4 July 2021.

ARGENTINA
(MALVINAS)

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2023
CLEARANCE DECLARED COMPLETE BY THE UNITED KINGDOM

RECOMMENDATIONS FOR ACTION

- **Argentina should carefully review the declaration by the United Kingdom that all mined areas on the Malvinas/Falkland Islands have been cleared and then declare fulfilment of its obligations under Article 5 of the Anti-Personnel Mine Ban Convention if it satisfied.**

UNDERSTANDING OF AP MINE CONTAMINATION

Argentina claims that it is mine-affected by virtue of its sovereignty over the Malvinas. On ratifying the Anti-Personnel Mine Ban Convention (APMBC), Argentina submitted a declaration reaffirming "its rights of sovereignty over the Malvinas, South Georgia and South Sandwich and the surrounding maritime areas which form an integral part of the territory."[1] It reiterated this declaration most recently at the APMBC Intersessional Meeting in June 2021.[2] Argentina does not accept the results of the demining undertaken by the United Kingdom, which it is unable to verify directly.[3]

The islands were mined, mostly by Argentinian forces, during its armed conflict with the United Kingdom in 1982. Argentina has reported that no other territory under its jurisdiction or control is mine-affected.[4]

PROGRAMME MANAGEMENT

Argentina has a Humanitarian Demining Working Group (Grupo de Trabajo Desminado Humanitario) established by a Ministry of Defence resolution, to which the Ministry of Foreign Affairs is invited, and a Humanitarian Demining Training Centre (Centro de Entrenamiento de Desminado Humanitario).[5]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Argentina has stated that it is unable to meet its Article 5 obligations because it has not had access to the Malvinas due to the "illegal occupation" by the United Kingdom. It did, however, make an offer more than a decade ago to support demining of the islands. In November 2020, Argentina reiterated its claim of sovereignty over the islands and declared that if the United Kingdom entered into negotiations over sovereignty, an agreement on the conclusion of the demining activities could be reached between the two States.[6]

Under Article 5 of the APMBC, and in accordance with the three-year extension granted in 2019 (the second extension granted since Argentina became a State Party on 1 March 2000), Argentina 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. In the request and in its statement at the 18th Meeting of States Parties, Argentina has indicated its readiness to elaborate a new provisional agreement on the basis of a form of joint sovereignty with the United Kingdom, which would definitely conclude the demining process.[7]

In 2018, the United Kingdom submitted and was granted a request to extend its Article 5 deadline by an additional five years until 1 March 2024, which included a plan to complete the demining of the Malvinas/Falkland Islands.[8] On 18 November 2020, the United Kingdom declared before the Eighteenth Meeting of the States Parties that it had fulfilled its Article 5 obligations and that clearance operations concluded on 14 November 2020.[9]

At the 18th Meeting of States Parties, the United Kingdom responded to Argentina's right of reply, stating that it had no doubt about its sovereignty over the Falkland Islands and South Georgia and the South Sandwich Islands and the surrounding maritime areas of both territories, nor about the principle and the right of the Falkland Islanders to freely determine their political status.[10]

At the intersessional meeting in June, the United Kingdom stated that an anti-vehicle mine washed up on Yorke Bay beach in May 2021. Any mines found in the future will be disposed of by the Explosive Ordnance Disposal team from the UK's Royal Air Force Armament Engineering Flight, based on the Islands.[11]

1 Article 7 Report (covering 1999), Form A.

2 Statement of Argentina, APMBC Intersessional Meetings, 23 June 2021

3 Article 7 Report (covering 2020), Form J.

4 Statement of Argentina, 16th Meeting of States Parties, Vienna, 20 December 2017.

5 Article 7 Report (covering 2018), Form A.

6 Statement of Argentina, 18th Meeting of States Parties, Geneva, 18 November 2020.

7 Argentina 2019 Article 5 deadline Extension Request, 19 March 2019, at: http://bit.ly/2JBbkAM; Statement of Argentina, 18th Meeting of States Parties, Geneva, 18 November 2020.

8 UK 2018 Article 5 deadline Extension Request.

9 Statement of United Kingdom, 18th Meeting of States Parties, Geneva, 18 November 2020.

10 Statement of United Kingdom, Right of Reply in response to Argentina's Right of Reply in response to United Kingdom's declaration of completion, 18 November 2020.

11 Statement of the United Kingdom, APMBC Intersessional Meetings, 24 June 2021.

BOSNIA AND HERZEGOVINA

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2027
UNCLEAR WHETHER ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: HEAVY

MINE ACTION REVIEW ESTIMATE

50KM²

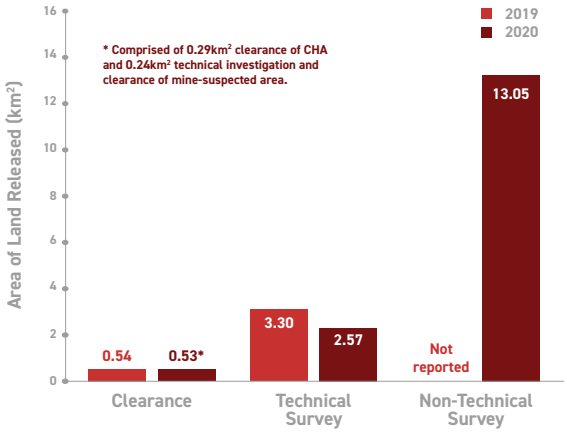
AP MINE CLEARANCE IN 2020

0.53KM²*

AP MINES DESTROYED IN 2020

1,342

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

In 2020, Bosnia and Herzegovina (BiH) was granted a request to extend its Article 5 deadline by a further six years to 1 March 2027.

The European Union (EU)-funded country assessment project, which took place from July 2018 to May 2020, consisted of non-technical survey of all remaining areas suspected to be mined. The project grouped together suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs) into logical units/polygons based on economic, cultural, geographical, or other reasons, encompassing one or more impacted communities, in what the Bosnia and Herzegovina Mine Action Centre (BHMAC) terms "Mine Suspected Areas" (MSAs). The MSAs will then be assigned as single organisational tasks to clearance operators for land release.

However, despite one of the aims of the country assessment project being to improve BiH's baseline of anti-personnel mine contamination, the assessment did not result in a significant amount of cancellation of mined area. This appears to be largely the result of the decision by BHMAC to only cancel uncontaminated area once technical survey and clearance in each MSA has been fully completed.

According to targets in its 2020 Article 5 extension request, BiH had expected to release a total of 71.8km² in 2020. It appears that actual output has fallen far short, with only 0.53km² cleared in 2020 (29km² of CHA and 0.24km² of MSA released through combined technical investigation and clearance), 2.57km² reduced, and 13.04km² cancelled.

RECOMMENDATIONS FOR ACTION

- **The amended demining law drafted in 2017, which has still to be adopted, 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 reforming and 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), are consistent in their approach, in particular regarding the use of evidence-based survey to more accurately identify and delineate areas of actual contamination prior to clearance, releasing areas found not to be contaminated.**
- **As part of efforts to enhance efficiency and effectiveness of land release operations, BHMAC should review and update relevant national mine action standards (NMAS) to bring them in line with the International Mine Action Standards (IMAS), in collaboration between demining organisations and other implementing partners. To facilitate this process, BHMAC should consider re-establishing technical working groups (TWGs).**
- **BHMAC 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 strengthen coordination and identify and overcome challenges.**
- **BHMAC should report more accurately and consistently on the extent of anti-personnel mine contamination, including using the classification of SHA and CHA in a manner consistent with IMAS.**
- **In its reporting, BHMAC should disaggregate release through technical survey from release through clearance, including with regard to processing of MSAs. Furthermore, BHMAC should ensure it reports the amount of mined area cancelled through non-technical survey upon completion of release of each MSP.**
- **BHMAC should provide information on what steps it plans to take to further mainstream gender and diversity within its mine action programme and strive to 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 (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	The EU-funded "country assessment" project, which was completed in May 2020, groups SHAs and CHAs together into logical units/polygons known as "MSAs", which are then each tasked for land release. The results of the country assessment were expected to facilitate planning and tasking, however the understanding and accuracy of BiH's baseline of remaining anti-personnel mine contamination have not markedly improved, with less than 10% of mined area cancelled during implementation of the country assessment project. It is expected that many of the SHAs contained within the MSAs are still inflated and will be further reduced. However, only BHMAC can formally conduct and cancel area through non-technical survey in BiH, with operators restricted to release through technical survey and clearance only (see also, criterion on Land release system below).
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 BHMAC. BiH's National Mine Action Strategy 2018–2025 was adopted in January 2019, but as at July 2021, 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. It is hoped that the Country Coalition established between BiH and Germany in 2020 will provide a forum for regular dialogue among all mine action stakeholders, help demonstrate national ownership, strengthen coordination of Anti-Personnel Mine Ban Convention (APMBC) Article 5 and Convention on Cluster Munitions (CCM) Article 4 implementation, and monitor progress against the 2018–25 strategy. However, due to COVID-19, the Country Coalition has only met once so far, virtually, in October 2020.
GENDER AND DIVERSITY (10% of overall score)	5	5	The National Mine Action Strategy 2018–2025 supports the 2003 Law on Gender Equality. BHMAC has stated that, under its leadership, relevant actors will include gender in all phases of all mine action activities. Two of the three members of the appointed Demining Commission are women. However, within BHMAC'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.

Criterion	Score (2020)	Score (2019)	Performance Commentary
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	6	BHMAC is still 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, with the support of UNDP and the Geneva International Centre for Humanitarian Demining (GICHD). In addition, UNDP has developed a Geographic Information System (GIS) mobile application, which was released in November 2020. Reporting appears to have become more complicated since the establishment of MSAs, with BiH's Article 7 report only specifying the amount of CHA cleared in 2020 and not the land released through technical investigation in MSA.
PLANNING AND TASKING (10% of overall score)	7	7	In 2020, BHMAC was granted a request to extend its Article 5 deadline by six years to 1 March 2027. The EU-funded "country assessment" project, which was completed in May 2020, resulted in the creation of 478 "MSAs which will be tasked as single units for land release. The results of the project will 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 reported to have been delayed until 2023.
LAND RELEASE SYSTEM (20% of overall score)	7	8	There is strong 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 BHMAC regional offices, apply efficient, evidenced-based land release methodology. Despite plans to do so, BHMAC did not review its national mine action standards in 2020. A review is urgently needed, to bring standards in line with international standards and best practice and to help ensure the efficiency of survey operations. In particular, non-technical and technical survey must be used to help confirm and better delineate mined areas prior to clearance.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	5	In 2020, BiH was granted a six-year extension to its Article 5 deadline to 1 March 2027. This target is achievable, with existing capacity, if efficient land release methodology is applied routinely by all clearance operators and annual targets are met. However, in 2020, BiH cleared under 0.53km^2 of mined area (including 29km^2 of CHA), similar to the previous year, and lower than the 0.8km^2 planned for clearance in 2020 according to BiH's extension request targets. Furthermore, the 2.57km^2 reduced through technical survey in 2020 was significantly less than the 12.7km^2 planned in its extension request. A total of 13.04km^2 was cancelled through non-technical survey in 2020.
Average Score	**5.4**	**5.9**	**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 (BHMAC)

NATIONAL OPERATORS

- Armed Forces of BiH
- BHMAC
- 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
  - UEM
- Commercial demining companies:
  - Detector
  - Humanitarian Demining Centre
  - In Demining N.H.O
  - N&N Ivsa
  - Point
  - 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 minefield records.[3] Physical changes to mined areas (such as in vegetation), and a lack of witnesses to the laying of the mines, pose additional challenges.[4]

At the Eighteenth Meeting of States Parties in November 2020, BiH reported that there were 478 "MSAs" (i.e. geographically grouped SHAs and CHAs) across 118 municipalities and that remaining mined area totalled 956.36km^2, which equated to 1.88% of its total territory.[5]

As at July 2021, BiH had yet to submit an Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report covering 2020. However, BHMAC reported to Mine Action Review that as at the end of 2020, there was more than 956km^2 of mined area remaining in BiH (see Table 1). The mined area was broken down into categories for prioritisation, but not into SHA and CHA, as is best practice. Category I includes humanitarian and economic development projects (for example renovation and reconstruction of facilities, and construction of roads and electricity networks. Category II encompasses areas in occasional use or areas that border with Category I areas. Category III encompasses SHAs in occasional use that do not contain resources of strategic importance.[6]

Table 1: Suspected anti-personnel mined area (at end 2020)[7]

Canton	Category I (km^2)	Category II (km^2)	Category III (km^2)	Total (km^2)
Unsko-Sanki	38.89	37.23	18.96	95.08
Posavski	3.40	9.72	1.86	14.98
Tuzlanski	16.78	18.32	45.59	80.69
Zenicko-Dobojski	28.48	11.67	74.52	114.67
Bosansko-Podrinjski	4.91	8.92	33.00	46.83
Srednje-Bosanski	24.42	39.06	47.48	110.96
Hercegovacko-Neret	13.37	25.35	111.08	149.80
Zapadno Hercegovacki	0.00	0.00	0.82	0.82
Sarajevo	16.89	12.48	28.69	58.06
Canton 10	10.24	12.66	56.07	78.97
BiH Federation	**157.38**	**175.41**	**418.07**	**750.86**
Brčko district	**0.91**	**9.36**	**2.72**	**12.99**
Republika Srpska	**59.77**	**70.56**	**62.18**	**192.51**
Totals	**218.06**	**255.33**	**482.97**	**956.36**

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."[8] 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."[9]

During 2017, plans were formalised between BHMAC, clearance operators, and the EU for a country assessment to establish a more accurate baseline of mine contamination and improve the efficiency of clearance operations.[10] 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.[11]

A total of 103km^2 was released during the period of implementation of the County Assessment Project (in 2018, 37km^2 was cancelled through non-technical methods and 6km^2 was reduced and cleared through operational activities of demining organisations; in 2019, 27km^2 was cancelled as a result of the project and an additional 22.5km^2 was cancelled by BHMAC and 3.5km^2 reduced by demining organisations;

and in the first five months of 2020 BHMAC cancelled 7km^2 through non-technical means). Total mined area fell from 1,069km^2 in 2018 to 966m^2 at project completion (15 May 2020), with an estimated 180,000 mines and UXO remaining to be cleared.[12]

The mined area remaining at the end of the country assessment project was subdivided into 478 MSAs, averaging 1.94km^2 in size.[13] The 93.5km^2 cancelled during the country assessment project,[14] was less than 10% of the total mined area at the start of the project, although the amount of area cancelled varied between BHMAC regional offices. Significant further cancellation of uncontaminated land is expected, but BHMAC intends to only cancel area within each respective MSA once operators have fully completed technical survey and clearance.[15]

MSA is a BiH-specific term, not consistent with IMAS. It is defined by BHMAC 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 BHMAC 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 1.7/2.5km^2 in size.[17]

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. Therefore, 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 and SOPs in BiH stipulate that only BHMAC can formally conduct non-technical survey and cancel land. Operators can, however, provide supplementary information collected during survey and community liaison to support BHMAC's non-technical survey, but only BHMAC can formally cancel uncontaminated 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.

Non-technical survey field activities under the country assessment project were completed in December 2019. The overall project had originally planned to be completed in February 2020, but was subsequently extended until 15 May 2020 to allow sufficient time for verification and analysis of the large quantities of data generated.[18] Additionally, the mapping of the MSAs created during the country assessment, preparation of assessment reports for individual MSAs for affected communities, and quality assurance (QA) of documents/reports also required more time than originally planned.[19]

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.[20] The project did not involve any technical interventions, so no area was reduced or cleared as part of it.

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.[21]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Demining Commission, under the BiH Ministry of Civil Affairs, supervises the State-wide BHMAC and represents BiH in its relations with the international community on mine-related issues.[22] 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 strategic body responsible for setting mine action policy, and it proposes the appointment of BHMAC senior staff, for approval by the Council of Ministers.[23]

While parliamentary elections in BiH were in October 2018, a new state-level government was only formed in December 2019. During this period, the mandate of the Demining Commission (the only body in BiH authorised to accredit and re-accredit demining organisations and to approve draft demining laws, work plans, and Article 5 deadline extension requests) expired in October 2019, affecting BiH's internal and external political representation. As there was no Demining Commission in place from late October 2019 to 19 April 2020, accreditations of clearance organisations that expired could not be renewed during this six-month period, thereby having a direct impact on survey and clearance efforts. By the time the new Demining Commission was commissioned on 30 April 2020, the accreditation for much of BiH's demining capacity had expired and required renewal, including that of the BiH Armed Forces and the Federal Administration of Civil Protection (FACP).[24]

According to a 2016 audit office report, "The Commission has not developed a methodology on how to monitor the work of the BHMAC".[25] BHMAC, established by a 2002 Decree of the Council of Ministers, is responsible for regulating mine action and implementing BiH's survey and clearance plans.[26] BHMAC operates from its headquarters in Sarajevo, and 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, BHMAC reported that the process had been suspended.[28] The Geneva 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 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 Donor meetings resumed in September 2015.[30] As at July 2020, however, the last Board of Donor meeting had taken place in Sarajevo in November 2017.[31] BiH's new National Mine Action Strategy 2018–2025 specifies that at least two such meetings should be organised every year.[32]

However, while official Board of Donor meetings have not taken place recently, a number of important multi-stakeholder workshops have. A workshop on 28–30 January 2020, convened by BHMAC, and attended by operators, expert organisations, and donors, was convened to present the provisional results of the country assessment, discuss mid-term planning, and help inform the elaboration of BiH's Article 5 extension request.[33] A further workshop on BiH's Article 5 planning took place on 6 March 2020, organised by BHMAC in cooperation with the Implementation Support Unit of the APMBC, and attended by State institutions, clearance operators, and non-government organisations (NGOs), and representatives of international organisations.[34] However, aside from this meeting, there was no further consultation with implementing partners during BiH's elaboration of its 2020 Article 5 extension request. On 28 April 2020, BHMAC convened an online meeting with donor representatives, in which it provided updates on recent progress in mine action, including plans to amend the NMAS. During the meeting, donors expressed concern because of the delay in demining process caused by the failure to form the Demining Commission;[35] something which has subsequently been addressed.

In its 2020 Article 5 extension request, BHMAC 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 is hoped that the "Country Coalition" established between BiH and Germany, will provide a forum for regular dialogue among all mine action stakeholders, help demonstrate national ownership, strengthen coordination of APMBC 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. The conference was focused on the political aspects of mine action in BiH, as well as on the technical challenges in the release of remaining contaminated areas.[37] It provided an opportunity for participants to highlight the progress being made in BiH and underline remaining challenges and obstacles towards completion.[38] However, as at July 2021, a follow-on Country Coalition meeting had yet to take place.

On 12 November 2020, BiH and the BHMAC, together with the APMBC Committee on the Enhancement of Cooperation and Assistance, convened an "Individualised Approach Platform" virtual meeting, to openly discuss the current status of its mine action programme and approaches to overcoming challenges in implementation of Article 5.[39]

BHMAC is funded by the common institutions of BiH and other institutions at State level.[40] BiH State funding also supports survey and clearance of mines. Operations of the BiH Armed Forces are supported by the State budget of BiH, while the Government of the Federation of BiH finances the operations of Federal Administration of Civil Protection (FACP).[41] The Civil Protection Administration of Republika Srpska is financed by the Government of Republika Srpska.[42]

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 goals linked to this strategic goal.[43] 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 4.5 million BAM (over US$2.5 million) per annum for the Armed Forces and 5.945 million BAM (US$3.4 million) per annum for BHMAC, for 2019 and 2020. These amounts were forecast to increase to a total of 21.55 million BAM (over US$12.3 million, at current exchange rates) per annum in 2025.[44] This national funding is in addition to forecast international funding, which is also budgeted in BiH's financial plan.[45]

In order to fulfil its Article 5 obligations by 1 March 2027, BiH claims to require a total of BAM 336 million.[46] Of the national funding contributions, funds for non-technical survey activities by BHMAC will be ensured from the budgets of BiH's institutions, and implemented through operational activities of BHMAC. 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, and public and private companies.[47] According to a statement of the Demining Commission in November 2020, the ratio of donor funds was 55% compared to 45% from national funding.[48]

On 7 April 2020, it was announced that €10 million of EU funding under the Instrument for Pre-accession Assistance (IPA) 2018–20 programme, which had been intended for humanitarian demining, had been diverted to COVID-19 and migration issues. The EU funds had been intended for support of mine action in BiH, including the procurement of personal protective equipment (PPE) and supplies for BHMAC's work, the entity Civil Protections, as well as financing of demining projects of priority areas.[49]

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.[50]

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".[51] 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.[52] However, as at June 2021, 25% of BHMAC's employees were female, with women employed in 8% of managerial/supervisory positions and 10% of operations positions.[53] BHMAC reported that it has a gender and diversity policy and that BHMAC upholds the Law on Gender Equality and routinely includes it in the development of strategies and standards.[54]

BHMAC has reported that it 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 is disaggregated by gender and age.[55] 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.

In a welcome development, however, two out of three of the new members of BiH's Demining Commission, adopted on 30 April 2020, are women.[56]

The Civil Protection Administration of Republika Srpska 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.[57] During survey and community liaison activities, it cooperates with the local population, regardless of ethnicity, and where needed has representatives from different ethnic groups.[58]

As at June 2021, the Demining Battalion of the Armed Forces of BiH had a workforce of 535 personnel, including 27 women (5% of the total). Three of these women were in managerial/supervisory positions and the remainder were working in operations.[59]

The FACP reported that of its 139 employees deployed in demining and destruction of UXO, 17 (12%) are women, including three (43%) of the seven managerial positions.[60]

Mines Advisory Group (MAG) has a gender policy and equal employment opportunities for suitably qualified females and males.[61] However, of MAG's 80 staff in BiH, only eight are women (10%), including four (7%) of its survey and clearance personnel (including medics), and four (50%) of its managerial/supervisory positions.[62] MAG's survey and clearance teams consult with women and men in communities neighbouring its operations, to obtain as much relevant data as possible for the conduct of land release activities.[63] MAG also conducts regular informant interviews with all entity groups, and its teams are mixed and include all three entity groups (Bosniaks, Croats, and Serbs).[64] MAG recruited a mixed community liaison capacity in October 2020, comprising two women and one man, of the different constituent groups, to support it to better take into consideration gender and diversity dynamics its land release work.[65]

NPA reports promoting gender equality in all aspects of its programme activities in BiH. Mixed gender representation is an obligation for NPA teams conducting community liaison and risk education.[66] That said, NPA reported that the overall gender split of its staff as at February 2021 was 107 men and 16 women, which represents 13% female staff. Women only accounted for 7 of NPA's 92 (8%) operational staff deployed in the field.[67] NPA explained that it rarely received applications from women for vacant operational roles. NPA says it is working to achieve a gender balance, and that the programme encourages the employment of women, including into managerial and operational staff positions.[68] Three of the five (60%) managerial positions in the NPA BiH programme are held by women.[69] During the implementation of its activities, NPA teams organise meetings with female representatives in smaller groups, to provide a forum in which women may feel more comfortable to talk about potentially contaminated areas in their community and NPA's interventions.[70]

INFORMATION MANAGEMENT AND REPORTING

BHMAC is in the process of migrating from its own information management system, the Bosnia and Herzegovina Mine Action Information System (BHMAIS), to Information Management System for Mine Action (IMSMA) Core, with the support of UNDP and the GICHD, and with financing from the EU.[71]

The joint development of IMSMA Core in BiH began in 2019. GICHD training on the new system was also planned for BHMAC staff, which will take place once the situation with COVID-19 permits.[72] As at July 2021, only data from the country assessment project had been transferred from BHMAIS to IMSMA Core so far, and BHMAC did not expect to complete the full migration until 2022.[73] Once in place, the database should be sustainable according to the GICHD, although the programme will still be susceptible to potential challenges stemming from turnover of key staff positions in the BHMAC IM department.[74]

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 locations of hazardous areas, as well as other features, through Android and iOS Apple devices.[75]

At present, while clearance operators do have access to data on specific tasks being undertaken, they do not have access to BHMAC's full Information Management database.[76]

The planned 2020 roll out of MAG's new global Information Management System (GIS, and compatible with IMSMA Core) in BiH was disrupted by the COVID-19 pandemic and was scheduled instead for 2021.[77]

BHMAC does not report consistently on anti-personnel mine contamination by SHAs and CHAs, in a manner consistent with IMAS. In addition, there are frequent inaccuracies in BHMAC reporting on land release. In its reporting to Mine Action Review, BHMAC did not disaggregate release through technical survey from release through clearance, with regards to processing of MSAs. Furthermore, cancellation of mined area can only reportedly be reported by BHMAC itself, at the end of the process, once technical survey and clearance have been completed.[78]

As at July 2021, BiH had yet to submit a APMBC Article 7 report covering 2020.

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.[79] The BiH previous Mine Action Strategy for 2009–19, adopted by the Council of Ministers in 2008,[80] 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. BHMAC 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,[81] and according to the strategy, a second revision is planned for 2023.[82] 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.[83] However, BHMAC subsequently reported that the *first* revision was only expected to be completed in 2023.[84]

BHMAC 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.

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.[85] 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.[86]

According to BiH's 2020 Article 5 deadline extension request, from 2020 to 2027 BiH plans to release a total of 967km^2: 816.6km^2 through cancellation; 141.7km^2 through reduction; and 7.8km^2 through clearance.[87] Annually, BiH planned to release 71.8km^2 in 2020; 91.3km^2 in 2021; 110.3km^2 in 2022; 126.4km^2 in 2023; 145.5km^2 in 2024; 155.7km^2 in 2025; 131.4km^2 in 2026; and 134.6km^2 in 2027. While BiH did disaggregate the amount cancelled, reduced, and cleared each year, in its operational plan, the totals in several columns did not correctly sum to the annual total.[88]

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.[89]

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).[90] Of the 478 MSAs created, 189 were high-risk MSAs, 274 medium-risk MSAs, and 15 low-risk MSAs.[91] Conversion of MSAs from "classic" to "land release" projects can reportedly take months at a central level.[92] As at July 2021, BHMAC had not yet finished preparing task dossiers of all 478 MSAs created during the country assessment.[93] However, in 2020, general / non-technical reconnaissance operations were performed on an area of 27.72km^2 and a total of 43 new projects (totalling 31.66km^2) were prepared ready for land release.[94]

In 2020, the Civil Protection Administration of Republika Srpska was tasked with land release of MSAs generated as a result of the EU-funded country assessment, and reported that task dossiers were issued in a timely and effective manner.[95] The FACP also commenced land release of MSAs in Una Bihać National Park in 2020, and reported that some projects were not submitted on time, as the BHMAC assessment had not been completed on time.[96] 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.[97]

Some MSAs that MAG opened in 2020 were divided into two parts (to be consistent with the average size of MSAs created by the country assessment).[98]

International NGOs (INGOs) reported that they 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. However, the INGOs do conduct supplementary non-technical survey/community liaison to help provide additional information to BHMAC. Upon completion of technical survey and clearance by the operators, BHMAC then cancels uncontaminated area.[99] NPA would, however, prefer to be allowed to formally conduct non-technical survey throughout the land release process, as is best practice. NPA feels that at present, the task dossiers received for SHAs/CHAs within the MSA are a little too prescriptive and that operators, in agreement with BHMAC, should be allowed to take responsibility for the entire MSA, including cancellation.

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.[100] 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 December 2012, having recognised the need for more efficient land release in BiH, the EU, with pre-accession funding, started a pilot "land release" project with BHMAC.[101] The resulting "IPA 2011 Land Release" was implemented from 2013 to 2016, with EU funding.[102] The project enabled efficient tasking of systematic technical survey and technical survey with targeted investigation, helping ensure clearance assets were only directed into CHAs.[103] Results from six completed tasks in the EU pilot project revealed that 91% of the total land released was cancelled through non-technical survey, 8.5% was reduced through technical survey, and 0.5% was cleared.[104] More recently, of the nearly 95km^2 released in 2018–19, over 89% was cancelled through non-technical survey, with almost 9% of the remainder reduced through technical survey, and less than 2% released through clearance.[105] This 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.[106]

Plans for revising the NMAS and further development of relevant chapters was planned by BHMAC for 2020, but no significant progress was made. This remains in BHMAC's plans for 2021 and beyond, including revising the chapters on QA and quality control (QC).[107] In 2020, BHMAC organised a TWG, with representatives from difference 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.[108]

There is broad support among both international and national clearance operators for a review of standards, especially those relating to land release.[109] MAG and NPA believe that further development of the land release process and the use of advanced techniques for the assessment and identification of minefields in BiH is crucial to the country meeting its Article 5 obligations.[110] MAG also believes that there is scope to improve efficiency and effectiveness through a more integrated approach to land release, including on chapters governing the use of mechanical and animal assets, in addition to survey and clearance.[111] BHMAC has publicly stated that it is "fully engaged and committed towards improving the efficiency and effectiveness" of its efforts.[112]

As previously mentioned, operators are assigned whole MSAs by BHMAC, and within an MSA BHMAC then designates specific areas (CHA or SHA polygons) for technical survey and clearance. Officially, only BHMAC can conduct non-technical survey and release mined area through cancellation.[113]

However, this can result in inefficiencies. For example, task dossiers for release of MSAs generated as a result of the EU-funded Country Assessment Project often lack fully comprehensive information, and INGOs have found they also need to conduct additional survey/community liaison to collect and analyse additional or missing information to supplement contained in the task dossiers received.[114] NPA stressed the importance of BHMAC 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, for which BHMAC should consider the possibility of allowing operators with adequate capacity and experience to participate in the cancellation of area through non-technical survey, which is not currently permitted.[115]

The GICHD organised a one-day workshop in 2020 titled "technical survey – current methodologies and possibilities for enhancement", with a view to identifying gaps and possibilities for improving the technical survey in BiH, in a broader context, including operations, information management, standards, and legal framework. In agreement with the BHMAC and dependent on funding, the GICHD will attempt to support BiH with development of several National Mine Action Standards, giving the priority to technical survey, information management, and quality management.[116]

The revised NMAS should be clearly written, so that all implementing partners in all parts of BiH can update their standing operating procedures (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.

BHMAC has stated that it will ensure through quality management that all organisations accredited for technical survey and clearance comply with the principles of land release.[117] However, there are reports of a lack of harmonisation of practices between different regional BHMAC offices, including in the understanding and application of the release approach and standards.[118] Such inconsistencies result in different requirements for operational work plans, some of which have excessive requirements and were drafted prior to the introduction of the land release NMAS (which themselves now need further updating). In such instances, there is little flexibility for operators to change the approach detailed in the operational plan, which therefore impacts the efficiency and effectiveness of operations.[119] International operators believe a renewed dialogue among the mine action community would strengthen the sector, including through technical working group meetings between operators, the BHMAC, and its regional offices, sharing lessons learned, challenges, and successes across the different parts of BiH.[120]

OPERATORS AND OPERATIONAL TOOLS

During the EU-funded country assessment project, which took place from 16 August 2018 to 15 May 2020, non-technical survey was conducted by the BiH Armed Forces, BHMAC, and NPA.[121] However, cancellation of mined area through non-technical survey in BiH can only be officially conducted by BHMAC.[122] While MAG does not conduct its own non-technical survey in BiH, it does contribute to non-technical survey through its community liaison capacity (one team of two personnel) 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.[123] 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.[124]

In 2020, a total of 17 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; four commercial organisations (all national); and 8 NGOs (6 national and 2 international).[125] Overall demining capacity totalled 1,200 persons in accredited organisations, comprising 900 deminers and 300 others (including team leaders, site leader, operational officers, QA officers, and dog trainers). The accredited organisations also have at their disposal a total of 33 accredited machines (for vegetation removal, ground disturbance, and removal of debris), 1,166 metal detectors, and 68 accredited explosive detection dogs (MDDs). In addition, BHMAC 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.[126]

During 2020, 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, and eleven other clearance organisations, comprising six NGOs (DEMIRA, MAG, Mine Detection Dog Centre (MDDC), NPA, Pro Vita, and UEM) and six commercial organisations (Detector, Humanitarian Demining Centre, In Demining N.H.O, N&N Ivsa, Point, and UEM d.o.o.[127] BHMAC had not expected any major changes to demining capacity in 2021.[128]

Both technical survey and clearance methodology in BiH will include deployment of manual, mechanical, and MDD assets.[129] BiH reported a decrease in operational capacity over recent years, with an average of 52 teams deployed in 2014–17 and 36 teams deployed in 2018 and 2019.[130] According to BiH, the problem of the ageing workforce is compounded by the reluctance of younger people to seek employment as deminers.[131] Clearance and technical survey operations in BiH include mechanical preparation of land, manual clearance, and the use of MDDs depending on the geographical conditions.[132] 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.[133] Since 2010, NPA has increasingly focused on building the capacity of the Army's Demining Battalion. This involves transfer of knowledge through the improvement of operational planning of clearance and technical survey operations and direct operational support to increase the Demining Battalion's toolbox, including through the provision of MDDs and equipment.[134]

The BiH Armed Forces require ongoing support to secure personal protective equipment, batteries for detectors, and fuel for demining machinery, since the Army's own complex procurement system often cannot deliver such items in sufficient time.[135] NPA supported the Demining Battalion with the provision of eight magnetic locators/detectors, under a Swiss-funded contract, enabling the Battalion to establish a third team within its organisational set-up. This is now fully operational for technical survey and clearance of areas contaminated with CMR. NPA also loaned the Demining Battalion its Digger D-250 and provided direct operational support for mechanical ground preparation.[136] The Demining Battalion also receives support from Austria, France, Italy, and the United States, as well as European Union Force Bosnia and Herzegovina (EUFOR), which alone provides 90% of total support.[137]

The State operators, the BiH Armed Forces' Demining Battalion and the Civil Protection, are both good partners and have effective capacities, but have suffered from logistical challenges and equipment deficits, which can prevent them from working at full capacity.[138] 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.[139] In the opinion of a UNDP expert, the BiH Armed Forces have sufficient demining equipment, but could benefit from stronger management and better oversight of demining operations.[140]

In the Country Coalition meeting in October 2020, the head of the BiH Demining Battalion said that the Battalion had 34 manual demining teams (three of which are dedicated to cluster munition remnants), 9 MDDs, and 4 mechanical assets for ground preparation. The Battalion wants to upgrade its PPE and demining equipment. If the necessary equipment for the Battalion is not secured, it could potentially result in a 25% reduction in its capacity.[141]

Federal administration of civil protection (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. [142] FACP's capacity for clearance and technical survey in 2020 was 11 demining teams totalling 73 personnel, four MDD handlers with four dogs, and two mechanical assets.[143] FACP believes the training system for explosive ordnance disposal (EOD) would benefit from being strengthened in BiH's national standards, to make it in line with the CWA 15464:2005 system (the 'Humanitarian Mine Action - EOD Competency Standards', under CEN (European Committee for Standardization)).[144]

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 BHMAC 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.[145] The FACP thinks it is

necessary "to establish two-way communication and exchange of information [with BHMAC] in order to treat the newly discovered mine contaminated area as efficiently as possible, without burdening the existing demining resources."[146]

The Civil Protection of Brčko District only conducts removal and destruction of ERW, not mine clearance.

The Civil Protection Administration of Republika Srpska conducts survey and clearance of mines, CMR, and other ERW. In 2020, it deployed six manual teams, totalling thirty-six deminers, and two MDDs and dog handlers, and one mechanical asset for technical survey and clearance of mined areas.[147]

MAG received operational accreditation in April 2017 and began technical survey and mine clearance operations in mid-May 2017.[148] In 2020, MAG deployed one community liaison team, totalling two personnel, for the first time and increased its manual clearance (including technical survey) teams from six to seven teams, totalling 49 deminers. It also doubled its MDD capacity to four MDDs and dog handlers, and deployed one mechanical asset rented from NPA. The increased capacity was thanks to additional funding from Germany. MAG expected its capacity in 2021 to remain constant.[149]

NPA deployed seven manual teams, totalling forty-two deminers; five MDDs and dog handlers; and two machines. Technical survey personnel are also clearance personnel.[150] NPA uses MDD for clearance and technical survey tasks, including targeted technical survey.[151] 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.[152] National demining NGOs, such as STOP Mines or PROVITA, which are registered in a similar way to companies, potentially have capacity to quickly mobilise additional resources and up-scale operations.[153]

The Demining Commission is responsible for considering the periodic re-accreditation of field operators, following the recommendation from BHMAC. 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.[154] 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.[155]

In October 2020, the BHMAC invited operators to consult and comment on the new draft rules for the accreditation process, which had been posted online. In addition to the online consultation, the BHMAC plans to invite operators to a meeting to discuss and address comments and questions on these new rules. This participatory approach is welcomed by international NGO clearance operators.[156]

QC and QA is conducted by BHMAC.[157]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of more than 16km^2 of mined area was released in 2020, of which almost 0.53km^2 was cleared (0..29km^2 of CHA and 0.24km^2 released through technical investigation and clearance of MSA) (see Tables 6 and 7); 2.57km^2 of CHA was reduced through technical survey (see Table 4); and almost 13.04km^2 in MSAs was cancelled through non-technical means (see Tables 2 and 3).[158]

SURVEY IN 2020

In 2020, nearly 2.57km^2 was reported to have been reduced through technical survey in CHAs, according to data disaggregated by canton (see Table 4) and reported in BiH's Article 7 report.[159] Data disaggregated by operator, reported the amount reduced through technical survey as slightly less (see Table 5). A further 13.05km^2 was cancelled in MSAs (see Tables 2 and 3).

Furthermore, for land release in MSAs, technical survey was reported combined with clearance (see Tables 6 and 7), and not disaggregated as best practice and IMAS require.

Table 2: Cancellation in MSAs by canton[160]

Canton	No. of areas	Area cancelled (m^2)
Sarajevo	5	6,214,233
Unsko-Sanki	1	2,250,859
Hercegovacko-Neret	1	3,235,053
Zanicko-Dobojski	1	785,050
Total BiH Federation	**8**	**12,485,195**
Total Republika Srpska	**1**	**551,180**
Grand totals	**9**	**13,036,375**

Table 3: Cancellation in MSAs by organisation[161]

Canton	No. of areas	Area cancelled (m^2)
Mine Detection Dog Centre (MDDC)	4	3,226,967
UEM d.o.o.	1	2,274,295
MAG	1	3,235,053
NPA	3	4,300,060
Grand totals	**9**	**13,030,375**

Table 4: Technical survey of CHA in 2020 by canton[162]

Canton	No. of areas	Area reduced (m^2)
Unsko-Sanki	6	113,474
Posavski	7	534,588
Tuzlanski	3	72,053
Zenicko-Dobojski	3	72,053
Srednje-Bosanski	6	198,735
Hercegovacko-Neret	11	211,587
Sarajevo	5	206,114
Bosansko-Podrinjski	1	96,366
Canton 10	5	118,768
BiH Federation	**47**	**1,623,738**
Republika Srpska	**18**	**789,059**
Brčko District	**3**	**160,289**
Totals	**68**	**2,573,086**

Table 5: Technical survey of CHA in 2020 by operator (based on BHMAC data)[163]

	Demining entity	No. of areas	Area reduced (m^2)
Government organisation	Federal Administration of Civil Protection	17	595,580
	Armed Forces BiH	29	1,252,925
	Civil Protection Administration of Republika Srpska	5	101,116
Totals		**51**	**1,949,621**
Non-governmental organisations	Pro Vita	2	70,039
	DEMIRA	2	90,614
Totals		**4**	**160,653**
Commercial organisations	HN&H IVSA	5	280,943
	"Point" d.o.o.	4	114,890
	In Demining N.H.O	2	48,315
	UEM d.o.o.	2	54,236
Totals		**13**	**498,384**
Grand totals		**68**	**2,608,658**

CLEARANCE IN 2020

A total of 529,455m^2 of mined area was cleared in 2020, with the destruction of 1,342 anti-personnel mines, 22 anti-vehicle mines, and 192 ERW/UXO.[164] This includes 293,252m^2 of confirmed mined area cleared in 2020, during which 424 anti-personnel mines, 7 anti-vehicle mines, and 143 ERW were destroyed. In addition, there appears to be release of a further 236,203m^2 of MSA, through combined technical investigation and clearance, during which an additional 918 anti-personnel mines, 15 anti-vehicle mines, and 49 items of UXO were destroyed (see Tables 6 and 7).[165]

The 2020 total clearance output (including combined technical investigation and clearance of MSA) is roughly equivalent to the 0.54km^2 of mined area cleared and 963 anti-personnel mines destroyed in 2019.[166]

Table 6: Mine clearance in CHAs in 2020 by canton; and combined mine clearance and technical survey in MSAs (BHMAC data)[167]

Canton	Areas cleared	Area cleared in CHAs (m²)	AP mines destroyed	AV mines destroyed	ERW
Unsko-Sanki	2	23,074	68	0	3
Posavski	1	41,630	58	0	0
Tuzlanski	3	22,077	54	0	0
Zanicko-Dobojski	2	33,773	0	0	0
Srednje-Bosanski	5	62,326	44	3	18
Hercegovačko-Neretvanski	1	39,500	0	0	0
Sarajevo	3	45,800	69	0	100
Bosansko-Podrinjski	0	0	0	0	0
Canton 10	0	0	0	0	0
Total BiH Federation	**17**	**268,180**	**293**	**3**	**121**
Total Republika Srpska	**3**	**25,072**	**131**	**4**	**22**
Subtotals	**20**	**293,252**	**424**	**7**	**143**
Administrative level	**MSAs**	**Area cleared during clearance and technical survey of MSAs (m²)**	**AP mines destroyed**	**AV mines destroyed**	**UXO destroyed**
Sarajevo	5	137,333	369	6	6
Unsko-Sanki	1	15,393	60	3	12
Hercegovacko-Neret	1	35,594	232	0	3
Zanicko-Dobojski	1	11,446	36	3	21
Total BiH Federation	**8**	**199,766**	**697**	**12**	**42**
Total Republika Srpska	**1**	**36,437**	**221**	**3**	**7**
Subtotals	**9**	**236,203**	**918**	**15**	**49**
Grand totals		**529,455**	**1,342**	**22**	**192**

Table 7: Mine clearance in CHAs in 2020 by operator; and combined mine clearance and technical survey by operator in MSAs (BHMAC data)[168]

	Organisation	Areas cleared	Area cleared (m²)	AP mines destroyed	AV mines destroyed	ERW
Government organisation	Federal Administration of Civil Protection BiH	6	63,565	25	0	29
	Armed Forces BiH	4	162,257	271	7	55
	Civil protection of RS	1	11,235	75	0	35
Totals		**11**	**237,057**	**371**	**7**	**119**
NGOs	NGO Pro Vita	1	3,765	0	0	0
	UEM d.o.o.	1	8,874	42	0	20
Totals		**2**	**12,639**	**42**	**0**	**20**
Commercial organisations	Humanitarian Demining Centre	1	395	0	0	0
	Detektor	5	43,159	11	0	4
Totals		**6**	**43,554**	**11**	**0**	**4**
Subtotals		**19**	**293,250**	**424**	**7**	**143**

Table 7 continued

Organisation	MSAs	Area cleared during clearance and technical survey of MSAs (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
Mine Detection Dog Centre (MDDC)	4	152,711	408	3	15
UEM d.o.o.	1	17,923	172	6	8
MAG	1	35,594	232	0	11
NPA	3	29,975	106	6	15
Subtotals	**9**	**236,203**	**918**	**15**	**49**
Grand totals		**529,453**	**1,342**	**22**	**192**

The Civil Protection Administration of Republika Srpska itself reported clearing a total of 10,816m^2 in 2020, during which it destroyed 10 anti-personnel mines and 17 anti-vehicle mines.[169] The FACP itself reported clearing 10,582m^2 in 2020, with the destruction of six anti-personnel mines.[170]

In 2020, MAG worked across seven tasks in BiH, completing three. MAG itself reported reducing 814,042m^2 through technical survey and clearing a total of 541,760m^2 through clearance in 2020 (including 279,772m^2 of lanes cleared as part of technical survey), with the destruction of a total of 396 anti-personnel mines, 7 anti-vehicle mines, and 166 items of UXO. While all "MSAs" proved to be contaminated, some micro-locations (polygons for investigation within the MSPs) did not contain any landmine contamination.[171]

NPA conducted technical survey and clearance of mined area in 2020, both in the Federation of BiH and in Republika Srpska. NPA reported that it reduced 868,038m^2 through technical survey and cleared 54,282m^2, destroying 377 anti-personnel mines and 10 anti-vehicle mines. All of the areas in which NPA conducted clearance in 2020, contained mines.[172]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR BIH: 1 MARCH 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

↓

FIRST EXTENDED DEADLINE (5-YEAR EXTENSION): 1 MARCH 2019

↓

SECOND EXTENDED DEADLINE (2-YEAR INTERIM REQUEST): 1 MARCH 2021

↓

THIRD EXTENDED DEADLINE (6-YEAR REQUEST): 1 MARCH 2027

ON TRACK TO MEET ARTICLE 5 DEADLINE: UNCLEAR
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

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.

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".[173] 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.[174]

Over the last five years, BiH has released just over 4km^2 thorough clearance (see Table 6). 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.[175]

According to BiH's 2020 Article 5 extension request, BiH planned to release 71.8km^2 in 2020 (58.4km^2 through cancellation; 12.7km^2 through reduction, and 0.8km^2 through clearance, although this sums to 71.9km^2, and not 71.8km^2 as reported in the extension request).[176] BiH's actual land release output in 2020 was 0.53km^2 cleared, 2.61km^2 reduced, and BHMAC did not report the amount of mined area cancelled in 2020.[177]

BiH reported that its ability to meet planned targets was impeded by a delay in accreditation for some demining organisations, due to the delay in appointing the new Demining Commission; financial resources having not met the expectation of the Strategy; climate conditions with the demining season lasting from mid-March to the beginning of December; and the COVID-19 pandemic, which caused either a cessation or hindrance to survey and clearance efforts between March and May 2020.[178]

Table 6: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	*0.53
2019	0.54
2018	0.92
2017	0.69
2016	1.34
Total	**4.02**

* Combined technical survey and clearance output for MSAs

BHMAC reported that between February and May of 2020, most demining operations were halted, and only 10% of the capacities worked. This was due to COVID-19, but also because of BiH Demining Commission was not appointed on time and many demining companies had to halt operations while they waited for the Demining Commission to be appointed and to re-accredit them. From June 2020, demining operations continued as normal.[179]

The Civil Protection Administration of Republika Srpska was not able to realise its demining plan for 2020, due to the impact of COVID-19 on operations.[180] FACP reported that COVID-19 had a significant impact on implementation of its demining plan in 2020, as a significant part of the demining staff were engaged in mitigating the consequences of the pandemic. All demining activities were halted between 18 March and only recommenced in the start of June.[181] COVID-19 caused NPA's survey and clearance operations to be paused from 17 March to 1 June 2020, and two manual teams were then forced to stand down again in October 2020, during the second wave of COVID-19. NPA redistributed working hours, annual leave, and engaged additional workforces to compensate and minimise the impact of implementation, and NPA was able to meet its targeted for 2020.[182] MAG stood down its demining operations on 21 March 2020, as requested by BHMAC. Following risk assessments and implementation of health and safety protocols, MAG re-deployed an initial team on 4 May, and then increased capacity weekly and was deploying its full capacity by June. One demining team was put on stand-down for seven days due to COVID-19, and other individuals were put in self isolation. Furthermore, staff shortages caused by COVID-19 at BHMAC regional offices, also caused some overstretch at the regional offices and therefore constraints to MAG's deployment plans.[183]

With the completion of the country assessment in 2020; a strong national mine action strategy; updates planned to the NMAS; the scheduled migration to a new information management system; and the establishment of a country coalition, supported by Germany, to help strengthen coordination of mine action, BiH is better placed to fulfil its Article 5 commitments by the requested March 2027 deadline. 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. The national authorities must ensure stronger coordination and a more consistent and efficient approach to land release operations by all stakeholders across the country, including more efficient mobilisation of strategic national demining resources such as the Demining Battalion and Civil Protection entities, and an enabling operating environment (including accreditation rules).

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

The National Mine Action Strategy for 2018–2025 requires the development of a strategy for the management of residual contamination by 2022. As at July 2021, BHMAC had still to begin development of the strategy.[184]

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.

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

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

4 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.

5 Statement of BiH, APMBC 18th Meeting of States Parties, 16 to 20 November 2020; and BiH draft Mine Action Report for 2020, undated draft, p. 3.

6 Email from Ljiljana Ilić, BHMAC, 22 September 2021.

7 Email from Ljiljana Ilić, BHMAC, 2 July 2021; and BiH draft Mine Action Report for 2020, undated, p. 5. In the Table provided by BHMAC and included in its draft Mine Action Report for 2020, the Category I total was reported as 218.07km^2 and the Category II total as 255.32km^2. This is most likely due to rounding issues. Mine Action Review has used the actual totals for the BiH Federation.

8 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.

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

10 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.

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

12 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.

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 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 966.7km^2 (p. 5), but this figure is believed to be an error, given that 1,030km^2 mined area was addressed during the country assessment (p. 11) and remaining mined area as at the beginning of 2020 was nearly 966.7km^2 (p. 16 and Annex 2). The 966.7km^2 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.

15 Emails from Jonas Zachrisson, NPA, 14 March 2021; and Clement Meynier, MAG, 28 July 2021.

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

17 Ibid., p. 11.

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

19 Ibid.

20 Ibid.

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

22 BHMAC Organisational chart, accessed 17 July 2019 at: http://bit.ly/2Ycj4xl.

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

24 BHMAC website, "New members of BiH Demining Commission appointed today", 30 April 2020, available at: http://bit.ly/3dv7nco; "The first session of BiH Demining Commission held today", 27 May 2020, at http://bit.ly/2B3UdWO; and 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 6 and 7; and email from Muamer Husilović, FACP, 12 March 2021.

25 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. 8.

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, BHMAC, 2 July 2021.

29 Email from GICHD, 14 May 2021.

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

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

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

33 BHMAC 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; and BiH Mine Action Report for 2020, undated draft, p. 12.

34 BHMAC 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.

35 BHMAC, "Online meeting with donors' representatives for Mine Action in BiH", 28 April 2020, at: http://bit.ly/2VdFiQA; and BiH Mine Action Report for 2020, undated draft, p. 27.

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

37 BHMAC 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, CCM Second Review Conference (Part 1), virtual format, 25–27 November 2020.

38 Email from Clement Meynier, Country Director, MAG, 11 March 2021.

39 APMBC Individualised Approach Meeting, virtual meeting, 12 November 2020; and BHMAC website, "Individual Approach to Resolving Remaining Challenges and Complying the Deadlines in Accordance with the Ottawa Convention", 13 November 2020, at: http://bit.ly/2ZogUNQ.

40 Emails from Goran Zdrale, BHMAC, 17 May 2017; and Ljiljana Ilić, BHMAC, 24 April 2019.

41 Ibid.; and email from Fotini Antonopoulou, EU, 23 July 2018.

42 Email from Suad Baljak, UNDP, 18 September 2020.

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

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

45 Ibid.

46 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 6–7, and 23.

47 Ibid., pp. 23–24.

48 Statement of BiH, APMBC 18th Meeting of States Parties, 16 to 20 November 2020.

49 BHMAC website, "Ten million EUR intended for humanitarian demining projects in BiH diverted to COVID-19 and migration issues", 10 April 2020, at: http://bit.ly/37X1Wlq; and email from Suad Baljak, UNDP, 18 September 2020.

50 2020 Revised Article 5 deadline Extension Request, August 2020, p. 7.

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

52 Ibid.

53 Email from Zeljko Djogo, BHMAC, 17 June 2021.

54 Email from Ljiljana Ili, BHMAC, 24 April 2019.

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56 2020 Revised Article 5 deadline Extension Request, August 2020, p. 18.

57 Email from Milisav Pantic, on behalf of Dragan Kos, Civil Protection Administration of Republika Srpska, 3 June 2021.

58 Email from Dragan Kos, Assistant Director, Civil Protection Administration of Republika Srpska, 2 April 2020.

59 Email from Brig. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, 11 June 2021.

60 Email from Muamer Husilović, Federal Administration of Civil Protection (FACP), 12 March 2021.

61 Email from Clement Meynier, Country Director, MAG, 3 April 2020.

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

63 Emails from Djadranka Gillesen, Regional Director for the Middle East and Europe, MAG, 27 August 2019; and Clement Meynier, MAG, 16 July 2020.

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

65 Emails from Clement Meynier, MAG, 16 July 2020 and 28 July 2021.

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

68 Emails from Jonas Zachrisson, NPA, 26 March 2020 and 14 March 2021.

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

70 Email from Jonas Zachrisson, NPA, 26 March 2020.

71 2020 APMBC Article 5 deadline Extension Request, p. 5.

72 Emails from Suad Baljak, UNDP, 30 March and 14 July 2020.

73 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

74 Email from GICHD, 13 May 2020.

75 Emails from Suad Baljak, UNDP, 18 February 2021; and Clement Meynier, MAG, 11 March 2021.

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

77 Emails from Clement Meynier, MAG, 11 March and 28 July 2021.

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

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

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

81 2020 Revised Article 5 deadline Extension Request, August 2020, p. 7.

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

83 Statement of BiH, APMBC 18th Meeting of States Parties, 16 to 20 November 2020.

84 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

85 BHMAC 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.

86 Interview with Saša Obradovic, BHMAC, Geneva, 11 February 2020.

87 2020 Revised Article 5 deadline Extension Request, August 2020, p. 24.

88 Ibid., Table, p. 24.

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

90 2020 Revised Article 5 deadline Extension Request, August 2020, pp. 6 and 19–22.

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

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

93 Email from Kristina Duric, NPA, 30 July 2021; and video interview with Clement Meynier, MAG, 30 July 2021.

94 BiH Mine Action Report for 2020, undated draft, p. 14.

95 Email from Milisav Pantic, on behalf of Dragan Kos, Civil Protection Administration of Republika Srpska, 3 June 2021.

96 Email from Muamer Husilović, FACP, 12 March 2021.

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

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

99 Emails from Kristina Duric, NPA, 30 July 2021; and Clement Meynier, MAG, 11 March 2021.

100 Email from Suad Baljak, Mine Action Officer, 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.

101 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, pp. 19 and 20.

102 Statement of BiH, Intersessional Meetings, Geneva, 8 June 2017; BHMAC, "Analysis of implementation of mine action strategy of Bosnia and Herzegovina (2009–2019) and draft amendments", adopted by the Demining Commission on 28 March 2016, p. 6; and 2018 Article 5 deadline Extension Request, p. 5.

103 2018 Article 5 deadline Extension Request, p. 5.

104 Ibid., p. 10.

105 2020 Revised Article 5 deadline Extension Request, August 2020, p. 7.

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

107 Email from GICHD, 14 May 2021; and Ljiljana Ilić, BHMAC, 2 July 2021.

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

109 Emails from Clement Meynier, MAG, 3 April 2020; and Jonas Zachrisson, NPA, 26 March 2020.

110 Ibid.

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

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

115 Ibid.

116 Email from GICHD, 14 May 2021.

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

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

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

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

121 BiH draft Mine Action Report for 2020, undated draft, p. 9.

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

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

124 Emails from Jonas Zachrisson, NPA, 14 March 2021; and Kristina Duric, NPA, 30 July 2021.

125 BiH draft Mine Action Report for 2020, undated draft, p. 28.

126 2020 Revised Article 5 deadline Extension Request, August 2020, p. 24; and Draft Demining plan in BiH for 2020, Annex 6 to the 2020 Revised Article 5 extension request, August 2020, p. 13.

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128 Ibid.

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130 Statement of BiH, Fourth APMBC Review Conference, Oslo, 27 November 2019.

131 Ibid.

132 2018 Article 5 deadline Extension Request, p. 11.

133 Interview with Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.

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

135 Interview with Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017; and email from Goran Šehić, NPA, 18 October 2017.

136 Email from Jonas Zachrisson, NPA, 26 March 2020.

137 Email from Fotini Antonopoulou, EU, 18 September 2017.

138 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.

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144 Email from the Cabinet, Federal Administration of Civil Protection, 16 July 2020.

145 Email from the Cabinet, Federal Administration of Civil Protection, 29 August 2019.

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147 Email from Milisav Pantic, on behalf of Dragan Kos, Civil Protection Administration of Republika Srpska, 3 June 2021.

148 Interview with Josephine Dresner, MAG, Sarajevo, 9 May 2017; and email from Kathy Keary, MAG, 5 April 2018.

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

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

151 Emails from Goran Šehić, NPA, 10 July 2017 and 30 March 2018; and interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.

152 UNDP, Draft Mine Action Governance and Management Assessment for BiH, p. 35.

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154 Email from GICHD, 13 May 2020.

155 2020 Article 4 deadline Extension Request, September 2020, p. 5.

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

157 2020 Revised Article 5 deadline Extension Request, August 2020, p. 8.

158 Email from Ljiljana Ilić, BHMAC, 2 July 2021; and BiH draft Mine Action Report for 2020, undated draft. In its Article 7 report (covering 2020) BiH reported that 2.57km^2 was reduced through technical survey; 13.03km^2 was cancelled; and 029km^2 was cleared. According to BHMAC's Article 7 report, a further 3.54km^2 of suspected hazardous area was reduced and cleared by technical means (technical reconnaissance and mine clearance), but the amount of clearance was not disaggregated.

159 Email from Ljiljana Ilić, BHMAC, 2 July 2021; and Article 7 Report (covering 2020), Form C.

160 Ibid.

161 Ibid. NPA reported to Mine Action Review that it cancelled 40.43km^2 in the first five months of 2020, as the result of three NPA non-technical survey teams engaged under the EU-funded Country Assessment project (email from Jonas Zachrisson, NPA, 14 March 2021).

162 Email from Ljiljana Ilić, BHMAC, 2 July 2021; Article 7 Report (covering 2020), Form C; and BiH draft Mine Action Report for 2020, undated draft, pp. 16 and 17.

163 Email from Ljiljana Ilić, BHMAC, 2 July 2021; and BiH draft Mine Action Report for 2020, undated draft, p. 18. The Civil Protection Administration of Republika Srpska reduced 240,171m^2 through technical survey in 2020 (email from Milisav Pantic, on behalf of Dragan Kos, Civil Protection Administration of Republika Srpska, 3 June 2021). FACP reported reducing 810,260m^2 through technical survey in 2020 (email from Muamer Husilović, FACP, 12 March 2021).

164 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

165 Ibid. The grand clearance and technical survey total by canton (529,455m^2) is very slightly different to the grand clearance and technical survey total by organisation (529,453m^2). Whereas BiH only reported the 293,252m^2 of clearance of confirmed mined area in its Article 7 Report covering 2020, Mine Action Review has also included the additional 236,203m^2 of MSA released through confirmed technical interventions and clearance.

166 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

167 Ibid.; and BiH draft Mine Action Report for 2020, undated draft, pp. 19 and 20.

168 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

169 Email from Milisav Pantic, on behalf of Dragan Kos, Civil Protection Administration of Republika Srpska, 3 June 2021.

170 Email from Muamer Husilović, FACP, 12 March 2021.

171 Emails from Clement Meynier, MAG, 11 March and 28 July 2021.

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

173 2020 Revised Article 5 deadline Extension Request estimate, August 2020, p. 17.

174 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.

175 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 14.

176 2020 Revised Article 5 deadline Extension Request estimate, August 2020, table, p. 24.

177 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

178 2020 Revised Article 5 deadline Extension Request estimate, August 2020, pp. 6 and 7.

179 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

180 Email from Milisav Pantic, on behalf of Dragan Kos, Civil Protection Administration of Republika Srpska, 3 June 2021.

181 Email from Muamer Husilović, FACP, 12 March 2021.

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

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

184 Email from Ljiljana Ilić, BHMAC, 2 July 2021.

CAMBODIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

MINE ACTION REVIEW ESTIMATE

400KM²

AP MINE CLEARANCE IN 2020

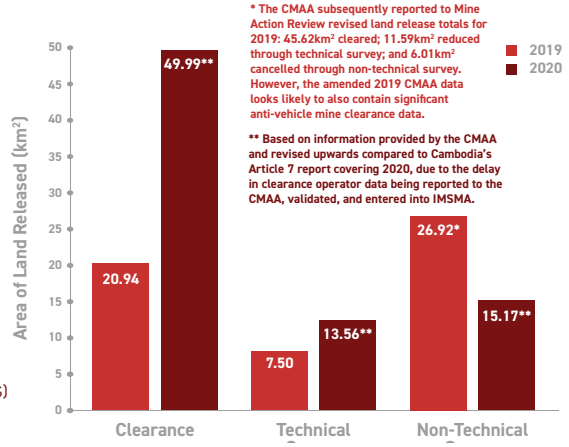
49.99KM²

AP MINES DESTROYED IN 2020

17,957

(INCLUDING 6,394 IN SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Cambodia continues to make progress in planning, prioritisation, and land release of mined areas, with clearance and technical survey output double that of the previous year, despite the impact of COVID-19. However, Cambodia has not been able to secure the additional funding and significantly increased clearance capacity planned for in its 2019 Article 5 extension request, and it is therefore not on track to complete anti-personnel mine clearance by 2025.

Furthermore, significant amounts of previously unrecorded suspected mined areas were added to the database in 2020, including as part of the baseline re-survey (BLS), but there remain concerns as to the extent to which new areas entered into the database are evidence-based.

RECOMMENDATIONS FOR ACTION

- **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 operators across the sector, including 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 synchronisation of reporting.**
- **The CMAA should also seek to develop more cost-efficient land release methods to deal with low-density mined areas. Linked to this, 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.**

- **The CMAA should establish a clear timeframe and resource mobilisation strategy for equipping, training, and deployment of the proposed 2,000 additional deminers from the Cambodian Armed Forces. The CMAA could also consider upscaling the number of deminers 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, as soon as the COVID-19 situation permits, and should seek to conclude a bilateral cooperation mechanism that would enable both countries 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 (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	The baseline re-survey (BLS), which has resulted in significant cancellation of uncontaminated land and release of reclaimed land, is progressing well and is expected to be completed in 2023. At present, it excludes the mined areas on Cambodia's border with Thailand. Some polygons identified through the BLS will require further investigation to confirm that mines are actually present. This is believed to be the case too for many of the newly discovered suspected mined areas entered into the database in 2020, some of which are believed to lack direct evidence. While the BLS classifies the type of mine contamination (e.g. anti-personnel or anti-vehicle) based on Cambodia's classification system, it only classifies mined areas as suspected hazardous area (SHA) instead of disaggregating into confirmed hazardous area (CHA) and SHA 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 seven Technical Reference Groups (TRGs), including one on survey and clearance. The Cambodian government contributes to mine action and is seeking additional international assistance to help fund deployment of additional deminers from the Royal Cambodian Army.
GENDER AND DIVERSITY (10% of overall score)	8	8	Cambodia has in place a Gender Mainstreaming in Mine Action Plan (GMAP) 2018–22, which is embedded in both its National Mine Action Strategy 2018–25 and implementation plan 2021–23. In 2020, trainings were provided to Mine Action Planning Units (MAPUs) and quality management team (QMT) staff on the new guidelines for gender mainstreaming, as well as on implementation of the GMAP 2018–22, and on data disaggregated by sex and age (SADD). As at July 2021, a new GMAP 2021–25 had been drafted to supersede the GMAP 2018–22, and was awaiting final consultation and approval. 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 five TRGs ensuring coordination of 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 made continued improvements in recent years, setting up a virtual private network (VPN) to allow operators to input directly into the database. Regular TRG meetings organised by the CMAA database unit (DBU) and held with operators continued throughout 2020, to discuss challenges, lessons learnt, and areas of improvement. They also allowed for reconciliation of data and the updating of IMSMA. The CMAA's DBU is working on data migration to IMSMA Core. CMAC, with support from NPA, finished uploading 8,381 backlogged CMAC records from explosive ordnance disposal (EOD) spot tasks onto the national database in 2020. However, there are concerns that unverified mined areas, which lack direct evidence of mine contamination, are being entered into the IMSMA database.

Criterion	Score (2020)	Score (2019)	Performance Commentary
PLANNING AND TASKING (10% of overall score)	7	7	Cambodia has a comprehensive National Mine Action Strategy 2018–25 and a detailed three-year implementation plan 2021–23. The CMAA detailed updated annual clearance targets in its 2019 extension request, but these were calculated based on an additional 2,000 deminers, which have yet to be secured. Cambodia has clear criteria and processes for the prioritisation of tasks, involving consultation with key stakeholders.
LAND RELEASE SYSTEM (20% of overall score)	6	7	Cambodia's mine action standards (CMAS) are broadly consistent with the International Mine Action Standards (IMAS). However, the CMAA needs to ensure new and existing mined areas entered into the IMSMA database contain mines, and that areas with no evidence of mines are cancelled or reclaimed. This requires strengthened quality management for new areas and re-survey of existing areas on the database that lack evidence of mines.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	6	Clearance output in Cambodia in 2020 was a huge (138%) increase on the previous year, however the 2019 total may in fact have been underreported, according to revised 2019 clearance data provided by the CMAA to Mine Action Review in 2021, although the amended 2019 data looks likely to also contain significant anti-vehicle mine clearance data. While a total of 78.7km^2 was released through survey and clearance in 2020, 74.8km^2 of newly discovered suspected mined area was also added to the database. Cambodia's annual land release targets are extremely ambitious, and are not being met. The targets will only be possible with significant additional funding and demining capacity along with successful coordination with Thailand to address all mined areas along the border, including those in areas with unclear border demarcation.
Average Score	**7.0**	**7.0**	**Overall Programme Performance: GOOD**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Cambodian Mine Action and Victim Assistance Authority (CMAA)

NATIONAL OPERATORS

- Cambodian Mine Action Centre (CMAC)
- Cambodian Self-help Demining (CSHD)
- National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC)

INTERNATIONAL OPERATORS

- APOPO
- The HALO Trust
- Mines Advisory Group (MAG)

OTHER ACTORS

- United Nations Development Programme (UNDP)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Norwegian People's Aid (NPA)

UNDERSTANDING OF AP MINE CONTAMINATION

As at December 2020, Cambodia estimated anti-personnel mine contamination at nearly 801km^2 across 8,923 suspected hazardous areas (SHAs) (see Table 1).[1] This is a reduction compared to December 2019, when contamination stood at over 817km^2 across 9,539 suspected SHAs.[2] Significant reductions in the baseline of mined area, through land release operations, are being largely offset by large quantities of newly discovered suspected mined areas being added to the database (see the Newly discovered mined areas section below).

The CMAA, which oversees the mine action database, operates its own classification system for anti-personnel (AP) mined area that disaggregates and categorises land as containing: A1 (dense concentration of AP mines); A2-1 (mixed dense AP + AV [anti-vehicle] mines); A2-2 (mixed scattered AP + AV mines); A3 (AV mines); and A4 (scattered or nuisance AP mines).[3]

Since the start of the original BLS in 2009, the CMAA has only recorded mined areas as SHAs, and not disaggregated between confirmed hazardous areas (CHAs) and SHAs in line with best practice.[4] The CMAA planned to migrate CHA data resulting from the ongoing cluster munition remnant survey (CMRS) process into its national database,[5] but had no plans to reclassify landmine data into CHAs and SHAs.[6] CHAs are only stored in the databases of some clearance operators.[7] In its decision on Cambodia's 2019 Extension Request, the Anti-Personnel Mine Ban Convention (APMBC) Committee on Article 5 Implementation highlighted "the importance of Cambodia reporting on its remaining challenge in a manner consistent with IMAS [International Mine Action Standards], namely disaggregating by suspect and confirmed hazardous area in order to ensure clarity regarding its remaining challenge."[8]

Table 1: Anti-personnel mined area by province (at end 2020)[9]

Province	Districts	SHAs	Area (m^2)
Banteay Meanchey	9	2,080	137,704,330
Battambang	13	1,560	153,754,192
Kampong Cham	5	12	1,055,226
Kampong Chhnang	6	44	3,511,298
Kampong Speu	7	411	47,072,850
Kampong Thom	7	556	54,291,793
Kampot	7	137	12,486,197
Kandal	2	2	63,203
Kep	2	6	641,691
Koh Kong	6	360	23,933,698
Kratie	5	101	18,116,943
Mondul Kiri	5	62	8,399,249
Oddar Meanchey	5	980	97,550,917
Pailin	2	503	31,101,206
Phnom Penh	2	13	1,122,444
Preah Sihanouk	1	22	1,681,425
Preah Vihear	8	664	83,808,389
Prey Veng	1	1	5,900
Pursat	5	504	43,265,479
Ratanak Kiri	2	20	2,690,487
Siem Reap	12	729	65,557,216
Svay Rieng	5	93	9,382,708
Takeo	1	55	3,626,856
Tboung Khmum	2	8	817,955
Totals	**120**	**8,923**	**801,641,652**

The original baseline survey (BLS) of all explosive ordnance (EO) contamination, including mines, cluster munition remnants (CMR), and other explosive remnants of war (ERW), was conducted between 2009 and 2012 across 124 districts. The CMAA and demining operators acknowledge that the BLS data are imprecise, with contamination being found outside BLS polygons and substantial areas identified by the BLS now under cultivation.[10] The CMAA analysed land release data and found that, on average, 32% of land classified as A1 and 51% of land classified as A4 had been reclaimed.[11] In 2015, the CMAA introduced the land reclamation non-technical survey and baseline survey (LRNTS+BLS) methodology, a stand-alone process to re-survey or re-verify SHAs identified during the original BLS. The on-going re-survey/re-verification efforts, have helped more accurately define the extent of remaining mine contamination and cancel those areas currently on the database that are found to have no evidence of mine contamination and/or which meet the CMAA criteria for reclamation. In 2015–18, the LRNTS+BLS led to release of more than 44.4km^2 of anti-personnel mined area across 1,076 SHAs.[12]

Fifty-three districts were re-surveyed as part of the BLS in 2019[13] and 15 districts (across eight provinces) in 2020.[14] The BLS had been expected to be completed by the end of 2020.[15] However, while all areas contaminated by CMR have now been re-surveyed as part of the BLS, re-survey of mined area is still ongoing and was not expected to be completed for mined areas until 2023. The CMAA has said the delay in completion of the BLS is due to three main reasons: a lack of key informants; inaccessible, restricted, and preservation areas; and the rainy season/flooded areas. Among the areas yet to be surveyed are minefields along the Cambodia-Thailand border, in particular areas with unclear border demarcation the estimated size of which has not been reported. As at May 2021, these border minefields remained inaccessible for survey and clearance operations,[16] and commencement of the next pilot project with Thailand had been impacted by the COVID-19 situation.

Some of the hazardous areas added to the database during the BLS are thought to be overestimated or lack evidence of mines. These will require further investigation through desktop survey and field data verification, but also in many cases through physical survey to confirm or disregard the existence and size of contamination.[17] The CMAA could also consider using updated satellite images to check which BLS polygons are already in use by communities, facilitating the CMAA to assign operators to investigate and cancel areas where there is no evidence of mines and helping gain a better picture of the remaining areas to be technically surveyed/cleared.[18] In a positive development, in December 2020 the CMAA initiated a 30-day pilot project known as "ground data verification", supported by NPA, during which a selection of previously surveyed minefields were revisited to determine which areas could be cancelled or reclaimed and which were actual mined areas. Subject to funding, and the COVID-19 pandemic, the CMAA planned to expand the project to the most mine-affected districts in western Cambodia.[19]

Duplication in records of contaminated areas had resulted in a large amount of hazardous area being incorrectly recorded in the database, but the CMAA finished resolving this issue in 2020.[20] The CMAA database unit (DBU) conducted a desktop analysis using ArcMap to identify BLS polygons overlapped with completion polygons. As a result of the analysis, 158km^2 was removed from the national database.[21]

A data backlog of non-technical survey and land release forms pending quality control (QC) and approval by the CMAA, and also in part because of delayed handover and submission of forms by the operators, can impact how up to date contamination figures are.

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.[22]

Landslides caused by flooding in 2020 have unearthed mines and unexploded ordnance (UXO). According to online media reports, the provinces most affected by this phenomenon are Battambang, Banteay Meanchey, Kampong Thom, Kandal Kratie, Mondul Kiri, Oddar Meanchey, Pailin, Pursat, Preah Vihear, Stung Treng, and Tboung Khmum.[23]

Cambodia has extensive contamination from mines and ERW left by 30 years of conflict that ended in the 1990s. It is estimated that four million anti-personnel mines were laid after the fall of the Khmer Rouge in 1979 until the end of the armed conflict in 1998. Cambodia's anti-personnel mine problem is concentrated in, but not limited to, 21 north-western districts along the border with Thailand, which account 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.[24]

Cambodia also has significant contamination from CMR and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Cambodia for further information).

NEWLY DISCOVERED CONTAMINATION

In its 2018 Article 5 deadline extension request, Cambodia reported that the LRNTS+BLS had led to the identification of 1,363 SHAs of previously unrecorded anti-personnel mine contamination, covering a total area of almost 118km^2.[25]

In 2020, a further 74.8km^2 of additional contamination across 432 SHAs in 15 districts was added to the national IMSMA database (see Table 2).[26] This is a significant increase on the 7.2km^2 over 117 SHAs of additional contamination identified the previous year.[27] According to the CMAA, incidents have occurred in some areas that were inaccessible during the previous survey or in areas where key informants were absent when the previous survey was conducted. This has resulted in the discovery of previously unknown contamination being added to the database, after verification by the CMAA QA and Database Unit (DBU) teams. Furthermore, economic development in Cambodia is gradually expanding into jungle areas, resulting in the discovery of new mine contamination.[28] The CMAA reported that it conducts QA of newly discovered mined areas, before they are entered into IMSMA.[29] However, a large proportion of new polygons surveyed are thought to have been established without direct evidence of contamination (i.e. suspected hazardous areas) and rarely yield mines when clearance teams are deployed on them. Poor survey is therefore contributing to an inflated representation of remaining contamination in Cambodia. The CMAA is said to be working to address this concern,[30] and planned to discuss it during the TRG meeting on clearance in October 2021.[31]

The CMAA's DBU is working with operators to investigate all newly added mine contamination.[32] The CMAA's Department of Regulation and Monitoring and its quality management (QM) teams (QMTs) have been tasked with an increased focus on BLS operations to ensure that previously unrecorded mined areas added to the national database are supported by strong and clear evidence and are of an appropriate size. In addition, the DBU will review newly captured mined areas and verification will be conducted by the QMTs on any questionable polygons.[33] International non-governmental organisation (NGO) operators fully support the CMAA deploying survey QA teams to verify hazardous areas before they are accepted onto the database.[34]

Table 2: Newly added anti-personnel mined area in 2020[35]

Province	Districts	SHAs	Area (m^2)
Banteay Meanchey	1	1	119,630
Battambang	4	85	9,121,139
Kampong Cham	1	1	75,640
Oddar Meanchey	3	16	2,714,579
Pailin	2	102	10,391,074
Preah Vihear	2	210	51,540,330
Pursat	1	16	866,894
Siem Reap	1	1	15,228
Totals	**15**	**432**	**74,844,514**

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.[36] The CMAA has noticeably strengthened in recent years, and its roles and responsibilities have become more clearly defined.[37] 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.[38] CMAC conducts both humanitarian and commercial survey and clearance in Cambodia and is the country's largest mine action operator.[39]

Provincial Mine Action Committees (PMACs) and Mine Action Planning Units (MAPUs) were established in 2004, tasked with establishing clearance priorities in consultation with affected communities to ensure that clearance addresses their housing, agricultural, and infrastructure needs.[40] MAPUs meet regularly with all mine action operators to plan annual mine action activities.[41]

The Cambodian government established the Technical Working Group on Mine Action (TWG-MA) as a consultative mechanism between the government and implementing partners.[42] It meets on a bi-annual basis and is attended by the CMAA, relevant ministries, operators, and donors.[43] In 2020, however, TWG meetings were suspended due to COVID-19.[44] The Mine Action Coordination Committee (MACC) and seven Technical Reference Groups (TRGs) have been established by the CMAA to facilitate coordination and feedback at a strategic and technical level in areas such as survey and clearance, risk education, victim assistance, information management, gender, cluster munitions, and capacity development.[45] The TRG on survey and clearance meets on a quarterly basis,[46] but was only able to meet in Q1 and Q3 in 2020, due to COVID-19.[47]

The operating environment in Cambodia is permissive, with the Cambodian 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), and importation procedures. The CMAA is open to the trialling and use of innovative clearance methods and tools to improve efficiency.[48]

The Geneva International Centre for Humanitarian Demining (GICHD), Norwegian People's Aid (NPA), and the UN Development Programme (UNDP) all support capacity development of the CMAA.

The GICHD provides information management and risk management support to the CMAA. In 2019, GICHD support to capacity development included stakeholder workshops on the IMSMA Core migration; initial development of the new database; support on developing residual capacity in line with Cambodia's mine action strategy; gender mainstreaming activities in mine action; and workshops on risk management and development of national mine action standards.[49]

NPA conducts capacity development activities in support of the CMAA on gender equity and mainstreaming, information management, knowledge management, planning and prioritisation, QM, and strategic planning.[50] NPA's capacity development work in Cambodia was previously part of a United Kingdom Foreign, Commonwealth & Development Office (FCDO, previously the Department for International Development (DFID))-funded partnership that includes Mines Advisory Group (MAG) and The HALO Trust, in addition to some financial support from Norway. As at July 2021, its work was supported solely by Norway.[51]

Since 2006, UNDP has been implementing its "Clearing for Results" (CfR) programme in Cambodia, relating to clearance of minefields in north-west Cambodia's most mine-affected provinces of Battambang, Banteay Meanchey, and Pailin. Aspects of the project relating to capacity development include supporting the establishment of a Performance Monitoring System (PMS) that links mine action's contribution to human development to mine action and strengthening the CMAA's international and national participation in relevant fora.[52] The third phase of the CfR programme was completed at the end of March 2020. The fourth phase (CfRIV) commenced in 2020 and runs until the end of 2025, focusing on release of mined areas in the most affected provinces through Land Reclamation Non-Technical Survey (LR-NTS) and clearance contracting, supporting victim assistance, mine risk education, gender mainstreaming, provision of development pathways in villages that are cleared of mines, strengthening capacity of the CMAA to lead the sector and support the development of national sustainable capacity to address residual threats.[53]

The Cambodian government contributes funding towards clearance and the management of the sector.[54] This support includes covering expenses of the CMAA and providing funds to support planning and prioritisation, QA/QC, database management, Cambodia mine/ERW victim information system (CMVIS), and risk education activities.[55] The cost of the database unit is, however, shared by NPA and UNDP.[56] The Cambodian government also provides a 10% in-kind contribution to any new donor funding, and a 10% in-cash contribution to the UNDP CfR programme.[57] 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).[58] Indirectly, tax exemptions on mine action equipment have contributed to humanitarian demining.[59]

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.[60] From 2020 to 2025, Cambodia requires an estimated overall budget of $377 million, of which $165 million is required to release anti-personnel mined areas. Cambodia is refining its resource mobilisation strategy to help promote fundraising and it intends to target past and current donors as well as engage with emerging and non-traditional donors. It is also seeking support from the private sector and philanthropists.[61]

GENDER AND DIVERSITY

The CMAA has developed a Gender Mainstreaming in Mine Action Plan (GMAP 2018–2022), an objective of the National Mine Action Strategy 2018–2025, which consists of six goals. These include: the preparation of guidelines to aid gender mainstreaming across all mine action; capacity building of relevant stakeholders to implement the GMAP 2018–22; and the representation and participation of women in planning and prioritisation, risk education, and in mine action and advocacy at all levels. As at July 2021, a new GMAP 2021–25 had been drafted to supersede the GMAP 2018–22, and was due to be approved after the CMAA gender team had held a consultation meeting with operators and other relevant stakeholders.[62]

The latest National Mine Action Strategy three-year Implementation Plan (2021–23) sets out activities in support of these goals.[63] NPA, as part of its capacity development, is supporting the CMAA with training on gender mainstreaming in mine action, on implementation of the GMAP 2018–22 and the development of associated guidelines, and on how to use gender- and age-disaggregated data in planning and prioritisation processes.[64] Guidelines for Gender Mainstreaming in Mine Action were approved in December 2019. In 2020, trainings were provided to MAPU and QMT staff on the new guidelines, as well as on implementation of the GMAP 2018–22,[65] and on disaggregating data by sex and age (SADD).[66] Twenty-six data collection forms now need to be updated to fully roll out the collection of SADD. Further training is needed with the MAPUs, operators, and CMAA staff to ensure that the SADD is used for prioritisation and planning.[67] Furthermore, an assessment has been conducted on capacity, efficiency, and challenges of all demining operators and stakeholders in gender mainstreaming, in order to update GMAP 2018–22 to GMAP 2021–25.[68]

The GICHD conducted a gender and diversity baseline assessment of the CMAA in 2019 and has a joint action plan to support gender and diversity mainstreaming efforts for the remainder of the GMAP strategy period.[69]

A CMAA Gender Mainstreaming Team (GMT) was established to coordinate with the TRG on Gender (TRG-G), one of seven TRGs ensuring coordination of the sector. The TRG-G is composed of representatives from UNDP, Ministry of Women's Affairs (MoWA), Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY), MAPU, operators, and international and national organisations working in mine risk education (MRE) and victim assistance (VA).[70] Of the CMAA's 150 employees in 2020, 39 (26%) were female, with women in 15 of 71 (21%) managerial level positions and 13 of 44 (29%) supervisory positions.[71]

Survey and community liaison teams are said to be inclusive and mixed gender. Women are given access to job announcements and female candidates are given priority during the recruitment process. Women and children in affected communities are consulted during village meetings and community liaison activities, including regarding prioritisation. This commitment is reinforced by the demand for all reporting forms to have SADD and by the provision of training to MAPU and QMT staff.[72]

Support for increased and inclusive engagement of women and marginalised populations in the planning and prioritisation process was also demonstrated by the development and approval of a new "Village Meeting to Prioritize Minefields for Clearance (coordinated by Village Chief)" guideline. Drafted with input from the CMAA SEPD (Socio-economic planning and database management) and Gender Team, the UNDP Clearing for Results project team, and MAPUs, the guidance aims to support village chiefs to undertake inclusive village consultations. These are due to be held before the commune meetings at which chiefs and other key village members present the mined and ERW-contaminated areas they want cleared as a priority.[73]

Of APOPO's 72 staff in Cambodia 23 (32%) are women, along with 5 of the 49 (10%) CMAC employed seconded to APOPO. Five of fourteen (36%) of APOPO's managerial/supervisory-level positions are held by women. With respect to operations staff, 19 of APOPO's 48 (39%) employees are women, along with 6 of the 27 (22%) CMAC operations staff seconded to APOPO.[74] APOPO disaggregates relevant mine action data by gender and age.[75]

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 operations positions.[76]

CMAC's strategy addresses gender sensitivity in mine action and it is working to promote gender in its strategic goal. CMAC said this is achieved through promoting gender in mine action through policies and procedures, by providing equal opportunities for women to work at CMAC, nurturing a gender-friendly working environment, continuing to encourage the recruitment of women to management positions, 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.[77]

At the beginning of 2020, CMAC recruited mostly women for vocational training (64 female trainees) and appointed a large number of women as team leaders, office workers, and as the chief of office.[78] CMAC, which operates under Cambodian labour law, is actively recruiting women with a view to reaching an aggregate of 15% women in its workforce. Women currently work across all levels of the organisation, including in managerial level/supervisory positions. Two of the six directors were women in 2020.[79] As at June 2021, there were 178 female staff at CMAC, which is 13% of CMAC's workforce. Of these, 23 women were in managerial/supervisory positions and 86 women were in operational positions.[80]

The HALO Trust provides equal job opportunities and 38% of its employees in Cambodia are women, including 43% of operational staff (50% of HALO deminers are women), and 18% of managerial level/supervisory positions across the programme (double the 9% reported the previous year). Due to low historical levels of women employed until recently, relatively few women have yet acquired the required experience and expertise (typically six to ten years) to take up managerial/supervisory roles in HALO's view. However, the proportion of women employed in senior roles is expected to increase considerably in the coming years as women gain more experience and rise up the junior ranks from deminer upwards. HALO deploys gender-balanced survey and clearance teams to help ensure it consults all groups of the local community.[81]

During non-technical survey and pre-clearance impact assessments, MAG deploys mixed-gender community liaison teams to gather information on the suspected location of mines and the impact on the community. Of MAG's total employees in Cambodia, 32% are women. In its survey and clearance teams, 29% of staff are women, as are 24% of managerial level/supervisory positions.[82] In Q4 2020, MAG secured funding to conduct a gender analysis of its programme, in order to promote meaningful gender equity and mainstreaming, and ensure an increased proportion of women in operational supervisory and management roles within the programme. The assessment was planned for the first half of 2021.[83]

In 2020, NPA did not conduct land release of mined areas, only of CMR. Overall, 56% of NPA's employees in Cambodia are women, including 68% of operational staff and 55% of managerial level/supervisory positions.[84]

According to CMAA data, as at March 2019, NPMEC had a total of 294 employees (290 operational), all of whom were men.[85]

All international operators in Cambodia disaggregate relevant mine action data by gender and age.

INFORMATION MANAGEMENT AND REPORTING

The CMAA has used the Information Management System for Mine Action New Generation (IMSMA NG) since 2014. The CMAA is now upgrading the system to IMSMA Core. As at May 2021, however, the COVID-19 pandemic was slowing the process.[86] A significant backlog of data was resolved in 2019/20, before large-scale migration of existing data to IMSMA Core could begin.[87] CMAC, with support from NPA, finished uploading 8,381 backlogged CMAC records from explosive ordnance disposal (EOD) spot tasks onto the national database in 2020.[88] IMAS minimum data requirements will be incorporated as Cambodia migrates to IMSMA Core.[89] All the standardised data collection forms are being digitised and tested in the new system.[90]

NPA also supported CMAA to undertake a data verification project in Banteay Meanchey, Battambang, and Pailin provinces, which aimed to improve the quality of the data in the DBU system through assessment of whether or not SHAs could be released through cancellation. Approximately 30% of the areas visited appeared to meet the criteria for cancellation and reclamation under CMAS. The data verification project itself cannot cancel land, which is the intended purpose of the follow on LR-NTS. The data verification project was continued into 2021, as well as a follow on LR-NTS project with UNDP CfRIV funding.[91]

The CMAA's DBU is responsible for collecting, storing, analysing, and disseminating data in support of planning and prioritisation.[92] Improvements to information management are ongoing in Cambodia,[93] and the CMAA has worked closely with the GICHD on the development of online data collection tools, such as through use of tablets to allow data collection in the field and which allow MAPUs and QMTs to enter data online and verify the data submitted by operators.[94] Data relating to anti-personnel mine contamination, survey, and clearance in IMSMA are considered relatively accurate and up-to-date.[95]

Strengthening the national information management system for mine action is an objective of the National Mine Action Strategy 2018–25.[96] NPA has been conducting capacity development activities with the CMAA under an FCDO consortium project and also with funding from Norway.[97] This included introduction of a web-based application for MAPUs to enable better prioritisation of the tasks for operators' annual work plans, which is expected to increase the effectiveness of mine clearance across the sector in Cambodia.[98] It also included the development of a national mine action standard (IM-CMAS [Cambodian Mine Action Standard]) on information management. The IM-CMAS has been implemented since 2019 and the CMAA ensures compliance internally within the CMAA and by clearance operators.[99]

Regular TRG meetings organised by the CMAA DBU and held with operators continued throughout 2020, to discuss challenges, lessons learnt, and areas of improvement. They also allowed for reconciliation of data and the updating of the IMSMA database.[100] The main operators (CMAC, HALO, MAG, and NPA) agree that data collection forms are consistent.[101]

The CMAA shares all available data with operators every one or two months.[102] In 2018, the DBU set up a virtual private network (VPN), which allows operators to send their daily data input directly into the DBU IMSMA database. The DBU controls the quality of all submitted reports and approves them via this online network.[103] The CMAA plans to move everything related to data submission online soon.[104] In 2020, the CMAA successfully tested a new system and deployed it to CSHD to support field data collection and their daily operation.[105]

Cambodia submits timely Article 7 transparency reports and gives regular statements on progress at the meetings of States Parties to the APMBC. There have, though, been issues with the accuracy of information in Cambodia's reporting in the past, evidenced by discrepancies between data submitted by operators and that offered by the CMAA. The CMAA also reportedly still faces some issues with the late submission of reports by some operators, and also some technical challenges with the mapping of polygons, which it is working with operators to address.[106]

In 2019, Cambodia submitted a detailed and well prepared six-year Article 5 deadline extension request from 1 January 2020 to 31 December 2025, which was granted by States Parties at the Fourth Review Conference in November 2019.

PLANNING AND TASKING

Cambodia's National Mine Action Strategy 2018–2025 was officially launched in May 2018 with eight goals for clearance of mines, CMR, and other ERW. The first goal is to release all known mined areas by 2025 through planned land release of 110km^2 a year from 2020. The accompanying Three-Year Implementation Plan 2018–20 has now been replaced by a new Implementation Plan 2021–23, which sets out the activities and indicators to implement the strategy.[107]

In 2019, Cambodia submitted its Article 5 extension request with revised land release targets for 2019–25, as set out in Table 3, with predicted annual land release targets increasing over time as additional deminers are projected to come on board and become operational.[108] The targets assume that significant additional international funding will be secured allowing for deployment of 2,000 additional Royal Cambodian Army deminers, which has yet to happen. The annual targets in the extension request also assume that no new contamination will be added to the database, but more than 74.8km^2 of previously unrecorded mined area was added to the database in 2020. In 2020, Cambodia released 77.3km^2 (according to Article 7 data for 2020), again well short of the annual extension request target of 110km^2.

As of April 2021, CMAA reported that 818km^2 of mined area remained, equating to annual land release targets of 163.6km^2.[109] As previously indicated, current capacity and land release output indicates there will continue to be a significant gap between the 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 which were not fully released previously.

Table 3: Annual targets for release of mined area in 2019–25[110]

Year	Targets (m^2)
2019	84,250,000
2020	110,000,000
2021	110,000,000
2022	146,546,809
2023	146,546,809
2024	146,546,809
2025	146,546,809
Total	**890,437,236**

The CMAA maintains the annual national clearance work plan for landmines and cluster munition remnants, made up of all the provincial clearance work plans. MAPUs are responsible for developing their own work plans in accordance with the planning and prioritisation guidelines. The PMACs approve the MAPU's work plans, which are then endorsed by the CMAA. The MAPUs use the provincial work plan to monitor clearance performance and report progress to the PMAC and the CMAA.[111]

The current planning and prioritisation practices in Cambodia follow a combination of top-down and bottom-up approaches. The top-down approach involves CMAA establishing a list of priority villages based on agreed criteria. The bottom-up approach involves MAPUs coordinating at the provincial level to develop a clearance list, again, using agreed criteria.[112]

In accordance with objective three of goal one of Cambodia's National Mine Action Strategy 2018–25, the CMAA is adopting a mine-free village policy, and has identified 500 priority villages from the most anti-personnel mine contaminated provinces, totalling a mined area of 220km^2 that will be released by 2021, and the remainder by 2025.[113] In accordance with the revised planning and prioritisation guidelines, the defined criteria to determine the 500 priority villages was based on the size of the mined area in the village, the number of casualties there, the number of people in the village, and the levels of poverty.[114] At least 75% of funding and resources are allocated to these priority villages, leaving a maximum of 25% of resources to address clearance needs outside of the priority villages through the MAPU process.[115] In addition, to maintain government and donor support to mine action by generating publicity and awareness, CMAA will also implement a complementary policy that will prioritise working to declare villages with very low contamination (defined as SHAs with less than 50,000m^2) as mine-free.[116]

Within this bottom-up element of Cambodia's approach, the MAPUs, in consultation with operators, then develop a list of priority minefields within the priority villages identified by the CMAA. The following criteria are used by MAPUs for prioritising minefields: BLS land classification; casualty data; intended beneficiaries; level of threat; development needs; and post-clearance land use.[117] It is hoped that this process will be facilitated by the introduction of the web-based application for MAPUs. It is important to note that often the BLS data is old and the information may not or no longer be accurate. Therefore, working closely with the communities is vital to understand the most up-to-date picture of the landmine threat, thus help better prepare for the process of building annual work plans. Local authorities, such as village and commune chiefs, attend the meetings held by MAPUs for planning. However, these meetings often result in operators providing the list of tasks they intend to work on, rather than the engagement by all parties to avoid selecting tasks for clearance that may in fact potentially be released through non-technical survey.[118]

Operators have expressed some reservations about the "mine-free village" approach, with The HALO Trust prioritising clearance of those areas with the most significant impact: the highest density minefields within the communities at/near the Thai-Cambodian border. The HALO Trust has expressed concern that the mine-free village approach will lead to clearance of low-impact, low-density minefields in order to declare the village mine-free, diverting resources from high impact areas.[119] MAG's concerns that impact should be taken into account in the prioritisation criteria have been noted by CMAA, which has stated there will be some flexibility in the planning and prioritisation process.[120] The CMAA has stated it does not believe that high-density minefields should be the deciding factor for prioritisation as they believe prioritisation should be based on addressing the needs of the affected communities.[121]

While following the CMAA prioritisation processes, HALO also includes the following in its planning and prioritisation matrix with MAPUs: minefields with confirmed anti-personnel mine threat and confirmed/suspected anti-vehicle mine threat, minefields that have caused accidents, proximity to population, and development requests. HALO prioritises clearance of highest impact minefields validated by HALO's internal pre-clearance non-technical survey and post-clearance study to maximise its impact for the beneficiary communities.[122]

According to NGO operators, the criteria and prioritisation processes for landmine tasks in Cambodia are well established and survey and clearance task dossiers are issued in a timely and effective manner.[123] There was, however, a suggestion that Cambodia should consider categorising infrastructural projects that require formal clearance prior to construction as stand-alone projects agreed between the implementer, mine action operator, and the donor (if applicable), rather than including such projects together with humanitarian mine action.[124]

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,[125] although the criteria for cancellation of mined area require strengthening.[126] No updates were made to the NMAS in 2020.[127] In 2019–21, the CMAA, with support from NPA with FCDO funding and in consultation with other mine clearance operators, is in the process of developing new standards.[128]

As at April 2021, the CMAS chapter on mechanical clearance was pending approval having received comments from international operators, CMAC, and armed forces; the CMAS on animal detection systems and on the environment, were finalised and awaiting approval by the CMAA; and the CMAS on information management had been finalised and approved by the CMAA.[129] In addition, the CMAS on explosive ordnance risk education (EORE) has also been revised and updated to bring it in line with IMAS. It included input from all operators and was completed in early 2021, and expected to be distributed in April/May 2021.[130]

National standards are reflected in operators' standing operating procedures (SOPs).[131] Updates to the SOPs are conducted as and when required, such as when a need is identified through the CMAA-led TRG. Reviews are conducted in consultation with all operators, and against IMAS and best practice.[132] A comprehensive review of CMAS, referenced in the National Strategy, was planned for 2021.[133]

HALO Trust believes the sector would benefit from a review of the CMAS on non-technical survey.[134] In addition, NPA believes that the QM CMAS needs to be strengthened and QM capacity further developed.[135] In 2019, the CMAA said it would improve efficiency of its QMT to strengthen QA and QC of survey and clearance activities to ensure that any additional mined areas registered in the national database are supported by strong and clear evidence and are appropriately size.[136] However, the financial impact of COVID-19 on the national budget had reportedly impacted the QM capacity under CMAA in 2020.[137]

The National Mine Action Strategy 2018–25 emphasises the need for more efficient use of demining assets. In a 2018 monitoring visit to Pailin province it was found that one in three of the mined areas could have been released by LR-NTS rather than full clearance. UNDP has now mandated that all minefields in its targeted villages will be assessed before clearance assets are deployed,[138] and has engaged NPA to conduct LR-NTS before the MAPUs select the mined areas for tendering for 2022.[139]

In a positive development, in December 2020 CMAA initiated and carried out a 30-day pilot project known as "ground data verification". The pilot project team revisited previously surveyed minefields of a total size of 55km^2 in six districts in three provinces: Banteay Meanchey, Battambang, and Pailin. Some areas of the minefields had been reclaimed by local people and used for housing, farming, food storage, roads, irrigation schemes, and other construction. Those areas that potentially met the criteria as stipulated in CMAS Chapter 15 on "Land Release" could be released through non-technical survey. The rest could be defined as actual mined areas to be released through applicable land release methodologies. As a result, the ground data verification project indicated 21km^2 (38%) of the minefields could be released through non-technical survey and 34km^2 (62%) are actual mined areas. Follow-on non-technical survey is required to actually cancel mined area found not to be contaminated, as the data verification itself does not result in cancellation. The result will help mine action operators to apply land release methodologies and use financial resources more effectively and efficiently to achieve higher productivity, more swiftly, and with lower cost. Contingent on available funding and the COVID-19 pandemic situation, the CMAA planned to continue this project in the most mined-affected districts to update all existing surveyed minefields in the western part of the country.[140]

The "ground data verification project" has been tested and implemented by the QMT to conduct quality checks on newly captured polygons and visit all existing surveyed polygons. This project will help the CMAA understand the current situation of BLS polygons on the ground before approval of polygon data into the national database or before deciding which methodology should be applied to release of existing polygons.[141]

The HALO Trust recommends that the CMAA QMTs engage the non-technical survey activities of operators through quality assuring their non-technical survey reports, ideally on the ground and as frequently as possible. HALO would also encourage fellow operators to conduct a non-technical assessment of tasks before selecting them for clearance. This will help avoid deploying clearance assets to tasks that can be released through non-technical survey due to land having been reclaimed through cultivation or incorrectly recorded initially.[142] CMAA has now started putting non-technical survey (including new survey and cancellation) dossiers for detailed analysis before accepting them onto IMSMA, which is a positive development.[143]

The CMAA also plans to organise annual meetings to discuss baseline survey and resurvey activity to ensure that national survey standards are consistently applied by all operators. For example, a mined area reclaimed for productive use must meet certain criteria to be released through non-technical survey without undertaking technical survey.[144]

The CMAA recognises that for Cambodia to complete clearance by 2025 (which it is not currently on track to achieve), the full toolbox of land release methodologies must be properly applied and operational efficiency encouraged among operators.[145]

OPERATORS AND OPERATIONAL TOOLS

Mine clearance is undertaken mainly by the national operator, CMAC, and two international mine action NGOs, MAG and The HALO Trust. To a lesser extent, mine clearance is also conducted by national operator the NPMEC, and by national NGO, CSHD. International operator APOPO also conducts clearance in partnership with CMAC.[146]

Table 4: Operational clearance capacities deployed in 2020[147]

Operator	Manual teams	Total deminers	Animal detection capacity	Machines	Comments
APOPO (working in partnership with CMAC)	3	22	4 animal detection teams (26 handlers with 36 rats and 4 dogs)		Includes technical survey and clearance capacity. Existing animal detection system (ADS) teams were enlarged in 2020, and an additional ADS team was created.
Armed forces	N/K	N/K	N/K	N/K	
CMAC	76 Demining platoons and mobile units	648	7 mine detection dog teams (40 dogs and 40 handlers) and 2 mine detection rat teams (36 mine detection rats)	11 demining machines	Based on data provided by the CMAA and CMAC.
CSHD	1	12	0	0	
HALO Trust	82	738	0	2	An increase on the 73 teams and 657 deminers in 2019.
MAG	17	136		2 mechanical operation units and 2 command vehicles.	Three mine detection dog (MDD) teams, contracted out to CMAC. MAG's capacity increased by one team, compared to the previous year.
NPMEC	N/K	392*	N/K	N/K	*Based on March 2019 data and includes both survey and clearance capacity for mines and ERW.
Totals		**More than 1,950** deminers**			

N/K = not known ** There is reported to be approximately 2,600 deminers in Cambodia[148]

APOPO, works in partnership with CMAC in Siem Reap, Preah Vihear, and Battambang provinces.[149] In its partnership with CMAC, APOPO deployed a SMART Technical Survey Dog (TSD) team for the first time in March 2019. In 2020, APOPO completed a GICHD Evaluation Project of the SMART TSD, during which it surveyed more than 1.43km^2 of mine affected areas and found 149 landmines and 61 items of ERW. The methodology combines long-range search dogs with the use of track and trace systems and unmanned aerial vehicles (UAVs). In addition, cluster munition-contaminated areas were also surveyed as part of the evaluation project (see *Clearing Cluster Munition Remnants* report on Cambodia). The results of the pilot project, which are reported to reveal increased productivity, were expected to be published in 2021.[150] In 2020, Magawa, one of APOPO's top performing mine detection rats was awarded the PDSA [The People's Dispensary for Sick Animals] Gold Medal for his lifesaving work in Cambodia, detecting 39 landmines and 28 items of UXO over a five-year career.[151]

CMAC has 14 non-technical survey teams, totalling 70 survey personnel, and 4 technical survey teams totalling 20 personnel. From March 2021, CMAC has reformed its technical survey and clearance teams from five-person to seven-person teams.[152] APOPO provides CMAC with mine detection rats (MDR) and MAG reported contracting three mine detection dog (MDD) teams to CMAC.

The increase in HALO's clearance capacity in 2020 was due to the start of a new United States (US) PM/WRA grant and an increase in German funding. In addition, from mid-way through 2020, HALO's non-technical survey capacity increased from nine teams to eleven survey teams, thanks to the funding increase. This excludes team leaders, medics, and drivers who form vital roles in the multi-purpose survey teams (non-technical survey, EOD call out, cancellation, and EORE).[153]

MAG's survey capacity in 2020 was seven non-technical survey teams, totalling 16 personnel and 17 technical survey teams, totalling 145 personnel. MAG re-introduced dual sensor hand-held detectors (HSTAMIDS) into its detection toolbox and trained 15 deminers in Q4 of 2020. It also deployed MMW 330 mechanical clearance assets from Q2, and had a partnership with APOPO to trial the use of Mine Detection Rats which started in Q4.[154]

NPA deployed MDDs to conduct technical survey on the Thai-Cambodian border in early 2020 in support of CMAC/TMAC cross border initiative on the Cambodia-Thai border.[155] In 2021, NPA was deploying capacity to conduct non-technical survey on SHAs in Pailin, Battambang, and Banteay Meanchey provinces to see if they meet CMAA's cancellation and/or reclamation criteria. This project will be conducted in partnership with the CMAA and UNDP.[156]

UNDP has supported the CMAA through the Clearing for Results (CfR) programme since 2006, awarding contracts funded by international donors through a process of competitive bidding. In 2019, CMAC was awarded three clearance contracts totalling $1.7 million dollars with clearance targeted in high-priority villages in Battambang, Banteay Meanchey, and Pailin provinces. Phase three of the CfR exceeded the land release target of 47km^2, and upon completion Phase Three had released nearly 59km^2 of mined area from March 2016 to February 2020 .[157] For 2020, CfRIV released 11.42km^2 (4.67km^2 through technical survey and 6.75km^2 through clearance) and destroyed 951 anti-personnel mines, 6 anti-vehicle mines, and 992 items of ERW, with a total contract value of $1.63 million (including top-up).[158] Two clearance contracts were awarded to CMAC and one to HALO Trust, all for the seven-month period from June to December 2020.[159]

In its 2019 Article 7 extension request, the CMAA calculated that in order to meet its 2025 land release targets for anti-personnel mined area, an extra 2,000 deminers and 100 support personnel will be needed. The CMAA proposes that these deminers come from the Royal Cambodian Army and that the Cambodian government will cover the salaries, insurance, uniforms, and operational costs, but that it will require funding from the international community for training (to be provided by CMAC), vehicles, and equipment.[160] It was estimated that during the first year of deployment the deminers will be able to release 35km^2, rising to 57km^2 from the second year.[161] The CMAA is seeking international financial assistance for training (to be provided by CMAC) and equipment for the planned deminers, and in August 2020, the Indian government pledged $1.5 million to help increase the demining capacities of the Royal Cambodian Army.[162] As at the end of 2020, none of the additional 2,000 army deminers had been deployed, but the CMAA said that some army staff have been trained by CMAC and equipped for future deployment.[163]

The CMAA is responsible for quality management and since 2016 has deployed eight QMTs.[164] In 2017, with UNDP support, it developed the PMS, which will track land use and socio-economic changes after release of mined area/ERW-contaminated land as well as monitor the implementation of NMAS as a management tool for the sector.[165] The CMAA approved the PMS, which was launched in May 2018 and in late 2019 a pilot-test was conducted during which 121 completed minefields were visited and the associated beneficiaries were interviewed by MAPU staff in Banteay Meanchey province. Data from the 121 mined areas were collected, cleaned, and analysed, and a PMS report was produced in December 2020.[166]

CMAA reported that drones had been used to support non-technical and technical survey activities to capture more information for better planning for clearance.[167]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

According to data reported by the CMAA to Mine Action Review, a total of more than 78.72km^2 of mined area was released in 2020, of which more than 49.99km^2 was cleared, more than 15.17km^2 was reduced through technical survey, and nearly 13.5km^2 was cancelled through non-technical survey. The amount of area surveyed and cleared in 2020, as reported by the CMAA, is slightly greater than that reported in Cambodia's Article 7 report (covering 2020).[168] Over the course of the year, however, more than 74.8km^2 of previously unrecorded mine contamination across 432 SHAs was added to the database.[169]

SURVEY IN 2020

In 2020, more than 28.73km² was released through survey, of which nearly 15.17km² was cancelled through non-technical survey (see Table 5) and 13.56km² was reduced through technical survey (see Table 6), based on data provided to Mine Action Review by the CMAA.[170] Compared to the previous year, the amount reduced through technical survey in 2020 was more than double the 7.5km² of mined area reduced in 2019, while the amount of mined area cancelled in 2020 was less than the 26.9km² cancelled in 2019.[171] However, in 2021, the CMAA advised that the 2019 data had subsequently been revised to 6.01km² of mined area cancelled through non-technical survey and 11.59km² reduced through technical survey, due to delay in the clearance operator data being reported to the CMAA, validated, and entered into IMSMA.[172]

Furthermore, in 2020 the LRNTS+BLS captured an additional total of more than 74.8km² across 432 SHAs of additional contamination (see Table 2 above).[173]

Table 5: Cancellation through non-technical survey in 2020 (CMAA data)[174]

Operator	Area cancelled (m²)
CMAC	90,464
HALO Trust	11,604,326
MAG	3,475,807
Total	**15,170,597**

Table 6: Reduction through technical survey in 2020 (CMAA data)[175]

Operator	Area reduced (m²)
CMAC	11,216,092
CSHD	31,355
HALO Trust	333,251
MAG	1,979,893
Total	**13,560,591**

CLEARANCE IN 2020

In 2020, nearly 50km² of mined area was cleared, with the destruction of 11,563 anti-personnel mines and 28,668 other items of explosive ordnance (see Table 7), based on data provided to Mine Action Review by the CMAA.[176] This is a huge increased on the 20.9km² of mined area cleared and 4,111 anti-personnel mines destroyed in 2019.[177] However, in 2021, the CMAA advised that the 2019 data has subsequently been revised upwards to 45.62km², due to delay in the clearance operator data being reported to the CMAA, validated, and entered into IMSMA.[178] The amended 2019 CMAA data, however, looks likely to also contain significant anti-vehicle mine clearance.

In 2020, during EOD spot tasks/call-outs, a further 6,394 anti-personnel mines and 93 anti-vehicle mines were destroyed: 3,043 anti-personnel mines and 33 anti-vehicle mines by CMAC; 664 anti-personnel mines and 6 anti-vehicle mines by CSHD; 1,802 anti-personnel mines and 44 anti-vehicle mines by HALO Trust; 878 anti-personnel mines and 4 anti-vehicle mines by MAG; and 7 anti-personnel mines and 6 anti-vehicle mines by NPA.[179]

Of the total anti-personnel mined area released in 2020, 23 minefields totalling over 1.12 km² were subject to full clearance without any anti-personnel mines being found.[180] CMAC reported that it cleared 24 mined areas, totalling 104,989m², in which no anti-personnel mines were found.[181] HALO reported that it cleared 62 mined areas (classified as category A2 minefields), totalling 3,821,274m², in which no anti-personnel mines, and only 4 anti-vehicles mines, were found. Twenty-five of these tasks were cleared as part of the UNDP Clearing for Results project. These A2 tasks are primarily planned for anti-vehicle mine clearance, with large-loop detectors (LLD), which HALO said are ten times more efficient than standard hand-held detectors. LLDs are calibrated to pick up large metal signals from the items, such as high-metal-content anti-vehicle mines or anti-personnel fragmentation mines. HALO also reported clearing one mined area (category A1), totalling 17,979m², in which no anti-personnel or anti-vehicle mines were found.[182] CSHD reported that it cleared 12 polygons in 2029, totalling 757,331m², in which no anti-personnel mines were found.[183]

APOPO's clearance and technical survey output, in partnership with CMAC, increased by 65% in 2020, compared to the previous year. APOPO said the main reason for the increased productivity was the technical survey dog component of its operations. While APOPO aims to conduct technical survey whenever appropriate, many of the mined areas it worked on contained scattered mines making technical survey challenging. All of the mined areas cleared by APOPO in 2020, in partnership with CMAC, contained anti-personnel mines.[184]

CSHD said the number of mined areas cleared in 2020, was an increase on the previous year, as it had adapted to NMAS and its headquarters were closer to the mined area.[185]

Table 7: Mine clearance in 2020 (CMAA data)[186]

Operator	Area cleared (m²)	AP mines destroyed	UXO destroyed during mine clearance
CMAC	40,272,670	8,539	28,377
CSHD	663,930	105	104
HALO Trust	6,938,902	2,470	154
MAG	2,118,224	449	33
Totals	**49,993,726**	**11,563**	**28,668**

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR CAMBODIA: 1 JANUARY 2000

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 JANUARY 2010

↓

FIRST EXTENSION REQUEST DEADLINE (10-YEARS): 1 JANUARY 2020

↓

SECOND EXTENSION REQUEST DEADLINE (5-YEARS, 11 MONTHS): 31 DECEMBER 2025

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

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. Based on current land release output, Cambodia will not meet this deadline.

Cambodia remains committed to clearing all anti-personnel mine contamination by the end of 2025, and believed it could meet its obligations by this date, "if action plans can be achieved on time".[187] However, the 2025 completion target relied on additional funding, Cambodia bringing on board an additional 2,000 deminers (a near doubling of capacity), and no additional mined areas being added to the national database. However, no additional army demining capacity was deployed in 2019 or 2020 and an additional 74.8km^2 of mined area was added to the database in 2020. Based on existing capacity and funding as at February 2020, the CMAA expected it will take 11 years to complete clearance.[188]

The CMAA said an assessment of current capacities in Cambodia is required to realise the 2025 vision. It plans to coordinate the mine action sector to mobilise more resources, increase capacity, and promote more innovative approaches/toolboxes to enhance operational efficiency and effectiveness, particularly the CMAA's new "ground data verification" approach. The CMAA hopes this new approach will help Cambodia quickly identify actual contaminated area.[189]

It is also vital that the CMAA has effective QM processes in place to ensure that only new mined areas with evidence of contamination are entered into IMSMA. Additional desk analysis of surveyed areas is reportedly now being implemented to prevent flawed areas entering the database.[190]

According to its 2019 extension request, Cambodia planned to steadily increase annual land release (i.e. survey and clearance) output from 84km^2 in 2019 (which it did not achieve) to 110km^2 from 2020 to 2021 (which it did not achieve in 2020), to 146.5km^2 from 2022 to 2025. Between the Third Review Conference in 2014 and the Fourth Review Conference in 2019, Cambodia released an average of 84km^2 per year, so the land release targets it has set itself require additional funding and capacity as well as exceptional performance. Cambodia released a total of nearly 63.22km^2 through survey and clearance in 2019, and 78.72km^2 in 2020; well short of the 84.3km^2 and 110km^2 respective annual land release targets forecasted in the extension request.[191]

Table 8: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	49.99
2019	20.94*
2018	41.00
2017	27.68
2016	25.33
Total	**164.94**

* In 2021, the CMAA subsequently revised the 2019 clearance output upwards to 45.62km^2. However, the amended 2019 CMAA data looks likely to also contain significant anti-vehicle mine clearance.

The high-density K5 minefield lies along the Cambodian-Thai border, including in areas where the border is not demarcated and where access is limited. In order to make progress towards its 2025 clearance deadline, Cambodia must ensure that it can release all contaminated land along its border with Thailand, which will require cross-border cooperation.[192] Improved relations between Thailand and Cambodia have opened the way for this. The Cambodia-Thailand General Border Committee, chaired by the Deputy Prime Minister and Minister of Defence from both countries, has agreed that CMAC and the Thailand Mine Action Centre (TMAC) can cooperate to conduct demining along the Thai-Cambodian border.[193] In September 2018, CMAC and TMAC met and agreed to find a task for a pilot border project: a small area that could be cleared within a month as a symbolic demonstration of two sides working together. In September 2019, CMAC and TMAC agreed the respective mined areas on a demarcated section of the Thai-Cambodia border, distanced not too far apart.[194] The selected area on the Cambodian side is Kilobuan village, Poipet District, Banteay Meanchey province. The selected pilot project area on the Thai side is in Sano-noi village, Aranyaprathet District, Sa Kaeo province.[195]

TMAC and CMAC signed the agreement for the pilot site survey on 2 March 2020,[196] after which operations were expected to start shortly thereafter and were expected to

take no more than 50 days to complete.[197] CMAC completed its clearance of the pilot site between the start of March and end of June 2020, and cleared more than 3.18km^2, destroying 34 anti-personnel mines and 32 items of UXO.[198] As at July 2021, CMAC had released a further 0.35km^2 of mined area along the border in Banteay Meanchey province, and the next pilot project was under negotiation.[199]

According to the CMAA, survey and clearance operations in Cambodia were not badly affected by the COVID-19 pandemic in 2020. The land release operations were generally in remote areas where population movement is limited.[200] APOPO reported it had a 15-day re-organisation due to the COVID-19 outbreak, during which operational calendars were adjusted and new preventative measures were taken. No further working days were lost in 2020.[201] CMAC said that its mine clearance operations continued as normal in 2020.[202] CSHD said that its deployment plan was sometimes delayed or changed in 2020 due to COVID-19, and it also saw an increase in costs due to required personal protective equipment (PPE) and COVID-19 health checks twice a month.[203]

HALO remained fully operational in 2020, with promptly implemented COVID-19 preventative measures. HALO also supported the CMAA in distribution of COVID-19 prevention posters in HALO's area of operations; distribution of hygiene kits to ID poor families (in its area of operations, with a grant from the Bobby Charlton Foundation), and conducted a Diabetes screening project (supported by HALO Head Office and the UK Embassy in Cambodia).[204] NPA reported its operations were largely able to continue as normal with staff abiding by COVID-19 hygiene measures.[205] MAG said its operations in Battambang province were suspended during April 2020, during which there were no land release outputs, with teams then redeployed to the field in May, following implementation of COVID-19 mitigation measures.[206]

In the last quarter of 2020, the Government of Cambodia declared that international operators may not work on the K5 mine belt or within 7km of any international border at this time. Only demining teams from the military are permitted to work on these tasks. This has resulted in MAG withdrawing all teams from Pailin and redeploying them to Battambang province.[207] Similarly, HALO reported that in July 2020, the Cambodian military temporarily suspended access to the minefields forming the K5 mine belt. The suspension is due to the revision of planning processes between the militaries, provincial authorities, and CMAA. While the suspension remains in place, the CMAA is working with both parties to agree on the planning process and to re-gain access to the border minefields as soon as possible. In the interim, HALO clearance teams have moved to other minefields within HALO's area of operation across north-west Cambodia. Minefields further back from the border typically yield significantly fewer anti-personnel mines, but this is balanced by the mine clearance teams now working in areas of a higher population density.[208]

From February to May 2021, the COVID-19 situation has been more serious and problematic, due to the spread of the virus across the country, especially in the cities of Phnom Penh and Sihanouk. As a result, personnel from CMAA and clearance operators have not been able to travel between provinces, due to enforced restrictions. According to the CMAA, field operations were mostly suspended and retained in one place.[209]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Goal seven of Cambodia's National Mine Action Strategy 2018–2025 is to establish a sustainable national capacity to address residual threats after 2025. Reference to the issue is also included in the foreword signed by the Cambodian Prime Minister and noted throughout the document. Objectives include reviewing by 2020 the legal, institutional, and operational framework, strategy, and capacity needed to address the residual threats.[210] As at July 2021, the review had yet to take place, but was planned for 2022 under the current National Mine Action Strategy's three-year implementation plan 2021–2023.[211]

In Phase I (2018–22) of the national strategy Cambodia planned to "develop a comprehensive residual threats strategy; establish a residual threat legal and institutional framework; and establish residual threats regulatory and operational frameworks including coordination, planning, and prioritisation, and sustained information management system". In Phase II (2023–25), Cambodia plans to "develop residual threat capacity in preparation to transition from the traditional mine action program; determine resource mobilisation schemes to support the development of residual threat capacity and its future activities; and to conduct post-programme evaluation of achievements and outcomes after the conclusion of the strategy in 2025 to evaluate performance, lessons learned, recommendations for efficiencies and improvements in any remaining mine action".[212]

In its 2019 APMBC Article 5 extension request, the CMAA said it is likely that the Royal Cambodian Army will be tasked with addressing explosive threats after 2025.[213]

In February 2021, 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 capacity for addressing residual threat

1 APMBC Article 7 Report (covering 2020), Point 4; and email from Ros Sophal, on behalf of Prum Sophakmonkol, Secretary General, CMAA, 14 May 2021.

2 Article 7 Report (covering 2019), Point 4.

3 2019 Article 5 deadline Extension Request, Annex 1.

4 Ibid., Additional Information, undated but August 2019, p. 5.

5 Article 7 Report (covering 2019), Point 4.

6 Interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020; and email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

7 Article 7 Report (covering 2019), Point 4; and email from Rebecca Letven, Country Director, MAG, 7 April 2020.

8 Statement by the Chair of the Committee on Article 5 Implementation on the Analysis of the Request for extension submitted by Cambodia, Oslo, 26 November 2019.

9 Article 7 Report (covering 2020), Point 4; and email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

10 Interviews in Phnom Penh with Prum Sophakmonkol, CMAA, 24 April 2018; Matthew Hovell, Head of Region SE Asia, HALO Trust, 26 April 2018; Greg Crowther, MAG; Su Yeon Yang, Conflict Prevention Officer, and Tong Try, National Mine Action Advisor, UNDP, 23 April 2019; and Heng Rattana, Director General, CMAC, 25 April 2019.

11 CMAA, National Mine Action Strategy 2018–2025, p. 8.

12 2019 Article 5 deadline Extension Request, p. 21.

13 Email from Prum Sophakmonkol, CMAA, 1 July 2020.

14 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

15 Statement of Cambodia on Article 5 implementation, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

16 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

17 Email from Zlatko Vezilic, Programme Manager, NPA, 5 May 2020.

18 Email from Michael Heiman, Program Manager, APOPO, 4 May 2020.

19 Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021; and Portia Stratton, Programme Manager, NPA, 17 August 2021.

20 Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021; and Matthew Hovell, HALO, 9 April 2021.

21 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

22 Email from Prum Sophakmonkol, CMAA, 1 July 2020.

23 "Recent floods unearth concealed explosives", *The Phnom Penh Post*, 12 October 2020, at: https://bit.ly/3isFTKy.

24 CMAA, National Mine Action Strategy 2018–2025, p. 1; and The HALO Trust, "Where we work: Cambodia", accessed 10 July 2019, at: http://bit.ly/313jTKs.

25 2019 Article 5 deadline Extension Request, p. 21.

26 Article 7 Report (covering 2020), Form 4.

27 Article 7 Report (covering 2019), Form 4.

28 Email from Ros Sophal, CMAA, 17 September 2021.

29 Video interview with Ros Sophal, CMAA, 7 September 2021.

30 Email from Matthew Hovell, HALO, 9 April 2021.

31 Video interview with Ros Sophal, CMAA, 7 September 2021.

32 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.

33 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 2.

34 Email from Lasha Lomidze, Programme Manager, HALO Trust, 15 May 2020.

35 Article 7 Report (covering 2020), Form 4. CMAA reported to Mine Action Review, that 74.89km^2 of additional mined area had been identified in 2020, across 435 SHAs; slightly higher than reported in Cambodia's Article 7 report covering 2020 (email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021). There are some discrepancies between the amount of newly discovered contamination reported by the CMAA and that reported by operators directly to Mine Action Review. This is because the CMAA only records new areas in the database, once the necessary checks and QA have been completed. CMAC reported discovering 730 polygons in 2020, totalling 149,099,139m^2 (email from Oum Phumro, CMAC, 9 June 2021), which exceeds the total amount of newly discovered mined area reported by the CMAA. CSHA does not conduct the survey, but did find unrecorded contamination during its operations, which it reported to the CMAA (email from Chhun Bora, Training and Monitor Officer, CSHD, 19 April 2021). HALO surveyed more than 1.62km^2 of AP mine-contaminated area in 2020, most of which was emergency responses where locals found mines or accidents occurred (email from Matthew Hovell, HALO, 9 April 2021). No previously unreported mined areas were discovered by MAG in 2020 (email from Alexey Kruk, Programme Manager, MAG, 29 March 2021).

36 CMAA, "Legal framework and mandate", at: http://bit.ly/2W7r3dJ.

37 Interviews with Su Yeon Yang, and Tong Try, UNDP, 23 April 2019; and Rebecca Letven, MAG, Phnom Penh, 25 April 2019.

38 CMAC, "20 Years' Achievement in Mine Action 1998-2018 and Path Ahead", 2018.

39 Interview with Heng Rattana, CMAC, Phnom Penh, 25 April 2019.

40 GICHD, "Landmines and Land Rights in Cambodia", December 2010, pp. 9 and 13.

41 Email from Zlatko Vezilic, NPA, 5 May 2020.

42 CMAA, National Mine Action Strategy 2018–2025, p. 24; and email from Tong Try, UNDP, 18 June 2019.

43 Emails from Prum Sophakmonkol, CMAA, 1 July 2020; Alexey Kruk, MAG, 29 March 2021; and Zlatko Vezilic, NPA, 5 May 2020.

44 Email from Matthew Hovell, HALO, 8 April 2021.

45 CMAA, National Mine Action Strategy 2018–2025, p. 24; and emails from Tong Try, UNDP, 18 June 2019 and 27 July 2021.

46 Email from Zlatko Vezilic, NPA, 5 May 2020.

47 Email from Alexey Kruk, MAG, 29 March 2021.

48 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.

49 Email from GICHD, 1 July 2020.

50 Email from Portia Stratton, NPA, 21 April 2021.

51 Email from Portia Stratton, NPA, 17 August 2021.

52 UNDP, "Clearing for Results Phase III project document", 17 December 2015; and interviews with Su Yeon Yang and Tong Try, UNDP, 23 April 2019.

53 Email from Tong Try, UNDP, 28 July 2021.

54 Article 5 deadline Extension Request, 27 March 2019, p. 12.

55 Email from Prum Sophakmonkol, CMAA, 1 July 2020.

56 Emails from Rune Dale-Andresen, Country Director, NPA, 26 September 2020; and Tong Try, UNDP, 28 July 2021.

57 Emails from Prum Sophakmonkol, CMAA, 11 September 2019; and Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 6 September 2020; and Statements of Cambodia on Second Extension Request, APMBC Fourth Review Conference, Oslo, 27 November 2019; and on Article 5 implementation and enhancement of cooperation and assistance, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

58 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

59 Emails from Prum Sophakmonkol, CMAA, 11 September 2019; Rebecca Letven, MAG, 7 April 2020; and Lasha Lomidze, HALO Trust, 15 May 2020.

60 Article 5 deadline Extension Request, 27 March 2019, p. 6.

61 Statements of Cambodia on Article 5 implementation and enhancement of cooperation and assistance, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020; and email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

62 Email from Tong Try, UNDP, 27 July 2021.

63 CMAA, Three-Year Implementation Plan 2018–2020, Phnom Penh, undated but 2018, p. 14.

64 DFID Capacity Development Report, Activity Detail Extract, 18 September 2018.

65 Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021; and Portia Stratton, NPA, 21 April 2021.

66 Email from Portia Stratton, NPA, 21 April 2021.

67 Emails from Portia Stratton, NPA, 21 April 2021; and Tong Try, UNDP, 27 July 2021.

68 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

69 Email from Arianna Calza Bini, Head of GMAP division, GICHD, 7 September 2020.

70 CMAA, National Mine Action Strategy 2018–2025, p. 22; and email from Tong Try, UNDP, 27 July 2021.

71 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

72 Email from Prum Sophakmonkol, CMAA, 1 July 2020.

73 Email from Tong Try, UNDP, 27 July 2021.

74 Email from Michael Heiman, APOPO, 22 March 2021.

75 Email from Michael Heiman, APOPO, 4 May 2020.

76 Email from Chhun Bora, CSHD, 19 April 2021.

77 Email from Oum Phumro, CMAC, 9 June 2021.

78 Ibid.

79 CMAC, "20 Years' Achievement in Mine Action 1998-2018 and Path Ahead", 2018; interview with Heng Rattana, CMAC, Phnom Penh, 25 April 2019; and email from Oum Phumro, Deputy Director General, CMAC, 28 July 2020.

80 Email from Oum Phumro, CMAC, 9 June 2021.

81 Emails from Lasha Lomidze, HALO Trust, 15 May 2020; and Matthew Hovell, HALO, 9 April 2021.

82 Email from Alexey Kruk, MAG, 29 March 2021.

83 Emails from Rebecca Letven, MAG, 7 April 2020; and Alexey Kruk, MAG, 29 March 2021.

84 Email from Portia Stratton, NPA, 20 April 2021.

85 Article 5 deadline Extension Request, Additional Information, undated but August 2019, Annex 18.

86 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

87 Email from GICHD, 1 July 2020.

88 Emails from Zlatko Vezilic, NPA, 4 April, 25 June, 10 July 2019, and 19 March 2020; and interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.

89 Email from GICHD, 1 July 2020.

90 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

91 Emails from Portia Stratton, NPA, 20 April and 17 August 2021.

92 CMAA, National Mine Action Strategy 2018–2025, p. 22.

93 Email from Zlatko Vezilic, NPA, 5 May 2020.

94 Email from Prum Sophakmonkol, CMAA, 1 July 2020; and interview with Ros Sophal, CMAA, 30 June 2021.

95 Email from Zlatko Vezilic, NPA, 5 May 2020.

96 CMAA, National Mine Action Strategy 2018–2025, pp. 14–15.

97 Emails from Portia Stratton, NPA, 20 April and 17 August 2021.

98 Email from Lasha Lomidze, HALO Trust, 15 May 2020.

99 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

100 Email from Alexey Kruk, MAG, 29 March 2021.

101 Email from Zlatko Vezilic, NPA, 5 May 2020.

102 Ibid.

103 Email from Rebecca Letven, MAG, 9 May 2019; and interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.

104 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

105 Ibid.

106 Email from Rebecca Letven, MAG, 7 April 2020.

107 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

108 Statement of Cambodia on Second Extension Request, APMBC Fourth Review Conference, Oslo, 27 November 2019.

109 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

110 2019 Article 5 deadline Extension Request, p. 8.

111 Ibid., p. 5.

112 Ibid., p. 8; and interviews with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2018; and Geneva, 11 February 2020.

113 2019 Article 5 deadline Extension Request, p. 7; Statement of Cambodia on Second Extension Request, Fourth APMBC Review Conference, Oslo, 27 November 2019; and interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020.

114 2019 Article 5 deadline Extension Request, p. 31; and 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 3.

115 CMAA, National Mine Action Strategy 2018–2025, pp. 14–15.

116 2019 Article 5 deadline Extension Request, p. 9; and interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020.

117 2019 Article 5 deadline Extension Request, pp. 30–31; and email from Damian O'Brien, HALO Trust, 10 April 2019.

118 Email from Lasha Lomidze, HALO Trust, 13 August 2021.

119 Interview with Lasha Lomidze, HALO Trust, 3 May 2019; and email, 13 August 2021.

120 Email from Rebecca Letven, MAG, 9 September 2019.

121 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 4.

122 Emails from Matthew Hovell, HALO, 9 April 2021; and Lasha Lomidze, HALO Trust, 13 August 2021.

123 Email from Rebecca Letven, MAG, 7 April 2020.

124 Emails from Lasha Lomidze, HALO Trust, 15 May 2020; and Matthew Hovell, HALO, 9 April 2021.

125 Emails from Rebecca Letven, MAG, 7 April 2020; and Zlatko Vezilic, NPA, 19 March 2020.

126 Email from Portia Stratton, NPA, 17 August 2021.

127 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021; Matthew Hovell, HALO, 9 April 2021; Alexey Kruk, MAG, 29 March 2021; and Portia Stratton, NPA, 20 April 2021.

128 Emails from Prum Sophakmonkol, CMAA, 11 September 2019; and Zlatko Vezilic, NPA, 4 April 2019.

129 Email from Portia Stratton, NPA, 21 April 2021.

130 Emails from Portia Stratton, NPA, 21 April 2021; and Matthew Hovell, HALO, 8 April 2021.

131 Emails from Zlatko Vezilic, NPA, 4 April 2019 and Rebecca Letven, MAG, 9 May 2019.

132 Emails from Rebecca Letven, MAG, 9 May 2019; and Damian O'Brien, HALO Trust, 10 April 2019.

133 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

134 Email from Lasha Lomidze, HALO Trust, 15 May 2020.

135 Email from Zlatko Vezilic, NPA, 5 May 2020.

136 Email from Prum Sophakmonkol, CMAA, 11 September 2019; and 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 2.

137 Email from Portia Stratton, NPA, 20 April 2021.

138 UNDP, "Clearing for Results Phase III Annual Report", 2018.

139 Email from Tong Try, UNDP, 28 July 2021.

140 Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021; and Portia Stratton, NPA, 17 August 2021.

141 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

142 Emails from Lasha Lomidze, HALO Trust, 15 May 2020 and 13 August 2021.

143 Email from Matthew Hovell, HALO, 9 April 2021.

144 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 2.

145 2019 Article 5 deadline Extension Request, p. 43.

146 Ibid., p. 48.

147 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, Annex 18; emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021; Oum Phumro, CMAC, 9 June 2021; Michael Heiman, APOPO, 22 March 2021; Chhun Bora, CSHD, 19 April 2021; Alexey Kruk, MAG, 29 March 2021; and Matthew Hovell, HALO, 9 April 2021.

148 'Government commits to removing landmines by 2025', *The Phnom Penh Post*, 23 February 2021, at: https://bit.ly/3g7xU2Y.

149 Email from Michael Heiman, APOPO, 22 March 2021.

150 Emails from Michael Heiman, APOPO, 4 May 2020; and 22 March and 28 July 2021.

151 Email from Michael Heiman, APOPO, 28 July 2021; and PDSA website, 'HeroRAT Magawa - PDSA Gold Medal', undated, at: https://bit.ly/3fTd0p7.

152 Email from Oum Phumro, CMAC, 9 June 2021.

153 Email from Matthew Hovell, HALO, 9 April 2021.

154 Emails from Alexey Kruk, MAG, 29 March 202; and Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

155 Email from Portia Stratton, NPA, 20 April 2021.

156 Ibid.

157 Email from Tong Try, UNDP, 19 June 2020.

158 Email from Tong Try, UNDP, 28 July 2021.

159 Emails from Tong Try, UNDP, 19 June and 21 July 2020.

160 2019 Article 5 deadline Extension Request, p. 9; and interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020.

161 2019 Article 5 deadline Extension Request, p. 41.

162 "India Provides $1.5 million to Support Cambodia's Demining Program", Cambodianess, 10 August 2020, at: https://bit.ly/36V5rJr.

163 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

164 Email from CMAA, 2 May 2017.

165 Interview with Edwin Faigmane, UNDP, Phnom Penh, 24 April 2018.

166 Emails from Tong Try, UNDP, 19 June 2020 and 28 July 2021.

167 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

168 Email from Ros Sophal, CMAA, 17 September 2021. According to Cambodia's Article 7 report (covering 2020), a total of more than 77.3km^2 of mined area was released in 2020, of which more than 46.4km^2 was cleared, nearly 17.5km^2 was reduced through technical survey, and nearly 13.5km^2 was cancelled through non-technical survey. The reason for the difference in 2020 survey and clearance data reported by CMAA in September 2021, compared to that reported in Cambodia's Article 7 report (covering 2020), is that 2020 land release data reported by clearance operators to the CMAA is sometimes delayed.

169 Article 7 Report (covering 2020), Form 4.

170 Email from Ros Sophal, CMAA, 17 September 2021.

171 Email from Prum Sophakmonkol, CMAA, 11 September 2019.

172 Video interview with Ros Sophal, CMAA, 7 September 2021.

173 Article 7 Report (covering 2020), Point 4.

174 Email from Ros Sophal, CMAA, 17 September 2021. The amount of mined area cancelled through non-technical survey in 2020 reported by the CMAA directly to Mine Action Review was slightly higher than the 13,456,263m^2 reported in Cambodia's Article 7 report. The CMAA data matched the data reported directly by CMAC (email from Oum Phumro, CMAC, 9 June 2021) and HALO Trust (email from Matthew Hovell, HALO, 9 April 2021). The CMAA data was also broadly consistent, although slightly higher, compared to the nearly 3.08km^2 MAG reported that it cancelled in 2020, in Battambang and Pailin provinces (email from Alexey Kruk, MAG, 29 March 2021).

175 Email from Ros Sophal, CMAA, 17 September 2021. The amount of mined area reduced through technical survey in 2020 reported by the CMAA to Mine Action Review was less than the 17,450,872km^2 reported in Cambodia's Article 7 report (covering 2020). The CMAA data matched the data reported directly by CMAC (email from Oum Phumro, CMAC, 9 June 2021), CSHD (email from Chhun Bora, CSHD, 19 April 2021). MAG reported that it reduced nearly 0.40km^2 through technical survey in 2020, in Battambang and Pailin provinces (email from Alexey Kruk, MAG, 29 March 2021) and APOPO reported that it reduced nearly 1.72km^2 through technical survey in 2020, in partnership with CMAC (email from Michael Heiman, APOPO, 22 March 2021).

176 Email from Ros Sophal, CMAA, 17 September 2021.

177 Ibid.

178 Video interview with Ros Sophal, CMAA, 7 September 2021.

179 Emails from Ros Sophal, CMAA, 17 September 2021; Oum Phumro, CMAC, 9 June 2021; Chhun Bora, CSHD, 19 April 2021; Matthew Hovell, HALO, 9 April 2021; Alexey Kruk, MAG, 29 March 2021; and Portia Stratton, NPA, 20 April 2021.

180 Email from Ros Sophal, CMAA, 17 September 2021.

181 Email from Oum Phumro, CMAC, 9 June 2021.

182 Emails from Matthew Hovell, HALO, 9 April 2021; and Lasha Lomidze, HALO Trust, 13 August 2021.

183 Email from Chhun Bora, CSHD, 19 April 2021.

184 Email from Michael Heiman, APOPO, 22 March 2021.

185 Email from Chhun Bora, CSHD, 19 April 2021.

186 Email from Ros Sophal, CMAA, 17 September 2021. The amount of mined area released through clearance in 2020 reported by the CMAA to Mine Action Review was more than the 46,418,027m^2 reported cleared in Cambodia's Article 7 report (covering 2020), and also more than the 10,085 anti-personnel mines and 23,466 anti-vehicle mines reported destroyed. The clearance data reported to Mine Action Review by operators differed: CMAC reported that is cleared 40.17km^2 of mined area in 2020 during which it destroyed a total of 5,229 anti-personnel mines, 58 anti-vehicle mines; and 5,234 items of UXO (email from Oum Phumro, CMAC, 9 June 2021); CSHD reported that it cleared nearly 0.73km^2 in 2020, with the destruction of 113 anti-personnel mines, 3 anti-vehicle mines, and 113 other UXO (email from Chhun Bora, CSHD, 19 April 2021); HALO Trust reported that it cleared 6.94km^2 of mined area in 2020 during which it destroyed a total of 2,470 anti-personnel mines, 122 anti-vehicle mines; and 154 items of UXO (email from Matthew Hovell, HALO, 9 April 2021); and MAG reported that it cleared 3.70km^2 in 2020, in Battambang and Pailin provinces, and destroyed 449 anti-personnel mines and 63 other items of UXO (email from Alexey Kruk, MAG, 29 March 2021). As part of its partnership with CMAC, APOPO reported that it cleared nearly 2.15km^2 in 2020, during which it destroyed 419 anti-personnel mines, 1 anti-vehicle mine, and 379 items of UXO (email from Michael Heiman, APOPO, 22 March 2021). UNDP reported that 6.75km^2 of mined area was cleared by the CfR project in 2020, during which 951 anti-personnel mines, 6 anti-vehicle mines, and 992 items of ERW were destroyed (email from Tong Try, UNDP, 28 July 2021).

187 Statement of Cambodia on Article 5 implementation, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

188 Interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020.

189 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

190 Email from Matthew Hovell, HALO, 9 April 2021.

191 2019 Article 5 deadline Extension Request, p. 7.

192 Ibid., p. 38.

193 Emails from Shushira Chonhenchob, NPA (on behalf of Lt-Gen. Sittipol Nimnuan, Director General, TMAC), 8 April 2019; and Prum Sophakmonkol, CMAA, 1 July 2020.

194 "CMAC, Thais join forces to clear mines at border provinces", *The Phnom Penh Post*, 24 September 2019, at: http://bit.ly/3ejuyrW.

195 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, on 27 February 2020.

196 Cambodian Mine Action Centre (CMAC), "A record of discussions signed between CMAC and TMAC", 3 March 2020, available at: http://bit.ly/34yiUEW.

197 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, on 27 February 2020.

198 Email from Oum Phumro, CMAC, 9 June 2021.

199 Ibid.

200 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

201 Email from Michael Heiman, APOPO, 22 March 2021.

202 Email from Oum Phumro, CMAC, 9 June 2021.

203 Email from Chhun Bora, CSHD, 19 April 2021.

204 Email from Matthew Hovell, HALO, 9 April 2021.

205 Email from Portia Stratton, NPA, 21 April 2021.

206 Email from Alexey Kruk, MAG, 29 March 2021.

207 Ibid.

208 Email from Matthew Hovell, HALO, 9 April 2021.

209 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

210 CMAA, National Mine Action Strategy 2018–2025, p. 14.

211 Email from Tong Try, UNDP, 27 July 2021.

212 CMAA, National Mine Action Strategy 2018–2025, p. 16.

213 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 5.

CAMEROON

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2013
NEW EXTENDED DEADLINE NEEDED TO RETURN TO COMPLIANCE

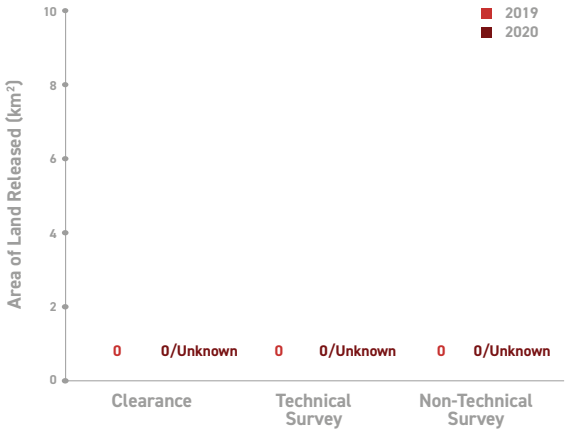
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: LOW, EXTENT UNKNOWN

AP MINE CLEARANCE IN 2020
0KM²

AP MINES DESTROYED IN 2020
UNKNOWN

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Explosive devices, including mines of an improvised nature, continue to claim casualties, particularly in Cameroon's northern districts along the border with Nigeria but also in other regions amid escalating military activity by Boko Haram. No formal mine action programme has yet been established and Cameroon remains without an extended Article 5 deadline.

RECOMMENDATIONS FOR ACTION

- **Cameroon should respect its obligations to the Anti-Personnel Mine Ban Convention (APMBC).**
- **Cameroon should inform States Parties to the APMBC of the discovery of any anti-personnel mine contamination, including mines of an improvised nature. It should report on the location of all suspected or confirmed mined areas under its jurisdiction or control and on the status of programmes for their destruction in its Article 7 transparency report.**
- **Cameroon should request a new APMBC Article 5 deadline in order to return to compliance with the Convention.**
- **Cameroon should try to mobilise and facilitate assistance and expertise from humanitarian demining organisations for survey and clearance.**

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. This includes 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 less from minefields than from explosive devices, including victim-activated and remotely detonated devices, placed on an ad hoc basis on roads and sites frequented by civilians.[1]

Casualties inflicted by explosive devices linked to the five-year old Anglophone insurgency escalated sharply in 2020 and 2021.[2] The military said in December 2020 that it had cleared six devices placed along a major road in the south west that was regularly used by troops.[3] The following month, a roadside explosive device struck a military convoy near the North Western town of Mbengwi, killing four soldiers and a government official.[4] Cameroon's Defence Minister Joseph Beti Assomo said in May 2021 that improvised explosive devices (IEDs) in western Cameroon had killed 24 people in the preceding two weeks and that the military were seizing or destroying them almost daily.[5]

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.[6]

One member of Cameroon's elite Rapid Intervention Battalion was killed and 11 others were injured in February 2019 when their truck detonated an anti-vehicle mine of an improvised nature in the vicinity of Kerawa on the border with Nigeria. The troops were returning from an operation in which soldiers reportedly destroyed four workshops which were producing mines and found to hold hundreds of containers of explosives, batteries, and detonators. Two other detonations in the area in October 2018 involving mines or improvised devices reportedly caused the deaths of three soldiers and injured six others. Seven soldiers were killed in two separate incidents in the same area in April 2019.[7]

A senior army officer commented in 2017 that some roads in areas bordering Nigeria were "riddled with mines".[8] A Cameroonian analyst commented that insurgents were using "homemade mines" with increasing frequency on roads, in houses, and in vehicles.[9] 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,[10] a department bordering Nigeria, because of the presence of mines and reports of kidnappings.[11]

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.[12]

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.[13]

In the past five years, the Army has received military training in demining and counter-IED measures, mainly from France and the United States.[14] A Twitter feed by the US mission in Yaoundé in May 2021 reported provision of equipment for countering IEDs and training.[15] Cameroon previously received demining/explosive ordnance disposal (EOD) equipment from the United States and Russia in 2015, with armoured mine-detection vehicles provided by the US Army Africa Command.[16] The United States also donated significant quantities of demining equipment, including metal detectors, to Cameroon in 2017.[17] US Army Africa and the French Army's French Elements in Gabon (EFG) provided further demining and EOD training up to Level 4 EOD in March–April 2018.[18]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Cameroon did not report results of clearance and EOD conducted by its Army engineers.

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR CAMEROON 1 MARCH 2003

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2013

NEW ARTICLE 5 DEADLINE REQUEST REQUIRED
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC, Cameroon's deadline to destroy all anti-personnel mines in mined areas under its jurisdiction or control expired on 1 March 2013.

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 needs to 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. Cameroon must 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.

1 UNICEF, "Cameroon Humanitarian Situation Report No. 2", February 2021, accessed at https://uni.cf/33TBRCs.

2 "Cameroon: Violence spirals in Anglophone region", Ake Intel Department, 3 March 2021.

3 "Cameroonian forces dismantle explosive devices I restive Anglophone region", *Xinhua*, 14 December 2020.

4 J. Kouam, "Roadside bomb kills five in Cameroon's restive North West region", *Reuters*, 6 January 2021.

5 M. E. Kindzeka, "Military says rebels turn to IEDs as numbers fall", *Voice of America*, 11 May 2021.

6 « 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.

7 "Boko Haram landmines inflict heavy toll on Cameroon", *Latin American Herald Tribune*, 30 May 2019, at: http://bit.ly/2XUT4ef; "Cameroon: Boko Haram mine kills four soldiers in Far North region", Journal du Cameroun.com, 13 April 2019, at http://bit.ly/2Z50o3u.

8 P. Kum, "Landmine explosion kills two Cameroon soldiers", *Anadolu Agency*, 28 September 2017, at: http://bit.ly/2LxKjQO.

9 "Boko Haram landmines inflict heavy toll on Cameroon", *Latin American Herald Tribune*, 30 May 2019.

10 The towns were Assighassia, Cherif Moussari, Talla-Katchi, and Zéméné.

11 IOM, "Cameroon, Far North Region, Displacement Report, Round 15, 3–15 September 2018", p. 8.

12 « Cameroun: formation de 1 000 policiers et gendarmes à la lutte contre les engins explosifs improvisés », *Xinhua*, 20 June 2019.

13 Statement of Cameroon to the United Nations General Assembly, New York, 23 October 2019.

14 "Military Cooperation: mine clearing training (Sept. 19-30th 2016)", French embassy in Yaoundé webpage at: http://bit.ly/2Z3ShnY; M. E. Kindzeka, "Cameroon Vigilantes Hunt for Boko Haram Landmines", Voice of America News, 4 March 2016, at: http://bit.ly/2XZGxGM.

15 US Embassy Yaoundé, @USEmbYaounde, 8 May 2021.

16 M. E. Kindzeka, "Land Mines Hamper Cameroon, Chad in Fight Against Boko Haram", Voice of America News, 3 March 2015, at: http://bit.ly/2XXOfkD; and "US Helps Cameroon in Fight Against Boko Haram", Voice of America News, 17 October 2015, at: http://bit.ly/2y1GeeR.

17 "US donates mine-clearing devices to Cameroon", *Journal du Cameroun*, 24 April 2017; at: http://bit.ly/2Z3Hryl.

18 "Génie Militaire – Des démineurs formés", *Cameroon Tribune (Yaoundé)*, 23 April 2018, at: http://bit.ly/2M2uoJO.

CHAD

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 JANUARY 2025
UNCLEAR WHETHER ON TRACK

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

NATIONAL AUTHORITY ESTIMATE

78.7 KM²

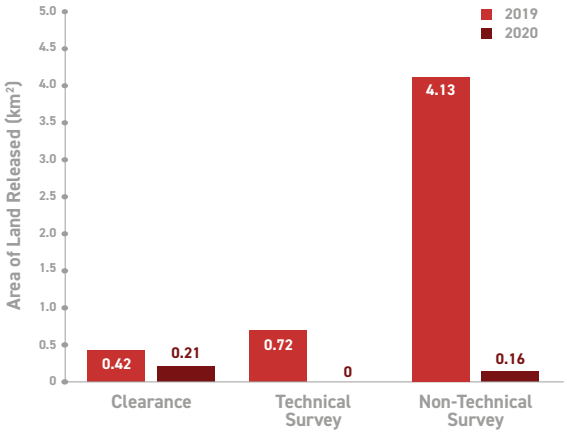
AP MINE CLEARANCE IN 2020

0.21 KM²

AP MINES DESTROYED IN 2020

39

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Chad released a small amount of land in 2020 but also substantially increased its estimate of anti-personnel mine contamination. Measures to contain COVID-19, including tight travel restrictions and closure of the international airport, halted operations for several months.

RECOMMENDATIONS FOR ACTION

- **The National High Commission for Demining (HCND) should set out clear plans detailing the priority areas to be targeted for non-technical survey along with timelines for implementation.**
- **The 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 (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	Chad provided estimates of contamination broken down into CHAs and SHAs for the first time in 2021. However, the total far exceeded the previous year's estimate of contamination, continuing sharp fluctuations in assessments of Chad's mine threat that underscore the weakness of available data.
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. 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)	4	4	Chad's last Article 5 deadline extension request did not address gender and diversity and at a point when mine action has experienced major cuts in human resources they remain low on Chad's list of mine action priorities. The HCND employed 9 female staff among more than 200 employees in 2019 and implementing partners who employ their staff on secondment from HCND similarly have low numbers of female staff, with very few in operations.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	A clean-up of Chad's database conducted by the Swiss Foundation for Mine Action (FSD) continued in 2020 and verification of survey results led to cancellation of more than 155,000m^2, but only a year after Chad announced sharply reduced estimates of its mine challenge to 42km^2, in 2021 it has assessed mine contamination as 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)	5	6	Chad has national standards in place, which were last updated by Humanity and Inclusion (HI) in 2017. These are said to comply with the International Mine Action Standards (IMAS).
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	3	3	Progress of Chad's survey and clearance was set back by the COVID-19 pandemic in 2020 and results were obscured by discrepancies between the HCND and operator reporting. Operators cleared a little over 0.2km^2, half the area cleared in 2019, but they also destroyed 39 anti-personnel mines, compared with none in 2019.
Average Score	**4.3**	**4.5**	**Overall Programme Performance: POOR**

DEMINING 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

Chad's estimate of its anti-personnel mine contamination has fluctuated wildly in the last two years. Its latest estimate, as of June 2021, is that contamination at the end of 2020 totalled nearly 79km^2, including 72 confirmed hazardous areas (CHAs) covering 56km^2 and 50 suspected hazardous areas (SHAs) covering 22.7km^2 (see Table 1).[1]

That assessment marks the first time Chad has provided disaggregated estimates for confirmed and suspected areas. A year earlier, Chad had reported confirmed contamination as covering 42km^2,[2] and in the Article 5 deadline extension request Chad submitted in August 2019, it said it had 137 mined areas affecting 111km^2.[3] 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.[4]

The latest estimates suggest contamination of more than 15.8km^2 in Borkou, compared with the end-2019 estimate of 4,000m^2, and nearly 20km^2 in Ennedi, compared with the previous estimate of 2.7km^2. Maps accompanying the Article 5 extension request identify most mines in Tibesti as being around Azouzou, 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]

Table 1 : Anti-personnel mine contamination (at end 2020)[6]

Province	CHAs	Area (m^2)	SHAs	Area (m^2)	Total area (m^2)
Borkou	10	13,493,518	8	2,266,963	15,760,481
Ennedi	12	18,298,292	4	1,409,809	19,708,101
Tibesti	50	24,224,624	38	19,049,801	43,274,425
Totals	**72**	**56,016,434**	**50**	**22,726,573**	**78,743,007**

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.[7] 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.[8]

The HCND is responsible for preparing a national demining strategy and annual work plans, and proposing a budget to support their implementation.[9] 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.[10]

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.[11] 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.[12] Operators say constant changes in coordination staff have hampered efficiency.[13]

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 2019.[14] However, the government's persistent non-payment of salaries has badly affected sector performance. A long-running strike by deminers in 2017 gave rise to threats by former deminers that have prevented operations in areas of Tibesti earmarked for survey and clearance.[15] Operators also report lengthy delays obtaining the permits required to import equipment as well as in other bureaucratic procedures.

GENDER AND DIVERSITY

Chad's 2019 Article 5 deadline extension request did not address the issue of gender and diversity. The sharp reduction in staff in 2017 caused anger among deminers claiming payment of back-pay, eclipsing questions such as moving towards gender parity. 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.[16]

The low level of female employment in HCND carries over to international demining organisations which take staff on secondment from the national authority. Mines Advisory Group (MAG) said it employed six women among its ninety-one staff in 2020, reporting female staff made up 21% of its 23 headquarters staff but had only one female among 68 staff working in field operations. MAG's female deminer was also the first woman in Chad to attain an explosive ordnance disposal (EOD)

Level 3 certification and is employed as a team leader.[17] Women make up 13% of the employees in HI's Chad programme but its humanitarian mine action programme employed only one woman among its seventy-six personnel. The female staff member worked as a community liaison officer.[18]

INFORMATION MANAGEMENT AND REPORTING

The HCND is equipped with an Information Management System for Mine Action (IMSMA) database 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 became unreliable because of lost reports and duplication. FSD started a clean-up of the database in 2017 under the European Union (EU)-funded PRODECO project, which has resulted in cancellation of large numbers of duplicate entries.[19] 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. In 2020, FSD conducted two missions to Borkou province to confirm non-technical survey results and conducted a series of quality assurance and quality control 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".[20]

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.[21] Since 2017, Chad's mine action has been shaped largely by the EU-backed PRODECO project (2017–21), the main source of funding for mine action, which has been implemented by a consortium of three international operators and one national operator.[22] FSD provided information management while Secours Catholique et Développement (SECADEV) addressed victim assistance, leaving demining operations to HI and MAG. HI, the consortium leader, has focused on Borkou and Ennedi and MAG on Tibesti and Lake Chad. Due to insecurity, MAG was unable to deploy to Tibesti and has concentrated largely in Borkou. 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.[23]

The 2019 extension request took the same approach, setting out only very general goals and approximate timelines for survey and clearance (see Table 2). Despite the importance of survey to developing a mine action strategy, Chad's extension request did not provide any annual work plan for survey.

The HCND prioritises tasks according to requests from local authorities. It issues task orders to operators usually after receiving their input on technical and resource requirements of the task. Operators are also usually able to physically review tasks with the HCND and local authorities prior to deploying staff.[24] HI said it prioritised tasks according to local community development priorities.[25]

Table 2: Planning for the Extension Period 2020–25 [26]

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

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.[27] HCND said it planned to update national standards for land release, supervision of organisations, and quality assurance, but gave no details.[28]

OPERATORS AND OPERATIONAL TOOLS

HI's mine action programme in Chad included three multi-task teams (MTTs) with a total of 35 personnel (two 15-strong MTTs and one 5-person MTT) among a total staff of 76, along with a five-strong non-technical survey team. HI also had a mechanical team operating a GCS 200 multi-purpose vehicle for ground preparation. In 2020, HI worked on mine and battle area tasks, mainly in Ennedi West province, and particularly in the Fada and Wadi Doum areas.[29]

HI worked with a private company testing the use of drones for non-technical survey using infra-red and thermal technologies. HI found the drones enhanced mapping of hazardous areas and the identification of high- and low-threat areas, helping the project to save time and assign more precisely the resources needed to tackle specific tasks.[30]

MAG employed a total of 70 people in 2020, including 44 in operations and the remainder in management and support. Operating capacity included three 12-strong explosive ordnance disposal teams comprising a total of 26 deminers. It also had one survey team and a mechanical team operating an ARMTRAC 100-350 to assist technical survey. In 2019, it worked in northern Chad's Borkou region, including road clearance operations to enable communications between towns in the north. In 2020, it shifted operations to the western part of northern Ennedi province where teams continued working in 2021, tackling mined areas around Fada and other unexploded ordnance around Kalaït and conducting spot EOD tasks.[31]

FSD employed a total of 12 people at the end of 2020 (four international staff, four national programme staff, and four support personnel). In addition to developing Chad's IMSMA database and training HCND staff, activities in 2020 included assisting non-technical survey operations.[32]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Chad released a total of 369,525m^2 through clearance and other activities in 2020, according to official data,[33] falling back sharply from the 5.3km^2 that Chad said it released in 2019. However, the official 2020 results varied significantly from results reported by HCND's implementing partners creating considerable uncertainty about the progress of Chad's mine action.

The COVID-19 pandemic proved a major setback to the sector in 2020 and the impact has spilled over into 2021. In March 2020, Chadian authorities imposed travel restrictions in response to the pandemic and closed the international airport, which blocked mine action medevac arrangements. The government also imposed a countrywide lockdown in January 2021. HI said it suspended operations for about five months in 2020–21.[34] MAG said it received official dispensation to resume operations after about two months after engaging with authorities and demonstrating its health precautions exceeded official requirements. In January 2021, MAG quarantined its operations teams and tested them before deploying them to the field.[35]

SURVEY IN 2020

Chad said it cancelled 155,328m^2 in 2020, not as a result of non-technical survey but through missions conducted by HCND with support from FSD to verify the coordinates of mined areas.[36]

Table 3: Cancellation through verification in 2020[37]

Operator	Areas cancelled	Area cancelled (m^2)
HCND	14	94,974
MAG	2	60,354
Total	**16**	**155,328**

CLEARANCE IN 2020

The amount of clearance conducted in 2020 is unclear as a result of discrepancies between results reported by HCND and operators. Chad's Article 7 report records only clearance 214,167m^2, attributing close to 98% of this to HI (see Table 4). [38] HI, however, said it cleared 847,445m^2, although it also reported destroying only eight anti-personnel mines, the same number as recorded by HCND.[39]

Table 4: Mine clearance in 2020[40]

Operator	Location	Area cleared (m^2)	AP mines destroyed	ERW
HI	Ennedi	208,769	8	1,121
	Borkou	703	0	0
MAG	Ennedi	4,695	31	229
Totals		**214,167**	**39**	**1,350**

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR CHAD: 1 NOVEMBER 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 NOVEMBER 2009

↓

FIRST EXTENSION REQUEST DEADLINE (1-YEAR, 2-MONTH): 1 JANUARY 2011

↓

SECOND EXTENSION REQUEST DEADLINE (3-YEAR EXTENSION): 1 JANUARY 2014

↓

THIRD EXTENDED DEADLINE (6-YEAR EXTENSION): 1 JANUARY 2020

↓

FOURTH EXTENDED DEADLINE (5-YEAR EXTENSION) 1 JANUARY 2025

ON TRACK TO MEET ARTICLE 5 DEADLINE: UNCLEAR
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

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.

Chad made some progress towards achieving its Article 5 deadline in 2020. Despite delays resulting from measures to control the COVID-19 pandemic, Chad managed to release a small amount of land in 2020 but a year after HCND lowered the estimate of mine contamination to 42km^2, it has revised the estimate back up to nearly 79km^2.

Funding also remains a critical uncertainty. The only source of international funding in the past four years, the EU-backed €23 million PRODECO project, was due to expire in September 2021. Operators hoped that after the delays experienced as a result of the pandemic it would be possible to get a no-cost extension, but Chad had not received assurances of longer-term financing for mine action. The HCND estimated the cost of completion at $34 million and counted on international donors to provide all but around half a million dollars in salaries that would come from the government. Chad's Article 7 Report, submitted in June 2021 gave no indication that Chad has identified any alternative sources of funding.[41]

Even if funding becomes available Chad's ability to fulfil the plans set out in its Article 5 deadline extension request will be tested by progress in Tibesti, identified as its most mine affected province, where deminers have had no access since 2016 because of insecurity.[42] As of August 2021, more than a year and a half into its five-year extension, Chad had not yet started work in Tibesti.

Table 5: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0.2
2019	*0.0
2018	0.0
2017	0.0
2016	0.5
Total	**0.7**

* A total of 423,934m^2 of anti-vehicle mined area was cleared in 2019.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

As at 1 August 2021, Chad had not provided information on whether it had a plan in place for dealing with residual risk after completion.

1 Article 7 Report (covering 2020), p. 5.
2 Email from Moussa Soltani, Manager/Administrator, HCND, 27 April 2020.
3 Revised Article 5 deadline Extension Request, August 2019, p. 9.
4 Article 7 Report (covering 2020), p. 4.
5 Revised Article 5 deadline Extension Request, August 2019, Annexes 5-9.
6 Email from Moussa Soltani, HCND, 27 April 2020.
7 Article 5 deadline Extension Request, April 2019, p. 9.
8 Ibid., p. 12. The four centres are Abeche (Ouaddaï), Bardai (Tibesti), Fada (West Ennedi), and Faya-Largeau (Borkou region); the two sub-centres are at Am-timan (Salamat) and Zouar (Tibesti).
9 Article 5 deadline Extension Request, April 2019, p. 10.
10 Ibid., p. 26.
11 Article 5 deadline Extension Request, April 2019, p. 11; and emails from Soultani Moussa, HCND, 14 May 2019 and 27 April 2020.
12 Article 5 deadline Extension Request, April 2019, p. 10.
13 Email from Seydou Gaye, HI, 3 June 2020.
14 Emails from Soultani Moussa, HCND, 14 May 2019 and 27 April 2020.
15 Email from Romain Coupez, 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.
16 Emails from Soultani Moussa, HCND, 14 May 2019 and 29 May 2020.
17 Email from Gerard Kerrien, Country Director, MAG, 20 May 2021.
18 Email from HI, 2 June 2021.
19 Email from Moussa Soltani, HCND, 27 April 2020.
20 Email from Olivier Shu, Senior Technical Adviser, FSD, 18 May 2021.
21 Article 5 deadline Extension Request, April 2019, p. 30.
22 HI "Country Profile Chad", September 2017, at: http://bit.ly/2Sri4nx.
23 HCND, Provisional Plan of Action 2020-2024, July 2018, p. 24.
24 Email from Daniel Davies, MAG, 27 April 2020.
25 Email from Seydou Gaye, HI, 3 June 2020.
26 2019 Article 5 deadline Extension Request, pp. 33-34.
27 Email from Julien Kempeneers, HI, 5 September 2017.
28 Email from Moussa Soltani, HCND, 27 April 2020.
29 Email from Marie-Cécile Tournier, HI, 2 June 2021.
30 Ibid.
31 Email from Gérard Kerrien, MAG, 20 May 2021.
32 Email from Olivier Shu, FSD, 18 May 2021.
33 Article 7 Report (covering 2020), pp. 10–11.
34 Email from Marie-Cécile Tournier, HI, 2 June 2021.
35 Email from Gérard Kerrien, MAG, 20 May 2021.
36 Article 7 Report (covering 2020), p. 10.
37 Ibid.
38 Article 7 Report (covering 2020), p. 11.
39 Email from Marie-Cécile Tournier, HI, 2 June 2021.
40 Article 7 Report (covering 2020), p. 11.
41 Article 7 Report (covering 2020), pp. 13–14.
42 Chad statement to 18th Meeting of States Parties, 16-20 November 2020.

CHILE

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2020
CLEARANCE DECLARED COMPLETED

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

MINE ACTION REVIEW ESTIMATE

0 KM²

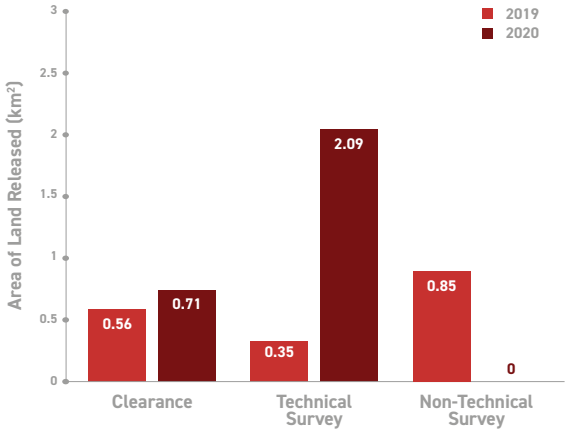
AP MINE CLEARANCE IN 2020

0.71 KM²

AP MINES DESTROYED IN 2020

12,526

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET *(as per the Oslo Action Plan commitment):* **Clearance completed in 2020**

KEY DEVELOPMENTS

Chile ended its formal mine clearance operations on 27 February 2020, meeting its 1 March 2020 Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline. Chile made an official declaration of completion of its obligations under Article 5 at the APMBC 18th Meeting of States Parties in November 2020.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	9	9	Chile has no known anti-personnel mine contamination remaining in the country since the end of February 2020.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	There is strong national ownership in Chile with effective leadership of the programme from the National Demining Commission (Comisión Nacional de Desminado, CNAD) and demining operations were fully funded by the Chilean government.
GENDER AND DIVERSITY (10% of overall score)	6	6	In previous years Chile has taken steps to mainstream gender across the armed forces with women working at all levels of the mine action programme. However, in 2019 only 4% of staff employed by the demining units were female.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	8	8	Chile uses the Information Management System for Mine Action (IMSMA) database. Chile submits timely Article 7 transparency reports and provides regular updates on progress in Article 5 implementation at the annual meetings of States Parties.
PLANNING AND TASKING (10% of overall score)	8	7	Chile has had a National Plan for Humanitarian Demining 2016–2020; it submitted updated clearance plans in 2019. Chile far exceeded its target for 2020. Chile reported it has a plan in place for dealing with residual risk post-completion.
LAND RELEASE SYSTEM (20% of overall score)	7	7	Chile is guided by the International Mine Action Standards (IMAS) and the Humanitarian Demining Manual of the Chilean Army. All survey and clearance are undertaken by the military with both machines and dogs used during operations.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	10	10	Chile released 2.8km^2 in 2020 in meeting its Article 5 deadline. No mined area was cancelled by non-technical survey but Chile reduced a massive 2.09km^2 by technical survey in 2020. Its clearance output also rose rapidly with Chile reporting clearance of 0.7km^2 in just two months.
Average Score	**8.2**	**8.1**	**Overall Programme Performance: VERY GOOD**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Demining Commission (Comisión Nacional de Desminado, CNAD)
- Executive Secretariat of the National Demining Commission (Secretaría Ejecutiva de la Comisión Nacional de Desminado, SECNAD)

NATIONAL OPERATORS

- Army Corps of Engineers (Arica, Calama, Punta Arenas), Navy Landmine Operations Squad (POMTA), Air Force (CEDDEX)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

On 13 November 2020, Chile made an official declaration of completion that it had addressed all known mined areas and was now free of known anti-personnel mine contamination.[1]

The mines were all laid during the Pinochet regime in the 1970s on Chile's borders with Argentina in the south, and with Bolivia and Peru in the north. The mined areas, which typically contained both anti-vehicle and anti-personnel mines, were generally difficult to access and mostly in unpopulated regions. The regions of both Antofagasta and Arica y Parinacota were contaminated with anti-vehicle as well as anti-personnel mines while the region of Tarapacá was contaminated only with anti-personnel mines.[2] The vast majority of the mines were laid in the north, with some minefields as high as 5,000m above sea level.[3]

Chile is also contaminated with cluster munition remnants (currently estimated to cover 65km^2, although actual contamination is likely to be considerably lower) and to a limited extent by other unexploded ordnance (UXO) (see Mine Action Review's *Clearing Cluster Munition Remnants 2021* report on Chile for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The National Demining Commission (CNAD) acts as the national mine action authority while the Executive Secretariat of the National Demining Commission (SECNAD) acts as the national mine action centre. In 2002, Supreme Decree 79 created CNAD as an advisory body to the President and an interministerial coordinating body to support the fulfilment of Chile's obligations under the APMBC.[4] Its main functions are to advise the President, mobilise resources, coordinate demining with state agencies, and develop plans for implementing the APMBC. CNAD members are high-level representatives from government ministries and the armed forces, with additional technical support provided by a committee government ministers and other officials. SECNAD, which is located in the office of the Joint Chiefs of Staff (EMCO), is responsible for managing and coordinating the mine action programme.[5]

During 2020, demining operations were entirely funded by the Government of Chile.[6]

GENDER AND DIVERSITY

While there is no specific gender policy within CNAD, Chile's policy of integrating women into the armed forces has been in place since 2000. As at May 2019, 14% of total armed forces personnel were female. In 2016, restrictions on the type of military positions a woman could hold were lifted and legislation was adopted to modify the military grading system, allowing women to be promoted in the same way as men. Women have been working in demining in Chile since 2004 across all types of roles, including as deminers and in managerial/supervisory roles.

In 2007, a woman was appointed for the first time as Manual Demining Section Commander, in Arica. In May 2018, a woman was appointed as Demining Company Commander in Arica. Chile has made it easier for women to work in the sector by adapting demining equipment to better suit women's bodies, providing childcare, and eliminating the gender wage-gap.[7] Chile reported that in 2019, of the 246 personnel carrying out roles within the demining units, only 10 (4%) were women. They included two demining section commanders and four women in support roles (one medic, two nurses, and one paramedic).[8]

INFORMATION MANAGEMENT AND REPORTING

Since 2003, Chile has been using the Information Management System for Mine Action (IMSMA). During 2017, Chile upgraded to IMSMA New Generation after starting the MARS (Mine Action Reporting System) application that replaced IMSMA Mobile. This application has equipped Chile with high-quality geographic information to support decision-making on clearance.[9]

Chile has submitted its Article 7 reports almost every year since its accession to the Convention in 2002 and makes regular Article 5 statements at meetings of States Parties, although the information presented has not always been accurate. In previous years, Chile submitted clearance plans that contained estimates that were more than the amount of area indicated as remaining.[10] Chile submitted its Article 7 report for 2020 in April 2021.

PLANNING AND TASKING

The National Plan for Humanitarian Demining 2016–2020 was formulated in accordance with the request of the Eleventh Meeting of the States Parties (11MSP) that Chile provide updates relative to the timelines presented in its 2011 extension request.[11] The main objective of the plan was to eliminate all existing anti-personnel mines on national territory by the March 2020 clearance deadline.[12]

In 2019, Chile provided an updated demining plan for 2019 and 2020 (see Table 1).[13] Chile did not meet its targets for 2019 and released 15 mined areas totalling 1.76km^2, of which 0.56km^2 was cleared, 0.35km^2 was reduced through technical survey, and 0.85km^2 was cancelled through non-technical survey. Then in January and February 2020, Chile released a further 2.8km^2 of mined area, of which 2.09km^2 was reduced through technical survey and 0.71km^2 was cleared.[14]

Table 1: Updated demining plan (2019–20)[15]

Year	Mined areas	Planned release (m^2)
2019	18	4,374,448
2020	1	50,600
Totals	**19**	**4,425,048**

Annually, CNAD issued a National Directive on the Execution of Demining Activities from the Government of Chile, which contained a set of provisions and tasks to support the planning of demining.[16] Clearance was prioritised according to proximity to populated areas, impact on land designated a national park or which was a historical site of interest to tourists, and impact on land that obstructs development.[17]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Chile is guided by the International Mine Action Standards (IMAS).[18] In addition to the IMAS, Chile also follows the provisions and regulations as set out in the "Humanitarian Demining Manual of the Chilean Army".[19]

OPERATORS AND OPERATIONAL TOOLS

Mine clearance in Chile is conducted by the Army Corps of Engineers, the Navy Landmine Operations Squad, and the Air Force.[20]

In 2020, there were two non-technical survey teams deployed totalling six personnel and eight technical survey teams totalling fifty-five personnel.[21]

Table 2: Operational clearance capacities deployed in 2020[22]

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**
Arica	6	69	0	3
Calama	2	45	0	3
Totals	**8**	**114**	**0**	**6**

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

Since 2008, mechanical assets have been used to support manual demining in Chile. During 2019, machines were deployed to conduct clearance in the regions of Arica y Parinacota and Antofagasta.[23] Chile also used explosive detection dogs for the first time in 2018 to carry out quality control of an area that had been cleared using machines.[24]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Chile released a total of 2.8km^2 from 1 January 2020 to 27 February 2020, of which 0.7km^2 was cleared and 2.1km^2 was reduced by technical survey. A total of 12,526 anti-personnel mines and 10,170 anti-vehicle mines.

SURVEY IN 2020

In 2020, Chile reduced a massive 2.09km² through technical survey in just two months (see Table 3), almost six times the amount reduced through technical survey throughout the whole of 2019. The contaminated area of Seilao in Antofagasta province was estimated to cover 2.28km² when technical survey was carried out in 2017 based on the information from manual and mechanical demining conducted in the area since 2010.[25] This area was then partially reduced through survey in 2019. No mined area was cancelled through non-technical survey in 2020.[26]

Table 3: Reduction through technical survey in 2020[27]

Province	Area reduced (m²)
Arica y Parinacota	160,899
Tarapacá	24,278
Antofagasta	1,905,685
Total	**2,090,862**

CLEARANCE IN 2020

In 2020, over the course of only two months, Chile cleared 0.71km² across three regions, finding and destroying 12,526 anti-personnel mines and 10,170 anti-vehicle mines (see Table 4).[28] This is a 27% increase in the amount cleared over the whole of 2019 and a threefold increase in the number of anti-personnel mines found and destroyed. According to Chile, it managed to achieve this amount of clearance as the climatic conditions were optimal. In addition, the mechanical demining units were reorganised allowing them to work up to three shifts per day, thereby significantly increasing clearance output.[29]

Table 4: Mine clearance in 2020[30]

Region	Area cleared (m²)	AP mines destroyed	AV mines destroyed
Arica y Parinacota	265,786	11,176	9,934
Tarapacá	7,600	212	0
Antofagasta	436,018	1,138	236
Totals	**709,404**	**12,526**	**10,170**

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR CHILE: 1 MARCH 2002

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2012

↓

FIRST EXTENDED DEADLINE (8-YEAR EXTENSION): 1 MARCH 2020

REPORTED COMPLETION OF ARTICLE 5: 27 FEBRUARY 2020

Under Article 5 of the APMBC (and in accordance with the eight-year extension request granted by States Parties in 2012), Chile 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 2020. Chile completed clearance on 27 February 2020 and officially declared it had met its obligations under Article 5 in November of the same year by video message to the 18MSP.[31] Chile reported that it had destroyed 179,815 mines and cleared close to 27km² since it became a State Party to the APMBC.[32]

Table 5: Five-year summary of AP mine clearance

Year	Area cleared (km²)
2020*	0.71
2019	0.56
2018	0.96
2017	0.86
2016	3.52
Total	**6.61**

* January and February 2020

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Chile has reported having a plan in place to deal with residual risk post-completion and has pledged to maintain a demining capacity within the Chilian military to address any residual contamination that may be discovered in the future.[33]

1 Statement of Chile, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

2 Article 7 Report (covering 2018), Form C.

3 Article 7 Report (covering 2009), Form I.

4 Article 7 Report (covering 2017), Form A3.

5 Presentation by National Demining Commission Executive Secretary Col. Juan José López Demuth for the Regional Dialogue on Humanitarian Demining (virtual meeting), 10 February 2021.

6 Statement of Chile, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

7 Statement from Chile during the Thematic Discussion on Integrating Gender into Mine Action, Intersessional Meetings, 23 May 2019; and emails from Col. Juan José López Demuth, Executive Secretary, CNAD, 22 and 27 June 2019.

8 Email from Carlos Rivera Bugueño, Senior Sub-Officer, CNAD, 6 August 2020.

9 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.

10 Conclusions on the implementation of Article 5, 16th Meeting of States Parties, 18–21 December 2017.

11 Decisions on the request submitted by Chile for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 11MSP, 2 December 2011.

12 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.

13 Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019.

14 Article 7 Report (covering 2019), Form F.

15 Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019.

16 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018; and Article 7 Report (covering 2019), Form A.

17 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.

18 Article 7 Report (covering 2018), Form F.

19 Article 7 Report (covering 2019), Form F.

20 Email from Carlos Rivera Bugueño, CNAD, 6 August 2020.

21 Ibid.

22 Ibid.

23 Ibid.

24 CNAD, "Desminado Canino", 27 December 2018, at: http://bit.ly/2VCpHwb.

25 Email from Carlos Rivera Bugueño, CNAD, 6 August 2020.

26 Article 7 Report (covering 2019), Form F.

27 Ibid.

28 Ibid.

29 Email from Carlos Rivera Bugueño, CNAD, 6 August 2020.

30 Article 7 Report (covering 2019), Form F.

31 Statement of Minister of Defence of Chile to the 18MSP, November 2020, at: https://bit.ly/3lut3gu.

32 Statement of Chile, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020

33 Presentation by National Demining Commission Executive Secretary Col. Juan José López Demuth for the Regional Dialogue on Humanitarian Demining (virtual meeting), 10 February 2021.

COLOMBIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

10KM²

AP MINE CLEARANCE IN 2020

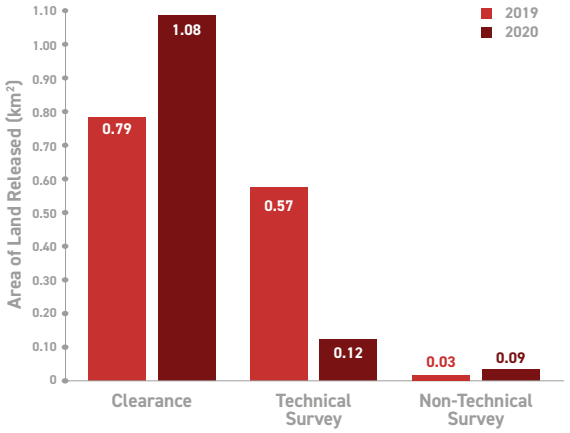
1.08KM²

AP MINES DESTROYED IN 2020

196

(INCLUDING 52 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

In 2020, 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. While overall land release output fell in 2020, on a positive note clearance output increased despite the restrictions imposed as a result of 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) allocating all safely accessible tasks to operators and completing a review of national mine action standards (NMAS). 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.**
- **Colombia should implement the new technical norms and operators should be supported by the national mine action authority and the Organization of American States (OAS) to use the full toolbox of land release methodologies.**
- **Colombia should task all operators in a manner that ensures the best use of resources by geographically clustering task assignments and should prioritise the highest impact areas in response to humanitarian, community, and development needs.**
- **Quality management of operations should be streamlined and targeted towards making operations more efficient rather than imposing unnecessary delays on operators. The national authority should ensure that the OAS has personnel with the required capability to perform appropriate technical monitoring of clearance activities.**

- **Colombia should provide an updated work plan through to 2025, in light of the impact of the COVID-19 outbreak and including realistic targets for land release with current demining capacity.**
- **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 found. Colombia should conduct a risk analysis of anti-personnel mine functionality and define a level of acceptability for residual risk that is based on the high proportion of non-functioning mines found.**
- **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 (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	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 2020 at 2.95km^2. Insecurity remains an obstacle to access of suspected mined areas and mines are still being emplaced in some areas.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	6	There is strong national ownership in Colombia with responsibility for the mine action programme sitting with the OACP, and decision making the responsibility of the *Instancia de Desminado*, led by 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 2020, Colombia elaborated a resource mobilisation strategy and there was an increase in national funding for mine action.
GENDER AND DIVERSITY (10% of overall score)	7	6	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 mine risk education (MRE), but gender and diversity provisions are not reflected in the land release technical norm. A woman heads the national authority and women make up 63% of the staff dedicated to mine action. However, among deminers overall this figure drops to only 4%. 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	4	Improvements have been made to information management in Colombia following a review of the IMSMA database, and in 2020 a dashboard was introduced to allow for real-time monitoring of survey and clearance tasks. 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)	5	4	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 it is able to although 129 municipalities remain inaccessible due to insecurity. It is unclear why the updated annual land release targets until 2025 that Colombia provided in its latest Article 7 report only project to release 2.77km^2 of contaminated 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.
Average Score	**5.3**	**4.6**	**Overall Programme Performance: AVERAGE**

Criterion	Score (2020)	Score (2019)	Performance Commentary
LAND RELEASE SYSTEM (20% of overall score)	6	5	In 2020, Colombia developed a new set of 17 NMAS renamed as technical norms 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. As at June 2021, the norms had been issued, with their implementation due to begin in September.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	4	Overall land release output in Colombia fell in 2020 and clearance output increased by 62% from the previous year. Colombia was able to exceed the target set out in its 2020 extension request in spite of the ongoing challenges posed by the COVID-19 pandemic. In 2020, Colombia was granted an extension to its Article 5 deadline to 31 December 2025. It is difficult to assess whether Colombia will be able to meet this deadline as it is unclear how much contamination remains. If the land release output of the past few years is maintained, completion by 2026 looks unlikely.
Average Score	**5.3**	**4.6**	**Overall Programme Performance: AVERAGE**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Office of the High Commissioner for Peace (OACP) – AICMA

NATIONAL OPERATORS

- Humanitarian Demining Brigade (Brigada de Desminado Humanitario (BRDEH)
- Marine Corps Explosives and Demining Association (Agrupación de Explosivos y Desminado de Infantería de Marina (AEDIM)
- Campaña Colombiana Contra Minas (CCCM)
- Asociación Colombiana de Técnicos y Expertos en Explosivos e Investigadores de Incendios y NBQR (ATEXX) (closed its programme in 2020)
- Humanicemos DH

INTERNATIONAL OPERATORS

- Danish Demining Group (DDG) (now renamed Danish Refugee Council's Humanitarian Disarmament and Peacebuilding Sector, DRC)
- The HALO Trust (HALO)
- Humanity and Inclusion (HI)
- Norwegian People's Aid (NPA) (closed its programme in 2020)
- Perigeo (closed its programme in 2020)

OTHER ACTORS

- Swiss Foundation for Mine Action (FSD)
- United Nations Mine Action Service (UNMAS)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Organization of American States (OAS)

UNDERSTANDING OF AP MINE CONTAMINATION

The precise extent of anti-personnel mine contamination in Colombia remains unknown. As at end 2020, Colombia reported a total of 419 anti-personnel mined areas with an estimated size of 2.95km^2 remaining to be addressed in 13 departments (see Table 1). This includes just over 1.85km^2 across 232 confirmed hazardous areas (CHAs) and just over 1.09km^2 across 187 suspected hazardous areas (SHAs).[1] While a nationwide baseline survey has yet to be conducted in Colombia, operators are conducting non-technical surveys to investigate IMSMA reports and collect additional information from affected communities. This has provided an initial mapping of contamination in the municipalities that have been assigned for demining.[2] However, IMSMA "events" in Colombia are a notoriously unreliable source for contamination and are frequently not directly related to a hazardous area.[3]

Table 1: Anti-personnel mined area by department (at end 2020)[4]

Department	CHAs	Area (m^2)	SHAs	Area (m^2)	Total SHAs/CHAs	Total area(m^2)
Antioquia	23	107,297	23	217,011	46	324,308
Bolivar	11	22,954	12	58,488	23	81,442
Caldas	2	19,075	7	38,082	9	57,157
Caqueta	45	349,331	20	150,946	65	500,277
Cauca	25	75,530	17	30,844	42	106,374
Huila	7	365,465	11	205,053	18	570,518
Meta	48	563,413	7	27,778	55	591,191
Nariño	5	16,894	6	12,327	11	29,221
Putumayo	45	129,092	62	168,859	107	297,951
Santander	4	45,139	6	52,948	10	98,087
Sucre	0	0	1	3,330	1	3,330
Tolima	6	106,562	7	94,392	13	200,954
Valle del Cauca	11	51,838	8	32,852	19	84,690
Totals	**232**	**1,852,590**	**187**	**1,092,910**	**419**	**2,945,500**

In 2020, the mine action department of the OACP, with technical assistance from the Swiss Foundation for Mine Action (FSD) elaborated the "Baseline Methodology 2020. Statistical Operation: Results of the humanitarian demining operations" with a view to establishing a strategic direction for the demining programme and provide technical guidance to operators on establishing a baseline.[5]

In addition, within the 135 "zones" which have been assigned to operators but have not yet been surveyed, it is estimated there are 1,018 hazardous areas totalling 4.78km^2. This projection was calculated using an average for a contaminated area of 4,700m^2 per area plus a 5% margin. There are also 138 municipalities where neither survey nor clearance has been conducted, but "events" related to anti-personnel mines have been reported that have not yet been assigned to demining operators.[6]

During 2020, Humanity and Inclusion (HI) discovered and reported five anti-personnel mined areas totalling 21,343m^2 that were not linked to "events" recorded in the national database.[7] The HALO Trust reported a total of 166,078m^2 of newly discovered anti-personnel mined area. In both cases, this was believed to be legacy not newly emplaced contamination.[8]

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 with the average size of minefields identified by the organisation in 2019 as approximately 2,200m^2 in size.[9] The average size of minefields in 2019, according to figures reported by the national authority, was 4,574m^2.[10] Mines were planted in isolated rural areas to protect strategic positions; often coca cultivations whose crops were used by NSAGs to fund operations. When the groups moved on, the mines were left behind, blocking access to roads, paths, schools, and other civilian infrastructure, preventing productive use of land.[11] As there was little, if any, mapping of mined areas by NSAGs, and 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.[12]

In many areas where the FARC-EP (Revolutionary Armed Forces of Colombia-People's Army) demobilised, the government has yet to arrive in force, with other NSAGs now struggling for power.[13] This includes FARC-EP dissidents,[14] the National Liberation Army (ELN), and drug-trafficking groups, especially the largest among them, the Gaitán Self-Defence Forces, made up of former mid-level paramilitary leaders. Most of the fight for control is concentrated in about one quarter of the country's municipalities. Mine action operations will only be undertaken with the local community's agreement, often in areas where mistrust of the State is high and community members are sceptical of the operator's intentions due to the perception that operators are linked to the military. 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.[15]

NEW CONTAMINATION

Descontamina Colombia recorded a 52% increase in the number of victims of anti-personnel mines from 114 in 2019 to 173 in 2020.[16] More than three quarters of the victims came from five departments: Antioquia, Cauca, Nariño, Norte de Santander, and Valle del Cauca.[17] These departments are among those with the highest levels of coca cultivation, and new landmines have reportedly been planted to prevent current coca crop eradication campaigns. There are also reports of new mines are being emplaced by the ELN and the Gaitán Self-Defence Forces in the department of Chocó in a battle for control over territory.[18]

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 and reported that two soldiers had died from anti-personnel mine blasts and other nine were injured.[19] The presence of anti-personnel mines in this area and in the Norte de Santander (on the Colombian side of the border) also presents a danger to thousands of Venezuelan migrants that cross into Colombia on a daily basis escaping the longstanding social and economic crisis in the country.[20]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In April 2017, following the adoption of a Presidential Decree, the Directorate for Comprehensive Mine Action (Dirección para la Acción Integral contra minas Antipersonal, DAICMA) became Dirección para la Acción Integral contra Minas Antipersonal – Descontamina Colombia. 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 serves as the national mine action centre.[21]

In February 2019, responsibility for Descontamina Colombia was reallocated to the Office of the High Commissioner for Peace (OACP) along with the appointment of a new Director, the Commissioner for Peace.[22] Coordination of the mine action sector has been delegated to the Deputy Commissioner.[23] Decrees 179 and 1784, both issued in 2019, elevated decision-making on Descontamina Colombia to the presidential level and established its functions at national and local level.[24] However, in this process Descontamina Colombia has been disconnected from the Office of the Presidential Counsellor for Stabilization, limiting access for the sector to stabilisation and development funds.[25]

In 2011, Decree 3750 created the Instancia Interinstitucional de Desminado Humanitario (IIDH – Interinstitutional Tribunal for Humanitarian Demining), which is composed of a representative from the Ministry of National Defence, the General Inspectorate of the Military Forces, and Descontamina Colombia. It is responsible for recommending or suspending the certification of humanitarian demining organisations to the Ministry of National Defence as well as for determining and assigning demining tasks.[26]

Decree 3750 also called for the elaboration of National Standards for Humanitarian Demining and regulates the quality management of demining operations.[27] Promulgated in July 2017, Decree 1195 outlines mitigation and correction measures that must be applied by operators when demining in national parks and other areas of ecological value.[28] Operators are currently expected to reforest in protected areas after clearance to mitigate environmental impact.[29] However, the extent of reforestation often exceeds any estimated impact from manual clearance and there has been a lack of consistency in the application of the decree at a regional and local level.[30] In response, the OACP, with the support of FSD, created a toolkit which was being finalised as at June 2021, with a view to clarifying the obligations for operators and the process they should follow to comply with the decree; to clarify certain concepts and terminology; and to confirm the roles and responsibilities at local, regional, and national level within the environmental authorities.[31]

Operators report that there is largely an enabling environment for mine action in Colombia, although the approval and decision-making process can be slow (although this is not restricted to the mine action sector).[32] HI and CCCM reported difficulties obtaining accreditation for international staff with an explosive ordnance disposal (EOD) 2 qualification or above and delays in tax exemptions being granted for new contracts.[33] CCCM reported that this issue was raised with the OACP and a new procedure subsequently put in place.[34]

The Geneva International Centre for Humanitarian Demining (GICHD) has been supporting Colombia for several years on information management, gender and diversity, non-technical survey training of trainers, operational analysis, and through a study on the effect of ageing on improvised anti-personnel mines.[35] This study is particularly pertinent to the Colombian context due to the large proportion of non-functional mines found. Unfortunately, the process stalled due to a lack of political will and, by July 2021, the study had been shelved.[36] In 2021, the GICHD was working with Descontamina Colombia on the implementation of quality management systems which involves conducting an in-country assessment of the quality management system and review of the quality management standard. Upon completion, the GICHD will provide Descontamina Colombia with recommendations on how to improve their quality management systems. The GICHD is also conducting a study of the humanitarian and socio-economic impact of explosive ordnance in Colombia.[37]

FSD has been helping the OACP to develop, review, and implement national standards, and to improve their information management capacities, albeit with mixed success. In July 2019, following the start of FSD's new contract, an additional information management advisor was

hired to support Descontamina Colombia with data analysis and evidence-based decision making.[38] In 2020, FSD drafted a new matrix for evaluating new assignments for operators, which was approved by the OACP during a technical meeting with FSD, OAS and UNMAS, and performance indicators to measure operational efficiency and effectiveness as well as providing support to the OACP and operators on environmental management.[39] In 2021, the FSD conducted an analysis on the impact of the COVID-19 pandemic on demining in Colombia, consolidated the final version of the performance indicators, and conducted training on data analysis for the OACP and the operators to prepare for implementation of the performance indicators.[40]

The United Nations Mine Action Service (UNMAS) provides technical assistance to the national authority as well as training and capacity building with a focus on national operators. UNMAS worked closely with Humanicemos DH to support capacity development to enable it to become a fully self-sufficient operator. In March 2020, UNMAS was given responsibility for quality management of the work of Humanicemos DH, which formally began survey and clearance operations in November 2020.[41] In 2021, UNMAS was working with the OACP to develop a standardised methodology for post-clearance impact assessments that can be used by all operators. These are expected to help identify the link between mine action and the UN sustainable development goals (SDGs).[42]

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.[43] Of this, the projected cost of demining activities is estimated at $183 million, of which the government will fund $55 million.[44] 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.[45]

In 2020, Descontamina Colombia received $1.4 million in national funding, a reported 32% increase on the previous year. The resources were mainly allocated to MRE and victim assistance. In addition, the Humanitarian Demining Brigade (BRDEH) received over $42 million in national funding in 2020 and the Marine Corps Explosives and Demining Association (AEDIM) received nearly $400,000.[46] In 2020, Colombia received $23.8 million in international funding for mine action, a 37% decrease from the $37.7 million received in 2019. In addition, Colombia received $38.1 million from the Howard G. Buffet Foundation to strengthen the national capacity of the BRDEH for the period 2017–21.[47]

In 2020, Colombia elaborated a resource mobilisation strategy which estimated a funding shortfall of $174.1 million for demining activities, MRE, victim assistance, information management, and technical assistance for 2020–25. This takes into account the funding needs of civilian operators and the technical and financial support required by the BRDEH and AEDIM. It was approved in June 2021 that funding from the UN Multi-donor Fund for Sustaining Peace in Colombia (UN-MPTF) should include mine action.[48]

Operators have reported being consulted during the review of national standards.[49] In its latest Article 7 transparency report, Colombia reported that during 2020 the OACP worked on developing a coordination strategy in concert with the Presidential Cooperation Agency of Colombia (APC-Colombia) and in accordance with the National Strategy for International Cooperation (ENCI). It expected this would be consolidated in the first quarter of 2021, but this does not seem to have yet occurred.[50] However, 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 last meeting held by the OACP and donors was in 2019 but the Swiss Embassy in Colombia has offered support to the OACP to initiate a forum to bring together the OACP, operators, and other partners from the mine action sector with the aim of eventually bringing in other donors and national entities.[51]

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.[52] Data are disaggregated by gender, age, and ethnicity. The CCCM, DRC, The HALO Trust, HI, and NPA, 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.[53] According to the MRE technical norm, approaches must consider the needs, capacities, and strengths of everyone and all ethnic groups, and teams must be gender balanced. However, the technical norm on land release does not reflect the gender and diversity provisions in the International Mine Action Standards (IMAS).[54]

Colombia has a significant indigenous and ethnic minority group population at 13.7%, 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 mine contamination.[55] The Implementation Framework Plan 2017–2032 and the National Development Plan both contain commitments to clear anti-personnel mines affecting ethnic minority communities.[56] However, there is 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 the extension request, despite the commitments made in the 2017 Peace Deal and the Implementation Framework Plan. In order to gain access to indigenous reserves, special permission must be granted and operators 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.[57] 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.[58] CCCM reported that they also actively hire indigenous and afro-Colombia people for the non-technical survey and clearance teams in order to be more inclusive and improve their access to territories with indigenous populations.[59] There is also a plan in place by UNMAS for MRE materials to be made available in indigenous languages.[60]

Colombia has a female head of its national mine action authority, one of the few women who hold this position in the world. In the OACP, of the 30 officials dedicated to mine action 19 (63%) are women.[61] However, from the 5,563 accredited deminers in Colombia, only 220 (4.1%) are female deminers.[62] As reported in Colombia's latest Article 7 report, BRDEH, the largest operator in Colombia, had no female deminers operational in 2020 and nor did AEDIM, the smaller military operator.[63] As at July 2021, no information had been provided by the BRDEH or AEDIM to Mine Action Review on whether there is equal access to employment within these organisations for qualified women and men or whether any measures have been put in place to achieve this.

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.[64] In 2020, an average of 454 staff were employed across the programme each month, of whom 33% were women. Operations staff consisted of an average of 366 staff per month, of whom 37% were women. Managerial/supervisory staff consisted of an average of 88 staff per month, of whom 26% were women.[65]

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 2020, 35% of staff in operational roles were women, which rose to 41% at a managerial/supervisory level. 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.[66]

In 2020, Danish Demining Group (DDG), now renamed Danish Refugee Council's Humanitarian Disarmament and Peacebuilding Sector (DRC), reported that 43% of the total number of its employees in Colombia are women with 20% of managerial/supervisory positions held by women and 42% in operational positions. The non-technical survey team leaders participated in an online course in 2020 which provided an "Introduction to Gender and Diversity in Mine Action" from the GICHD.[67]

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.[68]

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 2019, 29% of clearance teams and 31% of non-technical survey teams were women while 50% of the national management team and 31% of the operational management team are female.[69] In 2021, twelve of CCCM's non-technical survey and clearance teams were led by women.[70]

INFORMATION MANAGEMENT AND REPORTING

Government Decree 1649 of 2014 assigned Descontamina Colombia responsibility for the IMSMA database and mandated it to "compile, systematise, centralise, and update relevant information" to serve as a basis for programme planning.[71] Descontamina Colombia uses the IMSMA database 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.[72]

The GICHD have also noted improvements since 2017 in data sharing and data quality following a significant review and correction of IMSMA data.[73] 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.[74] In addition, efforts from the national authority to improve the data in the database are ongoing. 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).[75] The HALO Trust reported that the use of Survey123 for weekly reporting on clearance activities worked well in 2020 and has not increased the workload for operators.[76] HI says Descontamina Colombia are willing to listen and provide support in solving problems.[77] The national authority reported that in 2020 improvements were made to reporting tools and a dashboard of demining operations was created which is updated weekly and allows for real-time monitoring of survey and clearance tasks.[78]

Since 1990, Colombia has collected and reported on "events" related to anti-personnel mines, unexploded ordnance (UXO), and improvised explosive devices (IEDs). These data have been the main indicators of contamination and have formed the basis of demining planning and prioritisation.[79] 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.[80] Operators have found these IMSMA events are beset with errors, including duplications and inaccuracies. Despite some improvements 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.[81] As a result, most of the investigated events are cancelled or discarded.

In contrast, the national authority had conducted an analysis of IMSMA events in the database and found that 59% of the total number of hazardous areas that had been identified corresponded with sectors where IMSMA events had been found and investigated and that 30% of hazardous areas identified had an IMSMA event within 200 metres of the polygon.[82] Once non-technical survey has been carried out, there is a much clearer understanding of contamination and the data in the national information system for these areas become reliable.[83]

There are frequent discrepancies between operators' data and the figures from the national authority. While the national authority provide 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.[84] Administrative delays between the National Authority, the external monitoring system (the Organization of American States, OAS) and operators contribute to delays with approvals taking time between various parties.[85]

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 – Descontamina. In March 2020, Colombia submitted its Article 5 deadline extension request which while there are some positives in that it presents an estimate of contamination that is at least partially based on non-technical survey, it fails to address longstanding issues around land release, task prioritisation, and quality management; contains data inconsistencies; and lacks clear and achievable targets for land release of all the contaminated land remaining to be addressed.[86]

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. In March 2019, a participatory review of the mine action sector began. Operators and other sector stakeholders including UNMAS and FSD were asked to help redesign the mine action strategy through workshops, but these ceased in June 2019, as did feedback or progress updates from Descontamina.[87] Some operators also reported concerns that the framework for the strategy lacks specific detail in addressing some key issues, such as prioritisation, technical survey, insecurity, and lack of capacity at the national authority.[88] GICHD reported that they were not involved in any review of the strategy and that the process did not seem to follow the strategic planning guidance.[89]

Colombia included an operational plan for demining in both its extension request and Article 7 report covering 2019 and provided annual land release/clearance targets for 2020–23 for the 3.33km^2 of suspected and confirmed hazardous area that has been identified through non-technical survey in 156 municipalities (see Table 2). These tasks have already been assigned to operators, the majority of which at 64%, has been assigned to the Humanitarian Demining Brigade (Brigada de Desminado Humanitario, BRDEH).[90] It is not clear from the extension request how much of this will be released through survey and how much through clearance.

According to the plan, the additional 166 municipalities with reported anti-personnel mine contamination, but no ongoing operations, will be surveyed and cleared in 2024–25, although this is obviously heavily dependent on security conditions. As at July 2021, 129 municipalities were restricted due to insecurity with the rest of the 37 municipalities now accessible and assigned to operators. The OACP has now tasked all operators with all the accessible contaminated municipalities but UNMAS has raised concerns that the 129 inaccessible municipalities should not be left behind and that there should be an entry strategy in place for the mine action activities which are possible in these areas, such as MRE.[91] Colombia plans to implement a "micro-targeting" methodology in these municipalities which will involve convening working groups to assess the available information about inaccessible areas that have suspected mine contamination.[92] Although not included in the annual targets, Colombia reports elsewhere in its 2020 extension request that an estimated 4.95km^2 of mined area located in areas where non-technical survey has yet to be completed in the 156 municipalities assigned to operators will also require clearance.[93]

Table 2: Annual land release projections in the 2020 Article 5 deadline extension request[94]

Year	SHAs/CHAs	Area (km²)
2020	194	1.02
2021	101	1.33
2022	140	0.95
2023	32	0.03
Totals	**467**	**3.33**

In 2020, Colombia planned to release 1.02km^2 across 194 hazardous areas, a target which Colombia managed to exceed despite the challenges posed by the outbreak of COVID-19 in the country. The Colombian government ordered a mandatory countrywide lockdown from March to June 2020 and all demining operations were suspended during this time. In June, the government began progressively opening some sectors of the economy and demining operations were allowed to officially restart. HI reported that at a national level operators were required to elaborate a biosecurity protocol to prevent the spread of the virus. In addition, local communities and municipal authorities adopted additional restrictions regarding mobility and were generally reluctant

to allow entry to non-community members. This varied from one place to another and led to some re-tasking for operators in June–August.

Some communities required teams to quarantine for two weeks before starting operations and limited the number of teams; others required periodic negative PCR tests. Operations were also affected by suspected or confirmed COVID cases, requiring quarantine period for part of the staff.[95] DRC reported that they had to suspend their operations during the official lockdown and then again from the end of June to November due to the number of COVID-19 cases within the teams.[96] For the HALO Trust operations did not fully resume until the end of August due to travel restrictions but they were able to restart inter-municipal and inter-departmental travel from late June allowing some operations to resume.[97]

In its latest Article 7 report, Colombia presented updated annual land release targets to 2025 for 397 "zones" across 2.77km^2 of suspected and confirmed hazardous area (see Table 3). In the new targets Colombia is planning to release only 459,890m^2 of hazardous area in 84 zones in 2021 across the departments of Antioquia, Bolívar, Caldas, Caquetá, Cauca, Huila, Santander, Sucre, and Valle del Cauca.[98] It is unclear when Colombia plans to release the remaining contamination, as the projections in the latest Article 7 report (covering 2020) do not even extend to the include all the 2.95km^2 across a total of 419 confirmed and suspected hazardous areas that Colombia reported as at end 2020.

Table 3: Annual land release projections from Article 7 report (covering 2020)[99]

Year	SHAs/CHAs	Area (km^2)
2021	84	0.46
2022	69	0.51
2023	94	0.79
2024	37	0.40
2025	113	0.61
Totals	**397**	**2.77**

Colombia prioritised its task allocation according to the IIDH and the Strategic Plan for Comprehensive Action against Antipersonnel Mines 2016–2021. The IIDH considers information provided by local bodies, the Early Warning System of the Ombudsman's Office, and the General Command of the Military Forces, and Descontamina Colombia.[100] The Strategic Plan 2016–21 categorised municipalities in Type (Priority) I, II, and III, which are then proposed for task allocation to the demining organisations without a given order, hindering a systemic approach to demining. Of the 156 municipalities assigned to operators for land release in 2020–23, 53% are Type I and 40% are Type II.[101] Type I areas, which correspond to municipalities with human casualties from anti-personnel mines between January 2010 and December 2015, 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.[102]

In Colombia's 2020 extension request, a new model for prioritisation was alluded to but no detailed information was provided.[103] According to Colombia, this new model integrates IMSMA data with more than 40 indicators that consider security conditions, public policy, and bids from demining operators.[104] However, there was no consultation with operators on this new model nor was this model discussed in the strategic review workshops.[105]

Descontamina Colombia's ability to coordinate has come under scrutiny, as operators are not always assigned tasks in geographical clusters or are assigned tasks that are disconnected from their existing areas of operation. This is not an efficient use of resources and it continued to be an issue into 2021. For example, an area in Chaparral, a municipality in the department of Tolima, was recently tasked to HI despite it not having a presence in the department and with the two other areas in the same municipality already tasked to BRDEH and the HALO Trust.[106] CCCM also 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.[107] Under Article 6(8) of the APMBC, States Parties receiving international assistance are obligated to cooperate with a view to ensuring the full and prompt implementation of agreed assistance programmes.

In previous years operators have raised concerns that the criteria for selection are biased towards the BRDEH with all but one municipality assigned to BRDEH in 2019.[108] FSD reported that the criteria for assigning tasks have been changed and will be aligned with a set of operational performance indicators that will measure efficiency of operators' task completion. The performance indicators will be used when assigning new tasks and also during operators' accreditation renewal. The performance indicators are in the technical norm for information management and the new criteria for assigning tasks is set out within the annex of the technical norm for assigning tasks.[109]

Within municipalities, operators prioritise tasks in agreement with municipal authorities, local leaders and the national mine action authority according to the needs of the local community.[110]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In 2020, Colombia developed a new set of 17 NMAS, which it renamed technical norms. The process was finalised in December with support from ICONTEC (Colombian Institute of Technical Standards and Certification) and the technical norms and annexes were published in June 2021. 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 OAS and UNMAS in their

capacity as the monitoring bodies; FSD in its role as advisor; and the national and international mine action operators.[111] 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.[112] The operators have three months from the publication of the technical norms to elaborate their standard operating procedures (SOPs), which will be reviewed by the OACP with implementation due to begin from September 2021.[113]

The new technical norms include the long-awaited land release standard and also new standards for technical survey, non-technical survey, and information management. The information management technical norm is key to establishing consistent and meaningful procedures for collecting, analysing, reporting, and sharing information across and outside the sector.[114] Technical survey had not yet been implemented by all operators in Colombia as, according to the previous standard, if any contamination was found during survey full clearance of the entire area must be carried out, negating the efficiencies of technical survey.[115] It is planned that once the new technical norms are implemented from mid-September 2021 operators should be able to conduct technical survey.[116]

In localities where security allows operators to conduct survey and clearance, contaminated areas are characterised as being of low density and "low functionality". The HALO Trust estimated that at least 90% of the ordnance they have found has degraded due to water ingression and is non-functional. However, the NMAS have not adapted to this context and are more appropriate to contamination that has a high functionality. This makes clearance extremely inefficient and expensive. Furthermore, the government has adopted an extremely conservative approach to risk management, due to concerns around legal liability, with an over-reliance on full clearance.[117] According to the FSD, this issue will be addressed in part by the new technical norms and they allow for the full toolbox of land release methodologies including technical survey and improvements to non-technical survey by including deployment of explosive ordnance disposal capacity to avoided marking areas for clearance when just EOD is necessary.[118]

In 2020, HI reported that in both of the two areas in which clearance operations were finalised in 2020, no contamination was found at all, totalling 2,687m^2 of cleared area.[119] DRC cleared three areas with no mines found totalling 2,039m^2 and the HALO Trust cleared 37 areas with no mines found totalling 86,414m^2.[120] The national authority reported that, in 2019, no contamination was found in 58% of tasks cleared.[121] The CCCM, however, reported an improvement from 2019 to 2020 in the number of items of explosive ordnance found per hazardous area.[122] According to Colombia's 2020 Article 5 deadline extension request, the high proportion of clearance conducted on areas with no mine contamination was in part due to the high perception of risk from anti-personnel mines by affected communities.[123] This is not persuasive from a land release perspective.

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).[124] By far the largest clearance operator is the National Army's Humanitarian Demining Brigade (Brigada de Desminado Humanitario (BRDEH)). 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.[125] Demining is also conducted by international mine action NGOs The HALO Trust, HI, and DRC, and national NGOs CCCM and Humanicemos DH. In 2020, NPA decided to close its programme in Colombia as it was decided that the resources could be better deployed elsewhere. Survey and clearance operations ceased at the end of February.[126]

Table 4: Operational clearance capacities deployed in 2020[127]

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	EOD personnel	Comments
BRDEH	N/R	4,058	10 dogs	3	78	Increase from 2019
AEDIM	N/R	142	0	0	164	Increase from 2019
CCCM	26	129	0	0	12	Increase from 2019
HALO	30	150	0	0	8	No change from 2019
HI	3	22	0	0	28	Reduction from 2019
DRC	3	15	0	0	2	Increase from 2019
Humanicemos DH	N/R	18	0	0	10	N/K
Totals	**N/K (62-)**	**4,534**	**10 dogs**	**3**	**302**	

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

The HALO Trust deployed on average three non-technical survey teams per month totalling 12 personnel in 2020. Overall, there was no significant increase or decrease in staffing numbers from 2019 to 2020. Due to additional funding from the US government HALO Trust is expecting to increase capacity of both clearance and survey teams in 2021 with HALO expanding its area of operations.[128]

There was a reduction in clearance capacity from 2019 to 2020 for HI due to an indefinite suspension of operations in San Vicente del Caguan, Caqueta. Overall HI's capacity remained stable as during 2020 non-technical survey operations were initiated in Cauca. HI deployed six non-technical survey teams totalling 28 personnel across the departments of Meta and Cauca in 2020. In 2021, HI expected a small overall increase in capacity due to new task assignments and has introduced a new mechanical asset into its operations.[129] HI has begun using the GCS-100 machine for mechanical ground preparation, which is expected to be highly useful for supporting efficient operations in the Colombian context, thanks to its small size and weight (and thus easier mobility). HI had planned to implement the machine in 2020 but was unable to do so due to issues around security, COVID-19 and importation which resulted in HI "losing" accredited personnel, having to train again and only start operations in 2021.[130]

In 2020, CCCM was assigned tasks in nine new municipalities, with demining activities planned to begin in 2021. The operator's demining capacity is also planned to increase in 2021 by 320%. In order to increase efficiency, capacity has been reconfigured with most teams now operating as multi-task teams able to conduct both survey and clearance and four teams remaining as solely non-technical survey teams.[131]

In 2020, DRC began clearance activities for the first time; it also deployed two non-technical survey teams totalling six people. In 2021, DRC planned to expand and conduct survey and clearance in 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.[132] DRC is using drones to conduct marking during non-technical survey activities. In addition, DRC has developed information management software, which automatises reporting, mapping, and risk analysis. 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.[133]

Humanicemos DH, the demining organisation comprised of ex-fighters from the FARC-EP, was accredited in August 2017.[134] 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.[135] In November 2020, Humanicemos DH began survey and clearance operations in La Montanita, Caqueta and has been tasked with demining a second municipality in Caqueta in 2021. In 2021, they have deployed a total of around 100 personnel divided into four non-technical survey teams and two to three clearance teams.[136]

The OAS serves as the 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 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.[137] 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.[138] The impact of excessive oversight can often disrupt the continuity of operations, causing the shut-down of tasks for minor non-safety related issues.[139] 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.[140] There is a high turnover of leadership at the OAS with a new head of mission in post almost every year. As of writing, it had been without a head of mission since January 2021.[141]

At the request of Descontamina Colombia, FSD has been seeking to build capacity in the OAS, including by refocusing monitoring on QA and QC, rather than on minor administrative non-conformities.[142] 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.[143] The initial idea was that each operator would be assigned a confidence level and an operator with good confidence levels would be subject to less frequent visits from OAS, allowing them to focus on operators that need more support.[144] However, the OAS wanted the confidence levels to work on an individual basis rather then an organisational one and this has now been superseded by the introduction of performance indicators. According to FSD, in general, the OAS has been very resistant to external support and very little capacity building has been carried out.[145] For example, the FSD was tasked by the OACP with analysing the OAS data on non-conformities, but the OAS refused to surrender these data, despite numerous requests from the OACP[146].

DEMINER SAFETY

There were two attacks by FARC dissidents on demining teams from the BRDEH during September 2020 in the Valle del Cauca department. In the first, a truck was burnt, and another vehicle was stolen along with demining equipment. In the second, twenty soldiers were detained by armed dissidents and then later released in a rural area.[147]

In March 2020, in the municipality of San Vicente del Caguan, in Caqueta two HI staff members were attacked in their homes in the urban area of the municipality and a third staff member was also sought out, but was not at home; fortunately, there were no injuries. This follows on from threatening phone calls to HI personnel in 2019, which led to HI asking the national authority to be de-assigned from this task. In addition, security concerns have led to suspension or partial suspension of HI operations in the Caloto, Corinto, Cajibio, and Paez municipalities, in Cauca department, and in Vistahermosa, in Meta.[148]

In the departments of Cauca and Valle del Cauca, HALO Trust operations were affected by a number of security incidents and the decision was made to suspend operations in both departments in July 2020.[149]

CCCM has not been able to conduct operations in Vista Hermosa in the department of Meta since 2018 when one of their vehicles was held by non-state armed groups for two months. During 2020, CCCM held meetings with community members and the OACP and is planning to start working in the area again as soon as possible.[150]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of just over 1.28km² of mined area was released in 2020, of which 1.08km² was cleared, 0.12km² was reduced through technical survey, and 0.09km² was cancelled through non-technical survey.

SURVEY IN 2020

In 2020, 86,891m² was cancelled through non-technical survey (see Table 5), more than double the 33,644m² cancelled in 2019. According to operators, areas cancelled through non-technical survey are either cancelled during clearance but recorded through non-technical survey teams or are the values of the IMSMA events with the equivalent size of the area per cancelled event as defined by the national authority.[151]

A total of 115,371m² was reported as reduced through technical survey in 2020 (see Table 4), an 80% decrease from the 574,473m² reduced in 2019.[152] As in previous years, neither the HALO Trust nor HI reported reducing any mined areas through technical survey as they do not implement technical survey in the country.[153]

Table 5: Cancellation through non-technical survey in 2020[154]

Department	Operator	Area cancelled (m²)
Antioquia	N/R	1,823
Caldas	N/R	2,026
Huila	N/R	34,692
Meta	N/R	35,104
Putumayo	N/R	630
Tolima	N/R	12,320
Valle del Cauca	N/R	296
Total		**86,891**

N/R = Not reported

Table 6: Reduction through technical survey in 2020[155]

Department	Operator	Area reduced (m²)
Antioquia	N/R	18,027
Caldas	N/R	31,613
Caqueta	N/R	115
Huila	N/R	12,362
Santander	N/R	14,654
Tolima	N/R	21,123
Valle del Cauca	N/R	17,477
Total		**115,371**

CLEARANCE IN 2020

In 2020, a total of 1,078,529m² was reported as cleared along with the destruction of 144 anti-personnel mines (see Table 7). This represents a 36% increase from the 791,078m² cleared in 2019, when 268 anti-personnel mines were found and destroyed.

Table 7: Mine clearance in 2020[156]

Province	Operator	Areas cleared	Area cleared (m²)	AP mines destroyed	UXO Destroyed
Antioquia	N/K	36	184,017	21	3
Bolivar	N/K	5	8,428	0	0
Caldas	N/K	15	76,349	12	0
Caqueta	N/K	26	187,706	45	15
Huila	N/K	32	44,145	9	9
Meta	N/K	17	287,025	27	8
Nariño	N/K	6	17,062	1	1
Putumayo	N/K	7	57,935	17	4
Santander	N/K	10	61,837	3	0
Tolima	N/K	4	32,865	3	4
Valle del Cauca	N/K	23	121,160	6	3
Totals		**181**	**1,078,529**	**144**	**47**

AP = Anti-personnel

An additional 52 anti-personnel mines were found and destroyed during spot tasks in 2020: 19 by HI; 1 by DRC, and 32 by HALO.[157]

HI reported an overall decrease in the amount of area cleared and cancelled through survey from 2019 to 2020 due to a suspension of operations from March to June due to the COVID-19 pandemic; a suspension of operations in Vistahermosa, Meta department, due to a security incident from September to December; and an indefinite suspension of operations in San Vicente del Caguán, Caqueta due to lack of security.[158] DRC reported an overall increase in output in 2020 as it did not undertake any clearance in 2019.[159] HALO Trust reported a significant decrease in the overall land released in 2020 compared with the previous year. The reason was attributed to the operational stand-down caused by the COVID-19 pandemic.[160]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR COLOMBIA: 1 MARCH 2001

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2011

↓

FIRST EXTENDED DEADLINE (10-YEAR EXTENSION): 1 MARCH 2021

↓

SECOND EXTENDED DEADLINE (4-YEAR, 9-MONTHS): 31 DECEMBER 2025

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Table 8: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	1.08
2019	0.79
2018	0.96
2017	0.38
2016	0.29
Total	**3.50**

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 will have to overcome, some of which are outside of the control of the mine action programme (though some are of its own making).

Overall land release output fell from nearly 1.40km^2 in 2019 to just over 1.28km^2 in 2020, although clearance output increased by 62%.[161] Colombia was able to exceed the 1.02km^2 target for 2020 set out in its extension request despite the countrywide suspension of demining operations for three months due to the COVID-19 pandemic. Although Colombia has begun non-technical survey and has started reporting both suspected and confirmed hazardous areas, it is still difficult to assess whether it is feasible for Colombia to achieve completion of Article 5 during the extension period, first and foremost as it remains unclear how much contamination exists.

Based on the reported figures of 2.95km^2 of SHAs/CHAs identified through non-technical survey and an additional 4.78km^2 of projected contamination in areas yet to be surveyed, this would give a total of approximately 7.73km^2 of land to release from 2021 to 2025 in the areas that are accessible to operators. This would mean that Colombia would need to release on average 1.93km^2 per year for the next four years. This is a sizeable increase from the 1.54km^2 released in 2018, 1.40km^2 released in 2019, and 1.02km^2 released in 2020.

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 being cleared without any mines found and, according to findings from The HALO Trust, up to 90% of mines that are found are non-functioning. 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.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

In accordance with the new technical norms, Colombia has made it obligatory for an operator to be responsible for addressing any residual contamination in an assigned municipality for six months after handover. After this time, it will be the responsibility of the BRDEH and AEDIM, as Colombia's national demining capacity, to deal with any residual contamination. Colombia has a mechanism in place for communities to report any anti-personnel mine contamination that they encounter. This information is then analysed by the OACP before being passed onto the armed forces.[162]

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4 Article 7 Report (covering 2020), Form D.
5 Article 7 Report (covering 2020), Form D.
6 Ibid.
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8 Email from Richard Scott, Programme Manager, HALO Trust, 14 May 2021.
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11 Email from Oliver Ford, HALO Trust, 6 August 2020; Article 7 Report (covering 2019), Form D.
12 Ibid.
13 "Colombia's Peace Deal Promised a New Era. So Why Are These Rebels Rearming?", *The New York Times*, 17 May 2019, at: http://nyti.ms/2YRCuf1.
14 FARC-EP dissidents are defined as those fighters never joined the peace process in the first place, or who have left the process since the signing of the peace agreement, or groups of fighters who were not part of the FARC-EP previously but have since joined.
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35 Email from GICHD, 13 May 2020.
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42 Telephone interview with Pablo Parra and Gina Bernal, UNMAS, 14 July 2021.
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44 Ibid., p. 96.
45 Ibid., Annex 10 (exchange rate of 1USD = COP 3,430).
46 Article 7 Report (covering 2020), Form A.
47 Ibid., Form H.
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140 Email from Caterina Weller, DRC, 5 May 2021.

141 Telephone interview with Angela de Santis, FSD, 21 June 2021.

142 Interview with Carlos Afonso, FSD, Bogota, 16 August 2018.

143 Telephone interview with Angela de Santis, FSD, 21 June 2021.

144 Interviews with representatives from OAS, Bogota, 15 August 2018; and Esteban Rueda, NPA, Vista Hermosa, 9 August 2018; and email from Gabriel Vanegas Gómez, Descontamina Colombia, 9 October 2018.

145 Email from Angela de Santis, FSD, 15 July 2020.

146 Telephone interview with Angela de Santis, FSD, 21 June 2021.

147 El Tiempo, "Presuntos disidentes retienen grupo de Desminado Humanitario en Tuluá", 25 September 2020, at: https://bit.ly/3ekhRyT.

148 Telephone interview with Angela de Santis, FSD, 21 June 2021.

149 Email from Richard Scott, HALO Trust, 14 May 2021.

150 Email from Alejandro Perez, CCCM, 13 August 2021.

151 Emails from Rupert Leighton, NPA, 24 April 2020; and Arturo Bureo, HI, 13 May 2020.

152 Article 7 Report (covering 2019), Form D.

153 Emails from Arturo Bureo, HI, 7 May 2021; and Richard Scott, HALO Trust, 14 May 2021.

154 Article 7 Report (covering 2020), Form D.

155 Article 7 Report (covering 2020), Form D. DRC reported reducing 697m^2 in Caqueta.

156 Article 7 Report (covering 2020), Form D. This differs from the OACP – Descontamina Colombia information dashboard where clearance in 2020 was reported as 1,348,325m^2 with 163 anti-personnel mines found and destroyed.

157 Emails from Caterina Weller, DRC, 5 May 2021; Arturo Bureo, HI, 7 May 2021; and Richard Scott, HALO Trust, 14 May 2021.

158 Email from Arturo Bureo, HI, 7 May 2021.

159 Email from Caterina Weller, DRC, 5 May 2021.

160 Email from Richard Scott, HALO Trust, 14 May 2021.

161 This is based on the figures provided by Colombia in its Article 7 report (covering 2020 and 2019). In the OACP – Descontamina Colombia humanitarian demining dashboard available online clearance in 2020 was recorded as 1.35km^2 in 2020 and as 1.81km^2 in 2019 which is closer to the figures provided for overall land release in the Article 7 reports. See: https://bit.ly/3jXyG4t.

162 Article 7 Report (covering 2020), Form D.

CROATIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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 2020

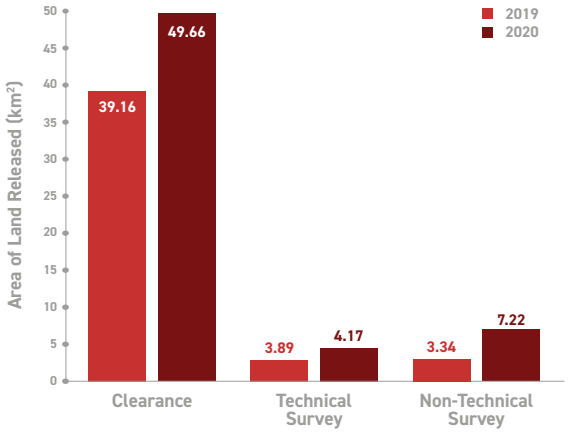
49.66KM²

AP MINES DESTROYED IN 2020

5,154

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 2020, Croatia cleared almost 50km² of mined area, an increase of more than 25% on the output in 2019, despite operations being halted for nearly two months between March and May due to the COVID-19 pandemic. The amount of mined area released through non-technical and technical survey in 2020 also represented increases on the previous year.

However, the total of 61km² of mined area released through survey and clearance in 2020 was still below the 70km² land release target in Croatia's revised work plan. In particular, non-technical survey output continued to fall short of annual targets. In addition, 0.42km² of annual mine clearance of military areas by the Ministry of Defence (MoD) in 2020 was well short of the 5km² annual MoD land release target, although it was not reported whether or not the MoD also released any mined area through survey.

RECOMMENDATIONS FOR ACTION

- **Civil Protection Directorate – CROMAC should increase its survey capacity in order to meet the targets outlined in its 2018 Article 5 deadline extension request.**
- **In addition to survey of suspected hazardous areas (SHAs), Civil Protection Directorate – 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 ensure sufficient capacity is in place and should significantly increase clearance to release mined areas on military land, in line with Croatia's revised work plan 2020–26. The MoD should also report whether it has released any mined area through survey.**
- **Civil Protection Directorate – 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, should be amended if necessary.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	6	Croatia considers its current baseline of anti-personnel mine contamination to be reasonably accurate, evidence-based, and complete. One third of remaining mined area is SHA, indicating the need for high-quality survey prior to clearance. Almost 99% of remaining mine contamination is on forested or mountainous land, 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.
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. The Civil Protection Directorate does not compile or disclose data regarding commercial demining companies. However, the proportion of women employed both at Civil Protection Directorate – CROMAC is low, following the incorporation of CROMAC into the MoI in 2019, during which a significant portion of woman (including in managerial positions) were transferred/promoted into different 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 APMBC meetings and in its Article 7 reports.
PLANNING AND TASKING (10% of overall score)	7	7	A "Mine Action Revised work plan 2020–26" has been adopted by the Deputy Prime Minister and Minister of the Interior. A new National Mine Action Strategy 2020–2026 had expected to be approved by the Croatian Parliament in the first half of 2021. 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 2020, hazardous areas which did not contain anti-personnel mines accounted for 13 of 79 projects, although CROMAC said that clearance where no explosive ordnance contamination was found accounted for only 3% of all demined land.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	7	Clearance output in 2020 was an increase of more than 25% on the previous year, and the output from non-technical and technical survey also increased. The annual land release total still fell short of the target in Croatia's revised work plan, which was the most ambitious work plan yet with a total target of 70.1km^2. The deviation from the work plan was most significant with respect to mined area under military control, with the MoD clearing less than 10% of the 2020 work plan output foreseen.
Average Score	**6.5**	**6.3**	**Overall Programme Performance: AVERAGE**

DEMINING 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-three commercial demining companies are accredited for mine and CMR clearance operations.
- The 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 areas[1] (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Croatia for further information on cluster munition remnants).

At the end of 2020, Croatia reported a total of more than 249km^2 of mined area remaining, excluding military areas. Of this 166km^2 was CHA, while mines were suspected to cover a further 82km^2 of SHA (see Table 1).[2] This represents an almost 20% decrease in estimated contamination compared to the 309.7km^2 of mined area, excluding military areas (189.98km^2 of CHA and 119.72km^2 of SHA) as at the end of 2019.[3] Croatia estimates that its hazardous areas, excluding the military zones, contain approximately 15,939 anti-personnel mines and 1,035 anti-vehicle mines.[4]

A further 30.14km^2 of confirmed mined area existed in areas under military control as at the end of 2020,[5] compared to 31km^2 as at the end of 2019.[6] This mined area, which is also contaminated with unexploded ordnance (UXO), is across military barracks, training sites, radar stations, and storage sites. The MoD Pioneer Company of the Engineering Regiment is responsible for clearing all military facilities.[7]

A total of nearly 49.66km^2 was released through clearance (including 0.42km^2 cleared at military sites) and nearly 9.7km^2 through survey in 2020.[8] In addition, survey in 2020 by the Civil Protection Directorate sector of CROMAC added 310,931m^2 of previously unrecorded mined areas to Croatia's information management database (33,266m^2 in Lika-Senj; 12,228m^2 in Požega-Slavonia; 22,152m^2 in Šibenik-Knin; and 243,285m^2 in Sisak-Moslavina).[9]

Eight of Croatia's twenty-one counties are still mine-affected. At the end of 2020, 98.75% of mine contamination was on forested land, 1.08% was on agricultural land, and 0.17% was on other areas (e.g. marshland).[10] 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.[11]

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.[12] However, the high ratio of SHAs to CHAs, and the fact that mined areas continue to be cleared without anti-personnel mine contamination being encountered, calls this into question.

Table 1: Anti-personnel mined area by county (at end 2020)*[13]

County	No. of municipal areas with hazardous areas	CHA (m^2)	SHA (m^2)	Total mined area (m^2)
Karlovac	6	25,360,027	16,882,943	42,242,970
Lika-Senj	9	68,280,990	25,648,686	93,929,676
Osijek-Baranja	7	13,349,344	4,250,139	17,599,483
Požega-Slavonia	1	8,691,420	3,914,416	12,605,836
Split-Dalmatia	2	15,860,094	3,348,229	19,208,323
Sisak-Moslavina	9	20,406,675	21,781,136	42,187,811
Šibenik-Knin	4	8,718,283	3,899,112	12,617,395
Zadar	6	6,092,128	2,937,994	9,030,122
Totals	**44**	**166,758,961**	**82,662,655**	**249,421,616**

*A further 30.14km^2 of mined area exists in areas under military control.[14]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In August 2018, the Croatian government decided that some 54 government agencies, including the Croatian Mine Action Centre (CROMAC) and the Government Office for Mine Action (GOMA), were to be integrated within existing State administration bodies. This was formally concluded through legislation enacted in December 2018 and which entered into force on 1 January 2019.[15] 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).[16] 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".[17]

Prior to 2019, both CROMAC (established in 1998 as the umbrella organisation for mine action coordination),[18] and the GOMA (created in 2012 as a government focal point for mine action),[19] had operated as independent entities.

A new law on mine action was adopted by the Croatian parliament on 21 October 2015.[20] 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.[21]

Regarding accreditation, the MoI now 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.[22]

In its 2018 Extension request, Croatia estimated that fulfilment of its Anti-Personnel Mine Ban Convention (APMBC) Article 5 obligations would cost a further €459 million in total.[23] Funding for the remainder of demining under the extension request is expected to come from, respectively, the national budget (52.3%); European Union (EU)/European structural and investment (ESI) funds (21.8%); EU/cross-border cooperation with Bosnia and Herzegovina (BiH) (15.3%); state budget of forest management positions (10.2%); and from private donations (0.4%).[24]

Funds from the EU have steadily increased over the last few years. In 2020, approximately €31.7 million was provided by the Croatian government for survey and clearance of anti-personnel mined areas, which represents just over 57% of total financing for survey and clearance in 2020.[25] The 2020 State contribution for demining was a 3.6% reduction on earmarked funds.[26]

Croatia does not have a resource mobilisation strategy in place for Article 5 implementation.[27] The Civil Protection Directorate reported in 2021 that an in-country platform for dialogue meets on a regular basis and consists of representatives from the MoI and the association of private companies in demining.[28]

GENDER AND DIVERSITY

Gender Equality Act (Official Gazette 82/08 and 69/17), which establishes national guidelines for gender equality, regulates against gender-based discrimination, and creates equal opportunities for men and women, including with regard to employment.[29]

According to the national authorities, women, men, boys and girls are all effectively consulted during survey and community liaison activities.[30] CROMAC gathers all relevant data during non-technical survey, in accordance with the SOPs.[31]

The Civil Protection Directorate does not compile or disclose data regarding commercial demining companies, which are privately owned.[32] Within the Civil Protection Directorate of the MoI, CROMAC employs 89 people, of whom 10 (some 12%) are women. As at April 2021, no women were employed in managerial or supervisory level positions in CROMAC, and only 2% of CROMAC field operations positions were held by women.[33] 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.[34]

INFORMATION MANAGEMENT AND REPORTING

For the purpose of 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.[35] There are ongoing efforts to improve the quality of mine-related data by CROMAC's survey personnel.[36]

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. As at July 2021, however, Croatia had yet to submit its Article 7 report covering 2020.

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.[37] The strategy, which was adopted by Parliament, included among its main goals the completion of mine clearance by 2019. This was not achieved.[38]

A "Mine Action Revised work plan 2020–26" has been adopted by the Deputy Prime Minister and Minister of the Interior. A new National Mine Action Strategy 2020–2026 was set to be approved by Parliament in the first half of 2021.[39] As at July 2021 it was still awaiting approval.[40]

In 2018, Croatia submitted and was granted a seven-year request to extend its APMBC Article 5 deadline from 1 March 2019 to 1 March 2026. In its 2018 Article 5 deadline extension request, Croatia stated it has 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.[41]

Based on approved funding, the Civil Protection Directorate – CROMAC drafts annual work plans, which are submitted to the responsible ministries and other State bodies for comment and approval.[42]

In its 2020 annual mine action plan, the Civil Protection Directorate – CROMAC planned to release 49.8km^2 through clearance, approximately 5km^2 through technical survey, and approximately 9km^2 through non-technical survey.[43] According to a revised work plan (see Table 6) the total land release target for 2020 was subsequently increased to 70.1km^2,[44] which Croatia fell well short of, releasing a total of 59.3km^2 of mined area in 2020.

In its 2021 annual work plan, the Civil Protection Directorate – CROMAC planned to release 42.4km^2 through clearance, 5km^2 through technical survey, and 6.8km^2 through non-technical survey. This excludes land release in mined areas under the authority of the MoD.[45] The Pioneer Company of the Engineering Regiment is responsible for clearance of all mine-affected military facilities. The MoD submits its demining plan for military facilities to the Civil Protection Directorate – CROMAC annually.[46]

According to its Croatia's Article 7 report submitted in August 2021 (covering 2020), Croatia's clearance priorities in 2020 were focused on environmental protection and agricultural production. Nearly 99% of the remaining hazardous area was forested land while 1% was agricultural land.[47]

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.[48] 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.[49] The law also eliminated the need for standing operating procedures (SOPs), as all aspects of mine action were defined in detail.[50] National mine action standards are also encompassed within it.[51]

In recent years, a significant number of CHAs were cleared in which were found to have no anti-personnel mine contamination, although the Civil Protection Directorate said many of these areas did, however, contain anti-vehicle mines and other UXO. Furthermore, other large, inflated CHAs were cleared with very few anti-personnel mines discovered. In 2020, hazardous areas which did not contain anti-personnel mines accounted for 13 of 79 projects, although CROMAC said clearance where no explosive ordnance contamination was found accounted for only 3% of all demined land.[52] This 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 the Civil Protection Directorate – CROMAC as "confirmed".

The Croatian Mine Action Centre's Centre for Testing, Development and Training (HCR-CTRO Ltd.) 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 will be used with the trained honeybee colonies: the passive and the active method that can be applied in suspected area reduction, or in internal and external quality control after completion of demining." The project started in 2017 and was extended to September 2021 due to the COVID-19 pandemic.[53]

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).[54]

OPERATORS AND OPERATIONAL TOOLS

Non-technical survey and technical survey in Croatia are conducted by the Civil Protection Directorate – CROMAC. In 2020, it had 30 non-technical personnel and 26 technical survey personnel.[55] This is an increase in survey capacity compared to the two non-technical survey personnel and twenty-two technical survey personnel in 2019.[56] Technical survey and non-technical survey personnel employed by CROMAC were not taken on by the MoI following CROMAC's integration within the Civil Protection Directorate at the start of 2019. Some of the survey personnel previously employed by CROMAC were retired or moved to other companies.[57] The Civil Protection Directorate did not expect any further changes to survey capacity in 2020.[58]

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.[59]

As at the end of 2020, 43 commercial companies were accredited to conduct mine and CMR clearance.[60] Non-governmental organisations (NGOs) are barred from competing for commercial tenders as CROMAC views their subsidy by other funds as unfair.[61] The Pioneer Company of the Engineering Regiment is responsible for clearing all military facilities.[62]

Table 2: Clearance capacity (at end 2020)[63]

Clearance capacity	Number	Comments
Deminers	424	Reduction from 534 deminers in 2019, due to various factors such as retirement and termination of contracts (mutually agreed and business-related).
Auxiliary workers (demining support staff)	82	Compared to 107 auxiliary workers in 2019.
Mine detection dogs	163	Increase on 108 MDDs in 2019.
Demining machines	43	An increase in one machine compared to 2019.

Clearance operations in Croatia are conducted manually as well as with mechanical assets and with the support of 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.[64]

A 2014 needs assessment by the United Nations Development Programme (UNDP) observed that in the preceding years the number of demining companies in Croatia had grown, but capacity overall had decreased.[65] A representative of the Croatian Employers' Association (CEA)'s Humanitarian Demining Association reported that the 2015 mine action law had resulted in more demining organisations in Croatia.[66] This rise is in part due to deminers leaving employment and starting new firms, with the 2015 Law requiring a minimum of only five deminers per company.[67] The current number of demining companies is disproportionate to the number of deminers, and according to a representative from CROMAC, it would be better to have half the number of companies, but with each one being properly managed.[68]

In 2014, CROMAC reported it had started issuing larger value tenders, to allow companies to reduce the cost of their operations, saying this had provided an incentive for companies to do better planning and to cooperate with each other.[69] A CROMAC representative claimed that although prices were lower, the larger tenders allowed continual work, resulted in fewer stoppages, and enabled companies to negotiate on better terms with hotels and services in their project areas.[70]

The 2014 UNDP needs assessment recommended that CROMAC consider longer-term contracting to maximise use of operational assets in Croatia for both technical survey and clearance.[71] However, operations are planned on a yearly basis, in accordance with the annual and three-year demining plans set by the Government.[72]

UNDP also noted that the current contracting of defined polygons is suitable for mine clearance but would not be conducive to effective technical survey, and called for a new procedure to be elaborated once the law is changed.[73] The Humanitarian Demining Association said it would be preferable if, where possible, technical survey had already been undertaken on project tasks prior to tendering them, so that commercial companies have as much information as possible to accurately plan for the tender.[74]

With the adoption of the new law, which enables use of technical survey, CROMAC planned to target demining on CHAs and to conduct technical survey on the remaining SHAs.[75] 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.[76] 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 2020

More than 61km^2 of mined area was released in 2020, of which more than 49.2km^2 was cleared by commercial demining companies, a further 0.4km^2 was cleared by the Croatian army on military sites, nearly 4.2km^2 was reduced by CROMAC through technical survey, and more than 7.2km^2 was cancelled through non-technical survey.[77]

Land release outputs in 2020 were all higher than the previous year when 39.16km^2 was cleared, 3.34km^2 cancelled through non-technical survey, and almost 3.89km^2 reduced through technical survey.[78] The increase in 2020 was because projects were finalised in late 2019, but accounted for in 2020, due to the administrative procedure of issuing a certificate of land release. In addition, all planned projects on rocky areas of Velebit mountain (some 16km^2) were completed ahead of schedule due to very favourable weather conditions.[79]

SURVEY IN 2020

CROMAC released a total of more than 11.39km^2 through survey in 2020, of which more than 7.22km^2 was cancelled through non-technical survey and almost 4.17km^2 was reduced through technical survey (see Tables 3 and 4).[80] This is an increase on the nearly 3.34km^2 cancelled through non-technical survey and almost 3.89km^2 reduced through technical survey in 2019.[81]

No data were available on the results of survey by the MoD.

In addition, survey in 2020 resulted in the addition of 0.31km^2 of previously unrecorded mined area to Croatia's estimate of contamination in its national information management database.[82]

Table 3: Cancellation through non-technical survey in 2020[83]

County	Operator	Area cancelled (m^2)
Karlovac	Civil Protection Directorate - CROMAC	826,563
Osijek-Baranja	Civil Protection Directorate - CROMAC	4,145,465
Požega-Slavonia	Civil Protection Directorate - CROMAC	43,335
Sisak-Moslavina	Civil Protection Directorate - CROMAC	1,299,548
Šibenik-Knin	Civil Protection Directorate - CROMAC	903,414
Zadar	Civil Protection Directorate - CROMAC	2,576
Total		**7,220,901**

Table 4: Reduction through technical survey in 2020[84]

County	Operator	Area reduced (m^2)
Karlovac	Civil Protection Directorate - CROMAC	426,029
Lika-Senj	Civil Protection Directorate - CROMAC	330,701
Osijek-Baranja	Civil Protection Directorate - CROMAC	607,994
Požega-Slavonia	Civil Protection Directorate - CROMAC	1,271,860
Sisak-Moslavina	Civil Protection Directorate - CROMAC	579,412
Šibenik-Knin	Civil Protection Directorate - CROMAC	135,185
Zadar	Civil Protection Directorate - CROMAC	818,041
Total		**4,169,222**

CLEARANCE IN 2020

In 2020, nearly 49.66km^2 of mined area was released through clearance (nearly 49.24km^2 by operators working under the direction of the Civil Protection Directorate – CROMAC (see Table 5) and a further 0.42km^2 by the Croatian army. During land release, a total of 5,154 anti-personnel mines were destroyed (4,883 by the Civil Protection Directorate – CROMAC; 70 by the MoD; and 201 by the MoI (as part of the "less arms, fewer tragedies" programme)); along with 527 anti-vehicle mines (493 by the Civil Protection Directorate – CROMAC and 34 by the MoI (as part of the "less arms, fewer tragedies" programme)).[85]

The 49.66m^2 of total mined area cleared in 2020 is an increase of more than 26% on 2019, when nearly 39.16km^2 of mined area was released through clearance (nearly 38.86km^2 by operators working under the direction of CROMAC and a further 0.3km^2 by the Croatian army).[86]

Table 5: Mine clearance in 2020[87]

County	Operator	Area cleared (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
Karlovac	Piton/Titan/Zeleni Kvadrat	710,046	27	2	6
Lika-Senj	Capsula Interna/ Cor/Diz-Eko/Dok-Ing razminiranje/Fas/Harpija/Istraživač /Heksogen/ Maper/Mina Plus/Orkan /Piton/Pipe/Rumital/ Titan/Zeleni Kvadrat	15,865,558	663	112	1,823
Osijek-Baranja	Heksogen/Cor/Detektor/Detektor /Piper/Zeleni Kvadrat/Titan/Dok-Ing Razminiranje/Titan	10,128,947	705	365	87
Požega-Slavonia	Istraživač	708,961	2	0	2
Sisak-Moslavina	Capsula Interna/Tornado Razminiranje/Manang/ Dok-Ing Razminiranje/Istraživač/Orkan/Piton Ltd./Piper/Titan/Zeleni Kvadrat	9,601,583	3,157	14	1,174
Šibenik-Knin	Dok-Ing Razminiranje/Titan/Zeleni Kvadrat	2,207,814	142	0	14
Zadar	Capsula Interna/Tornado Razminiranje/Manang/ Harpija/Dok-Ing Razminiranje/Istraživač/Piper/ Rumital/Titan/Zeleni Kvadrat	10,021,041	187	0	941
Totals	**79 demining projects**	**49,243,950**	**4,883**	**493**	**4,047**

AP = Anti-personnel AV = Anti-vehicle

Clearance output equates to approximately one anti-personnel mine destroyed for every 10,000 square metres of cleared area. Although this is better than the 16,000 square metre average of the previous year, it still indicates either very low density of contamination or poor targeting of clearance (or both). In 13 of 79 demining projects, totalling an area of 4.19km^2, no anti-personnel mines were found, though 10 anti-vehicle mines and 231 items of UXO were found and destroyed.[88]

In addition, the Pioneer company of the Engineering Regiment of the Croatian army cleared 415,756m^2 of military facilities in 2020, during which 70 anti-personnel mines and 184 items of UXO were found and destroyed.[89] This is an increase on the 298,880m^2 of military facilities cleared in 2019.[90] As part of explosive ordnance disposal (EOD) spot tasks and the continued "less arms, fewer tragedies" programme, the Croatian Police also collected 201 anti-personnel mines and 34 anti-vehicle mines, along with items of UXO and abandoned explosive ordnance, which were subsequently transported to Croatian military facilities and destroyed.[91]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR CROATIA: 1 MARCH 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

↓

FIRST EXTENDED DEADLINE (10-YEAR EXTENSION): 1 MARCH 2019

↓

SECOND EXTENDED DEADLINE (7-YEAR EXTENSION): 1 MARCH 2026

ON TRACK TO MEET ARTICLE 5 DEADLINE: UNCLEAR
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC (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 falling way behind schedule.

Croatia's 2018 request for a further seven-year extension to its Article 5 deadline was submitted on "the basis that this is a realistic but not unambitious amount of time given the extent of the remaining problem and the human, material and financial resources available or expected, and the demining and survey capacities currently available."[92] All relevant stakeholders in the Croatian mine action system are reported to have been involved in the analysis conducted as part of extension request process, and the request has also been "verified by the Croatian Government, which adopted the text of the 2nd Request thus giving it much needed political weight."[93]

While Croatia has requested an extended deadline of 1 March 2026, it foresees that survey and clearance operations will be completed by the end of 2025,[94] leaving only administrative/paperwork issues to be settled in the beginning of 2026.[95]

In 2019, Croatia prepared an updated work plan for release of the 341km^2 of mined area remaining as at the end of 2019 (309.7km^2 under the Civil Protection Directorate – CROMAC and 31.4km^2 under the MoD's jurisdiction). In its revised work plan, Croatia planned to release 70.1km^2 in 2020; 58.6km^2 in 2021; 61.1km^2 in 2022; 151.6km^2 in 2023; 63.1km^2 in 2024; and 18.8km^2 in 2025 (see Table 6).[96] The vision of the plan remains to achieve fulfilment of Article 5 by 1 March 2026, and it envisages accelerated release of military sites.[97]

Table 6: Planned land release output in km^2 (2020–26)[98]

	Total	2020	2021	2022	2023	2024	2025	2026
Clearance	210.4	51.1	39.1	37.1	38.3	35.0	9.8	0
Technical Survey	48.0	5.0	7.6	8.9	11.1	10.4	5.0	0
Non-Technical Survey	51.3	9.0	6.2	9.2	14.3	12.6	0.0	0
Subtotals	**309.7**	**65.1**	**52.9**	**55.2**	**63.7**	**58.0**	**14.8**	**0**
Croatian Army (MoD area)	31.4	5	5.4	6.0	6.0	5.0	4.0	0
Sum totals	**341.1**	**70.1**	**58.3**	**61.2**	**69.7**	**63**	**18.8**	**0**

Considering that most of the remaining mined area is in more challenging terrain, which will significantly reduce the potential to use demining machinery, the 341km^2 of land release forecast by the end of 2025 is very ambitious, at the least without increased capacity or improved efficiency.

Demining of military facilities/MoD area is conducted by the Pioneer company of the Engineering Regiment, according to an MoD plan.[99] The 4km² to 6km² per year planned for in Croatia's revised work plan 2020–26, is substantially more than what the armed forces have cleared in recent years, and in 2018, 2019, and 2020 the MoD cleared less than 0.5km² per annum.

Croatia has claimed that it is still on track to meet its Article 5 mine clearance deadline of 1 March 2026.[100] However, Croatia did not reach its planned survey output in 2020 calling into question whether it has sufficient (and sufficiently capable) survey capacity to meet its annual targets. Furthermore, the MoD only cleared 10% of its annual land release target for 2020, although it is not known if the MoD released any mined area through survey.

The remaining areas to be released are mainly forested (98.75%), therefore there will be a significant reduction in the use of demining machinery, especially medium and heavy machines.[101] 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.[102]

A total of nearly 207km² of mined area in Croatia has been cleared over the last five years (see Table 7).

Table 7: Five-year summary of AP mine clearance

Year	Area cleared (km²)
2020	49.66
2019	39.16
2018	49.01
2017	30.38
2016	38.71
Total	**206.92**

COVID-19 impacted clearance and survey operations in Croatia in 2020, with the complete shutdown of activities during between 23 March and 11 May.[103]

In order to ensure Croatia meets its Article 5 obligation by 1 March 2026, the Civil Protection Directorate – CROMAC will need to significantly increase its capacity and implementation of survey operations 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 RESIDUAL RISK AFTER COMPLETION

The Civil Protection Directorate continued research cooperation and discussions with the Geneva Centre for Humanitarian Demining (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.[104]

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 that this will elevate the importance of the issue within the MoI.[105] The integration also means that the challenge of residual risk will be handled within the responsibilities of the MoI – Police Directorate EOD teams and the Civil Protection Directorate – CROMAC.[106] Activities which must be conducted upon discovery of residual contamination are predefined by the Act on Mine Action.[107]

1 Statement of Croatia on Clearance, CCM Second Review Conference (Part 1, virtual meeting), 25–27 November 2020.

2 Email from Slavenka Ivšić, Head of Unit, Civil Protection Directorate, Ministry of the Interior, 30 April 2021.

3 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020; and Article 7 Report (covering 2019), Form 4.1. In its Revised work plan 2020–26, which was expected to be adopted and which Croatia planned to present at the 18th Meeting of States Parties in November 2020, the total CHA as at end of 2019 had increased to 210.4km² and the total of SHA had decreased to 99.3km².

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

5 Email from Ivana Odalj, Civil Protection Directorate, 16 August 2021.

6 Article 7 Report (covering 2019), Form 4.2.

7 2018 Article 5 deadline Extension Request, p. 25.

8 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

9 Ibid.

10 Ibid.

11 Interview with Nataša Mateković, CROMAC, Sisak, 18 May 2017.

12 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

13 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

14 Email from Ivana Odalj, Civil Protection Directorate, 16 August 2021.

15 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).

16 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.

17 Article 7 Report (covering 2019), Form 4.1.

18 CROMAC, "National Mine Action Strategy of Croatia 2009–2019", Zagreb, June 2009, p. 2.

19 Interviews with Dijana Pleština, Director, GOMA, in Geneva, 23 May 2012 and 10 April 2014; and email from Miljenko Vahtarić, CROMAC, 4 July 2013.

20 OG No. 110/15; and Article 7 Report (covering 2017), Form A.

21 Interviews with Neven Karas, CROMAC; and Tomislav Ban, Assistant Director and Head of Sector for Operational Planning and Programming, CROMAC, Sisak, 18 May 2017.

22 Email from Miljenko Vahtarić, CROMAC, 24 August 2016.

23 2018 Article 5 deadline Extension Request, p. 44.

24 Ibid., p. 45.

25 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021; and Article 7 Report (covering 2020), Form C.

26 Statement of Croatia on Clearing Mined Areas, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

27 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020.

28 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

29 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.

30 Ibid.

31 Email from Ivana Odalj, Civil Protection Directorate, 16 August 2021.

32 Ibid.

33 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

34 Email from Ivana Odalj, Civil Protection Directorate, 16 August 2021.

35 CROMAC website, "CROMAC's Mine Information System", accessed 26 June 2018.

36 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

37 2018 APMBC Article 5 deadline Extension Request, p. 25.

38 Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (covering 2015), Form B.

39 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

40 Email from Ivana Odalj, Civil Protection Directorate, 16 August 2021.

41 2018 Article 5 deadline Extension Request, pp. 8 and 11.

42 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

43 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

44 Article 7 Report (covering 2019), Form 4.2.

45 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

46 2018 Article 5 deadline Extension Request, p. 25; and email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

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

48 National Gazette No. 110/15; and CCM Article 7 Report (covering 2017), Form A.

49 CCM Article 7 Report (covering 2017), Form A; and emails from Miljenko Vahtarić, CROMAC, 13 and 18 May 2016.

50 Email from Miljenko Vahtarić, CROMAC, 13 May 2016; and Article 7 Report (covering 2015), Form A.

51 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.

52 Email from Ivana Odalj, Civil Protection Directorate, 16 August 2021.

53 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

54 Ibid.

55 Ibid.

56 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020.

57 Ibid.

58 Ibid.

59 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.

60 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

61 Interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014.

62 2018 Article 5 deadline Extension Request, p. 25; and email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

63 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

64 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

65 UNDP, "Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia", 2014, p. 16.

66 Interview with a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.

67 Interviews with Hrvoje Debač, GOMA, 17 May 2017, Zagreb; and Tomislav Ban, CROMAC, Sisak, 18 May 2017.

68 Interview with Tomislav Ban, CROMAC, Sisak, 18 May 2017.

69 Interview with Miljenko Vahtarić, CROMAC, in Zagreb, 16 March 2015.

70 Ibid.

71 UNDP, "Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia", 2014, p. 4.

72 Interview with Hrvoje Debač, GOMA, 17 May 2017, Zagreb.

73 UNDP, "Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia", 2014, p. 4.

74 Interview with a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.

75 Email from Miljenko Vahtarić, CROMAC, 21 October 2016.

76 2018 Article 5 deadline Extension Request, pp. 43, 44, and 45; and Additional information submitted 21 June 2018, p. 1.

77 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021; and Article 7 Report (covering 2020), Form C.

78 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020.

79 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

80 Ibid; and Article 7 Report (covering 2020), Form C.

81 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020.

82 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

83 Ibid.

84 Ibid.

85 Ibid.

86 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020; and Article 7 Report (covering 2019), Form 4.1.

87 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

88 Ibid.

89 Ibid.

90 Email from Slavenka Ivšić, Civil Protection Directorate, 8 April 2020; and Article 7 Report (covering 2019), Form 4.1.

91 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

92 2018 Article 5 deadline Extension Request, p. 8.

93 2018 Article 5 deadline Extension Request, Additional information submitted 21 June 2018, p. 1.

94 Ibid; and email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

95 2018 Article 5 deadline Extension Request, Additional information submitted 21 June 2018, p. 1.

96 Article 7 Report (covering 2019), Form 4.1; and Revised work plan 2020–26.

97 Croatia, "Submission of information for the Convention's website", Intersessional Meetings, 30 June–2 July 2020.

98 Revised work plan 2020–26, p. 9.

99 2018 Article 5 deadline Extension Request, p. 43.

100 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

101 Ibid.; and 2018 Article 5 deadline Extension Request, p. 43.

102 2018 Article 5 deadline Extension Request, p. 45; and email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

103 Email from Slavenka Ivšić, Civil Protection Directorate, 30 April 2021.

104 GICHD, "National capacities and residual contamination – Croatia", August 2019, at: http://bit.ly/2EwKcTt.

105 Emails from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019 and 8 April 2020.

106 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.

107 Statement of Croatia on Clearance, CCM Second Review Conference (Part 1, virtual meeting), 25–27 November 2020.

CYPRUS

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 JULY 2022
THREE-YEAR EXTENSION REQUESTED TO 1 JULY 2025

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: LIGHT

MINE ACTION REVIEW ESTIMATE

1 KM²

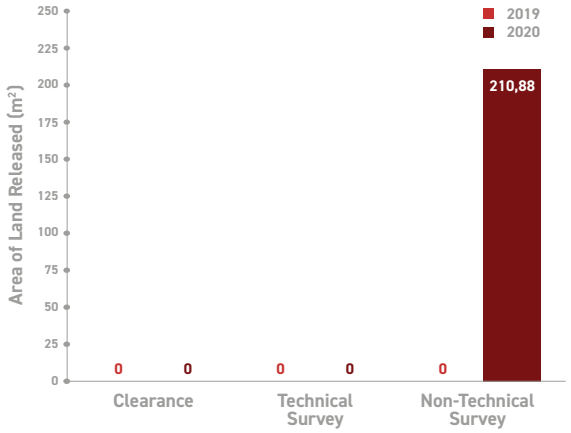
AP MINE CLEARANCE IN 2020

0 M²

AP MINES DESTROYED IN 2020

0

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Cyprus requested a further three-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline in February 2021. The United Nations upgraded its Information Management System for Mine Action (IMSMA) database to IMSMA New Generation.

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 implement a work plan to complete the demining of Cyprus.[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)

UNDERSTANDING OF AP MINE CONTAMINATION

The extent of anti-personnel mine contamination in Cyprus is unclear. The Article 7 Report submitted by Cyprus in June 2021 stated that 21 anti-personnel minefields were laid by Turkish forces, including one in the buffer zone, that "are known not yet to be cleared". Cyprus said it did not know the size of these mined areas or if they contained mines other than anti-personnel mines.[2] The report repeated details provided by the Republic of Cyprus in its first request for an Article 5 deadline extension submitted in April 2012.[3]

Contamination data in UNFICYP's mine action database, cited by the UN Mine Action Service (UNMAS), differs significantly from that provided by Cyprus. It shows that Cyprus had 29 mined areas covering a total of 1.5km^2 at the end of 2020, a level unchanged from the previous year, but that contamination consists mostly of anti-vehicle mines (see Table 1). Mined areas included only one confirmed hazardous area (CHA) and five suspected hazardous areas (SHAs) thought to contain a mixture of anti-personnel and anti-vehicle mines. It also reported 16 CHAs and six SHAs containing only anti-vehicle mines and one other CHA where the mine types were unknown.[4]

Table 1: Mined area (at December 2020)[5]

Location	CHAs	Contamination	Area (m^2)	SHAs	Type of 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**

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]

TERRITORY CONTROLLED BY THE REPUBLIC OF CYPRUS

Cyprus' Article 7 report for 2018 stated that no anti-personnel mines remained in the minefields laid by the National Guard that are in territory under its effective control.[7] In total, between becoming a State Party on 1 July 2003 and its original APMBC Article 5 deadline of 1 July 2013, Cyprus released all 20 mined areas under its effective control.[8]

BUFFER ZONE

Four mined areas remained in the Buffer Zone at the end of 2020, three of which belong to the National Guard and contain only anti-vehicle mines. The fourth belongs to Turkish Forces and the mine type is unknown.[9] The Government of Cyprus considers the three minefields with anti-vehicle mines to be under its control and not within the buffer zone.[10]

TURKISH CYPRIOT-CONTROLLED TERRITORY IN NORTHERN CYPRUS

The extent of mine contamination in areas controlled by Turkish Forces is not known. Cyprus requested an extension to its Article 5 deadline in 2021 on the grounds that certain parts of its territory that were outside its effective control contained mined areas "in which anti-personnel mines have been or are suspected to be emplaced."[11] Cyprus claimed in its Article 7 report (for 2018) that at least 20 minefields laid and maintained in the occupied areas by Turkish Forces are yet to be cleared of anti-personnel mines, of which one is situated within the buffer zone.[12] Cyprus' latest Article 7 report (covering 2020) did not estimate the number of mined areas and said their size and the mine types they contained was not known but that they were "overwhelmingly" located adjacent to the buffer zone.[13]

In addition, there is a minefield 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.[14] In 2017, a small area of the Mammari minefield was cleared by a Croatian commercial operator contracted by the Turkish Armed Forces.[15]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

UN-supported mine action operations in Cyprus are coordinated by UNMAS on behalf of UNFICYP.[16] In July 2016, UNMAS became an integral component of UNFICYP, providing expertise in mine action planning and coordination, quality assurance (QA) oversight, and management of mine action information.[17] 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 call-out tasks.[18]

INFORMATION MANAGEMENT AND REPORTING

UNFICYP uses the IMSMA database and in 2020 upgraded it from Version 6 to New Generation.[19]

In 2017, a review and reconciliation of all electronic and hardcopy minefield database documentation 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 950,000m^2) from the database.[20]

Cyprus has submitted annual Article 7 reports since acceding to the APMBC in July 2003. 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.

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 the Turkish Republic of Northern Cyprus (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".[21]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

All UN-supported mine action operations in Cyprus are said to be conducted in accordance with the International Mine Action Standards (IMAS).[22] 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.[23]

OPERATORS

UNMAS conducts non-technical and technical survey in cooperation with representatives of the National Guard and Turkish Cypriot Security Force.[24] No clearance has been conducted since 2017 when the Turkish Armed Forces contracted DOK-ING to conduct clearance, and MAG to conduct QA of demining in the Mammari minefield.[25]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

No mine survey or clearance was reported in Cyprus in 2020.[26]

The last land release occurred in 2019 when UNFICYP announced release of 18 SHAs covering 210,882m^2 under confidence-building measures agreed in February 2019.[27] 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.[28]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR CYPRUS: 1 JULY 2003

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 JULY 2013

↓

FIRST EXTENDED DEADLINE (3-YEAR EXTENSION): 1 JULY 2016

↓

SECOND EXTENDED DEADLINE (3-YEAR EXTENSION): 1 JULY 2019

↓

THIRD EXTENDED DEADLINE (3-YEAR EXTENSION): 1 JULY 2022

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO, EXTENSION REQUESTED TO 1 JULY 2025
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

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 2022.

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.[29] Cyprus has provided the same justification for all subsequent extension requests. The fourth request, submitted in February 2021, seeks an extension of three years until 1 July 2025.[30]

Turkey received an eight-year extension of its Article 5 clearance deadline until 1 March 2022 but did not request additional time for clearance of the areas it controls in northern Cyprus.[31]

The UN Security Council observed with regret in January 2019 "that the sides are withholding access to the remaining minefields in the buffer zone, and that demining in Cyprus must continue." It called on both sides to allow access to deminers and to facilitate the removal of the remaining mines within the buffer zone. Most recently in January 2021, the Council urged both sides in Cyprus to agree upon and implement a plan of work to achieve a mine-free Cyprus.[32]

1 UN Security Council Resolution 2561 (2021), unanimously adopted on 29 January 2021, operative para. 13.

2 Article 7 Report (for 2020), Form C.

3 Article 5 Extension Request, Executive Summary, APLC/MSP.12/2012/WP.5, 4 October 2012, para. 16.

4 Email from Mark Connelly, Chief of Operations, UNMAS, 28 May 2021.

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 Article 7 Report (for 2018), Form C.

8 APMBC Committee on Article 5 Implementation, "Observations on implementation of Article 5 by Cyprus", 23 June 2015; and Article 7 Report (for 2013), Form G.

9 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. Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/676, 6 July 2018, para. 44.

10 Interview with Demitris Samuel, Deputy Permanent Representative, Cyprus Permanent Mission to the UN in Geneva, Geneva, 19 May 2016.

11 Cyprus Article 5 deadline Extension Request, 9 February 2021.

12 Article 7 Report (for 2018), Form C.

13 Article 7 Report (for 2020), Form C.

14 Ibid.; and email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.

15 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.

16 Ibid.

17 UNMAS, "Cyprus" webpage, accessed 27 July 2017, at: http://bit.ly/2GtTXje.

18 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/25, 9 January 2018, para. 12.

19 Email from Mark Connelly, UNMAS, 16 June 2021.

20 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/25, 9 January 2018, para. 12.

21 Security Council Press Statement on Cyprus, 27 February 2019, SC/13722, at: http://bit.ly/2JKyYus.

22 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.

23 Ibid.

24 Email from Mark Connelly, UNMAS, 26 July 2019.

25 Ibid.

26 Article 7 Report (covering 2020), Forms C and F; email from Mark Connelly, UNMAS, 28 May 2021.

27 UNFICYP, "18 Suspected Hazardous Areas declared mine free", press release, 9 December 2019.

28 Emails from Mark Connelly, UNMAS, 26 June and 3 July 2020.

29 2012 Article 5 deadline Extension Request.

30 2021 Article 5 deadline Extension Request, submitted 9 February 2021.

31 Turkey's Article 5 deadline Extension Request, 29 March 2013. On the issue of Turkish jurisdiction, see, e.g., European Court of Human Rights, *Güzelyurtlu and others* v. *Cyprus and Turkey*, Judgment (Grand Chamber), 29 January 2019.

32 UN Security Council Resolution 2453 (2019), operative para. 17; and Resolution 2561 (2021), operative para. 13.

DEMOCRATIC REPUBLIC OF CONGO

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 JULY 2022
THREE-AND-A-HALF YEAR EXTENSION REQUESTED TO 31 DECEMBER 2025

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: LIGHT

NATIONAL AUTHORITY ESTIMATE

0.1 KM²

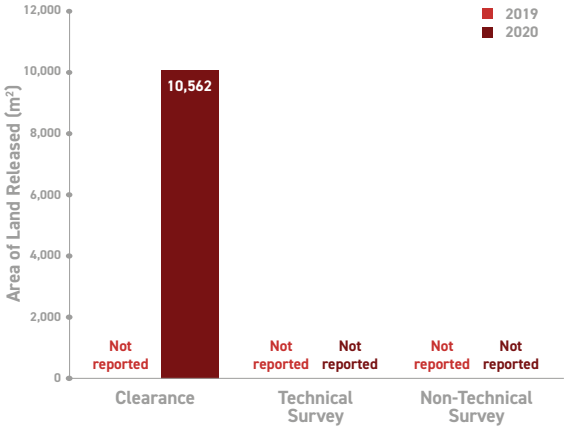
AP MINE CLEARANCE IN 2020

10,562M²

AP MINES DESTROYED IN 2020

NOT REPORTED

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

The Democratic Republic of Congo (DRC) requested an 18-month extension to its Article 5 deadline in 2020, which it was granted, but then in July 2021 it requested a further extension, this time for 42 additional months, which would take it to the end of 2025. Survey in 2019 and early 2020 cancelled many suspected hazards that proved to have no mines, leading to a much reduced and more realistic estimate of remaining mine contamination. Between August 2020 and July 2021, the DRC said it released 13,039m² through a mixture of area reduction and clearance. It has approximately 100,000m² to release.

RECOMMENDATIONS FOR ACTION

- **The Centre Congolais de Lutte Antimines (CCLAM) should provide, at the least, prompt Article 7 transparency reports that detail the scope and outcomes of survey and clearance.**
- **CCLAM should provide regular updates on resource mobilisation activities and their results.**
- **CCLAM should provide annual work plans detailing priorities and tasks to be addressed.**
- **CCLAM should specify what arrangements it is making for the long-delayed survey of Aru and Dungu territories.**
- **The DRC should clarify what demining assets and human resources are available from national implementing partners, including the police and military engineers.**
- **The DRC should detail its plans for sustainable capacity to tackle previously unidentified hazards after completion.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	6	Survey by DanChurchAid (DCA) and Norwegian People's Aid (NPA) in 2019 and early 2020 sharply reduced the national contamination estimate, previously inflated by inclusion of areas affected by unexploded ordnance, but survey still needs to be conducted in Aru and Dungu.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	6	The Congolese Mine Action Centre 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 DRC's latest Article 5 extension request says it will encourage operators to employ up to 30% women in operations teams and at least 50% of the risk education teams. CCLAM has recognised the significance of gender in mine action by including a dedicated section 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 systematically participate in mine action planning.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	3	3	The DRC has been inconsistent in submitting Article 7 reports. As of writing, the last report was submitted in April 2019 so the DRC has yet to provide comprehensive data on mine action outcomes for 2019 or 2020. Until 2020, CCLAM received support from NPA and UNMAS but in 2020 NPA closed its programme and CCLAM did not request support from UNMAS. Operators have previously said that the quality of data from the database was poor and that they were deployed to survey and clear areas that did not contain mines.
PLANNING AND TASKING (10% of overall score)	4	4	The July 2021 extension request includes a calendar for operations which provides monthly targets for clearance but implementation is dependant on funding from international donors. The request allows a year for survey and clearance in Aru and Dungu, but does 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	5	The DRC has not reported details of survey and clearance results in 2020. Its estimate of contamination has dropped from 49 hazardous areas in 11 provinces covering 469,338m^2 reported in November 2019 to 33 hazardous areas in 9 provinces affecting 117,031m^2 but the reduction is almost entirely a result of cancellation. Between August 2020 and July 2021 the DRC reported clearing 10,562m^2 in Maniema province.
Average Score	**4.7**	**5.1**	**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)
- The Development Initiative (TDI)

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

The DRC reported in July 2021 that it had 33 mined areas covering only 117,031m^2: 29 confirmed hazardous areas (CHAs) covering 81,614m^2 and 4 suspected hazardous areas (SHAs) covering 35,417m^2 (see Table 1). Contamination consists of mainly small hazards spread across nine provinces, but four of these provinces—Ituri, Maniema, North Kivu, and Tshopo—account for roughly 90% of the identified contamination.[1]

The estimated area, set out in DRC's latest request for an extension to its Article 5 deadline, is almost unchanged from the amount DRC reported to States Parties to the Anti-Personnel Mine Ban Convention (APMBC) a year earlier.[2] The only changes recorded were a fractional increase in the size of the area in Ituri and a reduction of 11,811m^2 in the contamination in Maniema province.[3] DRC also plans to conduct survey in Aru district of Ituri province and Dungu in Haut-Uele province following a preliminary assessment in 2013. The areas were not previously surveyed due to insecurity but in 2019 DRC indicated only that lack of financing was now holding back survey.[4]

DRC 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, the United Nations Mine Action Service (UNMAS) reported[5] that DRC still had 54 CHAs and SHAs covering a total of 851,228m^2 but subsequent resurvey found that a number of areas were contaminated by the DRC's more prevalent problem of unexploded ordnance (UXO) and contributed to a sharp fall in the estimate of contamination.

Table 1: Anti-personnel mine contamination (at July 2021)[6]

Province	Hazardous areas	Area (m^2)
Ituri	4	6,100
Kasai	1	700
Maniema	2	4,752
North Kivu	9	12,760
South Kivu	2	851
North Ubangi	4	35,417
Tanganyika	4	6,943
Tshopo	6	48,188
Tshuapa	1	1,320
Totals	**33**	**117,031**

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The mine action sector is overseen by the 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.[7]

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.[8] It is responsible for setting strategy, accrediting operators, information management, budgeting, and resource mobilisation. Law 11/007 of 9 July 2011 underpins the national mine action programme.[9] CCLAM took over from UNMAS as the national focal point for demining in early 2016 overseeing accreditation, issuing task orders, conducting QA/QC and managing the national database but lack of capacity remained a concern for operators.[10]

The Congolese government has provided funding for CCLAM's operating expenses but has not funded operations. In 2018, that support amounted to US$530,000,[11] but the Article 5 deadline extension request submitted in 2021 indicated this would fall to US$272,271, though CCLAM indicated it would argue for government support for operations.[12]

UNMAS started working in DRC 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 though it has continued to provide financial support; in 2020 and 2021, UNMAS was funded exclusively by MONUSCO.[13]

UNMAS supported mine action in DRC in 2020 operating with 24 staff, including 11 national and 13 international staff working from offices in Beni, Bukavu, and Goma. In 2021, it increased the number of international staff to sixteen, including six provided "in kind" by Switzerland, and added one more national staff member. It planned to fill three additional positions in 2021.[14] UNMAS contracted TDI for survey and battle area clearance in 2020 and funded national operator AFRILAM conducting explosive ordnance disposal (EOD) in five provinces. UNMAS provided technical advice to support national authorities preparing the Article 5 deadline extension request submitted in July 2021 and participated in a meeting convened by the APMBC Implementation Support Unit in November 2020 on what was needed for DRC to fulfil its Article 5 obligations.[15]

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.[16]

CCLAM reported in 2019 that approximately 30% of operational staff in survey and clearance teams were female but only around 7% of managerial or supervisory positions were held by women, arguing that local customs about the employment roles appropriate for women were an obstacle to hiring female staff. [17] DRC'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 50% of the members of risk education teams. It said risk education task orders would focus on increasing the participation of women in outreach sessions.[18]

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.[19]

As of December 2020, 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.[20]

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. 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.[21] Continuing issues include 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.

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.[22] Norwegian People's Aid (NPA) also previously provided refresher training for CCLAM staff in use of IMSMA and the associated Geographic Information System (GIS).[23] In 2020, CCLAM did not request IM support from UNMAS and a request submitted to the Geneva International Centre for Humanitarian Demining (GICHD) reportedly was not satisfied due to the GICHD's lack of human capacity and the onset of the COVID-19 pandemic.[24]

DRC has submitted three Article 7 transparency reports in the past the seven years. The last, submitted in April 2019, provided information on the progress of operations in the first three months of that year and DRC has not reported operating results for the whole of 2019 or for 2020.[25]

PLANNING AND TASKING

The National Mine Action Strategy 2018–19, prepared with support from UNMAS and the GICHD, focused on seeking to fulfil the DRC's Anti-Personnel Mine Ban Convention's Article 5 obligations by 2020, one year ahead of its extended 2021 deadline.[26] 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.[27] None of these goals was met.

The national strategy has been superseded by two requests for an extension to its Article 5 deadline submitted in August 2020 and July 2021. The second request sets out monthly clearance targets which would provide for tackling a total of 4,370.8m^2 in 2022, 59,644.13m^2 in 2023, 37,868.8m^2 in 2024 and 19,482.77m^2 in 2025. This makes for a total of 121,363.5m^2, which exceeds the 117,030.7m^2 that the request has identified as remaining contamination. The request also allows a year for survey of Aru and Dungu districts but does not say when it expects to conduct these or undertake whatever clearance is required. [28]

Tasking continues to be challenged by the remote location of many hazardous areas and database weaknesses, including misidentification of explosive remnants of war (ERW) as mine contamination and the addition of hazards to the database without robust evidence of the presence of explosive ordnance. Instead of prioritising tasks, NPA adopted a province-by-province approach as a more efficient way to deal with the logistical challenges and costs of tackling tasks separated by big distances.[29]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The DRC has 24 national standards developed with support from the GICHD[30] and the national strategy for 2018–19 called for revision of the standards and awareness raising of their content through training.[31] 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.[32]

OPERATORS AND OPERATIONAL TOOLS

DanChurchAid and TDI were the only international organisations active in survey and clearance for the whole of 2020. NPA had three teams conducting non-technical survey, manual mine clearance, and EOD spot tasks in 2019[33] but it ceased operations in February 2020 and closed the programme at the end of March 2020.[34]

TDI continued operating under contract to UNMAS in 2020, working with three multi-task teams (MTT) from January to June, then reduced to one MTT from July to November. It conducted survey and battle area clearance in Kalemie district of Tanganyika Province. It also conducted EOD as civilian protection tasks or to support the UN peacekeeping operation, MONUSCO, in Ituri, North Kivu, South Kivu, and Tanganyika provinces.[35]

UNMAS also contracted the national NGO, Afrique pour la Lutte Antimines (AFRILAM), to conduct EOD in Haut Katanga, Ituri, North Kivu, South Kivu, and Tanganyika. In 2020, it operated with two MTTs and in 2021 was scheduled to add a third, with the three teams providing the only EOD capacity under contract to UNMAS.[36]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

DRC has not published details of land released for the whole year 2019 or for 2020. Between the submission of its third Article 5 deadline extension request in August 2020 and the fourth request submitted in July 2021, the DRC said it released part of one hazardous area in Maniema province amounting to 13,039m^2 through a mixture of area reduction and clearance.[37]

SURVEY IN 2020

CCLAM said NPA and DCA had reassessed 12 tasks between December 2019 and February 2020, resulting in cancellation of three tasks, but gave no further details.[38]

UNMAS reported that TDI conducted two surveys in Kalemie, Tanganyika province, in 2020 but that these did not result in release of any land.[39]

Of the 13,039m^2 released in Maniema province between August 2020 and July 2021, the DRC's 2021 deadline extension request said 2,477m^2 was reduced, presumably through technical survey.[40]

CLEARANCE IN 2020

DRC reported clearing 10,562m^2 of the Maniema province task tackled in 2020–21. DRC did not provide details of items cleared during the operation.[41]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR THE DR CONGO: 1 NOVEMBER 2002

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 NOVEMBER 2012

↓

FIRST EXTENSION REQUEST DEADLINE (3-YEAR EXTENSION): 1 JANUARY 2015

↓

SECOND EXTENSION REQUEST DEADLINE (6-YEARS): 1 JANUARY 2021

↓

THIRD EXTENSION REQUEST (18 MONTHS): 1 JULY 2022

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO, EXTENSION REQUESTED TO 31 DECEMBER 2025
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): HIGH

Under Article 5 of the APMBC (and in accordance with the 18-month extension granted by States Parties in November 2019), the DRC 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 July 2022. It will not meet this deadline and is seeing a fourth extension.

The DRC's position on meeting its Article 5 obligations has undergone abrupt shifts in the past two years. In November 2019, the DRC told the other States Parties it had 49 hazardous areas totalling 469,338m^2 to tackle but pledged that it would not need to extend its January 2021 Article 5 deadline.[42] In August 2020, it said there were still 128,842m^2 to release and asked for an extension of 18 months to complete the job.[43] In July 2021, with 33 hazardous areas covering around 117,000m^2 still remaining, the DRC submitted its fourth extension request and said it now needed 42 more months to complete clearance. The DRC also plans to conduct survey in the territories of Aru (Ituri province) and Dungu (Haut-Uele province) and clear any mined areas found there but has not set a timeline for this work.[44]

The Committee on Article 5 Implementation, in its decision on the DRC's third request, said the DRC had made "commendable progress" but also recommended annual reporting by the DRC on progress of land release, the outcomes of survey in Aru and Dungu, updates on security as it affects mine action, the progress of resource mobilisation, and progress in establishing a sustainable national capacity to tackle residual contamination.[45] The Committee also said the DRC could benefit from improving its resource mobilisation strategy given the importance of foreign financing for completion.[46]

Risk factors include significant levels of insecurity in Ituri and North Kivu provinces which account for 13 of the 33 remaining hazardous areas and the logistical and environmental challenges faced in dealing with tasks scattered across large distances with poor roads as well as dense tropical forest vegetation and flooding. The biggest uncertainty appears to be funding.

DRC estimates the cost of completion at US$3.9 million, including the costs of demining, put at US$1.7 million, survey of Aru and Dungu ($568,270), risk education ($1.06 million), and programme management/coordination costs ($600,000). The government has reportedly budgeted to provide $272,271 towards programme management costs, representing 7% of the total, and looks to international donors to finance the rest. The request says DRC will organise a series of meetings with donors and envisaged having contacts with donors on the sidelines of international meetings but provides no details of international funding pledges or actions the government is taking to attract them.[47]

The reduced engagement of international demining organisations since Humanity and Inclusion, Mines Advisory Group, and NPA ended their programmes, has also been a significant setback for the mine action programme, leaving DCA and TDI as the only international operators. The extension request refers to the increasing capacity of national operators and to CCLAM's close cooperation with police and military engineers, who it says represent a good national reserve, but it does not provide details of the manpower available for mine survey and clearance, the number and location of demining teams available from the police, military and NGOs, or the levels of training.

Table 2: Five-year summary of AP mine clearance

Year	Area cleared (m^2)
2020	10,562
2019[48]	146,761
2018	275,700
2017	226,025
2016	211,293
Total	**870,341**

N/R = Not reported

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

DRC also has yet to provide clarity on the arrangements it is putting in place to deal with any residual mine contamination identified after formal completion.

1 Article 5 deadline Extension Request, 9 July 2021, p. 22.

2 Statement of DRC, Intersessional Meetings, 2 July 2020.

3 Data presented by CCLAM, Mine action coordination meeting, Kinshasa, February 2020; Article 5 deadline Extension Request, 9 July 2021, p. 22.

4 Statement of DRC to the Fourth APMBC Review Conference, Oslo, 25–29 November 2019.

5 Email from Steven Harrop, Chief of Operations, UNMAS, 20 September 2017.

6 Article 5 deadline Extension Request, 9 July 2021, p. 22.

7 "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, humanitarian affairs, and interior.

8 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.

9 Email from Maître Sudi Alimasi Kimputu, Director, CCLAM, 3 June 2019.

10 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Bill Marsden, MAG, 11 May 2018; and Guillaume Zerr, Humanity and Inclusion, 24 May 2018.

11 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.

12 Article 5 deadline Extension Request, 6 July 2021, p. 11.

13 UN Security Council Resolution 2147, 28 March 2014; email from Aurelie Fabry, UNMAS, 28 April 2021.

14 Emails from Aurelie Fabry, UNMAS, 13 April 2020 and 28 April 2021.

15 Email from Aurelie Fabry, UNMAS, 28 April 2021.

16 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, pp. 15–16.

17 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.

18 2021 Article 5 deadline Extension Request, pp. 30–31.

19 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.

20 Email from Aurelie Fabry, UNMAS, 28 April 2021.

21 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, p. 14.

22 Email from Aurelie Fabry, UNMAS, 13 April 2020.

23 Email from Jean-Denis Larsen, NPA, 24 May 2019.

24 Emails from Aurelie Fabry, UNMAS, 28 April and 7 June 2021.

25 Article 7 Report (covering 2018), p. 7.

26 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, p. 4.

27 Ibid., p. 5.

28 2021 Article 5 deadline Extension Request, pp. 60–61.

29 Skype interviews with Jean-Denis Larsen, NPA, 24 April 2019 and 16 May 2020; and email, 24 May 2019.

30 Statement of DRC, APMBC Intersessional Meetings, 2 July 2020.

31 "Stratégie Nationale de Lutte Antimines 2018–2019", November 2017, p. 34.

32 Skype interview with Jean-Denis Larsen, NPA, 24 April 2019; and email, 24 May 2019.

33 Ibid.

34 Skype interview with Jean-Denis Larsen, NPA, 16 April 2020.

35 Email from Aurelie Fabry, UNMAS, 28 April 2021.

36 Ibid.

37 2021 Article 5 deadline Extension Request, p. 8.

38 Statement of DRC, Intersessional Meetings, 2 July 2020.

39 Email from Aurelie Fabry, UNMAS, 28 April 2021.

40 2021 Article 5 deadline Extension Request, p. 8.

41 2021 Article 5 deadline Extension Request, p. 8.

42 Statement of DRC, Fourth APMBC Review Conference, 26 November 2019.

43 Statement of DRC, APMBC Intersessional Meetings, 2 July 2020.

44 2021 Article 5 deadline Extension Request, p. 8.

45 Committee on Article 5 Implementation, Draft decision on DRC Article 5 deadline extension request, 20 November 2020.

46 Ibid.

47 2021 Article 5 deadline Extension Request, p. 36.

48 Article 7 Report (covering 2018), p. 7. Although a report for 2018, it included results for the first three months of 2019.

ECUADOR

ARTICLE 5 DEADLINE: 31 DECEMBER 2022
NOT ON TRACK TO MEET DEADLINE AND COMPLIANCE IN QUESTION

KEY DATA

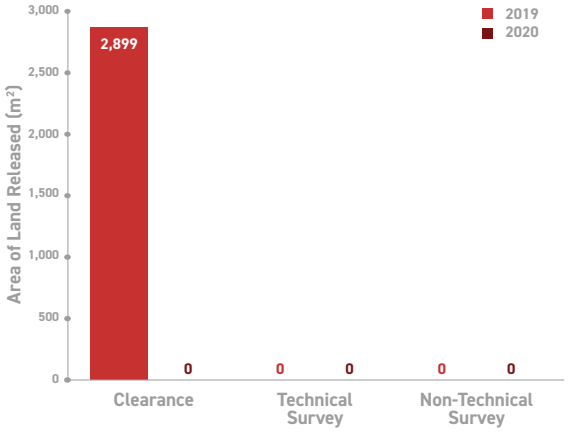
ANTI-PERSONNEL (AP) MINE CONTAMINATION: LIGHT

GOVERNMENT ESTIMATE
40,056M²

AP MINE CLEARANCE IN 2020
0M²

AP MINES DESTROYED IN 2020
0

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Ecuador's clearance output fell in 2020 for the fourth consecutive year, this time to nil, putting its compliance with the Anti-Personnel Mine Ban Convention (APMBC) in doubt. Ecuador has stated that it requires more than $7 million dollars to complete clearance in the next two years. At the same time, it is unclear whether its estimate of remaining contamination is accurate and whether Ecuador is using the most efficient and effective land release methods.

RECOMMENDATIONS FOR ACTION

- **Ecuador should clarify the extent of remaining contamination.**
- **Ecuador should ensure it deploys its limited resources in the most efficient manner and that it conducts both non-technical and technical survey, as appropriate, before full clearance.**
- **Ecuador should submit its annual Article 7 reports on time.**
- **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 residual contamination post completion.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	Ecuador's estimate of contamination is unchanged from 2019 to 2020. There have been some discrepancies in the amount of remaining contamination data in previous years that are still unexplained.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	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 and Ecuador has estimated that it requires more than $7 million in funding to complete clearance in the next two years.
GENDER AND DIVERSITY (10% of overall score)	3	3	Ecuador does not have a gender and diversity policy or plan and does not employ any women in its mine action programme. Women, children, and ethnic minorities are said to be consulted only when they are also informed about planned demining operations.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	Ecuador submitted its Article 7 report covering 2020 in August 2021.
PLANNING AND TASKING (10% of overall score)	6	6	Ecuador did not meet its land release target for 2020 and provided an updated plan for clearance based on the revised estimate of remaining mine contamination. These targets should be achievable but depend on the mobilisation of sufficient resources.
LAND RELEASE SYSTEM (20% of overall score)	6	6	Ecuador claims to conduct survey and clearance according to the International Mine Action Standards (IMAS). All clearance is conducted manually but Ecuador did not deploy its demining capacity in 2020.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	1	2	Ecuador's land release output fell again in 2020 to zero and the country is not on track to meet its Article 5 deadline even with the very small amount of remaining contamination it is now reporting.
Average Score	**4.3**	**4.5**	**Overall Programme Performance: POOR**

DEMINING 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

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Ecuador reported that, as at December 2020, 40,056m^2 of anti-personnel mine contamination remained in the Zamora Chinchipe province containing an estimated 2,941 mines.[1] The estimated 40,056m^2 is found in 27 confirmed hazardous areas (CHAs) and 26 suspected hazardous areas (SHAs) across four districts in Zamora Chinchipe province (see Table 1). The contamination is unchanged from the estimate provided as at December 2019.

This figure is less than half the amount of anti-personnel mine contamination reported at the end of 2018, despite Ecuador releasing only 2,899m^2 of contaminated land in 2019.[2] This also differs significantly from the contamination figures reported in Ecuador's Article 5 statement at the Fourth APMBC Review Conference at the end of November 2019 when Ecuador said it had 79,030m^2 of contamination and 3,233 anti-personnel mines to destroy in four mined areas.[3] Despite these very significant discrepancies, Ecuador considered its current estimate of contamination to be accurate as it is based on evidence from field reports and technical records of mine laying in the border area between Ecuador and Peru. Affected communities, including women, were reportedly consulted during survey.[4]

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.

Table 1: Anti-personnel mined area by province (at end 2020)[5]

Province	District	CHAs	Area (m^2)	SHAs	Area (m^2)	Total CHA/SHA	Total area (m^2)
Zamora Chinchipe	Chinchipe	1	7,009	0	0	1	7,009
	Yanzatza	3	6,565	0	0	3	6,565
	Nangaritza	14	4,577	0	0	14	4,577
	El Pangui	9	14,384	26	7,521	35	21,905
	Totals	**27**	**32,535**	**26**	**7,521**	**53**	**40,056**

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 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 amounts 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. In February 2021, Ecuador estimated that it requires $7,344,125 for land release operations in 2021 and 2022, split evenly over the two years, of which it would be able to provide about $500,000 of national funding. In 2021, Ecuador also estimated that it requires an additional $281,977 for mechanical demining and $2,321,568 for quality control (QC).[11]

Ecuador participated in the APMBC Individualised Approach, in 2019, in the course of which it claimed that it requires just over US$8 million dollars to complete clearance. This will be used to replace personal protective equipment and other demining tools which are no longer usable, as well as for vehicles, training, food, and shelter for the deminers.[12] 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 that they face in order to complete clearance by their deadlines.[13]

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.[14]

Ecuador has stated that it considers all populations affected by mines, without discrimination, in the planning and execution of demining operations.[15] Women, children, and ethnic minorities are targeted during risk education campaigns, 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.[16] Fourteen communities and five ethnic groups live in the eastern border sector near the contaminated areas.[17]

Mine action data are not disaggregated by sex or age.[18]

Ecuador has trained women in demining and in the Information Management System for Mine Action (IMSMA) database.[19] 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.[20] Ecuador has said it will continue to include and train female personnel "according to their availability" ("de acuerdo a la disponibilidad de dicho personal").[21]

INFORMATION MANAGEMENT AND REPORTING

Ecuador uses the IMSMA database, which is said to be updated regularly.[22]

Ecuador submitted its Article 7 report covering 2020 in August 2021 in which it provided an update on the work that was carried out during 2020 which was limited to training sessions for demining personnel.

PLANNING AND TASKING

Ecuador presented a revised plan for mine clearance for 2020 to 2022 in its Article 7 report covering 2019, based on the updated estimate of contamination as at end 2019.[23]

In 2020, clearance was planned of 11,285m^2 (with expected discovery of 1,362 mines) in El Oro and Loja in Zamora Chinchipe with seven demining teams working between June and August.[24] However, no clearance took place in 2020 and Ecuador presented an updated work plan for 2021–22 in February 2021.[25]

In addition to the plan for remaining clearance Ecuador also presented its programme for the handover of cleared land with 551,742m^2 to be certified and handed over during 2021 and 2022.[26]

Ecuador prioritises contaminated areas for clearance according to the proximity of the local population and the impact on socio-economic development.[27]

Table 2: Planned mine clearance in Zamora Chinchipe in 2020–22 (Article 7)[28]

Year	Mined areas	Area (m^2)
2020	12	11,285
2021	14	12,250
2022	27	16,521
Totals	**53**	**40,056**

Table 3: Planned mine clearance in Zamora Chinchipe in 2021–22[29]

Year	Mined areas	Area (m^2)
2021	23	21,010
2022	30	19,046
Totals	**53**	**40,056**

Table 4: Planned handover of cleared land 2021–22[30]

Year	Province	Area (m^2)	Total (m^2)
2021	El Oro	103,472	200,856
	Loja	66,314	
	Pastaza	31,070	
2022	Morona Santiago	272,601	350,885
	Zamora Chinchipe	78,285	
Total			**551,742**

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, and 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.[31] Ecuador has adopted the national mine action standards (NMAS) for land release, non-technical survey, technical survey, clearance requirements, and explosive ordnance disposal (EOD).[32]

At the APMBC 18th Meeting of States Parties, Ecuador and Peru delivered a joint statement detailing their cooperation on demining activities during 2020 in which they worked together to strengthen their demining procedures. Peru shared its health protocol with Ecuador to support demining during the COVID-19 pandemic while Ecuador approved an aerial evacuation protocol to allow Peruvian deminers through Ecuadorian airspace in case of emergencies. They also reported that they had organised a joint workshop on humanitarian demining which was planned for 2021 and that demining personnel from Ecuador and Peru had received EOD training from the Organization of American States (OAS) between January and March 2020.[33] In Ecuador's latest Article 7 request it was reported that humanitarian demining training was conducted by the Battalion No. 68 COTOPAXI in February 2020 and that a meeting was held with their demining counterparts in Peru to discuss ongoing cooperation.[34]

In granting Ecuador's 2017 Article 5 deadline extension request, the Sixteenth Meeting of States Parties noted that Ecuador should use the most relevant land release standards, policies, and methodologies, in line with IMAS, and encouraged it to continue seeking improved land release and certification techniques, which could lead to Ecuador fulfilling its obligations more quickly.[35] Ecuador stated in its 2017 extension request that non-technical and technical survey would be carried out to determine the location, size, and other characteristic of the mined areas before operations begin using records of mined areas.[36] No non-technical survey or technical survey was reported to have occurred in 2020.

OPERATORS AND OPERATIONAL TOOLS

Demining is conducted by Battalion No. 68 COTOPAXI and, in 2019, only manual clearance took place.[37] In the additional information provided alongside its 2017 extension request, Ecuador stated that the remaining clearance would be carried out only by manual deminers, due to the unsuitability of terrain for its machinery.[38] Mine detection dogs (MDDs) are used only for QC following clearance.[39] No personnel were deployed for survey or clearance during 2020.

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 the "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.[40]

CENDESMI is responsible for observing and monitoring compliance of the demining, including QC and certification of clearance operations.[41]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

No survey or clearance took place in 2020.[42] This is a reduction from the meagre 2,899m^2 of anti-personnel mined area was released in 2019, all of which was cleared, with 62 anti-personnel mines destroyed.[43]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR ECUADOR: 1 OCTOBER 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 OCTOBER 2009

↓

FIRST EXTENDED DEADLINE (8-YEAR EXTENSION): 1 OCTOBER 2017

↓

SECOND EXTENDED DEADLINE (3-MONTH EXTENSION): 31 DECEMBER 2017

↓

THIRD EXTENDED DEADLINE (5-YEAR EXTENSION): 31 DECEMBER 2022

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): MEDIUM

Ecuador has submitted three extension requests in recent years. Ecuador explained that the failure to meet the 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.[44] 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 another Article 5 deadline extension request in March 2017 and was granted a deadline extension to 31 December 2022.

Survey and clearance output fell from the already minimal 2,899m² in 2019 to nil in 2020, with the mine action programme grounding to a halt due to lack to funding. Ecuador has now set itself a land release target of approximately 20,000m² per year in order to complete clearance of remaining contamination by its Article 5 deadline. This should be possible if Ecuador can mobilise its existing operational capacity to significantly increase land release output. However, this is dependent on securing the requisite funds, establishing an accurate estimate of the remaining contamination and deploying its limited resources in the most efficient manner conducting both non-technical and technical survey, as appropriate, before full clearance.

Table 5: Five-year summary of AP mine clearance

Year	Area cleared (m²)
2020	0
2019	2,899
2018	14,068
2017	15,476
2016	1,410
Total	**33,853**

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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.[45]

1 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.

2 Email from Lt.-Col. Hugo F. Avilés León, Commander, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

3 Statement of Ecuador, Committee on Article 5 implementation, Oslo, 27 November 2019.

4 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

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

6 Executive Decree No. 1297, issued on 22 September 1999.

7 2017 Article 5 deadline Extension request, Annex I.

8 2017 Article 5 deadline Extension request, Annex I, pp. 39 and 40.

9 Ecuador Demining Action Plan 2019–2022, p. 20.

10 Ibid.; Statement of Ecuador, Committee on Article 5 implementation, Geneva, 22 May 2019; and Statement of Ecuador, Committee on Article 5 implementation, Fourth APMBC Review Conference, Oslo, 27 November 2019.

11 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.

12 APMBC Individualised Approach Meeting at Intersessionals, "Mine Action Program of Ecuador Status and Challenges in Implementation", Geneva, 23 May 2019; and Ecuador Demining Action Plan 2019–2022, p. 21.

13 Regional Dialogue on Humanitarian Demining, (virtual meeting), 10-11 February 2021, at: https://bit.ly/2SvmcYd.

14 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

15 Ecuador Demining Action Plan 2019–2022, p. 23.

16 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

17 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.

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. 17.

20 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.

21 Ecuador Demining Action Plan 2019–2022, p. 20.

22 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.

23 Article 7 Report (covering 2019), Form D.

24 Ibid.

25 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.

26 Ibid.

27 Demining Action Plan 2019–2022, p. 17.

28 Article 7 Report (covering 2019), Form D.

29 Ibid.

30 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

31 Demining Action Plan 2019–2022, p. 5.

32 Ibid., p. 17.

33 Joint statement of Peru and Ecuador, 18th Meeting of States Parties, APMBC, 16–20 November 2020

34 Article 7 Report (covering 2020), Form J.

35 Decisions on the request by Ecuador for an extension of its Article 5 deadline, 16MSP, 21 December 2017.

36 2017 Article 5 deadline Extension Request, p. 15.

37 APMBC Individualised Approach Meeting at Intersessionals, "Mine Action Program of Ecuador Status and Challenges in Implementation", Geneva, 23 May 2019.

38 2017 Article 5 deadline Extension Request, Additional Information provided on 8 September 2017, p. 1.

39 Ecuador Demining Action Plan 2019–2022, p. 18.

40 Statement of Peru, Fourth APMBC Review Conference, Oslo, 27 November 2019.

41 2017 Article 5 deadline Extension Request, p. 39.

42 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.

43 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

44 Letter from Efraín 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.

45 Email from Lt.-Col. Hugo F. Avilés León, Engineers Battalion No. 68 "COTOPAXI", 25 March 2020.

ERITREA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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

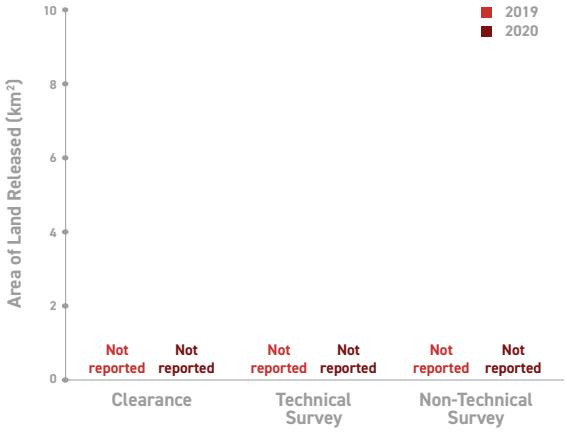
MINE ACTION REVIEW ESTIMATE

10KM²

AP MINE CLEARANCE IN 2020
NONE REPORTED

AP MINES DESTROYED IN 2020
NONE 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 June 2021, had neither done so nor sought a further extension. It is now in serious violation of the Convention. Eritrea has also not submitted an Article 7 transparency report since 2014 or responded to repeated requests for updated information from Mine Action Review, most recently in 2021. 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 violation of the Convention.

RECOMMENDATIONS FOR ACTION

- **Eritrea needs immediately to return to compliance with the APMBC. Failing this, the States Parties should initiate the procedure under Article 8 of the Convention to launch an obligatory fact-finding mission**
- **The authorities should ensure that demining is undertaken for humanitarian and developmental purposes as a matter of urgency.**
- **Eritrea should urgently submit an extension request for its Article 5 deadline, with an up-to-date list of all known or suspected hazardous areas (SHAs) with anti-personnel mines and a detailed timeline of activities planned for the extension period sought.**
- **Eritrea must urgently submit its outstanding annual Article 7 reports, the latest of which was due by 30 April 2021.**
- **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.**

- **Eritrea should cooperate with Ethiopia in cross-border mine action activities, which will also help to consolidate peace with its neighbour.**
- **Eritrea should develop and make public a resource mobilisation strategy on the basis of a clear understanding of remaining contamination.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	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. 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	4	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)	1	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	4	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)	1	1	Eritrea has made little, if any, progress in land release to meet its obligations under its second Article 5 extension period. In 2014, Eritrea reported it expected to require a third extension. Eritrea submitted an interim request for a third extension in November 2019 with the intention of providing a more detailed request by 31 March 2020. As at June 2021, no such request is forthcoming and it remains in violation of the Convention for failing to complete mine survey and clearance as soon as possible, and for not respecting other procedural provisions of the Convention.
Average Score	**2.4**	**2.7**	**Overall Programme Performance: VERY POOR**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Eritrea Demining Agency (EDA)

NATIONAL OPERATORS

- Engineering units of the Eritrean Armed Forces

INTERNATIONAL OPERATORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Eritrea is affected by mines and explosive remnants of war (ERW) dating back to World War II, 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 (EDA) 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 2021.

The last estimate of mine contamination in Eritrea dates back to the end of 2013, when Eritrea reported 434 mined areas covering an estimated 33.4km.[2] This was a two-thirds reduction on the earlier estimate of 99km^2 of June 2011,[3] and significantly lower than the 129km^2 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**

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 necessary for its survey and clearance activities, particularly in light of its policy of not accepting international technical assistance.[7]

GENDER AND DIVERSITY

Eritrea did not respond to Mine Action Review's inquiries in 2021 about the national mine action programme's policies relating to gender.

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 six years is a violation of the Convention. As at June 2021, Eritrea had yet to submit its latest Article 7 report covering 2020. It has also failed to provide an updated Article 5 work plan or detailed extension request.

PLANNING AND TASKING

There is no apparent 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 of the APMBC (25–29 November 2019), but 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 June 2021 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 eight 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 15.4km^2 of mined area could be cleared within five years. It reported that 67.3km^2 of contaminated area had been cancelled through non-technical survey and that 5.7km^2 was cleared over 38 mined areas in 2011–13.[13]

Eritrea has not provided any updates to States Parties to the APMBC, 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 33.5km^2, leaving 385 mined areas of close to 24.5km^2 to be surveyed.[14] Forty-nine new mined areas with a total size of 9km^2 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 2020 or recent years. In 2013, Eritrea seemingly cleared approx. 2.26km^2 of mined area, almost twice the amount cleared in 2012 (1.2km^2).[16] The number of anti-personnel and anti-vehicle mines destroyed in 2013 was not reported.

LAND RELEASE OUTPUTS IN 2020

As stated, no land release output, including survey or clearance, was reported in 2020.

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR ERITREA: 1 FEBRUARY 2002

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 FEBRUARY 2012

↓

FIRST EXTENDED DEADLINE (3-YEAR EXTENSION): 1 FEBRUARY 2015

↓

SECOND EXTENDED DEADLINE (5-YEAR EXTENSION): 1 FEBRUARY 2020

↓

INTERIM THIRD EXTENDED DEADLINE (11-MONTH EXTENSION): 31 DECEMBER 2020

ERITREA IS IN SERIOUS VIOLATION OF THE APMBC SINCE 1 JANUARY 2021
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Table 2: Five-year summary of AP mine clearance

Year	Area cleared (m^2)
2020	N/R
2019	N/R
2018	N/R
2017	N/R
2016	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 is now 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 June 2021, however, no further extension request had been submitted.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

As at June 2021, 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.

1 Email from Habtom Seghid, Deputy General Manager, EDA, 6 May 2015.

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 9km^2 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 Ibid., p. 11.

7 Statement of Eritrea, 13th Meeting of States Parties, Geneva, 6 December 2013.

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.

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.

ETHIOPIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

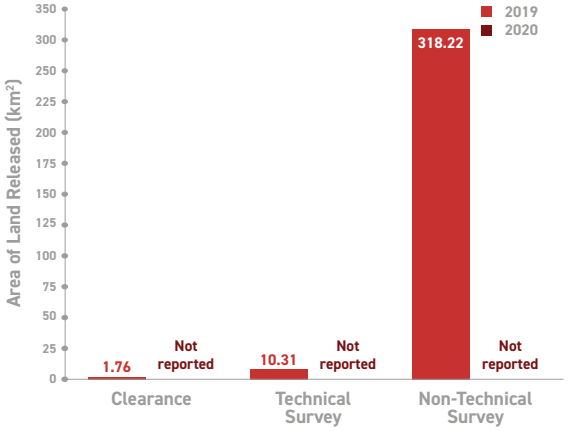
MINE ACTION REVIEW ESTIMATE

20KM²

AP MINE CLEARANCE IN 2020
NONE REPORTED

AP MINES DESTROYED IN 2020
NONE REPORTED

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Ethiopia has not reported on its survey or clearance output for 2020. As there was reportedly no funding available during the year it looks unlikely that their land release targets have been met despite the massive survey and clearance output Ethiopia achieved in 2019. It is unclear whether Ethiopia will meet its future land release targets with obstacles including technical and logistical challenges, a lack of basic infrastructure, and a critical lack of funding. Ethiopia has not yet submitted its Article 7 report covering 2020 or the updated work plan as requested by States Parties in accordance with the decision taken on Ethiopia's 2019 Article 5 deadline extension request.

RECOMMENDATIONS FOR ACTION

- **Ethiopia should conduct a desk assessment of remaining contamination in the database and conduct re-survey of mined areas as necessary to establish an up-to-date and accurate baseline.**
- **Ethiopia should ensure the re-established national mine action authority 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 consider whether mine detection dogs (MDDs) could be used to help cancel suspected hazardous areas (SHAs).**
- **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 (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	5	Ethiopia has an inflated baseline of mine contamination, 99% of which are in 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 but, as at July 2021, it has not reported on whether any progress has been made to establish a more accurate baseline.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	5	In 2019, it was announced that the national programme would report directly to the Ministry of Defence, with a view to raising the profile of mine action and improve the efficiency of operations and availability of national resources. As at July 2021, it was not known if this had taken place. Ethiopia reported that no funding was made available for survey or clearance in 2020.
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 July 2021, it was not known if any women were involved in survey or clearance in 2019 or 2020.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	5	Ethiopia's reporting in recent years have demonstrated improvements in accuracy although they lack detail. As at July 2021, Ethiopia has not submitted an Article 7 report covering 2020 or an updated work plan as requested by the decision taken by States Parties on Ethiopia's 2019 Article 5 deadline extension request.
PLANNING AND TASKING (10% of overall score)	4	5	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. As at July 2021, it was unconfirmed whether Ethiopia had done so.
LAND RELEASE SYSTEM (20% of overall score)	6	6	An update to the National Mine Action Standards (NMAS) is long overdue and, as at June 2020, Ethiopia had not reported on whether this has happened. All clearance is conducted manually, but Ethiopia should consider expanding to re-employ MDDs if it is to meet its ambitious land release targets.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	6	Ethiopia has not reported on its survey and clearance output for 2020 but as it has said that no funding was made available it seems unlikely it was able to sustain the massive increase in land release output in 2019. Ethiopia could still meet its 2025 deadline, but challenges remain around capacity, funding, and access due to insecurity.
Average Score	**4.3**	**5.2**	**Overall Programme Performance: POOR**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Head Office of the Ministry of Defence
- Ethiopia Mine Action Office (EMAO)

NATIONAL OPERATORS

- National Demining Companies (Ethiopian Armed Forces)

INTERNATIONAL OPERATORS

- The HALO Trust (registered but not yet accredited)

OTHER ACTORS

- International Committee of the Red Cross (ICRC)
- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

As at 30 April 2020, Ethiopia reported a total of 152 SHAs and confirmed hazardous areas (CHAs) with a size of 726km^2 remaining (see Table 1).[1] As at July 2021, Ethiopia has not provided an updated estimate of anti-personnel mine contamination. Almost all of the anti-personnel mine contamination is in SHAs, with just under 99% of the total estimate located in the Somali region. Ethiopia stated in its 2019 extension request that only 2% of the SHA are expected to contain mines.[2] As such, as at the end of 2018, the request projected a total of 27.3km^2 (6.3km^2 of existing CHA and 21km^2 of the SHA reported) would require clearance, while 1,029km^2 would be cancelled or reduced.[3]

Table 1: Anti-personnel mined area by region (at end April 2020)[4]

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**

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.[5] It is expected that survey of the buffer zone will be undertaken once demarcation of the border area is completed.[6] 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.[7]

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.[8] Humanitarian access to Tigray has been severely hampered by insecurity and the closure of road and air access to Tigray, Afar and Amhara Regions.[9] In July 2021, the self-styled "Government of Tigray" signed a statement accepting a ceasefire in principle but this is contingent on the withdrawal of Eritrean forces from the region as well as pro-Ethiopian government forces the neighbouring region of Amhara.[10]

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 continued to hamper access to Gambela and Benishangule regions.[11]

In 2001–04, a landmine impact survey (LIS) identified mine and explosive remnants of war (ERW) contamination in 10 of Ethiopia's 11 regions, with 1,916 SHAs across more than 2,000km^2 impacting more than 1,492 communities.[12] 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.[13] 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.[14] In November 2019, Ethiopia requested international assistance to conduct a new baseline survey.[15]

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'.[16] EMAO developed its operational capacities with technical assistance from NPA, the UN Development Programme (UNDP), and the UN Children's Fund (UNICEF).[17] 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.[18]

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 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 Ministry of National Defence 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.[19] In 2017, Ethiopia confirmed that this "autonomous legal entity" had been re-named EMAO, and was responsible for survey, clearance, and risk education.[20]

In 2019, however, Ethiopia reported that the responsibility for the national mine action programme had been transferred back to the headquarters of the Ministry of Defence. 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.[21]

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 $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: $28.7 million for demining, $6.1 million for coordination and administration, $4.1 million for training and equipment to manage "residual issues"; and $2 million for quality assurance and information management.[22] Of the total $41 million sought, the government pledged to cover 20% ($8.2 million).[23]

Ethiopia's 2019 Article 5 deadline extension request notes the availability of trained and highly experienced demining teams.[24] In 2018, the Ethiopian government was the sole funder of mine action operations.[25] EMAO had informed Mine Action Review that it expected to receive increased funding in 2019.[26] 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.[27] 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.[28] In May 2021, EMAO convened a meeting with international stakeholders to appeal for financial and technical assistance for mine action, including military equipment.[29] As a result, Terms of Reference (ToR) for the formation of a mine action standing group were established. The UN has also endorsed the establishment of a Mine Action Area of Responsibility (AoR) in Ethiopia, which falls under the Protection Cluster.[30] Currently there are no international mine action non-governmental organisations (NGOs) operating in Ethiopia but EMAO has been in discussion with UNMAS, UNICEF, The HALO Trust, NPA, and the ITF during 2021 to initiate a joint project to support the mine action sector in Ethiopia.[31] The HALO Trust reported it was registered in Ethiopia in April 2021 and, as at August, was awaiting accreditation from the Ministry of Defence in order to begin mine action activities in Somali region.[32]

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.[33] As at July 2021, Ethiopia had not provided information on whether women were involved in survey or clearance activities in 2020.

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.[34] 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.[35]

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.[36] 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.

As at July 2021, Ethiopia had not yet submitted an Article 7 report covering 2020. In the decision on Ethiopia's 2019 Article 5 deadline extension request the Conference requested that Ethiopia submit to the States Parties by 30 April 2021 an updated work plan for the period covered by the extension request. As at July 2021, Ethiopia had not done so.

PLANNING AND TASKING

Ethiopia's second Article 5 extension request for the period 2020–25 aims to achieve the following:

- Address the remaining 1,065km^2 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
- Finish the building of the demining training centre.[37]

In 2019, Ethiopia planned a "rearrangement" of the RRTs and demining companies in the Somali region, and to release 171.5km^2 through survey and 1.9km^2 through clearance.[38] As at July 2021, Ethiopia has not reported on whether it restructured its demining capacity in the Somali region. Ethiopia far exceeded its survey target, releasing nearly 329km^2, but did not quite meet its clearance target of 1.9km^2, clearing only 1.76km^2.[39] In 2020, Ethiopia planned to continue demining in the Somali region and expected to release 171.5km^2 through survey and to clear 4.3km^2 (see Table 2).[40] As at July 2021, Ethiopia has not reported on whether this has happened.

The work plan raises a number of critical questions as to whether it is realistic and achievable. For example, Ethiopia does not provide detail on how the significant jump in projections for clearance from 1.9km^2 in 2019 to 4.3km^2 in 2020 is 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.[41] 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 would seem improbably high.[42]

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 Review Conference 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.[43] As at July 2021, Ethiopia has not submitted the first of the requested updated work plans.

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**	**1,056,349,551**

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Ethiopia previously reported in 2017 that its 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 IMAS. It had also reported that this would happen in 2015, according to its extension request targets.[44] As at July 2021, Ethiopia had not reported that the revisions had been completed.

Ethiopia's second extension request details the land release methodology it intends to employ in demining operations.[45] The request claims 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.[46] However, with such large projections for cancellation and reduction of SHA, Ethiopia should consider other options beyond manual clearance, particularly MDDs for 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 foresees 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 will be deployed each year through to the end of its Article 5 extension period in 2025.[47] According to EMAO, two companies were deployed for clearance in 2018, along with two technical survey teams, and one EOD team.[48] As at July 2021, Ethiopia had not reported on operational capacity deployed in 2020.

The 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".[49] 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.[50]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Ethiopia last reported on land release output that took place between end-April 2019 and end-April 2020. Ethiopia has not reported on whether any survey or clearance has taken place since end-April 2020.

A total of 330.28km^2 of mined area was released between end-April 2019 and end-April 2020 across 128 hazardous areas, of which 1.76km^2 was cleared, 10.31km^2 was reduced through technical survey, and 318.22km^2 was cancelled through non-technical survey. A total of 128 anti-personnel mines were found and destroyed.

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR ETHIOPIA: 1 JUNE 2005

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 JUNE 2015

↓

FIRST EXTENDED DEADLINE (5-YEAR EXTENSION): 1 JUNE 2020

↓

SECOND EXTENDED DEADLINE (5-YEAR, 7-MONTH EXTENSION): 31 DECEMBER 2025

LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

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.[51] 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.[52]

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".[53] 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.[54]

Table 3: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	N/R
2019**	1.76
2018	1.10
2017	0.40
2016	*0.50
Total	**3.76**

* Estimated clearance based on report for 2016–18
** Reporting year is 31 April 2019–31 April 2020

Ethiopia has not reported on its survey and clearance output for 2020 but for the period April 2019 to April 2020 Ethiopia cleared 1.76km^2 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 and whether it is sustainable particularly as it appears that no funding was available for 2020. Ethiopia would benefit from providing an updated work plan with realistic and costed annual targets for land release.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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.[55] As at July 2021, Ethiopia had not reported on whether it has a strategy for managing residual risk post-completion

1 Article 7 Report (covering April 2019–April 2020), Form D.

2 2019 Article 5 deadline Extension Request, p. 35; and Article 7 Report (covering 2018), Form D.

3 2019 Article 5 deadline Extension Request, p. 48.

4 Article 7 Report (covering April 2019–April 2020), Form D.

5 2019 Article 5 deadline Extension Request, p. 9.

6 Ibid., p. 11.

7 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.

8 OCHA, "Humanitarian Needs Overview Ethiopia 2021", p. 16.

9 Ibid., p. 17.

10 BBC, "Ethiopia's Tigray crisis: Accept our rule or no ceasefire, rebels say", 4 July 2021, at: https://bbc.in/2Tt9DgF; "Ethiopia: Tigray rebels accept ceasefire but set out conditions", *The Guardian*, 4 July 2021, at: https://bit.ly/3AmB38i.

11 2019 Article 5 deadline Extension Request, p. 35.

12 Norwegian People's Aid (NPA), "Landmine Impact Survey Report, Federal Democratic Republic of Ethiopia", May 2004.

13 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 1,200km^2 from the LIS data needed to be re-surveyed.

14 2019 Article 5 deadline Extension Request, p. 8.

15 Statement on Article 5 deadline extension request, Fourth APMBC Review Conference, Oslo, 27 November 2019.

16 Council of Ministers, Regulation No. 70/2001, 5 February 2001.

17 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.

18 Statements of Ethiopia, Committee on Article 5 Implementation, Geneva, 25 June 2015, April 2014, and 24 May 2012.

19 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.

20 Revised National Mine Action Plan for 2017–20, October 2017, pp. 2 and 32.

21 2019 Article 5 deadline Extension Request, p. 9.

22 Ibid., p. 51.

23 Ibid., p. 11.

24 Ibid., p. 10.

25 Ibid., p. 21.

26 Email from Col. Tadege Yohala, Head, EMAO, 5 August 2019.

27 Statement of Ethiopia, 18th Meeting of States Parties, 5 Nov 2020.

28 Statement on Article 5 deadline extension request, Fourth APMBC Review Conference, Oslo, 27 November 2019.

29 "Ethiopia appeals for International support to combat landmines", *The Reporter*, 22 May 2021, at: https://bit.ly/3jKdoci.

30 Email from Abel Tesfai, UNMAS Advisor to the UN Resident and Humanitarian Coordinator in Ethiopia, 18 August 2021.

31 Phone interview with Claus Nielsen, NPA, 11 August 2021.

32 Email from Kim Feldewerth, Policy Manager, HALO Trust, 6 September 2021.

33 Email from Col. Tadege Yohala, EMAO, 5 August 2019.

34 2019 Article 5 deadline Extension Request, pp. 30–31.

35 Email from Dominic Wolsey, Advisor, Gender and Diversity, GICHD, 17 July 2020.

36 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.

37 2019 Article 5 deadline Extension Request, pp. 10–11.

38 Ibid., p. 47.

39 Article 7 Report (covering 31 April 2019–31 April 2020), Form D.

40 2019 Article 5 deadline Extension Request, Additional Information, p. 5.

41 Email from Col. Tadege Yohala, EMAO, 5 August 2019.

42 2019 Article 5 deadline Extension Request, p. 42.

43 Decision on 2019 Article 5 deadline Extension Request, 29 November 2019.

44 Revised National Mine Action Plan for 2017–20, October 2017, p. 12; and 2015 Article 5 deadline Extension Request, p. 11.

45 2019 Article 5 deadline Extension Request, pp. 24–25 and 27–29.

46 Ibid., p. 51.

47 Ibid., pp. 46–48.

48 Email from Col. Tadege Yohala, EMAO, 5 August 2019.

49 2019 Article 5 deadline Extension Request, p. 50.

50 Ibid.

51 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.

52 2015 Article 5 deadline Extension Request, pp. 40–41; and 2019 Article 5 deadline Extension Request, pp. 14–15.

53 For example, in just one year, 2018, the work plan stated that more than 518.5km^2 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 8km^2.

54 2019 Article 5 deadline Extension Request, p. 42.

55 Ibid., p. 16.

GUINEA-BISSAU

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 JANUARY 2012
EXTENSION REQUESTED TO 31 DECEMBER 2022

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

(NATIONAL ESTIMATE, BUT LIKELY TO INCLUDE AREAS ONLY CONTAINING ERW)

1.09 KM²

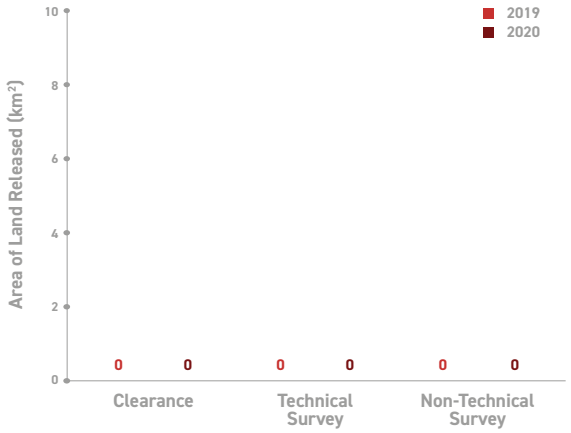
AP MINE CLEARANCE IN 2020

0 KM²

AP MINES DESTROYED IN 2020

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 an interim Article 5 deadline extension request, seeking a new deadline of end-December 2022. According to its Request, Guinea-Bissau will use the interim period to better understand the contamination, following which it will be in a better position to submit a follow-up extension request by March 2022.[1]

RECOMMENDATIONS FOR ACTION

- **Guinea-Bissau should mobilise funds and operational support to commence survey of all suspected hazardous areas to confirm or deny the presence of anti-personnel mines and more accurately determine the location and extent of contamination.**
- **Guinea-Bissau should ensure that it 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 multi-year national mine action strategy and work plan.**
- **Guinea-Bissau should elaborate a gender and diversity policy for mine action and an associated implementation plan.**
- **Guinea-Bissau should establish a sustainable national capacity to address residual risks posed by anti-personnel mines that might be discovered following the fulfilment of its Article 5 obligations.**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- The National Mine Action Coordination Centre – (Centro Nacional de Coordenação da Acção Anti-Minas, CAAMI)

NATIONAL OPERATORS

- Humanitarian Aid (HUMAID) – currently inactive
- We All Fight Against Mines (Lutamos Todos Contra As Minas, LUTCAM) – currently inactive.

INTERNATIONAL OPERATORS

- The HALO Trust

UNDERSTANDING OF AP MINE CONTAMINATION

After having declared fulfilment of its Article 5 obligations on 5 December 2012 at the 12th Meeting of States Parties (12MSP) to the APMBC,[2] Guinea-Bissau reported the discovery of new contamination of anti-personnel mines and ERW under its jurisdiction and control at the intersessional meetings in June 2021. According to its statement, a survey by Humanitarian Aid (HUMAID), a national non-governmental organisation (NGO) operator, revealed a little over 1.09km^2 of hazardous area across nine confirmed hazardous areas (CHAs) and 43 suspected hazardous areas (SHAs) whose size had not yet been determined. The SHAs were identified based on reports by the local population and are suspected to contain anti-personnel mines and ERW.[3]

The date and methodology of the survey were not made clear and the data provided were not disaggregated according to the type of contamination. It is also unclear to what extent—and indeed whether—the CHAs contain anti-personnel mines as opposed to other types of explosive ordnance.

In June 2021, Guinea-Bissau submitted an interim Article 5 deadline extension request through to 31 December 2022 to be considered at the 19MSP in November 2021. According to the request, the interim period will 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.[4] Following this work, Guinea-Bissau will be in a position to submit a follow-up extension request by 31 March 2022 for consideration at the 20MSP.[5]

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 unexploded ordnance (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.[6] 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 the National Mine Action Coordination Centre (Centro Nacional de Coordenação da Acção Anti-Minas, CAAMI).[7]

In its initial APMBC 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".[8] 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 2.24km^2.[9]

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 1.35km^2. In addition to these areas, there was a requirement to survey additional 29 areas and 16 communities who had not been visited but where contamination was reported by communities and NGOs. In September 2010, Guinea-Bissau submitted a two-month Article 5 deadline Extension Request of its original November 2011 Article 5 deadline. In December 2012, Guinea-Bissau declared that it had fulfilled its Article 5 obligations under the APMBC and had cleared 50 mined areas measuring a total of 6.52km^2 of anti-personnel mine contamination, destroying in the process 3,973 anti-personnel mines, 207 anti-tank mines, and 309,125 items of UXO.[10] 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".[11]

Since its declaration of completion in 2012, Guinea-Bissau has registered more than 40 casualties from mines and UXO, most of whom were children and women. The continued casualties led CAAMI to task the local NGO, HUMAID, to conduct additional survey, the results of which are indicated above. It is unclear when exactly this survey was conducted or what methodology was used, but as at August 2021, HUMAID was no longer active in Guinea-Bissau.[12] The last reported incident involving explosive ordnance 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.[13]

In its statement to the Fourth Review Conference of the APMBC in November 2019, Guinea-Bissau reported that, as at the end of 2019, 0.56km^2 of ERW contamination remained to be cleared along with almost 1km^2 still needing to be surveyed in its northern, southern, and eastern regions.[14] 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.[15]

Table 1: Confirmed mined areas (at June 2021)[16]

Region	Sector	Community	CHA	CHA area (m^2)
Cacheu	São Domingos	Djequemondo	1	15,000
Gabú	Pitche	Buruntuma	1	116,700
Oio	Bissorã	Encheia	1	600,000
Oio	Farim	Bricama	1	90,000
Oio	Farim	Cuntima	1	50,000
Oio	Farim	Demba Dabo	1	51,000
Quebo	Empada	Gubia	1	2,345
Tombali	Quebo	Imbai-Baila	1	60,000
Tombali	Quebo	Medjo	1	108,800
Totals			**9**	**1,093,845**

CHA = Confirmed hazardous area

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 Humánitaria, 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).[17] CAAMI has been inactive since 2012.[18] As at June 2021, CAAMI's activities, including survey, clearance, victim assistance, and data management, were put on hold due to the lack of financial means. CAAMI, however, reports that its maintains a good human resources capacity.[19]

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).[20]

GENDER AND DIVERSITY

It is not known if CAAMI has policies in place relating to gender and diversity in its mine action programme. Neither gender nor diversity were referenced in Guinea-Bissau's latest Article 7 report (covering 2010) or in its Article 5 deadline extension request submitted in June 2021.

INFORMATION MANAGEMENT AND REPORTING

According to Guinea-Bissau, its national information management database for mine action has been "paralysed" since 2014 due to the lack of financial resources.[21] Guinea-Bissau has not submitted an APMBC Article 7 report since 2011. In its Article 5 deadline extension request, submitted in June 2021, Guinea-Bissau said that it will submit a follow-up extension request by March 2022 in keeping with its obligations to the APMBC.[22]

PLANNING AND TASKING

CAAMI does not have a mine action strategy or implementation plan in place as Guinea-Bissau's mine action programme is currently inactive. In its interim Article 5 deadline extension request, Guinea-Bissau said it will use the extension period to further assess and understand the contamination and subsequently develop a "meaningful, forward-looking plan".[23]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

According to Guinea-Bissau's declaration of completion in 2012, all clearance work had been conducted in accordance with IMAS. Technical and non-technical survey were only applied in 2010; prior to this, land was released solely through clearance.[24]

OPERATORS AND OPERATIONAL TOOLS

As at August 2021, all CAAMI's activities were on hold due to the lack of financial means.[25] HALO Trust, the only mine action operator currently present, 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 in the north-east region of Gabú.[26]

Norwegian People's Aid (NPA) was present in Guinea-Bissau until 2012 conducting survey and clearance.[27] NPA also conducted a national survey of mine and UXO contamination, working in partnership with the national NGO, Lutamos Todos Contra As Minas (LUTCAM).[28] During the first quarter of 2012, NPA conducted mainly explosive ordnance disposal (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.[29]

The assessment survey of the new discovered anti-personnel mine and ERW contamination was carried out by the national NGO, HUMAID.[30] The date of the survey is, however, unclear. Both national operators, LUTCAM and HUMAID are currently inactive.[31]

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.[32] Several organisations conducted clearance in conjunction with the national operators HUMAID and LUTCAM, including, Humanity and Inclusion (HI), Landmine Action,[33] NPA,[34] and a British NGO: Clear Ground Demining.[35]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

No mined area was reported to have been released in Guinea-Bissau in 2020. HALO Trust destroyed five anti-personnel mines from Guinea-Bissau military stockpile.[36]

SURVEY IN 2020

There were no reports of any survey of mined areas in Guinea-Bissau in 2020.

CLEARANCE IN 2020

HALO Trust destroyed five PRB M409 anti-personnel mines from a military ammunition storage area and reports that other stockpiled mines were at locations around Guinea-Bissau as of February 2021.[37] Guinea-Bissau's deadline for stockpile destruction expired on 1 November 2005.

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR GUINEA-BISSAU: 1 NOVEMBER 2001

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 NOVEMBER 2011

↓

FIRST EXTENDED DEADLINE (2-MONTH EXTENSION): 1 JANUARY 2012

↓

REPORTED DISCOVERY OF NEW MINED AREAS IN JUNE 2021

↓

EXTENDED DEADLINE REQUESTED: 31 DECEMBER 2022

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO, EXTENSION REQUESTED TO 31 DECEMBER 2022
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): MEDIUM

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 12MSP in December 2012, but in June 2021, reported at the APMBC Intersessional Meetings the discovery of 1.09km^2 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, to be considered at the 19MSP in November 2021, and said it will 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 2022 for consideration at the 20MSP.[38]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

In its declaration of completion of Article 5 obligations under the APMBC, Guinea-Bissau stated that "battle area clearance tasks remain, as well as an expected residual contamination, which will be addressed by the CAAMI".[39] 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.[40]

1 Article 5 deadline Extension Request, 22 June 2021, paras. 10–11.

2 Guinea-Bissau declaration of completion of implementation of Article 5 of the APMBC at the 12th Meeting of States Parties (12MSP), Geneva, 3–7 December 2012.

3 Presentation of Guinea-Bissau, APMBC Intersessional Meetings, 22–24 June 2021, slide 9; and Article 5 deadline Extension Request, 22 June 2021, pp. 9–12.

4 Article 5 deadline Extension Request, 22 June 2021, para. 11.

5 Presentation of Guinea-Bissau, APMBC Intersessional Meetings, 22–24 June 2021, slides 10 and 11.

6 Guinea-Bissau declaration of completion of implementation of Article 5 of the APMBC at the 12MSP, Geneva, 3-7 December 2012, p. 2.

7 Article 7 Report (covering 2010), Form C.

8 Article 7 Report (covering November 2001 to April 2002), Form C.

9 Guinea-Bissau declaration of completion of implementation of Article 5 of the APMBC at the 12MSP, Geneva, 3-7 December 2012, pp. 2–4.

10 Ibid.

11 Ibid., p. 5.

12 Email from James Scott, HALO Trust, 9 August 2021.

13 Presentation of Guinea-Bissau, APMBC Intersessional Meetings, 22–24 June 2021, slide 8.

14 Statement of Guinea-Bissau to the Fourth APMBC Review Conference, Oslo, 25–29 November 2019.

15 CCM Article 7 Report (covering 2019).

16 Presentation of Guinea-Bissau, APMBC Intersessional Meetings, 22–24 June 2021, slide 9; and Article 5 deadline Extension Request, 22 June 2021, pp. 9–12; the total is reported as 1,093,840m^2 in the documents.

17 APMBC Article 7 Report (covering 2010), Form A.

18 Landmine and Cluster Munition Monitor, Guinea-Bissau profile, last updated 21 April 2021.

19 Presentation of Guinea-Bissau, APMBC Intersessional Meetings, 22–24 June 2021, slide 12.

20 Article 7 Report (covering 2010), Form A.

21 Presentation of Guinea-Bissau, APMBC Intersessional Meetings, 22–24 June 2021, slide 12.

22 Guinea-Bissau Article 5 Extension Request, 22 June 2021, para. 11.

23 Ibid.

24 Guinea-Bissau declaration of completion of implementation of Article 5 of the APMBC at the 12MSP, Geneva, 3–7 December 2012, p. 4.

25 Presentation of Guinea-Bissau, APMBC Intersessional Meetings, 22–24 June 2021, slide 12.

26 Email from James Scott, HALO Trust, 9 August 2021.

27 Email from Hans Risser, NPA, 10 August 2021.

28 Guinea-Bissau declaration of completion of implementation of Article 5 of the APMBC at the 12MSP, Geneva, 3-7 December 2012, pp. 3–4.

29 Email from Hans Risser, NPA, 10 August 2021.

30 Presentation of Guinea-Bissau to the APMBC Intersessional Meetings, online, 22–24 June 2021, slide 9.

31 Email from James Scott, HALO Trust, 9 August 2021.

32 Guinea-Bissau declaration of completion of implementation of Article 5 of the APMBC at the 12MSP, Geneva, 3-7 December 2012, p. 4.

33 Email from James Scott, HALO Trust, 9 August 2021.

34 Email from Hans Risser, NPA, 10 August 2021.

35 Article 7 Report (covering November 2001 to April 2002), Form C.

36 Email from James Scott, HALO Trust, 9 August 2021.

37 Ibid.

38 Article 5 deadline Extension Request, 22 June 2021, paras. 10–11.

39 Guinea-Bissau declaration of completion of implementation of Article 5 of the APMBC at the 12MSP, Geneva, 3–7 December 2012, p. 5.

40 Ibid., pp. 4–5.

IRAQ

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 FEBRUARY 2028
NOT ON TRACK TO MEET DEADLINE

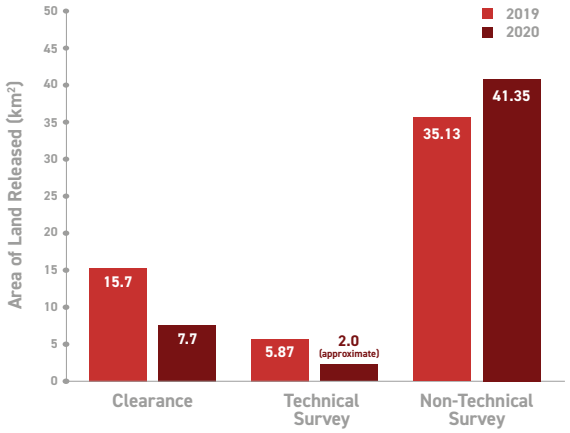
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE
PRECISE EXTENT UNCLEAR

AP MINE CLEARANCE IN 2020
7.7 KM²

AP MINES DESTROYED IN 2020
9,024
(FEDERAL IRAQ 7,852 AND KURDISTAN REGION OF IRAQ 1,172)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Federal Iraq and the Kurdistan Region of Iraq (KRI) imposed lockdowns, curfews, and movement restrictions in 2020 in response to the COVID-19 pandemic and the Directorate for Mine Action (DMA) suspended mine action operations in Federal Iraq for three months from mid-March to mid-June 2020 and direct explosive ordnance risk education/liaison until December 2020. Clearance results in both Federal Iraq and the KRI fell in 2020 as a result. The DMA appointed a new acting Director General in September 2020. For the first time in four years, donor funding became available in 2021 for survey and clearance of "legacy" mined areas in Federal Iraq.

RECOMMENDATIONS FOR ACTION

- **Iraq should update its mine action strategy with detailed proposals for survey and clearance that international donors can support.**
- **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.**
- **International donors should address the severely limited capacity and resources in national mine action structures.**
- **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 KRI should amend reporting forms to include improvised mines as a separate category distinct from improvised explosive devices.**
- **The DMA and the Iraqi Kurdistan Mine Action Agency (IKMAA) should provide comprehensive, disaggregated data on the results of survey and clearance, detailing the contribution of every active organisation.**
- **The DMA and IKMAA should report on contamination and land release using terminology compatible with the International Mine Action Standards (IMAS).**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	6	Iraq has a broad understanding of the location of legacy mined areas but 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.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	4	Federal Iraq has not provided the DMA, a department of the Ministry of Health, with the legal status and institutional authority to effectively manage or coordinate mine action activities by more politically powerful ministries such as defence, interior, and oil. Operators say that In the past year the DMA has engaged more widely with governorate and district authorities.
GENDER AND DIVERSITY (10% of overall score)	6	5	The DMA has engaged with international organisations to strengthen gender diversity in mine action and adopted a gender action plan. Operators are slowly increasing the number of women employees, as they strive for more gender-sensitive and inclusive programming, encouraged by donors, and possibly helped by economic pressures that appear to be increasing the number of female applicants for jobs in the mine action sector. International operators have also expanded the roles performed by female staff beyond office support tasks. Most operators have mixed-gender community liaison survey, and risk education teams and some employ female deminers and medics, but 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	4	Cumbersome reporting procedures slow entry of operator survey and clearance results, a problem seriously aggravated by the lockdown and restrictions imposed to tackle the COVID-19 pandemic, ensuring data is uploaded months late. Iraq has, however, submitted regular annual and, in the past two years much improved, Article 7 transparency reports.
PLANNING AND TASKING (10% of overall score)	5	4	Better coordination between the DMA, the United Nations Mine Action Service (UNMAS), and operators has significantly improved the issuing of task orders although restrictions imposed in 2020 caused delays in responding to tasking and data accompanying the task orders was largely out of date.
LAND RELEASE SYSTEM (20% of overall score)	5	5	Iraq's national mine action standards are old, exist only in Arabic, and do not address contemporary challenges such as clearance of improvised mines or the search and clearance of buildings. The DMA has started review of 13 chapters of standards with support from UNMAS and submitted seven for ministerial approval but 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)	6	6	Mine clearance fell in 2020 as a result of the disruption caused by measures to tackle the COVID-19 pandemic, including a three-month suspension of operations in Federal Iraq, but Iraq reported cancelling large areas of suspected contamination.
Average Score	**5.5**	**5.1**	**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 Khebra Al Fania Demining Co.
- Al Safsafa
- Alsiraj Almudhia for Mine Removal
- Arabian Gulf Mine Action Co.
- Al Waha

- Al Watania Company for Demining
- Eagle Eye
- Health and Social Care Organisation in Iraq (IHSCO)
- Iraq Tadhamon Company for Mine Clearance
- Kanary Mine Action Company
- Nabaa Al-Hurya Company
- Ta'az 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

UNDERSTANDING OF AP MINE CONTAMINATION

Iraq is the world's most mine contaminated country even allowing for the probability that further survey will significantly reduce the extent of the problem. At the end of 2020, Iraq estimated it had 1,794km^2 of contamination by conventional and improvised anti-personnel mines. This comprised 1,583km^2 in Federal Iraq and 211km^2 in the KRI.[1] The total was 3.7% less than a year earlier, partly as a result of reclassifying what were thought to be mine hazards as battle area. Clearance of areas affected by improvised mines continued but on a smaller scale as a result of the impact of COVID-19 measures on operations.

FEDERAL IRAQ

Most of Federal Iraq's AP mine contamination consists of confirmed and suspected "legacy" mined areas that covered 939km^2 at the end of 2020, down from 1,020km^2 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). They include major barrier minefields on the border with Iran stretching from Basrah to Missan and Wassit governorates. The Shatt al-Arab and Fao districts of Basrah governorate alone accounted for 87% of Federal Iraq's estimated legacy mined area.[2] No mine clearance occurred in these governorates in 2020 but by reclassifying hazardous area previously recorded as minefield as battle area it reduced the overall estimate of mine contamination by 39km^2.[3]

Table 1: Mined area in Federal Iraq (at end 2020)[4]

Contamination type	CHAs	Area (m^2)	SHAs	Area (m^2)	Total area (m^2)
Anti-personnel mines	303	972,070,400	48	17,290,546	989,360,946
Improvised devices*	975	327,937,898	256	265,445,391	593,383,289
Totals	**1,278**	**1,300,008,298**	**304**	**282,735,937**	**1,582,744,235**

* The area attributed to mines of an improvised nature

Table 2: Legacy anti-personnel mined area by governorate in Federal Iraq (at end 2020)[5]

Governorate	CHAs	Area (m^2)	SHAs	Area (m^2)	Total area (m^2)
Anbar	0	0	1	1,580	1,580
Basrah	56	842,950,545	1	962,731	843,913,276
Diyala	1	0	28	15,791,646	15,791,646
Kirkuk	1	5,584	0	0	5,584
Missan	207	50,110,013	3	400,183	50,510,196
Muthanna	4	38,978,577	0	0	37,978,577
Ninewa	2	390,786	9	132,792	523,578
Salah al-Din	2	51,712	6	1,614	53,326
Wassit	30	39,583,183	0	0	39,583,183
Totals	**303**	**972,070,400**	**48**	**17,290,546**	**988,360,946**

Federal Iraq also contends with heavy contamination by improvised mines in six governorates liberated from Islamic State four years ago. At the end of 2020, Iraq estimated it had 593km^2 of confirmed and suspected hazardous areas affected by improvised devices (see Table 3), nearly 33km^2 less than a year earlier. Most of the reduction occurred in Ninewa and Kirkuk governorates which have been a focus of clearance operations, but in Anbar governorate, where international NGOs have deployed increased survey and clearance capacity over the past year, the amount of contamination was 12.8km^2 more at the end of 2020 as a result of survey.[6] Although Iraq continues to report them as IEDs, the vast majority of the devices are victim-activated and qualify as anti-personnel mines. In 2019, only 2 of the 9,726 devices cleared were command detonated.[7]

Table 3: IED/Improvised mine contamination in Federal Iraq (at end 2020)[8]

Province	CHAs	Area (m^2)	SHAs	Area (m^2)	Total area (m^2)
Anbar	605	36,096,771	107	126,281,177	162,377,948
Baghdad	0	0	1	3,577,320	3,577,320
Diyala	6	206,540,876	12	47,617,199	254,158,075
Kirkuk	44	35,704,501	20	1,413,240	37,117,741
Ninewa	231	40,228,780	106	85,989,139	126,217,919
Salah al-Din	89	9,366,970	10	567,316	9,934,286
Totals	**975**	**327,937,898**	**256**	**265,445,391**	**593,383,289**

KURDISTAN REGION OF IRAQ

The 211km^2 of mine contamination in the KRI, though a fraction of Federal Iraq's, ranks the region as one of the most mined areas in the world and the total could be higher as some insecure Turkish border areas have not been surveyed. The KRI's end-2020 contamination estimate was marginally (1%) lower than at the end of the previous year, helped by significant reductions in the number and extent of CHAs in Slemani governorate, but it also included a 12km^2 CHA not recorded a year earlier.[9]

In contrast to Federal Iraq, the KRI reports only small amounts of land affected by improvised mines, estimated at the end of 2020 at 2,892,097m^2, including SHAs amounting to 2,169,723m^2 and CHAs totalling 722,374m^2.[10]

Table 4: Legacy anti-personnel mined area by governorate in the KRI (at end 2020)[11]

Province	CHAs	Area (m^2)	SHAs	Area (m^2)	Total area (m^2)
Dohuk	400	20,268,239	0	0	20,268,239
Erbil	335	47,823,202	0	0	47,823,202
Halabja	258	12,331,899	5	1,265,000	13,596,899
Slemani	2,095	100,387,755	117	28,519,766	128,907,521
Totals	**3,088**	**180,811,095**	**122**	**29,784,766**	**210,595,861**

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The mine action programme in Iraq is managed along regional lines. The Directorate for Mine Action (DMA) represents Iraq internationally and oversees mine action for humanitarian purposes in Federal Iraq covering 15 of the country's 19 governorates.[12] Mine action in the KRI's four governorates is overseen by the Iraqi Kurdistan Mine Action Agency (IKMAA), which reports to the Council of Ministers and is led by a director general who has ministerial rank.

FEDERAL IRAQ

The inter-ministerial Higher Council of Mine Action,[13] 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.[14]

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 Basrah city, oversees governorates with the greatest concentrations of legacy mine and cluster munition remnants (CMR) contamination and is the focal point for Iraq's response to cluster munitions. It maintains its own database and is responsible for tasking operators in its area of operations. RMAC North, which was based in Baghdad until August 2019 when it opened a satellite office in Mosul, covers the governorates most affected by improvised mines.[15] RMAC MEU has significant legacy mined area in one governorate as well as modest amounts of CMR contamination.

DMA coordination of mine action remains a challenge in a sector in which its formal status as a department of the Ministry of Health 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. Khaled Rashad Jabar al-Khaqani, appointed acting director in June 2019, was at least the twelfth director since 2003. He was replaced at the end of September 2020 by Dhafir Mahmood Khalaf, who was also appointed as acting director and as of end-June 2021 was awaiting confirmation in the post. The heads of five of nine DMA departments were also replaced in the course of 2020: Operations, Risk Education, RMAC-MEU, Administration & Finance, and Victim Assistance.[16]

Federal Iraq's spending on the DMA and mine action is unknown. The sector remains heavily dependent on international donor funding, most of it channelled through the United Nations Mine Action Service (UNMAS) and bilateral funding to clearance operators. In the past two years, the Iraqi government and donors have given priority to tackling massive contamination by mines of an improvised nature in areas liberated from Islamic State, leaving scant resources for tackling contamination by explosive remnants of war (ERW) in other areas of Iraq, including the substantial CMR threat concentrated in the south.

KRI

IKMAA functions as a regulator and 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 Slemani (Sulaymaniya).

IKMAA did not respond to requests for information from Mine Action Review about mine action in the KRI.

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; deliver risk education, nationally and locally; and support the capacity of government entities to manage, regulate, and coordinate Iraq's response to explosive ordnance contamination. The size of the UNMAS mission in Iraq dropped from 100 staff in 2019 to 86 staff in 2021, including 24 internationals (down from 43).[17]

Donor funding channelled through UNMAS appears to have continued an overall decline. UNMAS received US$76.9 million in 2019, some of it for activities in 2019–20. Funding available for mine clearance in 2020 amounted to $12.75 million. Funding pledged for 2021, as of March 2021, amounted to $14.4 million. UNMAS, meanwhile, provided grants to international and national NGOs for clearance and EORE projects also designed to build sustainable national capacity, explosive ordnance disposal (EOD) training for Ministry of Interior police and gender mainstreaming both within UNMAS operations and in the sector.[18]

GENDER AND DIVERSITY

The Iraq National Strategic Mine Action Plan specifically refers to gender equality and gender mainstreaming within mine action activities as objectives of an effective programmatic response.[19] The DMA adopted a Gender Unit Action Plan in 2020 drawn up with UNMAS support, and initiated the establishment of a Mine Action Gender Task Force in early 2021.[20]

Most operators employ women in administrative office roles; many also have a significant representation of women in community liaison, survey, and risk education functions; and some also employ women in clearance teams, including as team leaders.[21] This follows increased focus from operators and donors on more gender-sensitive and inclusive programming.[22] Social barriers to women working alone in activities undertaken mostly by men remain an obstacle to recruiting women but it appears economic pressures and the pandemic have created greater demand among women for jobs in mine action. Mines Advisory Group (MAG) received more than 1,000 applications in two days for employment as deminers in 2020, of which 12% were from women.[23]

The extent to which women participate varies according to cultural sensitivities in different parts of the country. Employing women for office jobs in Baghdad is easier than for operational roles in socially conservative governorates.

Still, Norwegian People's Aid (NPA), after extensive outreach to local officials and families, has found it possible to employ mixed-gender teams in even the most conservative areas, although not yet in southern Basrah governorate, and after initial hirings has found it easier to recruit women.[24] 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 hired additional women staff in Mosul in January 2021 and planned to recruit more female staff in Sulaymaniyah later in the year.[25] By mid 2021, four women had progressed to become deputy team leaders and three women were team leaders.[26] MAG also expected to roll out a Gender, Diversity and Inclusion (GDI) assessment in September 2021 intended to provide the basis for a three-year GDI action plan.[27]

Most international operators are strengthening the contribution of women in their Iraq operations. The Swiss Foundation for Mine Action (FSD) set up a team of female deminers and a medic at the end of 2019 and has hired additional female staff for survey.[28] HALO Trust employed 25 women out of a total staff of 125 and increased its female work force in 2020 after hiring women to work in multi-task teams undertaking explosive ordnance risk education (EORE), survey, and clearance in Anbar governorate.[29] In MAG, which

employed a gender focal point in 2020, women make up 14% of its total staff in Iraq and 16% of its operations staff, a proportion expected to rise with the recruitment of more women in 2021.[30] One third of NPA's 89 support staff are women as are one in twelve of its operational staff, including three female team leaders. NPA plans to increase the number of women in managerial positions.[31] Tetra Tech employed women in all its community liaison teams and planned to have female clearance teams subject to funding availability.[32]

INFORMATION MANAGEMENT AND REPORTING

The DMA and IKMAA maintain 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 CMR survey and clearance, maintains a database in Basrah, which receives reports from demining organisations in its area of operations. The database is synchronised with Baghdad's at intervals determined by the volume of data to be uploaded.[33] The DMA convenes a technical working group on information management which involves implementing partners and UNMAS and continued online in 2020.[34]

Operators are required to submit results to DMA in hard copy in Arabic delivered by hand every month. DMA then uploads results manually into the database. The procedure meets Iraqi legal requirements, but this can cause delays uploading results of survey and clearance. As a result, operators say data available with task orders and online are often not up to date.[35] RMAC-S has accepted data for its database electronically since March 2019.[36] The DMA says delays are caused by serious error and inaccuracies in thousands of operator reports which it needs to send back for correction.[37] Operators under contract to UNMAS submit reports electronically and in English to UNMAS, which then provides the data to the DMA. However, interruptions and reduced hours of work caused by measures to deal with the COVID-19 pandemic have slowed the uploading of survey and clearance results. As a result, operators report that delays in uploading data which commonly ran to several months pre-COVID can now stretch to up to a year.[38]

Since 2019, the DMA has given operators access to an online dashboard presenting mine action data and to an Online Task Management System developed by iMMAP. In December 2020, the DMA organised a workshop for mine action stakeholders to review information management. Operators say the Online Task Management System is easy to navigate, and enables them to obtain information on known contamination and the CHAs that are available for clearance. The system provides a clear indicator of DMA regional priorities and allows operators to get a snapshot of current activity in particular areas, but they say the data it presents are not up to date and the Online Task Management System does not record completed tasks, which prevents the identification of areas already cleared.[39]

PLANNING AND TASKING

Iraq's 2017 Article 5 deadline extension request, and the 2017–2021 strategic plan issued subsequently, laid out a general strategy for mine action but did not deal with improvised mines. Moreover, the documents were quickly superseded by the programme to tackle contamination in liberated areas with a view to facilitating the return of internally displaced persons, rehabilitation of public services, and restoration of the economy. The DMA reported that it would submit an update to the Article 5 extension request in 2021 before the 19th Meeting of States Parties to the APMBC and in 2020 started working with IKMAA drawing up a new strategic plan for 2022 to 2028 in consultation with the Geneva International Centre for Humanitarian Demining (GICHD).[40]

Tasking, which was previously a major source of friction between the DMA, operators and UNMAS, is reported to have improved significantly since 2019. Until then, UNMAS had issued task orders unilaterally for UN-funded projects, but a 2019 agreement between the DMA and UNMAS on "dual-key" procedures for UNMAS-funded projects has reportedly paved the way for improved coordination and better relations. A new task order process also reportedly clarified the roles of national mine action authorities and government ministries, including defence and interior.[41]

The DMA convened a meeting on tasking with international and national NGOs in November 2020 and subsequently adopted a protocol by which it continues to assign tasks relating to broad geographic areas but site priorities are determined in consultation with local authorities and stakeholders and written confirmation of the priorities is required from the local governor's or mayor's office.[42] Operators reported the DMA has been more proactive coordinating with local authorities and government planning departments.

IKMAA representatives in Dohuk, Erbil, and Garmian meet regularly with MAG and jointly develop an annual plan. IKMAA provides MAG with the necessary information to enable MAG to select mined areas to be released during the year. Once the yearly plan has been agreed upon, IKMAA issues task orders upon request from MAG.[43]

UNMAS said it meets at least twice a week with RMAC-North, overseeing governorates where nearly all UMAS-funded projects are located. It said task order procedures allow operators to receive new task orders a week before expiry of current tasks.[44] Operators reported some slowdown in the DMA's issuance of task orders as COVID-19 restrictions reduced staffing and working hours but overall reported improved coordination and efficiency and that an online task management system introduced by iMMAP in 2019 was functioning well although data accessible through the system were out of date.

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. In 2019, the DMA and UNMAS started to review and update 13 chapters of Iraq's national mine action standards (NMAS) and bring them into line with international standards.[45] The standards under review covered non-technical survey, technical survey, BAC, Manual Demining, Mechanical Demining, Post Clearance Documentation, Accreditation, EOD, IEDD, Land Release, Safety in the workplace, Training and House clearance.[46] In the meantime, operators apply their own SOPs approved by the DMA in the course of accreditation. In January 2020, Iraq circulated a modified national standard for technical survey.[47]

Iraq also does not yet have standards for survey and clearance of improvised mines or for search and clearance of buildings. The DMA issued a "Technical Work Statement for Detection and disposal of IEDs" but it consists mainly of general guidelines for task management. Operators have worked according to their own SOPs or UNMAS's Standard Working Practices (SWP) for implementing partners.[48] UNMAS produced a revised SWP on Residential Area Clearance, including a new tasking procedure aligned with the DMA's, guidance on housing, land, and property due diligence and standardised handover forms.[49]

The DMA set up a committee in October 2019 to review and update standards with the intention of producing draft revisions by the end of the year. The DMA consulted a number of stakeholders, including international demining organisations and the GICHD but work continued in 2020.[50] Discussions on standards experienced delays because of measures to deal with the COVID-19 pandemic.

OPERATORS AND OPERATIONAL TOOLS

The DMA reported 47 commercial companies and NGOs were accredited for mine action at the end of 2020, including 21 international and 26 national organisations, in addition to the Ministry of Defence and the Ministry of Interior's Civil Defence and Directorate for Combatting Explosives.[51] It was not clear how many were active during the year. International demining capacity included six international humanitarian operators who accounted for most of Iraq's mine clearance in 2020, operating mainly in Ninewa and Anbar governorates, which rank as the most contaminated by improvised mine contamination, as well as with a small presence in Diyala, Kirkuk, and Salah al-Din governorates.

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.[52] In Federal Iraq, the Army remains the only organisation authorised to conduct demolitions.[53] 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 were not systematically clearing IEDs or mines of an improvised nature.[54]

IKMAA remains the biggest mine action operator in the KRI focused on clearance of legacy mined areas. IKMAA is believed to have reduced capacity since 2018 when it had 37 demining teams employing 444 personnel, 7 mechanical teams, 3 EOD teams, 5 survey teams, 37 QA teams, and 10 risk education teams.[55] By the start of 2021, it reportedly deployed 35 manual clearance teams with total staff of 420, along with 4 mechanical teams, 6 EOD teams, 27 QA teams, 2 ground preparation teams, and an unspecified number of survey teams.[56]

FSD was one of six international mine action NGOs working in Federal Iraq (in Ninewa governorate_ in 2020, operating with a total staff of 131, including 11 manual clearance teams with 77 deminers, 4 four-person survey teams, and 2 mechanical teams with a total of 16 personnel. The COVID-19 pandemic prompted one donor to withdraw support, leading to termination of four teams but a new grant received in September 2020 allowed FSD to rehire them. It also added a remote-controlled Bobcat machine providing more flexibility for teams conducting building clearance.[57]

Despite the disruption caused by the pandemic, the HALO Trust expanded capacity in 2020 and with operations picking up momentum in 2021 it expected to grow further. Its total staff more than doubled from 68 at the end of 2019 to 150 a year later, which included eight manual clearance/multi-task teams, rising to ten by the end of 2020 with a total of 140 deminers as well as four mechanical teams also with a total of thirty-two staff and two community liaison/EORE teams. Operations centred on Anbar governorate's Fallujah and Ramadi districts and Salah al-Din's Baiji district, but in August 2020 it also opened an office in Erbil in the KRI. This allowed HALO to remotely manage an EORE contract in Mosul. It also facilitated import of equipment when Baghdad international airport was closed and provided a base for international staff in a period when Federal Iraq had put a brake on issuing visas, preventing them from returning until January 2021.[58]

MAG, the biggest of the international operators in Iraq and the only one conducting survey and clearance in the KRI, also experienced pandemic-related funding cuts in 2020 that led to the lay-off of 30 teams and hundreds of staff. MAG was able to rehire some teams in 2021 after the resumption of projects which had been suspended due to the COVID-19 pandemic but it expected to receive slightly less funding in 2021 than the previous year.[59] MAG kept existing offices in Baghdad, Chamchamal, Dohuk, Erbil, Mosul, Sinjar and Tel Afar, but reduced staff to 734, including 30 internationals, by the end of 2020, down from 1,071 employees in Iraq at the end of 2019.[60] In Federal Iraq, MAG had a total of 58 teams and 439 personnel in 2020, including 27 demining teams (down from 42 in 2019) with a total of 261 personnel. In the KRI, MAG had 68 deminers in 6 clearance teams, down from 12 teams in 2019, along with one team working with mine detection dogs and two BAC/EOD teams. It also had 36 mechanical assets for clearance and rubble removal in Ninewa and the KRI.[61]

NPA also expanded capacity in 2020, increasing its total staff from 208 in 2019 to 326 in 2020 when it had 23 clearance

teams with 172 deminers supported by nine survey teams, four mechanical teams, and three mine detection dog (MDD) teams, of which were not yet accredited or working. NPA previously worked in Ninewa governorate but since 2019 has transitioned demining operations to focus on clearance of improvised mines in Anbar governorate's Ramadi, Haditha and Ana districts. To cope with pandemic lockdowns and curfew restrictions, NPA adopted a system of remote management conducting virtual site visits, briefings and process field reports. In 2021, NPA expected to add another eight demining teams, four more mechanical teams, and five new non-technical survey teams. It also expected to receive accreditation for its MDDs and start them working on improvised mine belts, particularly in areas where machines cannot work, and searching building perimeters and checking rubble.[62]

DRC (formerly DDG) received new registration in January 2020 resolving bureaucratic issues that had led to a suspension of operations in May 2019 and closure of offices in Tikrit and Kirkuk. However, DDG (as it was in 2020) worked with a much smaller staff of 61, down from more than 160 people before the suspension of operations, and while it cleared CMR in Basrah governorate in 2020, it did not conduct any mine clearance. It expected to resume operations in Mosul district in 2021.[63]

DCA, which has worked in Iraq with a country office in Erbil since 2017, is the newest international partner in humanitarian demining. In 2020, with seven international and 19 national staff it engaged in building capacity of its national partner IHSCO for survey and clearance under a grant from UNMAS.[64] DCA provided training at a school in Hamdaniya district of Ninewa governorate and aimed to open another office in Tel Afar district in 2021. DCA expected to receive accreditation and start conducting survey and clearance in 2021 with a view to having four IHSCO search and clearance teams operational by 2022.[65]

Tetra Tech, working under contract to the US State Department's PMWRA, expanded from 10 multitask teams to 14 by the start of 2021, employing a total of 220 personnel. This comprised 30 internationals across a range of management and operational roles, 160 national operations staff, and 30 national support staff. It maintained a project office in Erbil and field offices in Ninewa (Mosul) and Anbar governorates, and in 2021 expanded its operating area to include Kirkuk. Tetra Tech was initially mandated to clear critical infrastructure such as schools, water, power, food security and hospitals but since 2020 has widened activities to include clearing houses to support the return of IDPs. Assets included armoured front-end loaders and excavators for rubble clearance and search.[66]

Table 5: Operational clearance capacities deployed in 2020

Operator	Manual teams	Total deminers	Dogs and handlers	Machines*	Comments
Army	12	est. 3,000			
IKMAA	35	385		7 teams	
DDG	3	35			DDG closed offices in Tikrit and Kirkuk while retaining an operational presence in Basrah, Erbil, and Mosul.
FSD	11	77		2 teams	
HALO	10	140		4 teams	
MAG (Federal Iraq)	27	261	Personnel 6	5 teams	
MAG (KRI)	6	68	4	1 team	
NPA	23	172		4 teams	NPA doubled its mechanical teams in 2019.
Tetra Tech	10	120		8 machines	
Totals	**137**	**est. 4,258**	**10**	**23 teams and eight additional machines**	

* Excluding vegetation cutters and sifters

OPERATIONAL TOOLS

Tetra Tech used IED robots to remove items deemed too unsafe for manual render-safe procedures and also employed multiple drones, including DJI Phantom 4 and 4 Pro, DJI Mavic Pro, and Yuneec H520 with high-definition and thermal cameras. These are operated by international staff for reconnaissance, non-technical and technical survey of task environments, assessments of buildings' structural integrity, and observation of explosive hazard threats through open doors and windows. It planned to train national staff as drone operators in 2021.[67] MAG also included five drones and one IED robot in a fleet of 36 mechanical assets and also worked with seven dogs specially trained for IED search and six dogs trained for traditional mine detection.[68] HALO Trust used the mobile data collection application, Fulcrum, to collect survey and clearance data electronically, avoiding human error and eliminating the need for preparing or distributing paper records, which proved particularly useful during the pandemic lockdown. Used in conjunction with a global navigation satellite system, it also facilitated recording and sharing mapping data, saving time and increasing accuracy.[69]

DEMINER SAFETY

Mine action authorities did not report any casualties related to mine action or insecurity in 2020.

Security deteriorated in 2020 against a background of tensions between the United States and Iran and Iranian-backed militias, as well as low-level activity by Islamic State remnants in certain districts. Militia threats against entities with perceived US links prompted FSD to remove teams from Hamdaniya district in early 2020.[70]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Despite the disruption cause by COVID-19 lockdowns and travel restrictions, Federal Iraq reported release of more than 89km^2 in 2020 (see Table 6), marginally more than the 87km^2 it reported in the previous year.[71] Results of land release in the KRI are unclear but are estimated by the Mine Action Review on the basis of available official and operator data at a little under 100,000m^2.[72] That total represents a sharp drop from the 2.72km^2 the KRI said it released in 2019.[73]

Table 6: Official Federal Iraq land release results for 2020 (m^2)[74]

Device type	Area cancelled	Area reduced	Area cleared	Total area released
Legacy AP mines	39,155,145	649,263	544,870	40,349,278
Improvised mines	41,346,876	377,114	7,035,531	48,759,521
Totals	**80,502,021**	**1,026,377**	**7,580,401**	**89,108,799**

Measures to deal with the COVID-19 pandemic, including a lockdown and curfew had wide-ranging impacts on survey and clearance operations in 2020. The DMA suspended clearance operations from March 17 until June 15 and restrictions on movements also continued to affect operations after the suspension was lifted. Following Ministry of Health rules on social distancing, the DMA halted all community liaison activities in March 2020, which led some operators to suspend direct EORE until January 2021. Federal Iraq stopped issuing visas in March 2020 preventing international staff from returning to or taking up posts for extended periods. Baghdad and Erbil international airports closed for extended periods. Expatriate staff with visas were able to return in August but operators said international staff applying for new visas continued to face restrictions until February 2021. Entry restrictions on a number of nationalities introduced in December 2020 also complicated staff movements.[75]

Operators said iMMAP facilitated the resumption of an online system for obtaining access permits from the NGO Directorate in October 2020 which produced a "drastic improvement" in operating conditions. Short-term, unannounced lockdowns continued in 2021 causing intermittent interruptions and ad hoc application by checkpoints of government directives on issues such as the requirement to show PCR tests has interrupted movements between Federal Iraq and the KRI.[76]

FEDERAL IRAQ

SURVEY IN 2020

Federal Iraq attributed more than 80km^2 or 90% of the land recorded as released in 2020 to cancellation but it is unclear how much was cancelled as a result of systematic non-technical survey or how this result was achieved. International demining organisations responsible for most of the mine clearance in Iraq reported cancelling just 1.4km^2 through non-technical survey in 2020 in liberated areas (see Table 7) which was not reflected in Iraq's Article 7 data. Some 41.km^2, or just over half the total area recorded as cancelled in 2020, was located in two districts of Kirkuk governorate affected mainly by improvised mines but there was no indication of the process by which the area was cancelled. The remaining area reported as cancelled consisted of 15 hazardous areas covering 39.15km^2 in Basrah governorate's Shatt al-Arab district, which were cancelled as landmine tasks but re-classified as battle area after investigation by Army engineers.[77]

Table 7: Cancellation and reduction through survey by INGOs in 2020 (m^2)

Operator	Governorate	Area cancelled	Area reduced
HALO	Salah al-Din	2,422	0
MAG	Ninewa	1,041,117	579,187
NPA	Anbar	312,549	1,380,308
Totals		**1,356,088**	**1,959,495**

CLEARANCE IN 2020

The total amount of land released through clearance in Iraq in 2020 is officially reported at 7.67km^2, including 7.58km^2 reported by Federal Iraq (see Table 8) and 92,672m^2 reported for the KRI. The result marks a significant downturn from 2019 when Mine Action Review estimated Iraq cleared around 15km^2, reflecting primarily the impact of the measures taken to combat the COVID-19 pandemic. The 7,852 mines reportedly cleared in Federal Iraq 2020 were one-third less than the number cleared previous year.[78]

The total area reported cleared by international NGOs in Federal Iraq in 2020 was similar to the official total but showed different levels of clearance in individual governorates. In a year disrupted by the pandemic, the area cleared by INGOs was one-third less than the previous year. INGOs also reported clearing 5,291 mines, little more than half the number reported cleared in 2019.[79] Clearance activities funded through UNMAS in 2020 accounted for 1,017,333m^2.[80]

Table 8: Mine clearance in Federal Iraq in 2020[81]

Governorate	Area cleared (m^2)	AP mines cleared
Improvised mines		
Anbar	1,089,790	1,289
Kirkuk	1,654,883	6
Ninewa	4,263,592	4,976
Salah al-Din	27,266	16
Subtotal	**7,035,531**	**6,287**
Legacy minefields		
Missan	544,870	1,565
Subtotal	**544,870**	**1,565**
Totals	**7,580,401**	**7,852**

Table 9: INGO clearance in Federal Iraq in 2020[82]

Operator	Governorate	Area cleared (m^2)	AP mines, including improvised mines, cleared
FSD	Ninewa	3,268,764	1,449
HALO	Anbar	659,101	572
HI	N/R	N/R	N/R
MAG	Ninewa	793,098	435
NPA	Anbar	1,992,391	2,835
Totals		**6,713,354**	**5,291**

N/R = Not reported

In 2021, for the first time in several years, Federal Iraq started a project to clear "legacy" mined areas in the south. Clearance operations since 2018 have focused almost exclusively on areas in the north and west liberated from Islamic State in order to rehabilitate critical infrastructure and clear areas required for resettlement of internally displaced people as part of a stabilisation programme. In June 2021, an Iraqi commercial operator, Al Khebra Al Fania (AKAF), started training for a project to survey and clear almost 15km^2 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, was dye to start operations in late July and run for a year.[83]

KRI

The KRI released few details of mine action operations but available data pointed to a sharp contraction in 2020. A workshop presentation by IKMAA in March 2021 said the KRI released 1km^2 through clearance in 2020 and destroyed 1,172 AP mines whereas in 2019 it cleared 2.2km^2 and destroyed 6,788 AP mines.[84]

Iraq's Article 7 Report recorded KRI clearance of 87,220m^2 and area reduction of 5,452m^2 for a total of 92,672m^2, down from a total of 2.27km^2, the previous year. It recorded all clearance as being conducted by MAG in Duhok and Slemani.[85]

MAG reported slightly higher results, including area reduction totalling 21,372m^2 in Dohuk and Slemani. It also reported clearing seven mined areas in Slemani covering 53,513m^2 and two mined areas in Dohuk affecting 21,680m^2 for total clearance of 75,193m^2 resulting in removal of 673 anti-personnel mines.[86]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR IRAQ: 1 FEBRUARY 2008

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 FEBRUARY 2018

↓

FIRST EXTENSION REQUEST DEADLINE (10-YEARS): 1 FEBRUARY 2028

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

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.

In the past five years Iraq has cleared at least 71.5km^2 of mines, including improvised mines (see Table 10), as well as substantial volumes of ERW. Despite the severe disruption caused by the COVID-19 pandemic, Federal Iraq's mine action programme continued to show progress. Large areas reported as cancelled in 2020, although not a result of systematic non-technical survey, still represented a step towards better defining hazardous areas that require further survey and clearance. The re-classification of 39km^2 in Basrah underscored the longstanding conviction expressed by RMAC South that the nearly 1,000km^2 identified as contaminated by conventional mines can be considerably reduced, perhaps by as much as one-quarter, through survey.[87] The possibilities will be further tested by a one-year survey and clearance project starting in the second half of 2021 in Basrah governorate, which accounts for 85% of 'legacy' mined areas and more than half the country's total mine contamination.

Iraq was preparing to submit an updated Article 5 deadline extension request ahead of the 19th Meeting of States Parties in November 2021, and a new strategic plan for 2022–28 under preparation by the DMA and IKMAA in consultation with the GICHD should clarify plans and priorities.[88] As part of the preparations, DCA, DRC, HALO Trust, HI, MAG, and NPA took part in a four-day workshop in Erbil in March 2021.[89]

Iraq's 2017 Article 5 deadline extension request laid out only general guidelines for mine action and did not address improvised mine contamination in liberated areas. A national strategic plan for 2017–21 defined roles of national institutions and summarised the findings of previous surveys but also did not detail survey and clearance targets. Iraq still has considerable international capacity to push survey and clearance ahead but donors withdrew support from some clearance projects as a result of the COVID-19 pandemic in 2020. With competition for donor funds intensifying, Iraq can expect further cuts to its mine action spending, particularly if it cannot revive momentum and outputs. The revised extension request and 2022–28 strategic plan provide an important opportunity for Iraq to set out targets for survey and clearance and make the case for donor support.

Table 10: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	7.7
2019*	15.7
2018	8.4
2017	23.3
2016	16.4
Total	**71.5**

* Mine Action Review estimate

1 Article 7 Report (covering 2020), pp. 14–17.
2 Ibid., pp. 14-15; email from Ahmed Aljasim, Head of Planning and Information, DMA, 15 April 2021.
3 Article 7 Report (covering 2020), pp. 20-22.
4 Ibid., pp. 14–15.
5 Ibid.
6 Article 7 Report (covering 2020), p. 10.
7 Article 7 Report (covering 2019), p. 41.
8 Article 7 Report (covering 2020), p. 10.
9 Article 7 Report (covering 2019), p. 21; and Article 7 Report (covering 2020) pp. 16–17.
10 Article 7 Report (covering 2020), p. 19.
11 Ibid., pp. 16–17.
12 DMA presentation to 2015 Mine Action Country Planning Workshop for Iraq, Istanbul, 13 May 2015; Geneva International Centre for Humanitarian Demining (GICHD), "Capacity Development Support to National Mine Action Authorities in Iraq, Phase 1: Initial Assessment Mission", February 2012.
13 The council is led by the Prime Minister and includes representatives of the ministries of defence, interior, oil, and environment, as well as the National Security Adviser and the head of IKMAA.
14 "Document of roles and responsibilities", undated but 2019, received by email from the DMA, 13 May 2019.
15 Interview with Gus Guthrie, NPA, in Geneva, 12 February 2020.
16 Email from Ahmed Aljasim, Head of Planning and Information, DMA, 15 April 2021; DMA Facebook post, 30 September 2020, at: https://bit.ly/3eKuljX.
17 Emails from Shinobu Mashima, Programme Officer, UNMAS, 4 May 2019 and 6 April 2020.
18 Email from Hannane Boulmaoui, Head of Programme Section, UNMAS Iraq, 16 April 2021.
19 National Strategic Mine Action Plan, pp. 12, 18, 20, and 30.
20 Email from Hannane Boulmaoui, UNMAS Iraq, 16 April 2021.
21 Interviews with mine action stakeholders in Iraq, 28 April–6 May 2019.
22 Email from Arianna Calza Bini, GICHD, 27 July 2021.
23 Email from Jack Morgan, Country Director, MAG, 19 April 2021.
24 Email from Gus Guthrie, Country Director, NPA, 23 March 2021.
25 Email from Jack Morgan, MAG, 19 April 2021.
26 Email from Katie Shaw, Programme Manager, MAG, 29 June 2021.
27 Email from Katie Shaw, MAG, 17 August 2021.
28 FSD Blog, "Demining: women make their mark", January 2021.
29 Email from Nicholas Torbet, Deputy Head of Region, Middle East, North Africa and Afghanistan, HALO Trust, 12 April 2021.
30 Email from Jack Morgan, MAG, 19 April 2021.
31 Email from Gus Guthrie, NPA, 23 March 2021.
32 Email from Jeff Caldwell, Iraq Senior Destruction Operations Manager, Tetra Tech, 22 July 2021.
33 Interview with Nibras Fakhir Matrood, DMA RMAC South, Basrah, 29 April 2019.
34 Article 7 Report (covering 2020), p. 27.
35 Interviews with operators in Iraq, 28 April–6 May 2019.
36 Interview with Nibras Fakhir Matrood, DMA RMAC South, Basrah, 29 April 2019.
37 Email from Ahmed Aljasim, DMA, 23 July 2021.
38 Emails from international operators, April 2021.
39 Ibid.
40 Email from Ahmed Aljasim , DMA, 15 April 2021; Article 7 Report (covering 2020), p. 26; and Skype interview with Asa Massleberg, GICHD, 5 May 2021.
41 Email from Shinobu Mashima, UNMAS, 6 April 2020.
42 Email from Hannane Boulmaoui, UNMAS, 16 April 2021.
43 Email from Katie Shaw, MAG, 17 August 2021.
44 Ibid.
45 Emails from Ahmed Aljasim, DMA, 15 April 2021; and Hannane Boulmaoui, UNMAS Iraq, 16 April 2021.
46 Email from Joel Yves Aboh, Associate Programme Officer, UNMAS, 15 July 2021.
47 Email from Jack Morgan, MAG, 19 April 2021.
48 Emails from international operators, April–June 2020.
49 Email from Shinobu Mashima, UNMAS, 6 April 2020.
50 Interview with Gus Guthrie, NPA, in Geneva, 12 February 2020; and email from GICHD, 12 June 2020.
51 Email from Ahmed Aljasim, DMA, 15 April 2021.
52 Interview with Brigadier-General Hassan, Ministry of Defence, Baghdad, 3 May 2019.
53 "Document of roles and responsibilities", undated but 2019, received by email from the DMA, 13 May 2019.
54 Interview with General Salah, Ministry of Interior, at the DMA, Baghdad, 3 May 2019.
55 Email from Khatab Omer Ahmed, Planning Manager, IKMAA, 8 May 2018.
56 IKMAA PowerPoint presentation, Erbil, 15 March 2021.
57 Email from Peter Smethers, Country Director, FSD, 11 April 2021.
58 Emails from Nicholas Torbet, HALO Trust, 12 April and 26 August 2021.
59 Email from Jack Morgan, Country Director, MAG, 15 April 2021; and Katie Shaw, MAG, 17 August 2021.
60 Interview with Portia Stratton, MAG, 28 June 2020.
61 Email from Jack Morgan, Country Director, MAG, 15 April 2021.
62 Email from Gus Guthrie, NPA, 23 March 2021, and telephone interview, 25 June 2020.
63 Emails from Marie-Josée Hamel, Regional Programme Advisor – Middle East, DDG, 31 May 2020 and 4 May 2021.
64 Email from Hannane Boulmaoui, Head of Programme Section, UNMAS, 16 April 2021
Emails from Peter Smethers, FSD, 11 April 2021; Nicholas To UNMAS, 16 April 2021.
65 Email from Luke Irving, Country Director, DCA, 26 April 2021.
66 Email from Jeff Caldwell, Tetra Tech, 22 July 2021.
67 Emails from Jeff Caldwell, Tetra Tech, 22 July and 12 August 2021.
68 Email from Katie Shaw, MAG, 17 August 2021.
69 Email from Nicholas Torbet, HALO Trust, 12 April 2021.
70 Emails from Peter Smethers, FSD, 11 April 2021.
71 Article 7 Report (covering 2019), pp. 24–28; and Article 7 Report (covering 2020), pp. 19, 25.
72 Estimate based on Article 7 Report (covering 2020), p. 24; and email from Jack Morgan, MAG, 19 April 2021.
73 Article 7 Report (covering 2019), pp. 25, 28.
74 Article 7 Report (covering 2020), pp. 19, 25.
75 Emails from Ahmed Aljasim, DMA, 15 April 2021; Peter Smethers, FSD, 11 April 2021; Nicholas Torbet, HALO Trust, 12 April 2021; Jack Morgan, MAG, 19 April 2021; Gus Guthrie, NPA, 23 March 2021.
76 Emails from Nicholas Torbet, HALO Trust, 12 April 2021; Jack Morgan, MAG, 19 April 2021; Gus Guthrie, NPA, 23 March 2021.
77 Article 7 Report (covering 2020), p. 25.
78 Ibid., p. 24.
79 Emails from Peter Smethers, FSD, 11 April 2021; Nicholas Torbet, HALO Trust, 12 April 2021; Jack Morgan, MAG, 19 April 2021; Gus Guthrie, NPA, 23 March 2021.
80 Email from Hannane Boulmaoui, UNMAS, 16 April 2021
81 Article 7 Report (covering 2020), p. 25.
82 Emails from Peter Smethers, FSD, 11 April 2021; Nicholas Torbet, HALO Trust, 12 April 2021; Jack Morgan, MAG, 19 April 2021; Gus Guthrie, NPA, 23 March 2021.
83 Email from Joel Yves Aboh, Associate Programme Officer, UNMAS, 15 July 2021.
84 IKMAA PowerPoint presentation, 15 March 2021.
85 Article 7 Reports (covering 2019) p. 25 and (covering 2020) p. 24.
86 Email from Jack Morgan, MAG, 19 April 2021.
87 Interview with Nibras Fakhir Matrood, DMA RMAC South, in Basrah, 29 April 2019.
88 Email from Ahmed Aljasim, DMA, 15 April 2021.
89 Email from Katie Shaw, MAG, 17 August 2021.

MALI

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2009
NEW EXTENDED DEADLINE NEEDED TO RETURN TO COMPLIANCE

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 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 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)

UNDERSTANDING OF AP MINE CONTAMINATION

A decade of conflict between multiple armed actors and deepening political turmoil in the past year have left Mali facing a rising threat from improvised explosive devices, including 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 IEDs including many that are victim activated and qualify as anti-personnel mines under the 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 number of improvised mine incidents recorded by UNMAS has nearly tripled in the past five years, reaching 103 incidents in 2020, compared with 98 the previous year. The explosive threat is concentrated in the central regions of Mopti and Kidal which together accounted for three-quarters of improvised mine incidents recorded by the UN Mine Action Service (UNMAS) in 2020 (see Table 1).[2] 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: Improvised mine incidents 2016-2020[3]

Region	2016	2017	2018	2019	2020
Gao	9	8	12	7	15
Kidal	25	19	29	27	33
Timbuktu	2	4	3	6	6
Mopti	0	2	27	53	44
Segou	0	0	5	5	4
Koulikouro	0	0	0	0	1
Total	**36**	**33**	**76**	**98**	**103**

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 said "it is supporting this endeavour."[4] Mine action observers note the agreement was verbal, that the authority's mandate would not include clearance, and have questioned whether the ALPC has sufficient seniority within the government to provide an effective platform. UNMAS reported that, after delays resulting from the August 2020 *coup d'état*, discussions had continued on how to "cement the capacity on mine action coordination".[5]

Mali has no programme of systematic mine survey and clearance. UNMAS comments that "strategic planning will be linked to the establishment of a national authority."[6]

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,[7] acting as the focal point for mine action pending the creation of a national authority. UNMAS said it had seven staff, including two internationals, working on humanitarian mine action in 2020. It expected to maintain the same staffing level in 2021, coordinating humanitarian mine action services, providing risk education, and assisting victims.[8]

Mines Advisory Group (MAG) operated with 36 staff in 2020: 9 internationals and 27 national staff. Operational capacity includes one team comprising an expatriate and six national staff that focuses on capacity building of two national non-governmental organisations (NGOs). Another team of three expatriates and three national staff, conduct weapons and ammunition destruction. MAG has offices in Bamako and Gao, where its partner organisations are based, and a small office in Timbuktu.[9]

UNMAS and MAG co-chair the Humanitarian Mine Action Working Group (Groupe de travail sur la lutte antimines humanitaire – GT-LAMH) said to involve around 20 participants, including a representative of the Permanent Secretariat, international organisations, and national mine action NGOs. 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.[10] In 2020, the working group convened ten times at the national level and three times at the regional level.[11]

INFORMATION MANAGEMENT AND REPORTING

UNMAS operates an Information Management System for Mine Action (IMSMA) database for Mali (IMSMA New Generation). 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 said it shares technical data with all mine partners engaged in explosive threat mitigation,[12] 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.[13]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Malian and international security forces serving with MINUSMA and Operation Barkhane, led by French forces, are the only organisations clearing mines and IEDs.[14] Clearance is limited to counter-IED operations and largely restricted to areas where they have security.[15] Operators do not employ any mechanical assets or mine detection dogs.[16]

MAG conducts limited non-technical survey, sending out teams in response to information of possible threats provided by communities and marking the location of any explosive items.[17]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR MALI: 1 MARCH 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

↓

IN VIOLATION: NEW EXTENDED 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. Since the expiry of this 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 2012.

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.[18]

1 Email from Benoit Poirier, Country Director, Mines Advisory Group (MAG), 30 July 2021.
2 Email from UNMAS Mali Programme, 12 May 2021.
3 UNMAS data, received by email from UNMAS Mali Programme, 12 May 2021.
4 Email from UNMAS Mali Programme, 12 May 2021.
5 Ibid.
6 Ibid.
7 UN Security Council Resolution 2100, 25 April 2013
8 Email from UNMAS Mali Programme, 12 May 2021.
9 Email from Benoit Poirier, MAG, 3 June 2020.
10 Email from UNMAS Mali Programme, 12 May 2021.
11 Ibid.
12 Ibid.
13 Email from Benoit Poirier, MAG, 11 March 2020.
14 Email from UNMAS Mali Programme, 26 May 2020.
15 Skype interview with Sebastian Kasack, Senior Community Liaison Adviser, MAG, Bamako, 27 May 2020.
16 Email from UNMAS Mali Programme, 26 May 2020.
17 Email from Benoit Poirier, MAG, 3 June 2020.
18 Final Report of the APMBC 12th Meeting of States Parties, Geneva, 21 January 2013, p. 10.

MAURITANIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 31 JANUARY 2022
EXTENSION REQUESTED TO 31 DECEMBER 2026

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

NATIONAL ESTIMATE

11.03KM²

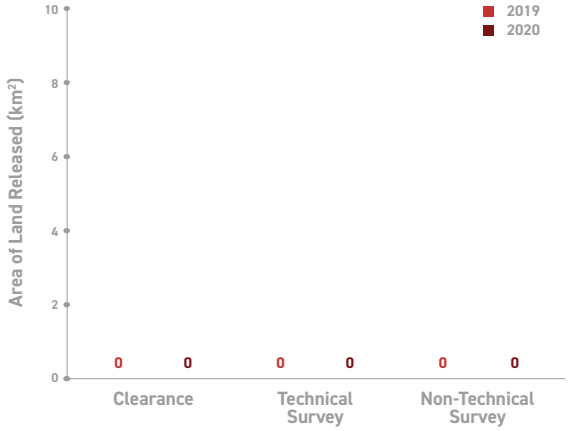
AP MINE CLEARANCE IN 2020

0KM²

AP MINES DESTROYED IN 2020

0

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Having previously declared fulfilment of its Article 5 obligations under the Anti-Personnel Mine Ban Convention (APMBC) in November 2018, Mauritania submitted an interim extension request in June 2020, to extend its Article 5 deadline by one year (and one month) having discovered new mined areas in territory within its jurisdiction. During the interim request, Mauritania intended to conduct further survey to better define the contamination, develop a work plan to address it, and submit a final extension request by March 2021.[1] Along with the newly found mine contamination, Mauritania has also reported discovering new cluster munition remnants (CMR) contamination on its territory.

In February 2021, upon request from Mauritania, Norwegian People's Aid (NPA) conducted an assessment of the newly discovered mined areas, together with the newly reported CMR-contaminated areas. The assessment identified a total of 15.47km² of mine contamination across ten suspected hazardous areas (SHAs), with 10.90km² across eight SHAs that contain only anti-personnel mines.[2]

On 1 June 2021, Mauritania submitted a request to extend its Article 5 deadline by four years and eleven months, to 31 December 2026. Having continued surveying new contamination since NPA's assessment mission in February, Mauritania had, by the submission of its extension request, identified total mined area estimated at 16.18km² across 20 confirmed hazardous areas (CHAs). Of this, 11.03km² across 16 CHAs appear to contain anti-personnel mines, including one whose area had yet to be confirmed.[3]

RECOMMENDATIONS FOR ACTION

- **Mauritania should proceed with all speed to mobilise funds and operational support, and commence survey and clearance of anti-personnel mine contamination that is within Mauritania's jurisdiction or control as soon as possible.**
- **For any areas under Mauritania's effective control but not under its jurisdiction, discussions need to be held and clearance coordinated with others concerned, in particular Morocco and the Saharawi Arab Democratic Republic.**
- **Mauritania should continue survey to establish a more accurate baseline of anti-personnel mine contamination.**

- **Mauritania should ensure its national mine action standards (NMAS) are updated and are in accord with the International Mine Action Standards (IMAS).**
- **Mauritania should establish a multi-year national strategy to replace the one that expired in 2020.**
- **Mauritania should elaborate a gender and diversity policy for mine action and an associated implementation plan.**
- **Mauritania should report more accurately and consistently on the extent of anti-personnel mine contamination, including using the classifications of SHA and CHA in a manner consistent with IMAS.**
- **Mauritania should establish a sustainable national capacity to address residual risks posed by anti-personnel mines that might be discovered following the fulfilment of its Article 5 obligations.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	Not scored	In February 2021, and with support of NPA, Mauritania conducted an assessment to determine the extent of anti-personnel mine contamination since Mauritania's discovery of new mined areas in 2018. Further technical survey is required to accurately determine the size and extent of the actual mine contamination.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	Not scored	The National Humanitarian Demining Programme for Development (Programme National de Déminage Humanitaire pour le Développement, PNDHD) is the national entity responsible for coordination of mine action in Mauritania. Mauritania contributes resources to support its mine action programme but the PNDHD remains operationally, financially, and technically under capacitated.
GENDER AND DIVERSITY (10% of overall score)	4	Not scored	It is not known if Mauritania has a gender policy for mine action, but it recently committed to taking gender principles into account during recruitment and to ensure that mine action teams are gender balanced.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	Not scored	Mauritania uses version 6 of the Information Management System for Mine Action (IMSMA) software. Mauritania's Article 7 report submitted in July 2021 provides incomplete contamination data due to missing pages. It does not classify mined areas into SHAs and CHAs in a manner consistent with IMAS and international best practice.
PLANNING AND TASKING (10% of overall score)	3	Not scored	Mauritania's mine action strategic plan and work plan both 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.
LAND RELEASE SYSTEM (20% of overall score)	6	Not scored	Mauritania's national mine action standards (NMAS) were published in 2007, and were said to be in accord with the IMAS at that time. The NMAS include standards on non-technical survey, technical survey, mine clearance, and quality control. The NMAS are supposed to be reviewed once every three years, but have not been revised since 2006.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	Not scored	Mauritania was granted a one-year, one-month interim extension at 18MSP, to extend its Article 5 deadline to 31 January 2022. In June 2021, Mauritania submitted a further extension for four years and eleven months to 31 December 2026. Mauritania will need to mobilise and sustain financial and operational international support to be able to meet its requested Article 5 extended deadline.
Average Score	**5.2**	**Not scored**	**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

- Norwegian People's Aid (NPA) (programme closed in 2015)

UNDERSTANDING OF AP MINE CONTAMINATION

On 23 June 2020, after having declared fulfilment of its Article 5 obligations on 29 November 2018 at the 17th Meeting of States Parties (17MSP) to the APMBC, Mauritania reported the discovery of mined areas (or "Zones", as Mauritania refers to them).[4] On 26 June 2020, Mauritania requested a thirteen-month extension to its Article 5 deadline, during which the National Humanitarian Demining Programme for Development (Programme National de Déminage Humanitaire pour le Développement, PNDHD), in collaboration with NPA, planned to investigate the mined areas and "possibly discover other areas not currently known".[5] Since the declaration of completion in November 2018, a total of three mine incidents occurred,[6] while others might have gone unreported.

In its Article 7 report covering 2019, Mauritania reported a total of more than 8km^2 of mined area (4.7km^2 of CHA and nearly 3.4km^2 of SHA).[7] However, it was not clear how the size and location of the 32 "zones" had been determined, and estimates of the size of mined areas were only provided for the region of Tiris Zemmour (north) and not the other three provinces 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.[8] Based on direct evidence, NPA confirmed the presence of 15.47km^2 of landmine contamination across 10 SHAs in Nouadhibou (west) and Tiris Zemmour (north) states. Of the total, 10.90km^2 across eight SHAs contained only anti-personnel mines.[9]

Mauritania continued surveying for new contamination after the NPA mission, and by the time of its submission of its extension request in June 2021, had identified a total mined area estimated at 16.18km^2 across 20 CHAs. Although Mauritania did not specify the type of contamination, the types of mines it reported indicate that six CHAs covering a total of 0.77km^2 contain anti-personnel mines, ten CHAs over 10.26km^2 contain a mix of anti-personnel and anti-vehicle mines, and four CHAs of 5.15km^2 contain only anti-vehicle mines. Of these latter four, one had an area of unknown extent. In addition, as at June 2021, a PNDHD team was deployed in the area of Ouadane of Adrar state following a report from the local authorities that had indicated a mined area.[10] Mauritania did not elaborate the methodology it used to identify the hazardous areas, but estimated that the size of areas requiring actual clearance will be reduced by an average 37% once further survey is conducted.[11] This means the areas are more akin to SHAs than CHAs.

In Nouadhibou, at least 11.53km^2 of the contamination was previously known but considered politically inaccessible until 2019, while at least a further 3.82km^2 has been newly discovered since 2018. In Tiris Zemmour, Mauritania had not been aware of the mined areas before their discovery in 2019.[12] It is not clear whether the minefields in Adrar were recently discovered or were already known to the authorities.

Table 1: Anti-personnel mined area by state (as at June 2021)[13]

State	Location ID	CHA	CHA area (m^2)	Identified mines	Type of contamination[14]	Comment[15]
Adrar	Mayaateg	1	585,700	PT Mi-K	AV mines	Data not available
Adrar	Gunive	1	TBC	PT Mi-K	AV mines	Data not available
Dakhlet Nouadhibou	Bouchon24	1	839,424	APID51, ACID51	AP and AV mines	Previously known
Dakhlet Nouadhibou	Bouchon55	1	9,147,780	APID51,TM57	AP and AV mines	Previously Known
Dakhlet Nouadhibou	Guergara	1	1,203,880	PT Mi-K	AV mines	Previously Known
Dakhlet Nouadhibou	Lewej 2	1	329,829	APID51, VS50	AP mines	Identified since 2019
Dakhlet Nouadhibou	Pk 126	1	132,585	APID51	AP mines	Identified since 2019
Dakhlet Nouadhibou	Pk 173	1	3,362,364	Type 72	AV mines	Identified since 2019
Dakhlet Nouadhibou	Rbeit l'echar1	1	62,819	PT Mi-K	AP mines	Previously Known
Dakhlet Nouadhibou	Wettatlechyakh	1	126,578	APID51	AP mines	Data not available
Dakhlet Nouadhibou	Zirezargue 1	1	28,794	VS50,TM57	AP and AV mines	Previously Known
Dakhlet Nouadhibou	Zirezargue 2	1	16,257	VS50,TM57	AP and AV mines	Previously Known
Dakhlet Nouadhibou	Zirezargue 3	1	23,638	VS50,TM57	AP and AV mines	Previously Known
Dakhlet Nouadhibou	Zirezargue 4	1	14,696	VS50,TM57	AP and AV mines	Previously Known
Dakhlet Nouadhibou	Zirezargue 5	1	75,375	VS50,TM57	AP and AV mines	Previously Known
Dakhlet Nouadhibou	Zirezargue 6	1	25,565	VS50,TM57	AP and AV mines	Previously Known
Dakhlet Nouadhibou	Zirezargue 7	1	26,654	VS50,TM57	AP and AV mines	Previously Known
Dakhlet Nouadhibou	Zirezargue 8	1	66,987	VS50,TM57	AP and AV mines	Previously Known
Tiris Zemmour	Boukhzame	1	63,796	VS50	AP mines	Identified since 2019
Tiris Zemmour	Guemgoum	1	50,769	APID51	AP mines	Identified since 2019
Totals		**20**	**16,183,490**			

AP = anti-personnel AV = anti-vehicle.

According to NPA, further survey work is required to determine the size and extent of the hazardous areas more accurately. It estimated that, once done, the areas requiring full clearance will be further reduced. However, since at least some of the contamination lies in very remote and sparsely populated areas, future residual risk post completion is likely.[16]

It is thought that the newly discovered landmine contamination lies either within Mauritania's jurisdiction and control, or outside of Mauritania's jurisdiction but within its effective control.[17] Both the PNDHD and NPA were aware of the 11.53km^2 of contamination in Nouadhibou before Mauritania declared itself mine-free in 2018. The PNDHD maintains that, at the time of declaration, this area was considered to be beyond Mauritania's borders. As at April 2021, the PNDHD assured NPA that it can provide access and security guarantees for clearance of all previously known contamination in Nouadhibou.[18] 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".[19]

All the newly identified contamination in Nouadhibou and Tiris Zemmour States is thought to be within Mauritania's jurisdiction and control.[20] For the Adrar minefields, however, it is not clear if the newly reported contamination lies within Mauritania's jurisdiction or control.

Mauritania previously declared completion of its Article 5 obligations in November 2018, at the APMBC Seventeenth Meeting of States Parties (17MSP).[21] Prior to this, at the end of 2015, Mauritania had reported that it had released all known areas of anti-personnel mine contamination (which had totalled 40 mined areas covering 67km^2),[22] 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.[23] 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 115 and 175 kilometres.[24] 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 1km^2, in Ain Bintilli district, Tiris Zemmour region.[25] The area had contained both anti-personnel and anti-vehicle mines.[26]

Mauritania's mine contamination was a legacy of the conflict over Western Sahara in 1976–78.[27] A 2006 Landmine Impact Survey (LIS) had found a total of 65 SHAs covering 76km^2 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.[28] 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.[29]

Mauritania has also reported discovering CMR contamination.[30] Please see Mine Action Review's *Clearing Cluster Munition Remnants* report on Mauritania for more information.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The PNDHD, which was created in 2000, coordinates mine action operations in Mauritania.[31] Since 2007, the programme has been the responsibility of the Ministry of Interior and Decentralisation, with oversight from an interministerial steering committee.[32] The PNDHD has its headquarters in the capital, Nouakchott, and a regional mine action centre (RMAC) in Nouadhibou.

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.[33] 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.[34] 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.[35] In its 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.[36]

GENDER AND DIVERSITY

It is not known if the PNDHD has policies in place relating to gender and diversity in its mine action programme, and gender and diversity are not referenced in Mauritania's 2020 Article 5 deadline extension request or its Article 7 transparency report covering 2019.

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 are employed in the financial management and victim assistance.[37] PNDHD claims to follow a gender-sensitive approach and that it ensures MRE materials take into consideration the gender and diverse needs of affected communities.[38] Mauritania committed to taking gender principles into account during recruitment and to ensure that mine action teams are gender balanced.[39]

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 Information Management System for Mine Action (IMSMA) software.[40]

As at 7 June 2021, Mauritania had yet to submit its Article 7 report under the APMBC.

PLANNING AND TASKING

In March 2017, Mauritania reported that a new national mine action strategic plan for 2017–20 had been developed with primary aims and targets, including verification of Mauritania's borders and clearance of any newly identified contamination by 2020; continuing risk education and victim assistance; and maintenance of national mine clearance capacities.[41] According to its latest Article 7 report, submitted in 2020, part of the international cooperation and assistance sought by Mauritania is to support its efforts to draft a new mine action strategy.[42]

The main aims of Mauritania's work plan for 2017–20 were to complete clearance of the remaining contaminated areas, establish a strategy for residual contamination, and declare its compliance with Article 5 before 1 January 2021.[43] Mauritania declared compliance with Article 5 at the 17MSP in November 2018,[44] but then subsequently submitted an interim one-year (and one-month) Article 5 deadline extension request in June 2020, followed by a four-year-and-eleven-month extension request in June 2021, having newly discovered mined areas and redefined its understanding of areas under its jurisdiction or control.

Mauritania said it will prioritise survey and clearance of the newly reported mined areas based on humanitarian impact taking into account gender and diverse needs of the mine-affected communities.[45]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Mauritania has NMAS in place, including on non-technical survey, technical survey, mine clearance, and quality control (QC). The NMAS, which were adopted in 2007, were elaborated with the support of the Geneva International Centre for Humanitarian Demining (GICHD) and in partnership with operators, most notably NPA.[46] The national standards were based on the IMAS in place when the NMAS were elaborated and on best practices from the Mauritania Programme at the time.[47] The NMAS are supposed to be reviewed once every three years,[48] but have not been revised since 2006.[49]

Mauritania recognises that an update to its NMAS is overdue and committed to "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".[50]

In December 2019, Mauritania attended the Arab Regional Cooperation Programme 7th Annual Conference, which was organised by the GICHD in Jordan. In the conference, the PNDHD, along with other national authorities from the region, discussed and approved recently translated IMAS into Arabic and shared experiences of their own national standards.[51]

In its fourth Article 5 deadline extension request, Mauritania committed to deploy three non-technical/technical survey teams to accurately define the extent of contamination before starting clearance.[52]

OPERATORS AND OPERATIONAL TOOLS

In accordance with a 2006 decree, all clearance activities were conducted by the Army Engineer Corps operating under the PNDHD. In 2011, NPA signed a memorandum of understanding (MoU) with Mauritania to provide support for mine and battle area clearance (BAC) in the country. NPA subsequently worked in Mauritania both as an operator and in a capacity-building role as a technical advisor for PNDHD until the end of 2015.[53] In 2021, the NPA conducted a one-month assessment mission to

determine the details of mined areas discovered since Mauritania's declaration of Article 5 completion in 2018. As at June 2021, the PNDHD had requested NPA to return to Mauritania and assist in the clearance of the remaining contamination but NPA had not yet decided whether to do so.[54]

Mauritania requires a clearance capacity of eight teams, each of 10 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 250m^2 a day.[55] 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.[56]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

There were no reports of land release of any mined areas in Mauritania in 2020.

SURVEY IN 2020

There were no reports of survey of any mined areas in Mauritania in 2020. The assessments conducted in 2021 have been reported above.

CLEARANCE IN 2020

There were no reports of survey of any mined areas in Mauritania in 2020.

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR MAURITANIA: 1 JANUARY 2001

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 JANUARY 2011

↓

FIRST EXTENDED DEADLINE (5-YEAR EXTENSION): 1 JANUARY 2016

↓

SECOND EXTENDED DEADLINE (5-YEAR EXTENSION): 1 JANUARY 2021

↓

THIRD EXTENDED DEADLINE (1-YEAR 1-MONTH INTERIM EXTENSION): 31 JANUARY 2022

↓

FOURTH EXTENDED DEADLINE SOUGHT (4-YEAR 11-MONTH EXTENSION): 31 DECEMBER 2026

ON TRACK TO MEET REQUESTED ARTICLE 5 DEADLINE: NO, EXTENSION REQUESTED TO 31 DECEMBER 2026
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Mauritania's original Article 5 deadline of 1 January 2011 was previously extended three times and currently ends on 31 January 2022. Mauritania had previously declared fulfilment of its Article 5 obligations at the 17MSP in November 2018, but in June 2020, submitted a third interim extension request to its Article 5 deadline, reporting that it had discovered new mined areas in the regions of Dakhlet Nouadhibou, Tiris Zemmour, and Adrar.[57] 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 Article 5 extension request asking for almost five years more to address the hitherto mine contamination. Mauritania underlines the following as risks to its ability to meet the 2026 deadline: resource mobilisation, lack of national political will and international support, change of the security situation, and the continued impact of the COVID-19 pandemic. It also works on the assumption that no or limited additional contamination will be discovered in the course of the five-year period.[58]

The five-year period sought based on an operational capacity of eight demining teams, working for 250 days a year and each team clearing 250m^2 per day, meaning clearance of half a square kilometre a year. The period also estimates a final reduction of CHAs by an average 37%.[59] Further, the almost five-year estimated period includes all mined area, including the 5.15km^2 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 an international operator, nor the time needed to setup the groundwork before commencing clearance, which can take up to one year.[60] As at June 2021, no international operator was present in Mauritania.

Mauritania is requesting US$9.65 million of financial support, including an initial investment of US$650,000 to purchase vehicles, detectors, personal protective equipment (PPE), and camping other field equipment. In addition, an annual budget of US$1.8 million for five years is requested to cover the running costs.[61] The government of Mauritania will contribute with staff, provide office space, and be responsible for the coordination of the clearance operation. [62] Mauritania said that an initial period of six months in 2021 will be dedicated to completing resource mobilisation.[63]

In order to secure resources, Mauritania intended to participate in an individualised approach initiative meeting on 17 June 2021, with the support of the Committee on the Enhancement of Cooperation and Assistance (ISU) and present its request for extension at the Intersessional meetings on 22–24 June 2021. Mauritania has also committed to keeping States Parties informed of developments at treaty meetings and through its Article 7 reporting,[64] 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".[65]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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".[66]

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".

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.[67] Since the closure of NPA's programme in 2015, some additional contaminated areas were identified, surveyed, and cleared in Mauritania by PNDHD with UNDP support in 2017.[68]

1 Third Article 5 Deadline Extension Request, received June 2020, Request Analysis, p. 2.

2 Mauritania Assessment Report, NPA, 12 April 2021, p. 6; and email from Melissa Andersson, NPA, 26 April 2021.

3 Fourth Article 5 deadline Extension Request, received June 2021, p. 5.

4 Third Article 5 deadline Extension Request, received June 2020, pp. 1 and 3. On pages 2 and 3 of Mauritania's 2020 extension request it said the requested deadline is 31 January 2022 while on page 10 it said 1 January 2022. In November 2020, Mauritania was granted a thirteen-month extension through to 31 January 2022.

5 Third Article 5 deadline Extension Request, received June 2020, pp. 1 and 3.

6 Fourth Article 5 deadline Extension Request, received June 2021, p. 8.

7 Third Article 5 deadline Extension Request, received June 2020, p. 3; and Article 7 Report (covering 2019), p. 3.

8 NPA, Mauritania Assessment Report, 12 April 2021, p. 2.

9 Ibid., p. 6; and email from Melissa Andersson, NPA, 26 April 2021.

10 Fourth Article 5 deadline Extension Request, received June 2021, p. 8.

11 Ibid., p. 10.

12 NPA, Mauritania Assessment Report, 12 April 2021, p. 2.

13 Fourth Article 5 deadline Extension Request, received 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.

14 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.

15 Mauritania's fourth Article 5 deadline Extension Request did not specify which areas where newly discovered since 2018 (as opposed to already known but considered out of Mauritania's control). This data is taken from NPA's assessment report.

16 NPA, Mauritania Assessment Report, 12 April 2021, pp. 2-3.

17 In its Assessment Report, NPA included a disclaimer noting that as an impartial international non-governmental organisation (NGO), NPA is not in a position to define the borders of Mauritania or any other State or country. This is political question that must be resolved between Mauritania, Morocco, and the Saharawi Arab Democratic Republic. See NPA, Mauritania Assessment Report, 12 April 2021, p. 2.

18 NPA, Mauritania Assessment Report, 12 April 2021, pp. 5-7.

19 Fourth Article 5 deadline Extension Request, received June 2021, p. 4.

20 NPA, Mauritania Assessment Report, 12 April 2021, pp. 6-7.

21 Statement of Mauritania, APMBC 18th Meeting of States Parties (18MSP), 29 November 2018; and Third Article 5 deadline Extension Request, received June 2020, p. 2.

22 Analysis of Mauritania's Second Article 5 deadline Extension Request submitted by the Committee on Article 5 Implementation to the APMBC 14th Meeting of States Parties, 17 November 2015, p. 2.

23 Ibid.

24 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".

25 Email from Alioune ould Menane, National Coordinator, PNDHD, 23 July 2018.

26 Article 7 Report (covering 2016), Form D; Statement of Mauritania, Committee on Article 5 Implementation, Geneva, 8 June 2017; and email from Alioune ould Menane, PNDHD, 29 March 2017.

27 Ibid., p. 2.

28 Revised Second Article 5 deadline Extension Request, 6 September 2010, p. 3; and email from Melissa Andersson, NPA, 17 September 2015.

29 Third Article 5 deadline Extension Request, received June 2020, p. 2.

30 Ibid., Annex 1, p. 14.

31 Decree No. 1960/MDAT/MDN establishing the PNDHD, 14 August 2007; and Third Article 5 deadline Extension Request, received June 2020, p. 2.

32 Decree No. 001358/MDAT establishing the Steering Committee of the PNDHD, 3 September 2007; and Third Article 5 deadline Extension Request, received June 2020, p. 2.

33 Fourth Article 5 deadline Extension Request (2021), pp. 11–12.

34 Third Article 5 deadline Extension Request, received June 2020, p. 10.

35 Fourth Article 5 deadline Extension Request, pp. 11–12.

36 Article 7 Report (covering 2020), p. 12.

37 Third Article 5 deadline Extension Request, received June 2020, additional information, received 16 September 2020, response 5.

38 Fourth Article 5 deadline Extension Request, received June 2021, p. 8.

39 Ibid., p. 12.

40 Article 7 Report (covering 2017), Form D.

41 Email from Alioune ould Menane, PNDHD, 29 March 2017; and interview, in Geneva, 5 September 2017.

42 Article 7 Report (covering 2019), pp. 13–14.

43 Email from Alioune ould Menane, PNDHD, 23 July 2018.

44 Statement of Mauritania, 18th Meeting of States Parties, 29 November 2018; and Third Article 5 deadline Extension Request, received June 2020, p. 2.

45 Fourth Article 5 deadline Extension Request, received June 2021, p. 12.

46 Third Article 5 deadline Extension Request, received June 2020, pp. 5 and 8.

47 Fourth Article 5 deadline Extension Request, received June 2021, p. 9.

48 Third Article 5 deadline Extension Request, received June 2020, pp. 5 and 8.

49 CCM Article 7 Report (covering 2019), Annex II.

50 Fourth Article 5 deadline Extension Request, received June 2021, p. 9.

51 Email from Hayder AlShakeri, Programme Officer, GICHD, 23 July 2020.

52 Fourth Article 5 deadline Extension Request, received June 2021, p. 13.

53 Emails from Alioune ould Menane, PNDHD, 1 September 2016; and Melissa Andersson, NPA, 12 September 2016 and 13 March 2017.

54 Interview with Hans Risser, Head Office Management Team; and Melissa Andersson, NPA, 19 April 2021.

55 Fourth Article 5 deadline Extension Request, received June 2021, p. 10; NPA, Mauritania Assessment Report, 12 April 2021, p. 11; and email from Melissa Andersson, NPA, 26 April 2021.

56 Fourth Article 5 deadline Extension Request, received June 2021, p. 13.

57 Third Article 5 deadline Extension Request, received June 2020, p. 2; Article 7 Report (covering 2019), p. 3; and online presentation by Mauritania, APMBC Intersessional Meetings, 2 July 2020, available at: http://bit.ly/3iBV1Dd.

58 Fourth Article 5 deadline Extension Request, received June 2021, p. 3.

59 Ibid., p. 10; NPA, Mauritania Assessment Report, 12 April 2021, p. 11; and email from Melissa Andersson, NPA, 26 April 2021.

60 Interview with Hans Risser, Head Office Management Team; and Melissa Andersson, NPA, 19 April 2021.

61 Fourth Article 5 deadline Extension Request, received June 2021, p. 11.

62 Ibid., p. 12.

63 Ibid., p. 9.

64 Ibid., p. 12.

65 Ibid., p. 13.

66 Ibid., p. 11.

67 Email from Alioune ould Menane, PNDHD, 23 July 2018.

68 NPA, Mauritania Assessment Report, 12 April 2021, p. 4.

NIGER

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 31 DECEMBER 2024
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

LIGHT
BUT PRECISE EXTENT UNCLEAR

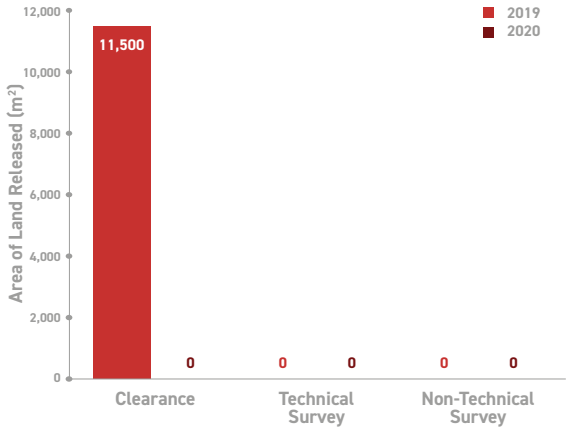
AP MINE CLEARANCE IN 2020

0M²/

AP MINES DESTROYED IN 2020

UNKNOWN

LAND RELEASE OUTPUT



LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 *(Oslo Action Plan commitment)*: **LOW**

KEY DEVELOPMENTS

Niger requested, and was granted, a four-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline until the end of 2024 but provided few details on plans for survey and clearance. Niger was specifically asked by the Committee on Article 5 Implementation to submit a detailed work plan that included annual targets. Niger continued to experience attacks by non-State armed groups employing mines and other explosive devices of an improvised nature. It provided no information about measures taken in 2020 to tackle this threat or the remaining mine contamination.

RECOMMENDATIONS FOR ACTION

- **Niger should prepare and circulate a detailed work plan for meeting its international legal obligations under its extended APMBC Article 5 deadline.**
- **Niger should submit annual Article 7 reports detailing the progress of mine action as the APMBC requires.**
- **Niger should develop and implement a fundraising strategy to ensure it fulfils commitments made in its Article 5 deadline extension request.**
- **Niger should seek and facilitate engagement of international demining organisations.**
- **Niger should ensure its national mine action standards reflect international standards and that a quality management system is in place to ensure the quality of demining operations.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	6	Niger has identified limited anti-personnel mine contamination in the Agadez region but it lacks clarity on the extent. It also now faces escalating attacks by non-State armed groups and new contamination from mines of an improvised nature.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	5	Limited mine action in the past five years was funded by Niger's limited resources 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	3	Niger's limited statements on mine action make no reference to gender or diversity.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	3	2	Inconsistent reporting on mine clearance points to weak information management. Niger has submitted only one Article 7 transparency report since 2012 (in 2018). 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. A request to extend its Article 5 deadline by four years submitted in May 2020 left out key details including proposed timelines for clearance and available demining capacity.
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)	3	4	Niger said it released a tiny amount of mined area in 2019, just ahead of submitting an Article 5 deadline extension request but it provided little information about clearance before making the request and has provided none since.
Average Score	**3.9**	**4.1**	**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. In 2018, Niger reported that it had two mined areas totalling 235,557m^2 near Madama, a military base in the north-eastern Agadez region of the country, consisting of a confirmed hazardous area (CHA) of 39,304m^2 and a suspected hazardous area (SHA) of 196,253m^2 with mixed AP and anti-vehicle mines (see Table 1).[1] In 2019, its estimate of contamination had fallen to 187,172m^2.[2] Six months later in May 2020, Niger requested an extension of its Article 5 deadline reporting that its remaining contamination amounted to 177,760m^2.[3] It repeated that estimate in a statement to the 18th Meeting of States Parties in November 2020 although the reduction in the estimated size of its mined area far exceeded the amount of clearance reportedly conducted in this period (see Land Release below).[4]

Niger said the CHA in Agadez contained French M51 minimum-metal anti-personnel mines and the SHA had mixed AP and anti-vehicle mines.[5] Nigerien army engineers, conducting earlier clearance operations, had found the mines buried in sand at depths of up to one metre.[6] 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.[7] A PRB M3 anti-vehicle mine was also discovered in March 2019 near the town of Intikane, also in the Agadez region.[8] 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.[9]

Table 1: Anti-personnel mine contamination by region (at 2016)[10]

Region	CHAs	Area (m^2)	SHAs	Area (m^2)	Total SHA/CHA	Total area (m^2)
Agadez	1	39,304	1	196,253	2	235,557

NEW CONTAMINATION

Since 2018, Niger has experienced a surge in attacks by groups affiliated with Islamic State or al-Qaida, adding a new challenge in the form of mines of an improvised nature. Attacks were concentrated in the western Tillabery and Tahoua regions bordering Mali and Burkina Faso, and the south-eastern Diffa region bordering Chad. A range of explosive devices were used, including anti-vehicle mines; artisanal victim-activated pressure plate devices that appear to meet the APMBC definition of anti-personnel mines; and command-detonated devices.[11]

A mine or improvised explosive device (IED) detonation in January 2019 injured four Niger soldiers near Titahoune (Tillabery region)[12] and an improvised device detonated under a convoy of vehicles in an ambush by insurgents in Tillabery in May 2019 during which 28 soldiers were killed.[13] A 12-ton armoured United States (US) Army vehicle was disabled in June 2019 by an improvised mine on the outskirts of Ouallem town (Tillabery region). The device was activated by a pressure plate linked to an 81mm mortar. Its explosion detonated a main charge consisting of nearly a dozen 60mm mortar shells.[14] A car bomb attack on a Nigerien army base near the border with Mali in July started an assault in which insurgents killed 18 Nigerien soldiers.[15]

Improvised mines continued to inflict casualties in 2020 and 2021. The United Nations (UN) High Commissioner for Refugees called for greater action to tackle the threat in the Sahel and Lake Chad regions, reporting four civilians were killed in two separate explosions near the town of Bosso in the Diffa region in February and March 2021.[16] Seven election officials were killed when their vehicle detonated a mine or improvised device in the Tillabery region in February 2021.[17]

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 has been carried out by the Nigerien army. In 2015, Niger said it had 60 deminers but lacked sufficient equipment for them to be able to work at the same time.[18] In 2020, it again reported this capacity, noting that the demining contingent included eight women.[19]

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.[20]

GENDER AND DIVERSITY

Niger's latest (fourth) Article 5 deadline extension request, submitted in 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.[21]

INFORMATION MANAGEMENT AND REPORTING

Niger submitted its last Article 7 report in 2018. That was its first report since 2012. It delivered statements to the Fourth Review Conference in Oslo in 2019 and the Meeting of States Parties in 2020.

PLANNING AND TASKING

Niger does not have a strategic plan for mine action. Niger submitted its fourth Article 5 deadline extension request in May 2020 calling for four additional years to complete clearance of 177,760m^2, but it did include set annual clearance targets or provide a detailed work plan for the extension period. The plan includes a graphic which indicates CNCCAI will deploy teams for clearance between 2020 and 2024,[22] but does not identify what operating capacity is available for survey and clearance. It projects the costs of completion at US$1,143,750, of which US$400,000 is to come from national sources.[23]

Niger's last Article 7 Report for 2013–18 set out a rudimentary operational timeline providing for clearance of 196,253m^2 by 2020: 56,000m^2 in 2018, 100,253m^2 in 2019, and 40,000m^2 in 2020.[24] It did not meet any of these targets.

The APMBC 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.[25]

Niger's security forces announced in April 2021 that they were undertaking an explosive ordnance risk education programme distributing 50,000 brochures provided by the United States military.[26]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In its Third Article 5 Extension Request, Niger reported that it had drafted national mine action standards (NMAS) in accordance with the International Mine Action Standards (IMAS) and standard operating procedures.[27] No information has been provided on whether Niger's NMAS have been finalised and adopted.

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 anti-vehicle mines mostly found in the area were largely undetectable by conventional detectors and sufficiently small as to make detection by 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. Mechanical excavation using sifting and screening equipment would dramatically improve the speed of technical survey and clearance but faced 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 deep-buried mines.[28]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Niger has not reported any release of mined area through survey or clearance in 2020. In a statement to the UN Security Council in April 2021 Niger said it had intensified mine clearance in response to the growing threat in the Lake Chad basin region but it has provided no information on any mine action interventions.[29]

CLEARANCE IN 2020

It appears from data incorporated in Niger's 2020 Article 5 deadline extension request that 11,500m² of land was cleared between July and end 2019 with the destruction of 199 anti-personnel mines.[30] CNCCAI reported to the Oslo Review Conference that it had deployed 40 deminers in mid-June 2019 to conduct mine clearance in Madama and that by the time of the conference in November it had cleared 9,080m², destroying 183 anti-personnel mines. It said the operation was continuing and that it was funded by Niger from national resources.[31]

In its Article 5 deadline extension request, it reported total clearance between July 2019 and March 2020 of 18,483m² with the destruction of 323 mines.[32] Niger's statement to the 18th Meeting of States Parties in November 2020, however, attributed these results to the period between 2016 and the end of 2020.[33]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR NIGER: 1 SEPTEMBER 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 SEPTEMBER 2009

↓

FIRST EXTENDED DEADLINE (5-YEAR, 4-MONTH EXTENSION): 31 DECEMBER 2015

↓

SECOND EXTENDED DEADLINE (1-YEAR EXTENSION): 31 DECEMBER 2016

↓

THIRD EXTENDED DEADLINE (4-YEAR EXTENSION): 31 DECEMBER 2020

↓

FOURTH EXTENDED DEADLINE (4-YEAR EXTENSION): 31 DECEMBER 2024

LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC (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.

In May 2020, Niger requested an Article 5 deadline extension of four years until 31 December 2024. The request cited a number of difficulties confronting mine action in Niger, including environmental factors, (extremes of heat and cold, sandstorms, the remoteness of affected areas), insecurity in border areas, and competing priorities for funding (including counter-terrorist activities and measures to check the proliferation of illegal weapons). It stated, however, that the only issue hindering clearance is the lack of funding. It estimates the total cost of completion at US$1,143,750 and says Niger will provide US$400,000, appealing to international donors for the balance of US$743,750. It also declared that it cannot guarantee clearance without support from donors.[34]

The amount of time looks more than sufficient for the modest amount of contamination of contamination remaining but Niger has demonstrated only very modest effort and progress to comply with the APMBC and the request does little to build confidence in prospects for completion. The request does not provide detailed annual targets for clearance despite repeated requests for such planning by the other States Parties and vaguely asserts clearance will be conducted between 2020 and 2024.[35] The request also does not address the emerging threat of IEDs, including mines of an improvised nature, and does not identify what preparation it is making for sustainable capacity to tackle contamination emplaced or found after completion.

The Committee on Article 5 implementation, commenting on the request, noted it did not set out annual milestones for clearance of the remaining contamination and asked Niger to submit them by the end of April 2021. The committee also requested that the work plan should contain an updated list of all areas known or suspected to contain anti-personnel mines, using terminology consistent with the IMAS, annual projections of which areas and what area would be dealt with during the remaining period covered by the request and by which organisation, matched to a revised detailed budget based on new funding levels.[36] As of May 2021, Niger had not complied with these requests.

The extent of Niger's progress since the Maputo Review Conference is uncertain because the results it reported for 2014 to 2016 varied from 17,000m² and 750 mines to 39,304m² and 1,075 mines.[37] The Article 7 report Niger submitted in 2018—the first in six years—set annual targets for achieving completion by the end of 2020 but it came nowhere near achieving them. Niger did not conduct any clearance in 2018, attributing the inaction to a lack of financial resources, the higher priority given to counterterrorism activities, and the "failure" of unspecified international organisations to respect their commitments.[38]

Niger submitted a second request for an extension to its Article 5 deadline on 12 November 2015, less than two months before the expiry of its first extended deadline. States Parties observed this did not conform to procedure and left insufficient time for analysis and discussion. The decision also observed that the plan presented by Niger in the request was "workable but lacks ambition". States Parties agreed to give Niger a one-year extension and requested that it provide, in its revised submission, information on the areas

already released disaggregated by the method of release and an updated work plan listing all areas known or suspected to contain anti-personnel mines and annual clearance projections during the period covered by the request.[39] The third extension request Niger submitted in 2016 did not include such a work plan and a request from the Committee on Article 5 Implementation for additional information received no reply.[40]

Niger has made repeated appeals for international assistance for mine action and claimed receiving no external support for its activities, save for assistance from France for medical evacuation in the case of demining accidents.[41] In fact, NPA and Danish Demining Group (DDG) have made offers of assistance to Niger but received no reply.[42]

Table 2: Five-year summary of AP mine clearance

Year	Area cleared (verified)(km^2)
2020	0
2019	0.01
2018	0
2017	0
2016	0.01
Total	**0.02**

1 Article 7 Report (for 2013 to April 2018), Annex I, p. 19.

2 Statement by Niger to the Oslo Review Conference, 27 November 2019.

3 Article 5 deadline Extension Request, 28 May 2020, pp. 5–6. The document says demining operations had cleared 18,483m^2 out of contamination of 196,304m^2, which would leave an area of 177,821m^2.

4 Statement of Niger, 18th Meeting of States Parties, Geneva, 16-20 November 2020.

5 Article 7 Report (for 2013 to April 2018), Annex I, p. 19.

6 NPA, "End of Mission Report: CTA-HMA Inputs", undated but 2018.

7 2016 Article 5 deadline Extension Request, pp. 6–8.

8 "Explosive developments: The growing threat of IEDs in Western Niger", The Armed Conflict Location and Event Data (ACLED) Project, 19 June 2019, p. 3.

9 Executive Summary of Niger's Second Article 5 deadline Extension Request, 27 November 2015; and Statement of Niger, Third APMBC Review Conference, Maputo, 24 June 2014.

10 2016 Article 5 deadline Extension Request, p. 6.

11 "Explosive Developments: The Growing Threat of IEDs in Western Niger", ACLED Project, 19 June 2019, pp. 2–5.

12 "Niger: military convoy hit by IED attack in Tillaberi region Jan. 31", *GardaWorld*, 1 February 2019, at: http://bit.ly/32Ib5Lw.

13 "Niger: Attaque meurtrière contre l'armée à la frontière malienne", *Jeune Afrique*, 16 May 2019, at: http://bit.ly/32EZSvg.

14 T. Gibbons-Neff, "Roadside blast in Niger that hit Americans shows growing threat", *New York Times*, 14 June 2019, at: http://nyti.ms/2M2mZKA.

15 "Niger: 18 soldiers killed in attack on military outpost near Inates", *The Defense Post*, 2 July 2019, at: http://bit.ly/2M4lETt.

16 "Landmines, improvised explosive devices pose deadly risks for displaced in Sahel and Lake Chad", Statement by Babar Baloch, UNHCR spokesman, 28 July 2020.

17 "Seven Niger election officials killed by landmine on poll day", *BBC*, 21 February 2021.

18 Statement of Niger, Intersessional Meetings (Committee on Article 5 Implementation), Geneva, 25 June 2015.

19 Statement of Niger, 18th Meeting of States Parties, Geneva, 16–20 November 2020.

20 Emails from Jean-Denis Larsen, DRC Country Director, NPA, 19 July 2017, 3 October 2018, and 15 August 2019.

21 Statement of Niger, Oslo Review Conference, 27 November 2019.

22 2020 Article 5 deadline Extension Request, p. 12.

23 Ibid., pp. 12–14.

24 Article 7 Report (for 2013 to April 2018), Annex 1, p. 23.

25 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.

26 Ismaël Chékaré, « Lancement de la sensibilisation sur les engins explosifs improvisés (EEI) : Fournir à la population civile des informations sur la manière de reconnaitre 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.

27 2016 Article 5 deadline Extension Request, pp. 8–9.

28 NPA, "End of Mission Report: CTA-HMA Inputs", undated but 2018.

29 "At Security Council debate, speakers call for end to indiscriminate use of improvised explosive devices", United Nations, 8 April 2021.

30 Article 5 deadline Extension Request, 28 May 2020, pp. 22–24.

31 Statement of Niger, Oslo Review Conference, 27 November 2019.

32 Article 5 deadline Extension Request, 28 May 2020, p. 8.

33 Statement of Niger, 18th Meeting of States Parties, 16–20 November 2020.

34 Article 5 deadline Extension Request, 28 May 2020, pp. 12–14.

35 Ibid., pp. 11–12.

36 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.

37 Analysis of Niger's 2016 Article 5 deadline Extension Request, p. 3; and Article 7 Report (for 2013 to April 2018).

38 Statements of Niger, Intersessional Meetings (Committee on Article 5 Implementation), 7 June 2018; and 17th Meeting of States Parties, 27 November 2018.

39 "Decision on the request submitted by Niger for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention", APMBC 14th Meeting of States Parties, Geneva, 4 December 2015.

40 Analysis of Niger's 2016 Article 5 deadline Extension Request, p. 2.

41 Statements of Niger, Intersessional Meetings (Committee on Article 5 Implementation), Geneva, 19–20 May 2016; and 14th Meeting of States Parties, Geneva, 1 December 2015; 2016 Article 5 deadline Extension Request, p. 13; and Executive Summary of Niger's 2015 Article 5 deadline Extension Request, p. 3.

42 Email from Chris Natale, Mine Action Advisor, NPA, 29 July 2016; Statement of the International Campaign to Ban Landmines, 15th Meeting of States Parties, Santiago, 28 November 2016.

NIGERIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 DECEMBER 2021
EXTENSION REQUESTED TO 31 DECEMBER 2025

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

EXTENT UNKNOWN

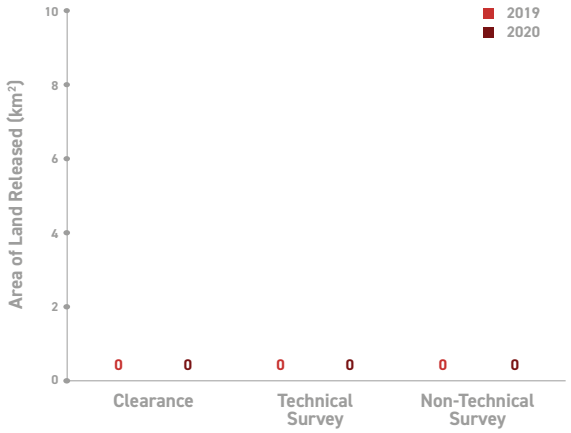
AP MINE CLEARANCE IN 2020

0KM²

AP MINES DESTROYED IN 2020

0

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Nigeria experienced an increase in explosive ordnance casualties in 2020, recording 120 people killed in 2020 and 150 people injured. In November 2020, Nigeria requested a one-year extension of its Article 5 deadline until the end of 2021 and in May 2021 requested four more years until the end of 2025. Few steps have been made toward the establishment of an effective national mine action programme.

RECOMMENDATIONS FOR ACTION

- **Nigeria should urgently implement its stated intention of developing a national strategy harnessing the resources of security forces and humanitarian organisations to clear anti-personnel mines, including those of an improvised nature.**
- **Nigeria should establish a national mine action authority to set policy and coordinate implementation of a national mine action strategy.**
- **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. It should also develop reporting forms and procedures to ensure collection of accurate data, including explosive incidents disaggregated by device.**
- **Nigeria should encourage and facilitate the provision of assistance and expertise from humanitarian demining organisations and continue to provide risk education to the civilian population.**
- **Nigeria should submit annual Article 7 reports providing comprehensive, disaggregated data and commentary on the progress of mine action.**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority or mine action centre

NATIONAL OPERATORS

- Army
- Police

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, 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 prevented 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 (see Table 1). However, the United Nations Mine Action Service (UNMAS) reported "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 out of 27 LGAs in Borno, the worst-affected state, five of 21 LGAs in Adamawa state, and 11 out of 17 LGAs in Yobe.[3]

The main threat is posed by improvised mines on roads. UNMAS recorded 186 incidents of improvised explosive devices placed on roads in 2020, 59% more than the previous year. It recorded another 105 road incidents in the first three months of 2021.[4] UNMAS determined that more than 100 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 Anti-Personnel Mine Ban Convention (APMBC).[5]

The findings were consistent with the results of a scoping mission by UNMAS to assess explosive threats in Adamawa, Borno, and Yobe states in 2017. It noted widespread use of pressure-plate devices along the main supply routes which were configured to detonate from the weight of a person and function as very large anti-personnel mines.[6] Borno state was the most severely impacted. Civilians reported the presence of victim-activated devices in 76% of LGAs in Borno; 59% of LGAs in Yobe; and 52% of LGAs in Adamawa.[7]

UNMAS has found no evidence of jihadist groups using industrially manufactured anti-personnel mines.[8] Boko Haram and other armed groups emplace mines of an improvised nature and other devices on an ad hoc basis particularly targeting key roads such as the Maiduguri-Konduga-Bama axis and the Bama-Banki or Bama-Pulka-Gwoza roads as well as some villages and water points.[9]

As a result of operations to counter the insurgency, Nigeria reports that, in addition to improvised mines, the northern BAY states are also affected by unexploded air-dropped bombs, grenades, rockets, mortars, artillery, and tank shells.[10]

Table 1: Explosive ordnance incidents in north-east Nigeria (2016–20)[11]

Year	Road Planted IED	Person Borne IED	Vehicle Borne IED	Other IED	ERW	Total incidents
2016	42	56	1	0	0	99
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

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Nigeria is in the process of creating a national mine action programme. In 2020, it set up an inter-ministerial committee to lead the process, including the Ministries of Defence, Foreign Affairs, and Humanitarian Affairs, the Office of Disaster Management and Social Development, the National Emergency Management Agency, the Northeast Development Commission, and the National Commission for Refugees, Migrants and IDPs. In 2021, Nigeria said it would expand the inter-ministerial committee to include the Police, the National Security and Civil Defence Corps, and the Federal Ministry of Education.[12]

The committee met for the first time in April 2021 when members travelled to Borno state capital Maiduguri to meet mine action stakeholders. The mine action community, however, has little information about the frequency or substance of the committee's meetings and little evidence, as of June 2021, that it had made progress in developing a national mine action programme.

A key objective of Nigeria's Article 5 deadline extension request is creating a national mine action centre to develop and coordinate a comprehensive response to the threat from mines and explosive devices and strengthen cooperation with implementing partners.[13] Nigeria envisages the NMAC will employ about 50 people with responsibilities that include developing a strategic plan; coordinating survey, clearance, and risk education; managing a national database; quality control, monitoring, and evaluation; capacity building; and victim assistance.[14] By June 2021, participants in the mine action sector said authorities had yet to move beyond a statement of intentions.[15]

UNMAS has worked in Nigeria since 2018 providing training and technical support to strengthen explosive hazard management, collect data on explosive incidents. In 2020, UNMAS provided explosive ordnance awareness training to national authorities and humanitarian agencies as well as explosive ordnance risk education (EORE) to populations affected by conflict and training to strengthen explosive hazard management capacity. This included first-responder training to 117 National Security and Civil Defence Corps (NSCDC) frontline officers, and first aid and emergency trauma training for 247 the National Security and Civil Defence Corps (NSCDC) and police explosive ordnance disposal (EOD) officers. UNMAS also conducted Geographic Positioning System training for EOD police and EORE training for 32 members of the National Emergency Management Agency.[16]

A Mine Action Working Sub-group (MAWSG) co-chaired by the Ministry of Reconstruction, Rehabilitation and Resettlement and UNMAS, met at least once a quarter, attended mainly by MAG, DRC, and Youths Awaken Foundation, and occasionally attended by other participants. Meetings paused for several months in 2020 because of the COVID-19 pandemic but later resumed in a virtual format and by the autumn was meeting in person again. The group supported preparation of Nigeria's Article 5 deadline extension request, collating data on types and location of contamination, casualties and EORE activities.[17]

After delays due to the pandemic, UNMAS conducted an assessment of training needs for the Nigeria Police Force in Borno and Adamawa states in October 2020. A training officer deployed to Maiduguri trained 26 police EOD personnel in improvised explosive device disposal (IEDD). The course covered scene management, questioning of witnesses, how to handle a witness, risk assessment, render-safe procedures, suicide vehicle/suicide bomber situation management, and a refresher training regarding conventional munitions and IED components.

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.[18]

MAG employed 12 women in its overall staff of 26 and reported that seven community liaison teams conducting risk assessment and explosive ordnance risk education were gender balanced, comprising one female and one male member of staff. By 2021 it had one woman team leader and said it aimed to increase the number of women in supervisory roles.[19]

UNMAS trained 16 women and 16 men as Emergency Trauma Management trainers for the NSCDC.[20] It also commissioned a gender baseline assessment to identify ways of strengthening the EOD capabilities of security service providers, notably the Nigeria Police Force and the NSCDC, in north-east Nigeria. The assessment conducted between August 2020 and February 2021 found the security services had not embraced gender mainstreaming. It called for more women officers and the changing of obsolete recruitment practices and discriminatory regulations, and said UNMAS should engage with both organisations on the need for gender parity.[21]

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 EORE beneficiary data.[22] The planned NMAC would be the custodian of the national database for mine action, responsible for maintaining it accurately and up to date.

UNMAS and its mine action partners, MAG and DRC, reviewed IMSMA victim forms in 2020 and adopted a version updated by MAG which collects information such as the victim's population group, place and nature of injury, occupation, age group, gender, the activity the victim was engaged in when the incident happened, if the area was known as a dangerous area, if the victim had received risk education in the past, and the medical facility where the victim received treatment.[23] In late 2020, however, DRC and MAG were discussing with UNMAS the way the information is used and shared.[24]

PLANNING AND TASKING

Nigeria did not have any mine action institutions or plans in 2020. In a request for an extension to its Article 5 deadline submitted in May 2021 Nigeria proposed to:

- establish a National Mine Action Centre to address the threat;
- develop National Mine Action Standards;
- strengthen the coordination and delivery of EORE;
- 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.[25]

The request indicates that the establishment of a national mine action centre, development of National Mine Action Standards, and a study visit to another mine action programme are all planned for 2021 to 2022. The national mine action strategy will be developed "within 2022" when Nigeria proposes to convene a strategy and prioritisation workshop with participation by the inter-ministerial committee, the Nigerian Police EOD unit, UNMAS, national and international NGOs, and civil society organisations.[26]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Nigeria does not have national mine action standards and has identified development of NMAS as an objective in its Article 5 extension request which it expects to address in 2021 and 2022.[27]

The extension request said Nigeria 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 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

All clearance of explosive ordnance is conducted by the Nigerian army and police with support from paramilitary groups.[30] The 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] It also provided training in non-technical survey and EORE to 14 members of the Youths Awaken Foundation, a national NGO.[32]

MAG started working in Nigeria in 2016 focusing at that time on arms management and destruction. In 2020, it employed 26 staff (5 international and 21 national). Working from a head office in Abuja and a field office in the Borno state's capital Maiduguri, it operated seven teams conducting risk assessments and delivering EORE, mainly in Borno state LGAs Bama, Damboa, Dikwa, Gwoza, Jere, Mafa, and Maiduguri, and Adamawa state LGA Madagali. MAG expected to expand capacity in 2021.[33]

DRC's Humanitarian and Disarmament and Peacebuilding Sector programme (formerly DDG) operated with 57 staff, of whom four were international staff, conducting a mixture of remote survey and EORE as part of a wider programme of humanitarian assistance. In addition to DRC's head office in Abuja, the demining programme worked from Maiduguri and six other offices in Borno state, four offices in Adamawa state, and five offices in Yobe state. DRC also puts emphasis on training community focal points 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 Nigerian police. [34]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

SURVEY IN 2020

MAG conducted 21 non-technical surveys in 2020 as a result of which it confirmed seven hazardous areas. Access to many areas of the three north-eastern states was blocked by insecurity so MAG conducted Remote Contamination Baseline Assessments (RCBAs). These consist of focus group interviews in camps for internally displaced persons, usually with five to twelve participants from the same community facilitated by MAG's community liaison teams. The interviews, based on a standardised list of questions collect data on types of conflict experienced, the types and impact of explosive ordnance encountered, and incidents causing casualties. Information provided by participants is cross-checked against secondary testimony of accidents or recorded findings of explosive items.[35]

MAG said it conducted 372 RCBAs between mid-November 2019 and early-December 2020 and from 251 of them concluded the presence of contamination in particular locations with "high confidence".[36] DRC conducted 238 non-technical survey assessments and was considering adopting the RCBA approach to get round the constraints on access to communities.[37]

CLEARANCE IN 2020

No record exists of clearance conducted by Nigerian security forces and paramilitary groups.

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR NIGERIA: 1 MARCH 2002

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2012

↓

FIRST EXTENSION REQUEST DEADLINE (ONE YEAR): 31 DECEMBER 2021

↓

SECOND EXTENDED DEADLINE SOUGHT (4-YEAR EXTENSION REQUEST): 31 DECEMBER 2025

↓

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO, EXTENSION REQUESTED TO 31 DECEMBER 2025

LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Nigeria's original Article 5 deadline, Nigeria 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 2012. At the Eleventh Meeting of States Parties in November 2011, Nigeria declared it had cleared all known anti-personnel mines from its territory.[38]

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 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.[39]

Nigeria submitted a follow-on request in May 2021 asking for a four-year extension until 31 December 2025. It acknowledged that insecurity prevented comprehensive survey or a determination of the extent of contamination. Nigeria proposed to use the 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.[40] It did not provide any estimate of costs of a mine action programme, plans for resource mobilisation or the results of engagement with potential donors.

In the absence of any baseline estimate of contamination or any mine action strategy, Nigeria's extension request did not set out timelines for clearance. It also did not offer clarity on how it would be able to develop systematic survey or clearance in the face of deteriorating security which prevents access to many affected communities. Instead, it said it will "continue to assess the situation on the ground in terms of accessibility and would liaise with partners to carry out survey and clearance once the affected areas are accessible".[41]

The access challenge raises doubts about how far Nigeria will be able to progress in even establishing a contamination baseline and, in a context of escalating conflict in the BAY states, and left a strong possibility that Nigeria will not achieve completion by 2025 and will need to request a further extension to its Article 5 deadline.

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 Email from Harshi Gunawardana, UNMAS, 7 May 2021.

5 Emails from Lionel Pechera, Programme Coordinator, UNMAS, Nigeria, 11 March and 20 July 2020.

6 UNMAS, "Mission Report: UNMAS Explosive Threat Scoping Mission to Nigeria 3 to 14 April 2017", p. 3.

7 Email from Lionel Pechera, UNMAS, 25 June 2019.

8 Email from Lionel Pechera, UNMAS, 11 March 2020.

9 See, e.g., "Six killed in Nigeria by land mine planted by suspected jihadists", *Agence France-Presse*, 27 September 2019.

10 2020 Article 5 deadline Extension Request, p. 11.

11 Email from Harshi Gunawardana, UNMAS, 7 May 2021; Article 5 deadline extension request, May 2021, p. 11.

12 2021 Article 5 deadline Extension Request, p. 15.

13 Ibid.

14 Ibid., pp. 28–31.

15 Email from mine action stakeholder, 24 June 2021.

16 Emails from Harshi Gunawardana, UNMAS, 7 May and 17 August 2021.

17 Email from Pierluigi Candier, Country Director, MAG, 24 June 2021.

18 UN, "Humanitarian Response Strategy January 2019 – December 2021", December 2018, pp. 43, 48.

19 Email from Pierluigi Candier, MAG, 24 June 2021.

20 Email from Harshi Gunawardana, UNMAS, 17 August 2021.

21 UNMAS, "Summary of Gender Baseline Assessment", May 2021.

22 Emails from Harshi Gunawardana, UNMAS, 7 May 2021; and John Sorbo, DRC, 3 July 2021.

23 Email from Pierluigi Candier, MAG, 24 June 2021.

24 Email from John Sorbo, Head of Programme, DRC, 3 July 2021.

25 2021 Article 5 deadline Extension Request, p. 8.

26 Ibid., p. 32.

27 Ibid., p. 33.

28 Ibid., p. 25.

29 Ibid., p. 31.

30 Email from Lionel Pechera, UNMAS, 11 March 2020.

31 Email from Harshi Gunawardana, UNMAS, 7 May 2021

32 Email from Harshi Gunawardana, UNMAS, 17 August 2021.

33 Email from Pierluigi Candier, MAG, 24 June 2021.

34 Email from John Sorbo, DRC-HDP, 3 July 2021.

35 Emails from Pierluigi Candier, MAG, 24 June 2021. MAG's RCBAs in 2020 covered 11 local government areas in Borno State: Abadam, Bama, Dikwa, Gwoza, Jere, Konduga, Kukawa, Madagali, Mafa, Marte, and Ngala.

36 Email from Pierluigi Candier, MAG, 24 June 2021.

37 Email from John Sorbo, DRC-HDP, 2 July 2021

38 Statement of Nigeria, APMBC 11th Meeting of States Parties, Phnom Penh, 29 November 2011.

39 Email from Harshi Gunawardana, UNMAS, 7 May 2021.

40 2021 Article 5 deadline Extension Request, p. 8.

41 Ibid., p. 24.

OMAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 FEBRUARY 2025
ON TRACK TO MEET DEADLINE

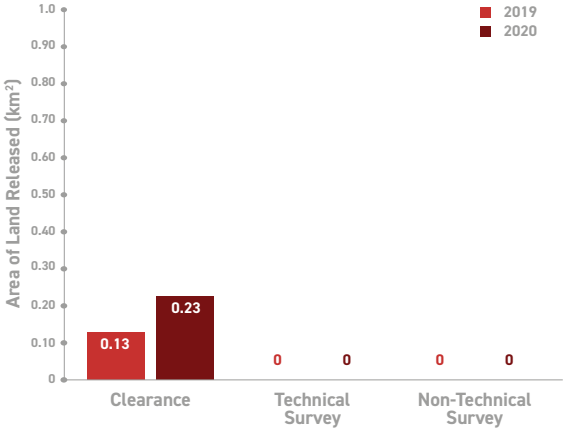
KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: LIGHT

AP MINE CLEARANCE IN 2020
0.23KM²

AP MINES DESTROYED IN 2020
0

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Oman is accelerating progress in "re-clearing" suspected mined areas and plans to complete release of all areas ahead of its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline of 1 February 2025.

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.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	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	7	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. In 2020, women were not represented in Oman's mine action programme.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	6	Oman submits annual Article 7 transparency reports detailing its progress in re-clearance. The report covering 2020 was submitted in advance of the treaty deadline and provided details of its updated work plan.
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	3	In 2020, as in previous years, Oman conducted clearance/re-clearance of mined areas, during which no anti-personnel mines were discovered. It is not known if Oman conducts evidence-based non-technical survey or technical survey prior to clearance, to better target its efforts.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	6	Oman "re-cleared" 225,100m^2 of suspected mined area in 2020; a significant increase on the previous year. 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.
Average Score	**5.9**	**5.3**	**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

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 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[2] in order to confirm they were free of anti-personnel mines.

According to its 2015 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 are 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 the areas set out in Table 1 as potentially contaminated and had set out on a plan to re-clear them between February 2021 and April 2024.[7]

Table 1: Anti-personnel mined area by region (at end 2020)[8]

Area/region	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]

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 these of different genders. Women did not occupy supervisory, administrative, or operational positions in Oman's mine action programme in 2020.[14] Women have, though, been permitted to serve in the Oman Army for a decade.[15]

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.[16]

After becoming a State Party to the APMBC 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.

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.[17] 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 is expected to complete land release by April 2024, leaving a buffer of nine months ahead of its February 2025 deadline.[18]

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.[19] 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".[20]

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".[21] Oman reports that its current operational procedures are efficient, follow the established work plan, and that they are reviewed and updated regularly.[22]

OPERATORS AND OPERATIONAL TOOLS

The Executive Operational Unit of Oman's army engineers is solely responsible for mine/explosive remnants of war (ERW) clearance. In 2020, the Unit comprised 83 personnel. Oman expected the same capacity to be used throughout 2021.[23]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

In 2020, Oman re-cleared a total of 225,100m^2 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.[24]

Clearance output in 2020 was a significant increase compared to the 130,100m^2 of mined area cleared between February and December 2019.[25] 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.[26]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR OMAN: 1 FEBRUARY 2015

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 FEBRUARY 2025

↓

ON TRACK TO MEET ARTICLE 5 DEADLINE: YES

LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): HIGH

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.[27] 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.[28]

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.[29]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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).[30]

1 Initial Article 7 Report, 2015, pp. 4–5.
2 Oman statement to the APMBC 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, submitted in 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.
14 Ibid.
15 "Women officers set to join army in Oman", *Khaleej Times*, 21 December 2011, at: http://bit.ly/3dYcDaH.
16 Email from the Oman MoD, 23 June 2021.
17 Article 7 Report (covering 2020), p. 14.
18 Article 7 Report (covering 2020).
19 Email from Oman MoD, 23 June 2021.
20 Article 7 Report (covering 2018).
21 Article 7 Report (covering 2019).
22 Email from Oman MoD, 23 June 2021.
23 Ibid.
24 Article 7 Report (covering 2020), pp. 8–13.
25 Article 7 Report (covering 2019).
26 Email from Oman MoD, 23 June 2021.
27 Article 7 Report (covering 2020), p. 14.
28 Ibid.
29 Statement of Oman, 17th Meeting of States Parties, Geneva, 29 November 2018.
30 Email from Oman MoD, 23 June 2021.

PALESTINE

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 JUNE 2028
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

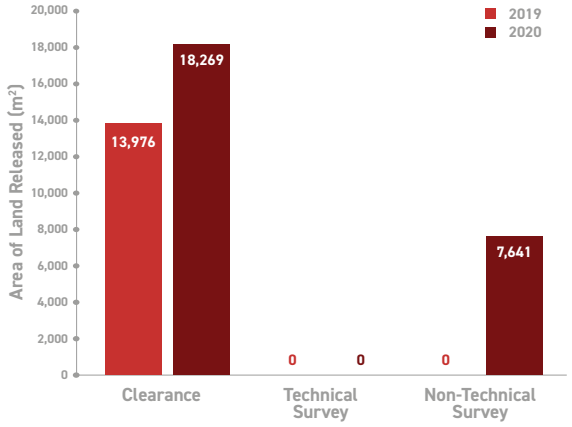
MEDIUM, PROBABLY LESS THAN 5KM²

MINE ACTION REVIEW ESTIMATE

AP MINE CLEARANCE IN 2020
18,269M²

AP MINES DESTROYED IN 2020
515

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

All mined areas are located in territory under Israeli control. To date, Israel has not authorised demining operations to be conducted by the Palestinian Mine Action Centre (PMAC), but progress is being made in clearance of mine contamination in the West Bank by The HALO Trust. Clearance at the Baptism Site, in the Jordan valley, was completed by HALO Trust in April 2020, while clearance of three priority minefields in the West Bank continues at a slow pace due to shortfalls in funding for quality assurance (QA) which, according to Israeli law, can only be conducted by an Israeli company.

RECOMMENDATIONS FOR ACTION

- **Palestine should mobilise resources to complete clearance of the three priority minefields in the West Bank as soon as possible.**
- **Israel should mobilise resources and secure funds for the external QA in order to complete the clearance of the three priority minefields in the West bank as soon as possible.**
- **Israel should authorise surveys to establish a baseline of anti-personnel mine and other explosive remnants of war (ERW) contamination of all areas under its control in the West Bank.**
- **Israel should permit Palestinian deminers to receive training and carry out demining operations in the West Bank.**

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 18.51km^2. All of the mined areas were said to be under Israeli control.[1] Palestine also reported that it is not in a position to know whether there are further mined areas 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]

Clearance operations must be coordinated with the Israeli authorities, in addition to PMAC, and, under Israeli law, must be quality assured by an Israeli company.[5] In addition, in 2019 HALO Trust reported being made aware of three other anti-personnel mined areas in the Jordan Valley, namely at Shademot Mehola (65,000m^2) and Sokot (228,000m^2), containing a mix of anti-personnel and anti-vehicle mines; and at Taysir (5,500m^2), 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 to survey 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 Israeli National Mine Action Authority (INMAA) or IDF decides to clear them by themselves.[7]

As at end of 2020, there was nearly 0.26km^2 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).[8] All five minefields had been laid by the Jordanian army.

The total at the end of 2020 is a reduction of 13,710m^2 from anti-personnel mine contamination at the end of the previous year, following clearance of Nur a-Shams minefield in 2020 by HALO Trust.[9]

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.[10] 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.[11]

Palestine is also contaminated with ERW. According to 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.[12]

Table 1: Mined area (excluding the Jordan Valley) (at end 2020)[13]

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

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

PMAC was established in accordance with Palestinian Minister of Interior decision on 25 March 2012,[14] 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.[15]

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.[16] The committee has established a number of sub-committees to deal with technical issues, risk education, legal affairs, foreign affairs, and health and safety.[17]

In November 2016, Palestine announced that it was seeking to adopt and 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.[18] As at May 2021, however, the process of developing and adopting the legislation was still ongoing.[19] In November 2017, Palestine's constitutional court ruled that, in an event of contradiction, the obligations dictated by international conventions, including the APMBC, override national legislation.[20]

PMAC, which has 11 employees,[21] 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.[22] 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.[23]

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.[24] As at July 2021, Israel had not granted Palestine the authorisation to conduct mine clearance operations.[25]

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 aims to train particularly women to provide EORE in at-risk communities in the West Bank. In addition, the project supported capacity enhancement training, training of trainers (ToT), training of beneficiaries and publication of EORE materials.[26]

Since November 2019 and throughout 2020, the Israeli government covered HALO's clearance operations costs at the Baptism Site Project. The clearance of the Jordanian laid minefields in Tulkarem and Jenin is not funded by either the Palestinian or the Israeli governments and HALO faces significant challenges raising funds for their clearance from donor countries.[27] PMAC does not provide direct funding for HALO Trust's clearance operations.

GENDER AND DIVERSITY

PMAC has said it has a gender policy and implementation plan and that it disaggregates data by sex and age.[28] There is reported to be equal access to employment for qualified women and men at PMAC, and three of PMAC's eleven employees (27%) are women, each in managerial/supervisory positions.[29]

The HALO Trust has a global policy on gender and diversity. 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. During 2020, HALO deployed a female finance officer and a female doctor at the Baptism Site. 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.[30]

INFORMATION MANAGEMENT AND REPORTING

PMAC uses the Information Management System for Mine Action (IMSMA) database, Level 1.[31]

The HALO Trust follows the INMAA's national standards and provides daily and weekly reports as well as completion reports for every task. The information is also shared with PMAC weekly, along with completion reports and Geographic Information System (GIS) data for every completed task.[32] 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.[33] However, Palestine's Article 7 report covering calendar year 2018 (submitted in 2019), did not contain any further details, including the amount of mined area cleared in 2018.[34] As at June 2021, Palestine had yet to submit its Article 7 report for 2020.

PLANNING AND TASKING

PMAC has a Strategic Plan for 2017–20,[35] in which primary objectives are the clearance of the Nur a-Shams, Qabatiya, and Yabad minefields.[36] According to PMAC, there was an annual work plan in place for 2020.[37]

HALO Trust's survey and clearance schedule in the West Bank is set in agreement with PMAC, INMAA, and its international donors.[38]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The HALO Trust's standing operating procedures (SOPs), which are based on its international standards and which also comply with national standards, are approved by the INMAA. Once a year, The HALO Trust submits its SOPs, including any necessary amendments, to INMAA for approval.[39]

OPERATORS AND OPERATIONAL TOOLS

To date, Israel has not authorised demining operations to be conducted by PMAC. In September 2013, however, the INMAA gave formal authorisation to 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 it has continued to do so ever since.

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. In addition, during 2020, HALO Trust deployed up to three armoured CASE721 wheeled medium loaders, two armoured tracked excavators, two armoured tracked excavators, and two industrial screeners. The machines were operated by a Palestinian team.[40]

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, as required by INMAA, 4CI Security, an external INMAA-certified QA/QC company, was contracted to monitor HALO Trust's clearance in accordance with Israeli National Mine Action Standards in the Baptism Site.[41]

The HALO Trust conducts both manual and mechanical clearance in the West Bank. It also uses a drone for survey and mapping purposes, and the maps generated are shared with all parties involved for planning and follow-up.[42]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

HALO Trust released 25,910m^2 of land in 2020 in the West Bank, including the Jordan valley. Of the released land, 7,641m^2 was cancelled while 18,269m^2 was cleared. A total of 515 anti-personnel mines were destroyed in the process.[43]

Under Convention on Certain Conventional Weapons (CCW) Amended Protocol II, Israel reported that INMAA had cleared 216,930m^2 in 2020, and destroyed 1,200 mines and ERWs in the West Bank. However, there was no disaggregation on what proportion of this land release was of mined area (as opposed to battle area) or how many of the total destroyed explosive devices were anti-personnel mines.

SURVEY IN 2020

In 2020, HALO cancelled 7,641m^2 of area during clearance of Nur a-Shams minefield by reference to the Jordanian benchmark, which allowed HALO to draw the minefield boundaries and compare them to the Jordanian military map. Both Palestinian and Israeli authorities were involved in the process and provided their approval to reduce the area of suspected contamination to 24,100m^2.[44]

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.[45]

CLEARANCE IN 2020

In 2020, HALO cleared a total of 18,269m^2 in the West Bank destroying 515 anti-personnel mines and 663 anti-vehicle mines in the process.

In Tulkarem governorate, HALO cleared 6,069m^2 of Nur a-Shams minefield and destroyed 13 anti-personnel mines, all PRB-M35s. In the Baptism Site of Jordan valley, HALO Trust cleared 12,200m^2 of mined area destroying 502 anti-personnel mines and 663 anti-vehicle mines in the process.[46]

Table 2: Mine clearance in 2020[47]

Operator	Governorate	Minefield task name	Area cleared (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
HALO Trust	Tulkarem	Nur a-Shams	6,069	13	0	0
HALO Trust	Jordan valley	The Baptism Site	12,200	502	663	0
Totals			**18,269**	**515**	**663**	**0**

Clearance of the Jordanian-laid minefields in Tulkarem and Jenin governorates continues to be influenced by the availability of funds for external QA, and output in 2020 more than halved compared to the 13,976m² cleared by HALO Trust in Jenin governorate in 2019. HALO could only start clearance of Nur a-Shams minefield in September 2020 after a private donation for the QA was secured from European Union Instrument Contribution to Stability and Peace (EU IcSP). The clearance ended on 3 December 2020 and marked the end of the grant that was signed in August 2018.[48] Due to weather conditions and the ending of funds, the task of Nur a-Shams could not be completed and over 500m² was left uncleared. The area was fenced, marked, and will be cleared and completed in HALO's next cycle of operations. As at April 2021, HALO could not secure any funds for its operations in 2021 and expected that its clearance outputs will be further reduced in 2021.[49]

The Baptism Site clearance operation was entirely funded by the Israeli Ministry of Defence (MoD) from July 2019 until its completion in April 2020. Between January and April, HALO completed the BAC and cleared 12,2000m² of anti-personnel minefield located on the southern side of the site main entrance. HALO also located and destroyed the final 663 anti-vehicle mines.

The overall clearance outputs of 2020 saw a significant increase compared to 2019 when 13,976m² was cleared and 106 anti-personnel mines destroyed. The increase is attributed to the intensive mechanical clearance of the Israeli anti-personnel minefield at the Baptism Site.

The HALO Trust commenced clearance of the West Bank minefield at Qaser al-Yahud (the Baptism Site Project), in the Jordan Valley, in March 2018,[50] with both funding from international donors and Israel.[51] The project aimed to remove mines and explosive ordnance in the area of the Baptism Site, which covers a total estimated area of 870,000m².[52] Approximately 90,000m² was thought to potentially contain anti-personnel mines, including those of an improvised nature.[53] IDF minefield records provided to The HALO Trust separate the land for clearance outside the church compounds into eleven areas, all of which contain a potential UXO threat. Six of the eleven areas were known to contain significant numbers of M15 anti-vehicle mines in multiple lines and more than 2,600 anti-vehicle mines in total. The land and buildings inside the seven church compounds are suspected to contain mines and booby-traps, but no official records exist regarding this contamination.[54]

HALO Trust completed clearance of the seven churchyards and their compound buildings at the Baptism Site by mid-July 2019,[55] and completed the clearance of the Baptism Site project in April 2020.[56]

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,[57] and is impacted by political factors, including the lack of authorisation granted by Israel for Palestine to conduct mine clearance operations.[58]

It is, however, a positive development that The HALO Trust was permitted to begin mine clearance operations in April 2014, and, as at the end of 2020, HALO had completed clearance of six minefields in Area C of the West Bank.[59] As at the end of 2020, three Jordanian-laid minefields in the governorates of Jenin and Tulkarem, which fall within HALO Trust's donor agreement, remained to be cleared. Funds permitting, HALO plans to complete clearance of the last three priority minefields Qabatiya, Yabad, and the remaining mined area of Nur a-Shams in 2021. HALO requires 17 months of operations to complete these three tasks. As at May 2021, however, funds had yet to be secured and HALO expected that the target date to clear these minefields will be delayed.[60] PMAC reported that concluding clearance by the 2025 deadline is highly dependent on the facilitation of the Israeli authorities and the availability of funds.[61]

The COVID-19 pandemic did not affect HALO's operations at the Baptism Site Project, but since 24 April 2020 operations had been suspended due to the lack of funding for QA in the Nur a-Shams minefield. HALO could only acquire the funds and resume its clearance for a three-month period (23 September to 3 December 2020).[62] PMAC reported that the COVID-19 impeded progress in technical and technical survey during 2020.[63]

After completion of the three priority Jordanian-laid minefields, HALO Trust plans to look into clearance of certain mined areas in the Jordan Valley, a third of which are Israeli-laid.[64]

In February 2019, INMAA 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.[65] As at April 2021, clearance in these minefields had not yet started.

Furthermore, 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. INMAA planned to invest around ILS 900,000 (approximately US$250,000) on this project in 2017–19.[66]

Table 3: Five-year summary of AP mine clearance

Year	Area cleared (m^2)
2020	18,269
2019	13,976
2018	5,221
2017	41,857
2016	34,057
Totals	**113,380**

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 and 20 April 2020.

7 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

8 Email from Ronen Shimoni, HALO Trust, 20 April 2020.

9 Ibid.

10 Email from Celine Francois, Programme Officer, UNMAS Jerusalem, 5 July 2012.

11 Ibid.; and "UNMAS 2013 Annual Report".

12 Email from Soula Kreitem, UNMAS, 30 June 2021.

13 Emails from Maj. Wala Jarrar, External and Internal Relations Officer, PMAC, 13 May 2020; and Ronen Shimoni, HALO Trust, 23 April 2021.

14 Minister of Interior Decision No. 69, 25 March 2012.

15 Emails from Celine Francois, UNMAS Jerusalem, 19 July 2012; and Imad Mohareb, Planning Department, PMAC, 31 March 2013.

16 Emails from Celine Francois, UNMAS Jerusalem, 5 and 19 July 2012; and UN, "2012 Portfolio of Mine Action Projects", New York, 2013.

17 Email from the Planning Department, PMAC, 9 May 2016.

18 Statement of Palestine, 15th Meeting of States Parties, Santiago, 29 November 2016.

19 Statement of Palestine, Fourth APMBC Review Conference, Oslo, 25 November 2019; and email from Wala Jarrar, PMAC, 12 May 2021.

20 Initial APMBC Article 7 Report, Form A, 26 November 2018

21 Email from Wala Jarrar, PMAC, 13 May 2021.

22 Initial Article 7 Report, Form D, 26 November 2018.

23 Email from staff member in the Planning Department, PMAC, 26 June 2018.

24 Interview with Brig. Osama Abu Hananeh, PMAC, Geneva, 7 February 2019; and email from Wala Jarrar, PMAC, 24 May 2020.

25 Initial Article 7 Report, Form D, 26 November 2018; interview with Brig. Osama Abu Hananeh, PMAC, Geneva, 7 February 2019; and email from Soula Kreitem, UNMAS, 30 June 2021.

26 Email from Soula Kreitem, UNMAS, 30 June 2021.

27 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

28 Email from Wala Jarrar, PMAC, 24 May 2020.

29 Email from Wala Jarrar, PMAC, 12 May 2021.

30 Emails from Ronen Shimoni, HALO Trust, 23 April and 13 June 2021.

31 Email from staff member in the Planning Department, PMAC, 30 August 2018.

32 Emails from Ronen Shimoni, HALO Trust, 3 Sept 2018 and 18 June 2020.

33 Initial Article 7 Report, Form D, 26 November 2018.

34 Article 7 Reports submitted in 2019 (covering 2018), and 2020 (covering 2019).

35 Palestine's Article 7 report covering 2017 indicated that the strategic plan covers 2017–2022. It is not clear whether Palestine's strategic plan expired in 2020 or is valid until 2022.

36 PMAC, "Strategic Plan 2017–2020", undated.

37 Email from Wala Jarrar, PMAC, 24 May 2020.

38 Email from Ronen Shimoni, HALO Trust, 18 June 2020.

39 Email from Ronen Shimoni, HALO Trust, 14 May 2018.

40 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

41 Emails from Ronen Shimoni, HALO Trust, 14 May 2018 and 23 April 2021.

42 Email from Ronen Shimoni, HALO Trust, 10 April 2019.

43 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

44 Ibid.

45 Emails from staff member in the Planning Department, PMAC, 9 May 2016; and Ronen Shimoni, HALO Trust, 14 June 2020.

46 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

47 Emails from Wala Jarrar, PMAC, 12 May 2021; and email from Ronen Shimoni, HALO Trust, 23 April 2021.

48 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

49 Ibid.

50 Emails from Ronen Shimoni, HALO Trust, 14 May 2018; and Michael Heiman, formerly of INMAA, 26 May 2018; and Israel CCW Amended Protocol II Article 13 Report (covering 2018), Form B.

51 Interview with Marcel Aviv, INMAA, Geneva, 7 February 2019.

52 Email from Ronen Shimoni, HALO Trust, 14 May 2018.

53 Email from Michael Heiman, formerly of INMAA, 26 May 2018.

54 Email from Ronen Shimoni, HALO Trust, 14 May 2018; and telephone interview, 23 August 2018.

55 Email from Ronen Shimoni, HALO Trust, 20 April 2020; and Israel CCW Amended Protocol II Article 13 Report (covering 2019), Form B.

56 Email from Ronen Shimoni, HALO Trust, 23 April 2021; and Israel CCW Amended Protocol II Article 13 Report (covering 2020), Form B.

57 Email from Ronen Shimoni, HALO Trust, 21 August 2019.

58 Initial Article 7 Report, Form D, 26 November 2018; and interview with Brigadier Osama Abu Hananeh, PMAC, in Geneva, 7 February 2019.

59 Emails from Ronen Shimoni, HALO Trust, 20 April 2020; and Wala Jarrar, PMAC, 12 May 2021.

60 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

61 Email from Wala Jarrar, PMAC, 12 May 2021.

62 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

63 Email from Wala Jarrar, PMAC, 12 May 2021.

64 Emails from Ronen Shimoni, HALO Trust, 22 April 2017, 14 May 2018 and 18 June 2020; and telephone interview, 3 August 2017.

65 Interview with Marcel Aviv, INMAA, in Geneva, 7 February 2019.

66 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.

PERU

MINE ACTION REVIEW

CLEARING THE MINES 2021

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

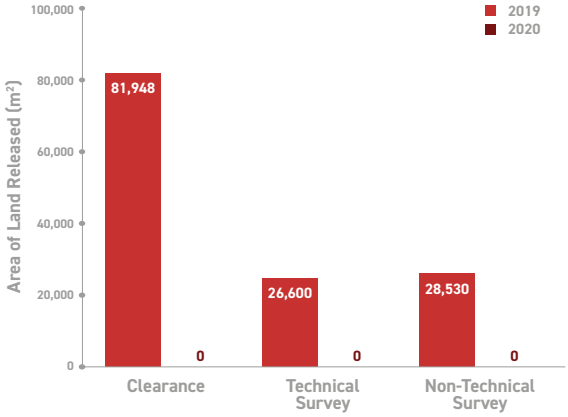
AP MINE CLEARANCE IN 2020

0 M²

AP MINES DESTROYED IN 2020

0

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Peru's land release output fell dramatically in 2020 to nil reportedly due to mine action resources being diverted towards efforts to support the COVID-19 pandemic. 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 the previous years levels. This is particularly so, as all remaining contamination is still recorded as suspected hazardous area (SHA) and actual contaminated area that requires full clearance is likely to be much less.

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 to completion that includes the number of areas and amount of area to be addressed annually.**
- **Peru should develop and implement criteria for the prioritisation of survey and clearance tasks.**
- **Peru should develop a gender and diversity policy and implementation plan.**
- **Peru should elaborate a resource mobilisation strategy which provides an estimate of required funding to complete clearance by its Article 5 deadline and how much of the costs will be allocated from State resources.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	4	The estimate of anti-personnel mine contamination in Peru was unchanged in 2020 from 2019. All of Peru's outstanding contamination continues to be recorded as suspected hazardous area (SHAs) and the size and extent of the 108 mined areas varied widely.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	6	Peru has the requisite legislation and the necessary management structure in place to oversee demining operations. Peru allocated over $700,000 to demining operations in 2020 but these funds were diverted towards COVID-19. Peru has allocated the same amount for 2021 but has also requested international assistance for additional funds.
GENDER AND DIVERSITY (10% of overall score)	5	5	Peru does not have a gender and diversity policy and implementation for mine action. While women and children participate in mine risk education activities it is not known if this consultation extends to survey. It is not known what proportion of CONTRAMINAS staff were female in 2020.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	Peru submitted a timely Article 7 report covering 2020 which also provide detail on its obligations in accordance with the Oslo Action Plan.
PLANNING AND TASKING (10% of overall score)	5	6	Peru did not meet its land release target for 2020 in its national plan for demining 2018–2024. It provided an updated plan in its Article 7 report, but the plan 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 to conduct technical survey and stated that it planned to also use MDDs to identify contamination and conduct clearance. Peru did not deploy its demining capacity in 2020.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	6	Peru did not conduct any survey or clearance in 2020, a dramatic reduction in output from the 137,078m^2 of land released in 2019. If it can reach the level of the previous years land release output then, Peru should easily be able to meet its Article 5 completion deadline. However, this seems funding contingent.
Average Score	**5.1**	**5.6**	**Overall Programme Performance: AVERAGE**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Peruvian Mine Action Centre (CONTRAMINAS)

NATIONAL OPERATORS

- Peruvian Army's Directorate General for Humanitarian Demining (DIGEDEHUME)
- Anti-Personnel Mine Action Centre (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 2020, Peru estimated that anti-personnel mine contamination covered a total of 369,212m^2 across 108 suspected hazardous areas (SHAs) within four "sectors" (see Table 1). Peru has not identified any confirmed hazardous areas (CHAs).[1]

The size and extent of the 108 mined areas varies widely, with one area only 5m^2 in size while the largest, by far, is estimated to extend over 160,000m^2.[2] In fact, most of this large 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 100,000m^2 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.[3] No survey was conducted in 2020, 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.

Table 1: Anti-personnel mined area by sector (at end 2020)[4]

Sector	SHAs	Area (m^2)
Santiago	42	70,690
Tiwinza	11	26,850
Cenepa	37	90,707
Achuime	18	180,965
Totals	**108**	**369,212**

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 400m^2 each. In the Cenepa sector, a mined area estimated at 68,000m^2 (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 18MSP that since October 2020 they have been working with Ecuador to clarify the location of an estimated 10,182m^2 of mined area (PV Gutiérrez) with approximately 2,000 anti-personnel mines. As at June 2021, it was not known if this area had been confirmed.[5]

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 Anti-Personnel Mine Ban Convention (APMBC).[8]

In its revised second Article 5 deadline extension request, submitted in August 2016, Peru estimated that US$38.6 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 $767,832 (3 million Soles) to demining operations but these funds were diverted towards supporting the COVID-19 health emergency within the country. For 2021, the same amount has been allocated by Peru, but as this is less than the costed amount needed Peru has requested international assistance for 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]

GENDER AND DIVERSITY

CONTRAMINAS does not have a gender and diversity policy but it does abide by 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 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 is disaggregated by sex and age but it is not known if other relevant mine action data is disaggregated. In 2019, 20% of operational roles were staffed by women and 50% of management and supervisory positions.[13]

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 0.49km^2 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] If Peru had met its annual land release targets to end 2020 it would have only 269,556m^2 of anti-personnel mine contamination to clear from 2020 to 2024.

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**

In 2020, Peru planned to clear 20 mined areas totalling 9,458m^2 from the Achuime sector according to its Updated Plan or 15 mined areas from Tiwinza and Cenepa of unspecified area according to its Article 7 report covering 2019.[18] In fact, Peru did not carry out any survey or clearance. In its latest Article 7 report covering 2020, Peru included a plan to release 108 mined areas between 2021 and the end of 2024, its Article 5 deadline (see Table 3). In 2021, Peru planned to release 9,150m^2 from Tiwinza.[19]

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.[20] One of the activities listed for CONTRAMINAS' policy work was to set priorities for clearance, in coordination with DIGEDEHUME and DIVSECOM.[21] Peru reportedly prioritises clearance by sector.[22]

Table 3: Planned mine clearance in 2021–24 (Article 7)[23]

Year	Sector	Mined areas
2021	Tiwinza	6
2022	Tiwinza	5
	Cenepa	18
2023	Santiago	20
	Cenepa	19
2024	Santiago	22
	Achuime	18
Total		**108**

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Peru has 16 national mine action standards (NMAS) which form part of the Humanitarian Demining Procedures Manual, and which are based on the International Mine Action Standards (IMAS).[24] According to CONTRAMINAS, the NMAS and associated standard operating procedures (SOPs) are reviewed annually. In 2019, updates were made to the technical survey standard on the use of mine detection dogs (MDDs) during technical survey.[25]

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.[26] According to CONTRAMINAS, new land release policies are formulated annually as mine clearance progresses and these are then reflected in the operation orders.[27] 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.[28]

At the APMBC 18MSP, Ecuador and Peru made a joint statement detailing their cooperation on demining activities during 2020 in which they worked together to strengthen their demining procedures. Peru shared its health protocol with Ecuador to support demining during the COVID-19 pandemic while Ecuador approved an aerial evacuation protocol to allow Peruvian deminers through Ecuadorian airspace in case of emergencies. They also reported organising a joint workshop on humanitarian demining which was planned for 2021 and said that demining personnel from Ecuador and Peru had received explosive ordnance disposal (EOD) training from the Organization of American States (OAS) between January and March 2020.[29]

OPERATORS AND OPERATIONAL TOOLS

DIGEDEHUME, which is responsible for demining on the border with Ecuador, has two teams each comprising 60 personnel.[30] CONTRAMINAS' Security Division (DIVSECOM), which is responsible for supporting DIGEDHUME 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 2021, Peru had not reported on whether this has happened.

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 2019. According to CONTRAMINAS, this is because the Unit's objective was to clear the Tiwinza square kilometre which was ostensibly completed in 2018.[34] 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.[35]

In its revised second Article 5 deadline extension request, Peru announced it would be using both machines and MDDs for demining.[36] 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.[37] 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.[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 2021, Peru has not reported on whether it plans to deploy drones.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

No survey or clearance activities took place in Peru in 2020 because of the health crisis caused by the COVID-19 pandemic.[40] This compares to the 137,078m^2 of mined area which released in 2019, of which 81,948m^2 was cleared, 26,600m^2 was reduced through technical survey, and 28,530m^2 was cancelled through non-technical survey. Peru reported that a total of 1,113 anti-personnel mines were found and destroyed that year.[41]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR PERU: 1 MARCH 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

↓

FIRST EXTENDED DEADLINE (8-YEAR EXTENSION): 1 MARCH 2017

↓

SECOND EXTENDED DEADLINE (7-YEAR, 9-MONTH EXTENSION): 31 DECEMBER 2024

↓

ON TRACK TO MEET ARTICLE 5 DEADLINE: JUST ON TRACK

LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): MEDIUM

Table 4: Five-year summary of AP mine clearance

Year	Area cleared (m^2)
2020	0
2019	81,948
2018	15,576
2017	*9,246
2016	**18,317
Total	**125,087**

* Covers March 2017 to March 2018
** Covers March 2016 to March 2017

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. If Peru's estimate of anti-personnel mine contamination at end of 2020 was accurate (at 369,212m^2) then Peru would need to release an average of 123,070m^2 per year to meet this deadline. Peru's land release output fell dramatically in 2020 to nil from a high of 137,078m^2 in 2019. If Peru can reach this level of land release output again this would exceed the amount it needed to release each year.

In its decision on Peru's 2016 extension request, the Fifteenth Meeting of States Parties noted that as Peru was seeking to develop enhanced processes of land release "Peru may find itself in a situation wherein it can proceed with implementation faster than that suggested by the amount of time requested".[42] 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]

In order to complete clearance by its Article 5 deadline Peru has requested international assistance to cover 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 RESIDUAL RISK AFTER COMPLETION

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]

1 Article 7 Report (covering 2020), Form C and I.

2 Ibid., Form I.

3 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.

4 Article 7 Report (covering 2020), Form C and I.

5 Statement of Peru, APMBC 18th 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 Presentation by Peru's Director General for Humanitarian Demining, Army Brig.-Gen. Jorge Agramonte Aguilar for the Regional Dialogue on Humanitarian Demining, (virtual meeting), 11 February 2021.

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.

18 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 11; and Article 7 Report (covering 2018), Form F.

19 Article 7 Report (covering 2020), Form J.

20 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.

21 Updated National Plan for Humanitarian Demining 2018–2024, p. 15.

22 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

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

24 Email from Mario Espinoza Llanos, CONTRAMINAS, 16 June 2020.

25 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

26 Revised Second Article 5 deadline Extension Request, July 2016, p. 36; and Updated National Plan for Humanitarian Demining 2018–2024, p. 14.

27 Email from Mario Espinoza Llanos, CONTRAMINAS, 16 June 2020.

28 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.

29 Joint Statement of Peru and Ecuador, APMBC 18th Meeting of States Parties, 16–20 November 2020.

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.

34 Email from Mario Espinoza Llanos, CONTRAMINAS, 16 June 2020.

35 Statement of Peru, Fourth APMBC Review Conference, Oslo, 27 November 2019.

36 Revised Second Article 5 deadline Extension Request, July 2016, pp. 5–6.

37 Updated National Plan for Humanitarian Demining 2018–2024, pp. 15–16.

38 Emails from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020 and 16 June 2020.

39 Email from Mario Espinoza Llanos, CONTRAMINAS, 26 May 2020.

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

41 Article 7 Report (covering 2018), Form F.

42 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 c.

43 Updated National Plan for Humanitarian Demining 2018–2024, p. 13.

44 Email from Mario Espinoza Llanos, CONTRAMINAS, 16 June 2020.

SENEGAL

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2026
NOT ON TRACK AND IN VIOLATION OF THE CONVENTION

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

LIGHT, UNCLEAR

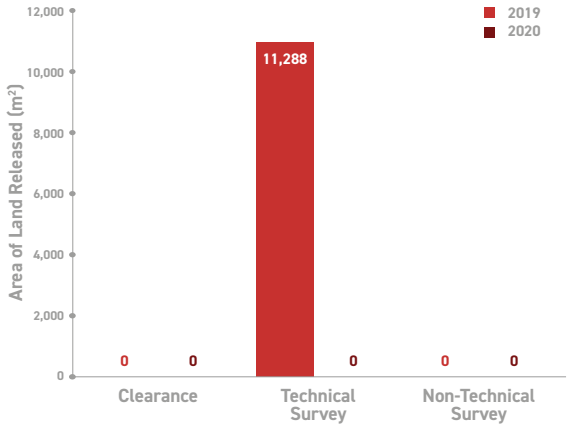
AP MINE CLEARANCE IN 2020

0 M²

AP MINES DESTROYED IN 2020

0

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

In 2020, Senegal sought and received a five-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline until March 2026. It requested international donors to provide US$8.85 million towards projected costs of $12.19 million. Non-technical survey resumed in Bignona province in February 2020, but was suspended the following month because of measures to control the spread of the COVID-19 pandemic. United States (US) funding, the only international donor supporting Senegal in 2020, expired at the end of the year.

RECOMMENDATIONS FOR ACTION

- **In order to ensure its compliance with the Convention, Senegal must immediately clear the anti-personnel mines emplaced between its military cantonment in the village of Djirak and the non-State armed group with which it is engaged in armed hostilities.**
- **Senegal should complete non-technical survey as soon as possible to establish a comprehensive baseline estimate of its remaining mine contamination.**
- **The Senegalese National Mine Action Centre (CNAMS) should update the Article 5 extension request work plan to reflect delays caused by measures to control the spread of COVID-19 and a broader lack of funding.**
- **The Government of Senegal should demonstrate commitment to its APMBC obligations by making national funding and resources available for demining operations.**
- **Senegal should provide details of the arrangements and capacity available for tackling residual contamination identified after completion.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	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 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 and its apparent failure to demine mined areas around military installations calls into 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. Humanity and Inclusion (HI), the only international operator, employs women in its field operations as well as administrative posts.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	4	CNAMS maintains an Information Management System for Mine Action (IMSMA) database but has cited shortages of funds as an obstacle to upgrading it. The quality of data in IMSMA is unknown. 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 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)	4	4	CNAMS introduced national mine action standards in 2009 but has not revised or updated them since 2013.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	3	3	Senegal did not report any land release through survey in 2020 and did not conduct any demining. Senegal requested and received a five-year extension to its Article 5 deadline but implementation is dependent on mobilising significant new sources of international donor funding to replace the shrinking support received in recent years.
Average Score	**3.8**	**3.8**	**Overall Programme Performance: VERY 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)

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 APMBC. It reports the presence of mines in four of the country's forty-five departments, all of them in the Casamance region, an area of low-level insurgency since the 1980s.

Senegal has reported 37 confirmed hazardous areas covering 491,086m^2 for more than a year, with more than 60% in Goudomp province (see Table 1).[1] Senegal's Article 5 extension request submitted in June 2020 also reported 37 confirmed hazardous areas covering 491,086m^2 but estimated the total area of confirmed and suspected mine contamination at 1,593,487m^2, indicating it had also identified 1,102,401m^2 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 1.7km^2.[4] Senegal's latest Article 7 transparency report, submitted in May 2021, reported nine areas of suspected mine contamination that had not been accurately assessed due to insecurity and whose size was not known. It added that 118 locations remain to be assessed: 101 in Bignona, 4 in Oussoye, and 13 in Ziguinchor.[5]

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. Eight soldiers were reportedly injured when their vehicle detonated a mine in the Ziguinchor region in June 2020. Two soldiers were reportedly killed and two more injured later that month in the same region as they escorted civilians back to villages that had been abandoned in the conflict.[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 reporting on demining military bases has raised concerns about Senegal's compliance with the APMBC. Senegal claimed previously that it already demined the mined areas around its military bases.[9] In 2020, however, it informed the APMBC Committee on Article 5 Implementation that mines remained between a Senegalese army cantonment at the village of Djirak on the border with Guinea-Bissau, and the headquarters of a faction of the MFDC. Senegal stated that the identity of the user of the mines "remained to be determined". It did not identify when the mines were laid.[10] Taking operational advantage of existing mined areas, even when laid by another party, constitutes prohibited use of anti-personnel mines.[11]

Table 1: Anti-personnel mined area (at end 2020)[12]

Province	CHAs	Area (m^2)	SHAs	Area (m^2)
Bignona	10	111,575	8	
Goudomp	16	299,871	1	
Oussoye	9	77,240	0	
Ziguinchor	2	2,400	0	
Totals	**37**	**491,086**	**9**	**1,102,401**

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 President 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.[13]

Demining operations in Casamance are coordinated by CNAMS, which was set up by decree in 2006. 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.[14]

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 its staff of 17 included six women of whom two were heads of division and two were heads of offices. It reported that HI employed four women among its field teams, including three explosive ordnance disposal (EOD) technicians qualified at EOD Levels 1, 2, and 3 respectively, as well as one paramedic.[15]

INFORMATION MANAGEMENT AND REPORTING

CNAMS operates an Information Management System for Mine Action (IMSMA) database, which was reportedly upgraded in 2015,[16] but reporting has proved erratic. 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.[17]

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 113,975m^2 in 2021, 16 CHAs affecting 299,871m^2 in 2022, and the remaining 9 CHAs covering 77,240m^2 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.[18]

Senegal was unable to conduct the planned amount of survey in 2020, due to a combination of factors, including the pandemic, lack resources and insecurity, and it indicated in 2021 that it planned to update its strategy.[19] No clearance was conducted either.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Senegal's national mine action standards were developed in 2009 and revised in 2013 but have not been updated since.[20] According to CNAMS, the 2013 revision included standards for accreditation, technical investigation, the minimum depth for mine clearance, and the use of machines and mine detection dogs in demining.[21]

The APMBC Article 5 committee noted 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.[22]

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.[23]

HI was the only international demining operator in Senegal from 2014. It suspended operations in October 2017 because of lack of funding.[24] With new funding from the United States, operations resumed in 2019 when HI had a total staff of 20: 5 deminers, 3 mechanical operators, and 12 support staff. In 2020, HI hired only 10 staff who were deployed to Ziguinchor province but funding expired at the end of the year. At the start of 2021, HI did not have any mine action teams operating but it reported plans for an 18-month project to complete non-technical survey of villages north of Bignona and the Bafata road in Goudom.[25]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Senegal reported it was able to start non-technical survey in Bignona region in February 2020 after 10 months of negotiation with MFDC to secure access but operations were suspended in March because of the COVID-19 pandemic and no land was released through survey in 2020.[26]

Senegal reported it did not conduct any demining activities in 2020.[27]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SENEGAL: 1 MARCH 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

↓

FIRST EXTENSION PERIOD (7-YEAR EXTENSION): 1 MARCH 2016

↓

SECOND EXTENSION PERIOD (5-YEAR EXTENSION): 1 MARCH 2021

↓

THIRD EXTENSION PERIOD (5-YEAR EXTENSION): 1 MARCH 2026

ON TRACK TO MEET DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC (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 and clearance should be easily completed within its third Article 5 extension yet the challenges it faces still leave uncertainty over its prospects for doing so. First and foremost, the full extent of Senegal's mine problem is still not known, 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 work plan set out in the Article 5 extension request assumed the support of two international operators, but only one is operating in the country and no agreement has been reached for deployment of a second. The plan called for non-technical survey in 2020 of 40 of the 118 locations that need to be investigated for the presence of mines, operations which did not take place because of COVID-19 control measures. The work plan calls for clearance of 113,975m^2 in 2021 but no mined areas have been cleared in Senegal in the past three years, raising significant questions as to whether Senegal will be able to keep to the work plan timelines.

A key factor in the meagre progress of Senegal's mine action programme is the low level of international donor support, which Senegal hopes will make up $8 million of the projected $12 million cost. Senegal appealed in June 2020 for $1.6 million for a period of 25 months to conduct clearance of 299,871m^2 and conduct non-technical survey of 118 locations in the Sédhiou and Ziguinchor regions, providing a test of Senegal's resource mobilisation efforts and donor interest.[28]

Insecurity remains a major potential stumbling block. All Senegal's confirmed and suspected hazardous areas are located in the Casamance region. 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."

Table 2: Five-year summary of AP mine clearance

Year	Area cleared (m^2)
2020	0
2019	0
2018	0
2017*	65,400
2016	147,650
Total	**213,050**

* Includes technical survey

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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.[29]

1 Email from Ibrahima Seck, Head of Operations and Information Management, CNAMS, 21 May 2020; Article 7 Report (covering 2020), p. 4.

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, APMBC 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 2020), Form D.

6 "Mine blast wounds multiple soldiers in Bignona department (Ziguinchor region) on June 13", *Garda World*, 13 June 2020; "Mine blast kills 2 soldiers, injures 2", *Garda World*, 16 June 2020.

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

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

12 Article 7 Report (covering 2020), Form D. The total figure for suspected contamination is extrapolated from reported total contamination.

13 Article 5 deadline Extension Request, 15 June 2020, pp. 9, 75.

14 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.

15 Email from Ibrahima Seck, CNAMS, 21 May 2020.

16 Email from Julien Kempeneers, HI, 1 September 2016.

17 Email from Ibrahima Seck, CNAMS, 21 May 2020.

18 Article 5 deadline Extension Request, 15 June 2020, pp. 93–98.

19 Article 7 Report (covering 2020), Form A.

20 Email from Ibrahima Seck, CNAMS, 21 May 2020.

21 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.

22 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.

23 Email from Ibrahima Seck, CNAMS, 21 May 2020.

24 Email from Julien Kempeneers, HI, 26 September 2016.

25 Emails from Catherine Gillet, HI, 10 May 2021; and Seydou Gaye, Armed Violence Reduction Specialist, HI, 3 June 2020.

26 Statement of Senegal, APMBC 18th Meeting of States Parties, 16–20 November 2020; email from Catherine Gillet, HI, 10 May 2021.

27 Article 7 Report (covering 2020), Form D.

28 Ministry of Foreign Affairs, Request for Financing,

29 "Clarifications du Senegal aux questions du comite d'examen de la 3Eme demande d'extension", 22 September 2020.

SERBIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

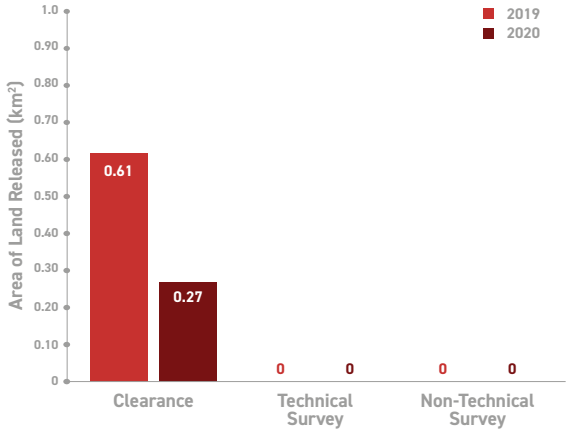
LIGHT, AROUND 1KM²

(GOVERNMENT ESTIMATE, EXCLUDING PREVIOUSLY UNKNOWN CONTAMINATED AREA DISCOVERED)

AP MINE CLEARANCE IN 2020
0.27KM²

AP MINES DESTROYED IN 2020
0

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

In 2020, Serbia continued its progress in Article 5 implementation, and cleared a total of 0.27km² of mined area, less than half the clearance output in 2019. While one anti-vehicle mine and many items of unexploded ordnance (UXO) were destroyed during the clearance task in 2020, no anti-personnel mine was discovered. The Serbian Mine Action Centre (SMAC) has yet to survey and add to its database the newly discovered and previously unrecorded mine contamination, discovered in late 2019.

In a positive development, in March 2020, SMAC and the Serbian Ministry of Defence, signed an Agreement on Cooperation in the field of demining and UXO/explosive remnants of war (ERW) removal. The initial focus will reportedly be on the training of personnel in explosive remnants of war demolition rather than clearance of mined areas. In addition, SMAC organised an EOD Level 1 training course in 2020, the first of its kind to take place in Serbia.

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.**
- **SMAC should conduct non-technical and technical survey, rather than full clearance, in instances where survey represents the most efficient means to release part or all of areas suspected or confirmed to contain anti-personnel mines.**
- **Serbia should conduct as a matter of priority the planned survey of the contamination discovered in 2019 in order to determine the size of the mined area.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	Serbia has a relatively good understanding of its baseline of anti-personnel mine contamination, although it records all mined areas as suspected hazardous areas (SHAs), not confirmed hazardous areas (CHAs). New, previously unrecorded mined area, identified as a result of fires in 2019, had yet to be surveyed or added to Serbia's database as at April 2021, as had an area of mixed mine and UXO contamination.
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 in 2020 was reduced to €260,000 due to the COVID-19 crisis and efforts by the Serbian government to tackle it. The funds were matched with donor funds through the ITF. In a positive development, 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.
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 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	SMAC has a plan in place for completion of Article 5 implementation with planned annual land release output through to its treaty deadline, subject to the availability of sufficient funding. Serbia also 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 ERW that hinder socio-economic development.
LAND RELEASE SYSTEM (20% of overall score)	5	6	While SMAC continues to express a preference for full clearance of SHAs and only conducted clearance tasks in 2020 and 2019, it does remain willing to conduct technical survey where it deems it appropriate.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	7	Serbia cleared less than half the amount of mined area in 2020 that it did the previous year. Serbia has set a 2023 target date for completion of Article 5, but meeting the deadline is largely contingent on securing sufficient funding.
Average Score	**5.7**	**6.1**	**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

- NGOs:
  - In Demining, Pale, BiH

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

As at 1 April 2021, five areas in Bujanovac municipality, covering nearly 0.86km^2, were suspected to contain anti-personnel mines (see Table 1).[1] This is a reduction from the nearly 1.13km^2 of mined area as at end of 2019,[2] which is due to clearance of mined area in 2020.

However, the baseline of mine contamination in Table 1 excludes a previously unreported hazardous area totalling 298,700m^2, which contains a mix of mines and other types of unexploded ordnance, which was planned for clearance in 2021. Furthermore, it also excludes the previously unrecorded anti-personnel mine contamination that was revealed as a result of fires in Bujanovac municipality in 2019, the size of which is not yet known.[3]

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 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] The newly discovered contamination is not included in Table 1 above. Subject to securing the necessary funding, SMAC planned to conduct survey in 2021 to determine the size of the newly discovered contamination.[5] The size of the area is expected to be relatively small based on rough estimates,[6] and includes several "micro-locations" contaminated with groups of unrecorded mines.[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] However, 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]

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 depots[14] (see Mine Action Review's Clearing Cluster Munition Remnants report on Serbia for further information).

Table 1: Anti-personnel mined area by village (at 1 April 2021)[15]

Municipality	Village	SHAs	Area (m^2)
Bujanovac	Ravno Bučje	1	390,300
	Končulj	3	437,730
	Dobrosin	1	28,000
Totals		**5**	**856,030**

SHA = Suspected Hazardous Area

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).[16] The NMAA is responsible for developing standard operating procedures (SOPs); accrediting demining operators; and supervising the work of SMAC.[17]

SMAC was established on 7 March 2002, with a 2004 law making it responsible for coordinating demining; 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.[18] As from 1 January 2014, according to a Government Decree on Protection against Unexploded Ordnance, the Sector for Emergency Management, under the Ministry of Interior, is responsible for accrediting demining operators. Previously, SMAC was responsible for doing so.[19]

A new director of SMAC was appointed by the Serbian government in July 2019.[20] There are seven other people employed at SMAC: two assistant directors and five other SMAC employees.[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 €300,000 per annum is 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] Furthermore, in 2019, Serbia also contributed national funding towards the establishment of an explosive ordnance disposal (EOD) training centre,[25] which is now operational.

Since 2015, Serbia has also been allocating national funds for survey and clearance, with roughly €100,000 allocated per year.[26] In 2018, the Serbian Government allocated double the amount of national funds previously dedicated to demining operations to €200,000 (which were matched with US and Korean funding and tendered through ITF Enhancing Human Security (ITF)). At the request of the national authorities, national funding was increased to €350,000 for 2019 demining operations.[27] The same amount had been allocated by the Serbian government for demining operations in 2020, but was subsequently reduced by 20% to €260,000 due to the COVID-19 crisis and efforts by the Serbian government to tackle it.[28] National funding for survey and clearance remained at €260,000 for 2021.[29] The funds will be matched with donor funds through the ITF.[30]

In June 2018, during the Anti-Personnel Mine Ban Convention (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.[31] SMAC reports having a resource mobilisation strategy for Article 5 implementation.[32]

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 of 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,[33] and not in clearance of mined areas.[34]

In late 2019, the Serbian government approved funds for the establishment of a training centre within SMAC. Together with experts from the Ministry of Interior, SMAC will provide different training modules, including on ERW recognition, international mine action standards, medical aspects, and risk education.[35]

SMAC organised an EOD Level 1 training course from 21 September to 10 October 2020, which was supported by the French Embassy in Belgrade and conducted by a French demining company, "EOD-EX", in accordance with IMAS. The course, said to be the first of its kind to take place in Serbia, was attended by a member of the Sector for Emergency Management of the Ministry of Interior, as well as representatives of demining companies from Serbia and the Republika Srpska in Bosnia and Herzegovina.[36] The training was aimed at strengthening human resources in the field of humanitarian demining in Serbia and also to standardise the level of national competencies in accordance with IMAS.[37] Prior to the opening of the new training centre, SMAC had been recognising certificates from organisations from Bosnia and Herzegovina and Croatia that had been accredited respectively by the Bosnia and Herzegovina Mine Action Centre (BHMAC) and the Croatian Mine Action Centre (CROMAC) to conduct training courses in mine action and humanitarian demining.[38]

GENDER AND DIVERSITY

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,[39] 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 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.[40]

With regards to the new mined area identified as a result of fires in 2019, SMAC planned to conduct a survey which will include representatives of Serbian and Albanian personnel.[41]

Serbia reports there is equal access to employment for qualified women and men in survey and clearance operations.[42]

At SMAC, 50% of employees are women, with 25% of managerial/supervisory level positions held by women along with 25% of operations positions.[43]

INFORMATION MANAGEMENT AND REPORTING

SMAC uses its own information management system. Following on from initial discussions several years ago, in early 2020, SMAC informally discussed the possibility of the installation of the Information Management System for Mine Action (IMSMA) with the Geneva International Centre for Humanitarian Demining (GICHD).[44] Subsequently, Serbia has been added to the GICHD's list of countries to be supported and an initial online meeting between the GICHD and SMAC took place in March 2021. The next step will be for GICHD to conduct an assessment mission to Serbia.[45]

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.[46] Serbia has since updated the plan in its annual Article 7 reports. In its latest report for calendar year 2020, Serbia announced a plan to release 294,230m^2 in 2021; 390,300m^2 in 2022; and 171,500m^2 in 2023. However, this excludes the new mined area identified as a result of fires in 2019, the size of which have not yet been determined, but which Serbia planned to survey in 2021 subject to funding.[47] The updated work plan also excludes a hazardous area, 298,700m^2 in size, which contains predominantly UXO contamination, but may also contain mines and which was scheduled to be cleared in 2021.[48]

Serbia intends to use non-technical survey, technical survey, manual clearance, mechanical demining (where applicable), and mine detection dogs (MDDs, where applicable), to complete clearance before its 2023 Article 5 deadline.[49] 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.[50]

The Government of Serbia adopts SMAC's annual work plans.[51] SMAC's 2021 work plan includes one mine clearance project totalling 294,230m^2, one mixed mine and UXO project totalling 298,700m^2, and one technical survey project totalling 390,300m^2. In addition, subject to funding, SMAC planned to conduct survey of the previously unrecorded anti-personnel mine contamination revealed as a result of fires in 2019.[52]

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.[53] 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.[54]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

According to SMAC, survey and clearance operations in Serbia are conducted in accordance with IMAS.[55]

National mine action standards (NMAS) were said to be in the final phase of development as at September 2015.[56] In April 2017, SMAC reported that, along with the relevant national authorities, it was in the process of establishing a commission to develop national standards and SOPs to define methods and techniques for demining in Serbia.[57] However, this process has subsequently been hindered due to lack of capacity.[58]

As at April 2021, Serbia planned to adopt a new decree on protection against ERW. The decree, developed by SMAC and the Ministry of Interior, addresses the need to develop national standards; introduces the concept of land release (not defined in the former decree); aims to improve the accreditation, monitoring, and evaluation process; and prohibits the practice of independent ammunition technicians being hired by infrastructure companies (which will instead be done through tasking and coordination from SMAC).[59] As at July 2021, the Decree was close to being finalised.[60]

Under new directorship in late 2015, SMAC reassessed its land release methodology to prioritise full clearance over technical survey of hazardous areas.[61] 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.[62]

As at March 2021, 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.[63]

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.[64]

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.[65] According to SMAC, incidents involving people or animals have occurred in most of these suspected areas or else mines have been accidentally detected.[66] While only clearance and not release by survey occurred in 2019 and 2020, the reduction of mined area through technical survey in 2017 and 2018, however, does demonstrate SMAC's greater willingness to adopt more efficient land release practices. Furthermore, a technical survey project was planned for 2021.

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.[67] 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.[68]

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".[69] Clearance is reported to be conducted in accordance with the IMAS and to a depth of 20cm.[70]

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 non-governmental organisations (NGOs), which are selected through public tender procedures executed by the ITF, supported by international funding.[71]

The Ministry of Interior issues accreditation to mine action operators that is valid for one year. In 2020, 24 companies/organisations were accredited for demining,[72] but only one NGO conducted clearance of mined areas (see Table 2).

Table 2: Operational clearance capacities deployed in 2020[73]

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**
In Demining (Pale, BiH)	3	30	2 dogs and 1 handler	0
Totals	**3**	**30**	**2 dogs and 1 handler**	

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

Table 2 represents a reduction in clearance capacity compared to the previous year and reflects the fact there were fewer mine clearance tasks in 2020. No survey personnel were deployed in Serbia in 2020[74] or 2019.

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.[75] 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.[76]

Technical survey and clearance in Serbia are primarily conducted manually. MDDs were used in technical survey and clearance operations in 2018 to release land,[77] but according to the authorities most of the mines are in mountainous areas with challenging terrain and thick vegetation and are not appropriate for the use of MDDs or machinery.[78] 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.[79]

SMAC uses data obtained by unmanned aerial vehicles to develop and monitor clearance and technical survey projects.[80]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of 0.27km^2 of mined area was released through clearance in 2020, during which one anti-vehicle mine and many items of UXO were destroyed, but no anti-personnel mines. No mined area was reduced through technical survey or cancelled through non-technical survey in 2020.[81]

SURVEY IN 2020

No mined area was reduced through technical survey or cancelled through non-technical survey in 2020 or in 2019.[82]

CLEARANCE IN 2020

In 2020, a total of 269,280m^2 of mined area was cleared, destroying 1 anti-vehicle mine along with 1,586 items of UXO, but no anti-personnel mines. The project, funded by the US, via ITF, was conducted by an NGO from Republika Srpska in Bosnia and Herzegovina (IN Demining).[83] This is a decrease in clearance output compared to 2019, when 606,210m^2 of mined area was cleared, destroying 22 anti-personnel mines along with 15 items of UXO.[84]

Table 3: Mine clearance in 2020[85]

Municipality	Village	Operator	Area cleared (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
Bujanovac	Končulj	IN Demining	269,280	0	1	1,586
Totals			**269,280**	**0**	**1**	**1,586**

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 2020.[86]

SMAC said that the decrease in the amount of mined area cleared in 2020, compared to 2019, was due to the unpredictability of COVID-19 situation, a smaller number of available donors, and a reduction in the available national demining budget in 2020 due to the COVID-19 pandemic, and government measures in the fight against the consequences of the crisis.[87]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SERBIA: 1 MARCH 2004

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2014

↓

FIRST EXTENDED DEADLINE (5-YEAR EXTENSION): 1 MARCH 2019

↓

SECOND EXTENDED DEADLINE (4-YEAR EXTENSION): 1 MARCH 2023

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): MEDIUM

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 is not on track to meet this deadline, but could still do so if it can secure and sustain required funding. However, the discovery of previously unrecorded anti-personnel mine contamination, revealed as a result of fires in 2019, adds to Serbia's existing Article 5 commitment. Furthermore, an additional previously unreported hazardous area containing both mines and other explosive ordnance, included in Serbia's Article 7 report submitted in 2021, further adds to the baseline of mined area, although this task was scheduled for clearance in the course of 2021.[88]

Serbia has stated that it remains fully committed to the fulfilment of its remaining obligations and aims to fulfil them within the Article 5 deadline. SMAC identified discovery of previously unknown mine contamination in October 2019 as a potential obstacle to meeting its clearance deadline, along with lack of adequate financial resources and the unpredictability of securing financial resources, and adverse climatic conditions which prevent access to areas of contamination during certain periods of the year.[89]

Serbia reported that the remaining mine contamination is of unrecorded mined areas/groups of mines, with mines having been emplaced with no particular pattern, which has complicated survey and clearance.[90] SMAC also simultaneously addresses areas contaminated with CMR and other unexploded ordnance, which have a socio-economic impact.[91] Several ERW clearance projects developed by SMAC were implemented in 2020, including projects to help ensure safe execution of gas, water, sewage supply line construction, and other projects.[92]

Furthermore, Serbia's claim to continued jurisdiction over Kosovo entails legal responsibility for remaining mined areas under Article 5 of the APMBC.[93] 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 the last five years Serbia has cleared a total of 1.17km^2 of mined area (see Table 4).

Serbia has fallen well behind the clearance plan it set out in its 2013 Article 5 deadline, and also fell behind on land release output in its subsequently adjusted work plans in 2015, 2016, and 2017, largely due to lack of funding.[94]

In a positive development, on top of existing US funding, Serbia also secured funding from a new donor, the Republic of Korea, in 2018, and has further secured funding from another new donor, Japan, in 2019.[95] This enabled Serbia to meet the updated clearance target for 2019, envisaged in its Article 7 report submitted in 2018.[96] In 2020, Serbia fell just short of meeting its updated clearance target to release 298,700m^2 of mined area, as had been envisaged in its Article 7 report submitted the previous year.[97]

In its 2018 Article 5 extension request, Serbia estimated that it required €2.5 million to complete release of all remaining mined areas, of which €900,000 was planned to come from national budget and around €1.6 million from the ITF and other sources of international funding.[98]

SMAC has pledged to continue to raise awareness of its need for further funding and will seek funding from state authorities, public enterprises, and local authorities.[99] As at March 2021, confirmed international donors for the year were the United States and the Republic of Korea, through the ITF.[100]

Table 4: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0.27
2019	0.61
2018	0.29
2017	*0
2016	0
Total	**1.17**

*0.28km^2 was reduced through technical survey, during which three anti-personnel mines were destroyed.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

SMAC envisages that it will most likely need both national and international capacity to deal with any residual contamination, discovered following completion.[101] Serbia is already dealing with residual ERW contamination and investing significant funds for ERW 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 APMBC Article 5 clearance obligations.[103]

1 Article 7 Report (covering 2020), Section D; and email from Slađana Košutić, Senior Advisor for Planning, International Cooperation and European Integrations, SMAC, 26 March 2021.

2 Email from Slađana Košutić, SMAC, 23 April 2020; and Article 7 Report (covering 2019), Section 4.

3 Article 7 Report (covering 2020), Section D; and email from Slađana Košutić, SMAC, 26 March 2021.

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; and Article 7 Reports (covering 2019 and 2020).

5 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.

6 Email from Slađana Košutić, SMAC, 18 June 2020.

7 Email from Slađana Košutić, SMAC, 11 May 2021.

8 2018 Article 5 deadline Extension Request, p. 7; Article 7 Report (covering 2020), Forms D and E; 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), Form D.

11 Email from Slađana Košutić, SMAC, 11 May 2021.

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.

14 2018 Article 5 deadline Extension Request, p. 7.

15 Article 7 Report (covering 2020), Section D; and email from Slađana Košutić, SMAC, 26 March 2021.

16 Official Gazette of the Republic of Serbia, No. 70/13.

17 Emails from Darvin Lisica, Regional Programme Manager, Norwegian People's Aid (NPA), 6 May and 12 June 2016.

18 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 2018 Article 5 deadline Extension Request, p. 17.

19 2018 Article 5 deadline Extension Request, p. 17.

20 Email from Slađana Košutić, SMAC, 23 April 2020.

21 Email from Slađana Košutić, SMAC, 26 March 2021.

22 Article 7 Report (covering 2020), Section D.

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 Interview with Bojan Glamočlija, Director, SMAC, in Geneva, 14 February 2020.

26 Email from Slađana Košutić, SMAC, 6 April 2017; interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request.

27 Article 7 Report (covering 2019), Section 4; and Statement on Clearance, Fourth APMBC Review Conference, Oslo, 27 November 2019.

28 Interview with Bojan Glamočlija, SMAC, in Geneva, 14 February 2020; Statements on Clearance, Fourth APMBC Review Conference, Oslo, 27 November 2019 and APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020; and Article 7 Report (covering 2020), Form D.

29 Email from Slađana Košutić, SMAC, 26 March 2021.

30 Article 7 Report (covering 2020), Form D; and email from Slađana Košutić, SMAC, 26 March 2021.

31 APMBC Individualised Approach Meeting, intersessional meetings, Geneva, 7 June 2018; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.

32 Email from Slađana Košutić, SMAC, 23 April 2020.

33 Article 7 Report (covering 2020), Form H.

34 Email from Slađana Košutić, SMAC, 26 March 2021.

35 Emails from Slađana Košutić, SMAC, 23 April 2020 and 26 March 2021.

36 Article 7 Report (covering 2020), Form D; and emails from Slađana Košutić, SMAC, 26 March and 11 May 2021.

37 SMAC, "Completion of explosive ordnance disposal - Level 1 training (EOD - Level 1) arranged by Serbian Mine Action Centre", 14 October 2020, at: https://bit.ly/32G7BKI.

38 Email from Slađana Košutić, SMAC, 11 May 2021.

39 Article 7 Report (covering 2020), Form D.

40 Email from Slađana Košutić, SMAC, 23 April 2020.

41 Statement of Serbia, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020; and Article 7 Report (covering 2020), Form D.

42 Article 7 Report (covering 2020), Form D.

43 Email from Slađana Košutić, SMAC, 26 March 2021.

44 Email from Slađana Košutić, SMAC, 23 April 2020.

45 Article 7 Report (covering 2020), Form D; and email from Slađana Košutić, SMAC, 26 March 2021.

46 2018 Article 5 deadline Extension Request, pp. 8, 9, 31, and 32.

47 Article 7 Report (covering 2020), Form D.

48 Ibid.; and emails from Slađana Košutić, SMAC, 26 March and 11 May 2021.

49 2018 Article 5 deadline Extension Request, p. 28; 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018; and Article 7 Report (covering 2020), Form D.

50 Emails from Slađana Košutić, SMAC, 23 April 2020 and 26 March 2021; Statements on Clearance, Fourth APMBC Review Conference, Oslo, 27 November 2019 and APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020; and Article 7 Report (covering 2020), Form D.

51 2018 Article 5 deadline Extension Request, p. 16; email from Slađana Košutić, SMAC, 26 March 2019; and interview with Bojan Glamočlneva, 14 February

52 Email from Slađana Košutić, SMAC, 26 March 2021.

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54 Email from Slađana Košutić, SMAC, 12 April 2018.

55 SMAC, "Mine Situation, November 2019", accessed 18 February 2020, at: http://bit.ly/1Nom1V7; and Article 7 Report (covering 2019), Section 4.

56 Interview with Branislav Jovanović, SMAC, in Dubrovnik, 10 September 2015.

57 Email from Slađana Košutić, SMAC, 6 April 2017.

58 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and email from Slađana Košutić, SMAC, 23 April 2020.

59 Article 7 Report (covering 2020), Form D; and emails from Slađana Košutić, SMAC, 26 March and 26 July 2021.

60 Email from Slađana Košutić, SMAC, 26 July 2021.

61 Interview with Jovica Simonović, SMAC, in Geneva, 18 February 2016.

62 Ibid.

63 2018 Article 5 deadline Extension Request, p. 30; and email from Slađana Košutić, SMAC, 26 March 2021.

64 Article 7 Report (covering 2020), Section D; and email from Slađana Košutić, SMAC, 26 March 2021.

65 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.

66 Article 7 Report (covering 2020), Form D; and Statement on Clearance, Fourth APMBC Review Conference, Oslo, 27 November 2019.

67 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and Article 7 Report (covering 2020), Form D.

68 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017.

69 Article 7 Report (covering 2020), Form D.

70 Ibid.

71 2018 Article 5 deadline Extension Request, p. 18.

72 Email from Slađana Košutić, SMAC, 26 March 2021.

73 Ibid.

74 Ibid.

75 Article 7 Report (covering 2018), Form J.

76 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and Second APMBC Article 5 deadline Extension Request (2018), p. 18.

77 Email from Slađana Košutić, SMAC, 26 March 2019.

78 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; 2018 Article 5 deadline Extension Request, pp. 25 and 30; 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018; and Article 7 Report (covering 2019), Section 4.

79 Email from Slađana Košutić, SMAC, 26 March 2019; and Article 7 Report (covering 2019), Section 4.

80 Email from Slađana Košutić, SMAC, 26 March 2019.

81 Email from Slađana Košutić, SMAC, 26 March 2021; and Article 7 Report (covering 2020), Form D and Annex III.

82 Email from Slađana Košutić, SMAC, 26 March 2021.

83 Article 7 Report (covering 2020), Form D and Annex III.

84 Email from Slađana Košutić, SMAC, 23 April 2020.

85 Article 7 Report (covering 2020), Form D and Annex III.

86 Email from Slađana Košutić, SMAC, 26 March 2021.

87 Ibid.

88 Article 7 Report (covering 2020), Section D; and email from Slađana Košutić, SMAC, 26 March 2021.

89 Emails from Slađana Košutić, SMAC, 23 April 2020 and 26 March 2021; and Statement of Serbia, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

90 Article 7 Report (covering 2019), Section 4; and Statements on Clearance, Fourth APMBC Review Conference, Oslo, 27 November 2019 and APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

91 Emails from Slađana Košutić, SMAC, 23 April 2020 and 26 March 2021; and Statement on Clearance, Fourth APMBC Review Conference, Oslo, 27 November 2019.

92 Email from Slađana Košutić, SMAC, 26 March 2021; and Statement of Serbia, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

93 See also in this regard UN Security Council Resolution 1244 (1999).

94 2013 Article 5 deadline Extension Request, p. 26; Preliminary observations of the Committee on Article 5 Implementation, Intersessional Meetings, Geneva, 19–20 May 2016; and "Republic of Serbia Updated Detailed Work Plan for the Remaining Period Covered by the Extension", submitted to the Implementation Support Unit (ISU), 3 March 2016; email from Slađana Košutić, SMAC, 6 April 2017; and Article 7 Report (covering 2016), Form D.

95 Article 7 Report (covering 2018), Form C; and email from Slađana Košutić, SMAC, 26 March 2019.

96 Article 7 Report (covering 2018), Form C.

97 Article 7 Report (covering 2019), Section 4.

98 2018 Article 5 deadline Extension Request, pp. 9 and 34.

99 2018 Article 5 deadline Extension Request, p. 34; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.

100 Email from Slađana Košutić, SMAC, 26 March 2021.

101 Email from Slađana Košutić, SMAC, 23 April 2020.

102 Email from Slađana Košutić, SMAC, 18 June 2020.

103 Email from Slađana Košutić, SMAC, 26 March 2021.

SOMALIA

ARTICLE 5 DEADLINE: 1 OCTOBER 2022
EXTENSION REQUESTED TO 1 OCTOBER 2027

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

7 KM²

AP MINE CLEARANCE IN 2020

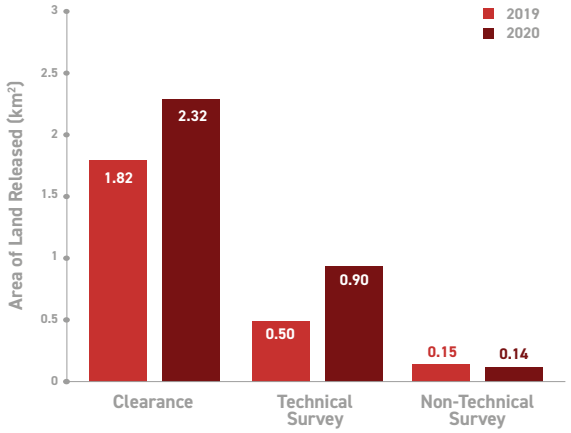
2.32 KM²

AP MINES DESTROYED IN 2020

172

(OF WHICH 22 WERE DESTROYED DURING SPOT TASKS AND 4 WERE HANDED IN BY THE LOCAL COMMUNITY)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Somalia is not on track to meet its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline for clearance and in 2021 it submitted a request for a five-year extension. Somalia lacks an accurate baseline of anti-personnel mine contamination but there are plans in the extension request to conduct non-technical survey, although they lack detail. A pilot non-technical survey has been proposed for later this year. Both clearance and overall land release output increased in 2020 compared to the previous year although the number of anti-personnel mines found and destroyed remains extremely low, particularly if survey and clearance in Somaliland are excluded. The Somali Explosive Management Authority (SEMA) is still to be formally recognised by the Federal Government of Somalia (FGS), a major obstacle to mine action programming and which excludes SEMA from accessing any State funding.

RECOMMENDATIONS FOR ACTION

- **Somalia should provide information on the expected timeframe in which SEMA hopes to receive formal approval from the FGS.**
- **Somalia should develop a more detailed and structured work plan to be presented in addition to its Article 5 deadline extension request. Ideally this work plan should be made available prior to the decision being taken by States Parties on the extension request at 19MSP. The work plan 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 elaborate a new National Mine Action Strategic Plan, updating the National Mine Action Strategic Plan 2018–2020.**
- **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 commit to providing annual updates through Article 7 reporting and revised work plans on the current baseline of mined area and Somalia's plans to address it, as and when more information becomes available.**
- **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).**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	4	There is no accurate baseline of anti-personnel mine contamination in Somalia. The significantly reduced estimate of contamination at the end of 2019 is now claimed by the authorities to be an underestimate though no revised estimate was provided for 2020. A pilot non-technical survey is planned for 2021 with the United Nations Development Programme (UNDP), which intends to help to build SEMA's capacity to undertake a nationwide non-technical survey at a later date.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	4	4	The FGS has still not formally recognised SEMA as a government institution or funded its operations. SEMA continued to receive external capacity development and financial support for salaries throughout 2020.
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 2020.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	5	SEMA has assumed full ownership and responsibility for the national mine action database, resulting in reported improvements in information management. In April 2021, SEMA submitted Somalia's Article 5 deadline extension request, seeking a further five years. The request was poorly formulated and requires significant revision as it lacks sufficient detail and clarity. As at July 2021, Somalia had still to submit its Article 7 report covering 2020.
PLANNING AND TASKING (10% of overall score)	5	6	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. SEMA has stated in the extension request that it is working with stakeholders on a costed operational work plan that will be presented in 2021 in addition to its Article 5 deadline extension request. 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 and submitted an extension request in 2021 for a further five years. Overall land release and clearance output rose from 2019 to 2020 but the overwhelming majority of anti-personnel mines found during clearance were in Somaliland.
Average Score	**4.4**	**4.6**	**Overall Programme Performance: POOR**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Somali Explosive Management Authority (SEMA)
- Mine Action Department in the Somaliland Ministry of Defence (formerly, Somaliland Mine Action Centre)

NATIONAL OPERATORS

- Federal Member States (FMS) NGO consortium

INTERNATIONAL OPERATORS

- The HALO Trust
- Norwegian People's Aid (NPA)
- Ukroboronservice
- Danish Demining Group (DDG)

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 end 2020. In its 2021 APMBC Article 5 deadline extension request the most recent estimate was from the end of 2019 and, as at June 2021, Somalia had still to submit an Article 7 report covering 2020. As at the end of 2019, the Somali Explosive Management Authority (SEMA) reported 125 suspected and confirmed mined areas across Somalia covering an estimated total area of 16.2km^2 (see Table 1).[1] Operators reported that confirmed hazardous areas (CHA) 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]

Table 1: Mine contamination (at end 2019)[4]

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

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] It was estimated, at the end of 2019, that 29 CHAs contained anti-personnel mines, covering a total area of 6.1km^2, along with one suspected hazardous area (SHA) of an unknown size in Puntland, see Table 2.[6] This is a massive reduction from the more than 72.2km^2 of anti-personnel mine contamination across 72 SHAs/CHAs as at April 2019, which cannot be explained by land release.[7]

According to SEMA, this new estimate of contamination is because "closed" hazardous areas were removed from the database but they believe that the true extent of contamination is far greater. SEMA intends to synchronise the national database with that of operators in order to improve the quality of the database. In 2020, SEMA met with operators to discuss synchronising their data and operators provided SEMA with information not already within the national database.[8] SEMA and UNMAS have agreed to work together to consolidate the national data.[9]

Table 2: Anti-personnel 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**

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 6km^2 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] The United Nations Development Programme (UNDP) planned to launch a capacity building project in July 2021 to support SEMA and an implementing partner to initiate a pilot non-technical survey in the fourth quarter of 2021. This pilot will help to build SEMA's capacity to undertake a nationwide non-technical survey at a later date.[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) and 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 2020, The HALO Trust undertook a number of surveys across Somalia, identifying three hazardous areas contaminated with anti-personnel and anti-vehicle mines totalling 870,000m^2.[16]

In Somaliland, The HALO Trust reported that as at July 2020, a total of 20 mixed anti-personnel and anti-vehicle minefields remained to be cleared with a total size of just under 5.8km^2. Most of these mined areas are barrier minefields or surround the perimeter of military bases.[17]

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.[18] In 2020, a total of 626,896m^2 of anti-personnel mine contamination was discovered and added to the database, all of which was legacy contamination.[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] In 2020, Norwegian People's Aid (NPA) continued non-technical survey activities throughout Puntland state and in 2021 NPA was planning to establish non-technical survey teams with Puntland police officers embedded within the teams which will work to establish a baseline of mine contamination within Puntland. Ten areas of previously unrecorded legacy contamination of mixed anti-personnel and anti-vehicle mines totalling 1,170,820m^2 were discovered and added to the database in 2020.[21]

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 is significantly contaminated with mines and ERW. According to the UN, mines were laid as recently as 2012 in the disputed regions of Sool and Sanaag.[22] 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.[23] NPA have 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 and DDR. In 2020, eight mines of an improvised nature that had been collected by locals in Puntland were disposed of outside task sites.[24]

Somalia also has a significant amount of contamination from ERW, including what is thought to be limited contamination from cluster munition remnants (see Mine Action Review's *Clearing Cluster Munition Remnants 2021* 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.[25]

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.[26] Under each of the five states is an independent consortium of national 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.[27] SEMA's aim was to assume full responsibility for all explosive hazard coordination, regulation, and management by December 2015.[28] However, SEMA's legislative framework was not approved by the Federal Parliament in 2016 as expected, and progress was further stalled by elections in February 2017 that resulted in a period of government paralysis.[29] 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.[30] Salaries at SEMA were covered by NPA from 2015 to March 2021.[31] The UN Mine Action Service (UNMAS) was supporting SEMA state offices with operational incentives from January to December 2021.[32] UNDP was planning to launch a 12-month project in July 2021 to build administrative capacity in SEMA in order to improve their administrative functioning, including supporting one existing staff position in SEMA to enable the implementation of the programme.[33] In July 2021, the HALO Trust started a capacity development project where it will provide support to SEMA until March 2022.[34]

In July 2018, the SEMA central office at the Ministry of Internal Security in Mogadishu was attacked and significantly damaged, some of its staff injured, and much of SEMA's office equipment and materials, including computers and documents, were destroyed.[35] In 2020, UNMAS provided support to SEMA in the reconstruction of a solid-walled office and provided office furniture and IT equipment for SEMA's central and regional offices. UNMAS also provided training on basic quality assurance monitoring for SEMA personnel; paid for a consultant to support SEMA's Article 5 deadline extension request; and provided financial support for mine action related events and meetings.[36] In the first half of 2021, UNMAS provided training for SEMA on operations, quality assurance, victim assistance, and gender and diversity in mine action.[37]

In 2019, as part of the United Kingdom Foreign, Commonwealth and Development Office (FCDO)-funded consortium project with The HALO Trust, which provide technical training and support with quality assurance (QA) to SEMA, NPA continued its capacity development work with SEMA. In 2020, key activities included supporting information management and operational planning, providing QA and quality control (QC) training, and providing training in financial, administrative and logistical procedures, and supporting with donor coordination. According to NPA, SEMA is now in a position where most of their organisational environment has been established, although they are not fully capable of implementation due to the lack of financial support from the government.[38]

SEMA began conducting quarterly meetings with all mine action implementing partners in 2018, with a focus on

monitoring of operations. Operators considered this a major step forward towards improving the cooperation, consultation, and coordination between SEMA and the clearance operators within Somalia.[39] However, SEMA has raised concerns about the level of coordination by the operators, on issues such as tasking and prioritisation, and SEMA does believe that operators fully respect its de facto position as the national authority.[40]

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.[41] Somalia is currently wholly reliant on international financial resources for its mine action programme. In its 2021 Article 5 deadline extension request, Somalia has 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; implementation of projected land release at US$5 million per year.[42] 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.[43]

PUNTLAND

The SEMA Puntland State Office, formerly known as 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, throughout 2020 the implementing partners were NPA and the Puntland Risk Solution Consortium.[44] It runs the only police explosive ordnance disposal (EOD) team in Puntland, which is responsible for collecting and destroying explosive ordnance.[45]

SOMALILAND

As part of a larger process of government reform in early 2018, SMAC, which was responsible for coordinating and managing demining in Somaliland since 1997, was restructured and renamed the MCICA. The Agency underwent a change of line ministry from the Office of the Vice President to the Ministry of Defence.[46] It was then renamed the Mine Action Department in January 2019.[47]

The HALO Trust reported that within Somaliland it is involved in key decision-making processes by the national authorities; and that there is an enabling environment for mine action as international staff can easily obtain visas, memorandums of understanding can be drawn up with line ministries, and there are favourable tax regulations in place (as for international NGOs in other sectors). The HALO Trust established a committee for "Explosives Hazards Management" within the government to collectively discuss progress, challenges and support for Article 5 implementation in Somaliland.[48]

GENDER AND DIVERSITY

Somalia's National Mine Action Strategic Plan 2018–2020 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 considered, 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 affiliation, movement patterns of local populations, and barriers to participation for different gender and age groups.[49] SEMA reported that gender and diversity have also been integrated into the national mine action standards.[50]

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.[51] As at May 2021, SEMA had not reported on whether it has developed a gender or diversity policy or implementation plan.

SEMA also reported that within the federal State national mine action NGO consortia, there was a large focus on gender in survey and community liaison teams to ensure the inclusive participation of all affected groups, including women and children.[52] 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.[53] SEMA confirmed that data are disaggregated by sex and age, with gender considered in the prioritisation, planning, and tasking of survey and clearance activities,[54] although it is unclear how in practice 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.[55] Employing more women typically enables operators to access all strata of Somali society to gain information and consider the views of all relevant groups.[56] 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 that there is a strong understanding of all sections of Somaliland society.[57]

In 2020, 34% of NPA's total workforce are women with 40% of managerial/supervisory roles held by women and 29% of operational roles.[58] In 2020, UNMAS introduced social impact surveys with participation from women and ethnic minority groups on the impact of land release in their communities. Overall 27% of UNMAS contracted employees are women with 40% of managerial/supervisory positions held by women and in operational positions 25% of UNMAS employees are women.[59] In Somaliland, the number of female demining staff employed by HALO Trust doubled in 2020 to include four all-female clearance teams. In October 2020, the HALO Somaliland programme recruited ten women from the marginalised Gaboye ethnic minority group, to be trained and deployed as deminers. Overall, 12% of HALO Somaliland staff are female with 16% of managerial/supervisory positions held by women and 11% of operations positions.[60] In HALO Somalia, 20% of all employees are women with women filling 15% of managerial/supervisory positions and 17% of operations positions.[61] In SEMA, 17% of the current workforce are female.[62]

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.[63] In 2020, NPA continued to support SEMA with information management but, according to NPA, high turnover of SEMA staff has hampered progress.[64] According to UNMAS, however, SEMA's database is neither up to date nor accurate.[65] In 2020, SEMA met with operators to discuss synchronising operator data with the national database and operators provided SEMA with information not already within the national database.[66] SEMA and UNMAS have agreed to work together to consolidate the national data.[67] In 2020, UNMAS began implementing the mobile collection tool, Survey123, which enables real-time data collection in the field and improved data quality with an online data validation application.[68] HALO Somalia has moved data collection to Survey123 in 2021.[69]

The Mine Action Department, the mine action authority in Somaliland, manages a separate IMSMA database. The HALO Trust stated that its data undergoes monthly quality assurance being reported to MCICA, 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.[70]

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. As at July 2021, Somalia had still to submit its latest Article 7 report but it did make a presentation at the APMBC intersessional meeting in support of its extension request.

PLANNING AND TASKING

Somalia's National Mine Action Strategic Plan 2018–2020, developed with input from SEMA, UNMAS, international operators, national NGO consortia, and international institutions in late 2017.[71] 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 new strategy.[72]

The plan focuses on setting "achievable" goals over the three-year period. The strategy's five goals, identified by SEMA, are 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
- 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.[73] According to UNMAS, the Badbaado plan lacked consultation with other stakeholders and will be usurped by Somalia's strategic plan.[74] In Somaliland, The HALO Trust has encountered a lack of political will to conclude a strategic plan or handle residual risk.[75]

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 2021.[76] 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 Article 5 deadline extension

request. SEMA has also stated that it will produce a detailed budget during 2021 for activities under the work plan.[77] 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.[78]

SEMA, with technical and capacity development support from NPA, held a meeting in 2019 to set indicators for the planning and prioritisation of mine action activities which will be used as a guide for future planning and prioritisation.[79]

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.[80] 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.[81] SEMA, however, expressed concern that operators task themselves without its agreement.[82]

NPA reported that in Puntland task dossiers are issued in a timely and effective manner.[83] In Somaliland, The HALO Trust manages its own tasking and prioritisation.[84] Release of anti-personnel mined areas is prioritised by HALO according to a criteria of humanitarian need, e.g. number of accidents, patterns of land use, and socio-economic data.[85]

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.[86] However, according to The HALO Trust, since their introduction there have not been updated and do not accurately reflect the clearance standards required for Somalia. They allow for methodologies such as detector-assisted prodding, which should be critically reviewed as it has resulted in missed mines in Somalia.[87] SEMA conducted a review of the NTSGs in 2019 with technical support from NPA and in compliance with IMAS. As at April 2021, the NTSGs were awaiting approval from the Ministry of Internal Security before they can be adopted.[88]

The HALO Trust reported that SEMA still lacked capacity and technical training to perform QA checks in 2018, and that consequently it carried out internal QA.[89] In 2020, NPA continued to provide QA and QC training to SEMA staff.[90] According to HALO QA activities by SEMA remained sporadic and operators continued to conduct their own quality management.[91]

In Somaliland, The HALO Trust confirmed that the Mine Action Department Information Management Unit occasionally visit survey and clearance operations.[92]

OPERATORS AND OPERATIONAL TOOLS

In 2020, two international NGOs conducted clearance operations in Somalia and Somaliland, The HALO Trust and NPA, along with UNMAS-contracted commercial clearance company, Ukroboronservice.[93]

Table 3: Operational clearance capacities deployed in 2020[94]

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
Ukroboronservice (UNMAS)	6	46	0	0	No change in AP mine clearance capacity from 2019.
HALO Somalia	20	169	0	0	HALO Somalia only conducted BAC in 2019.
HALO Somaliland	34	272	0	3	Increase from 2019
NPA	1	6	0	0	No MDD team in 2020
Totals	**61**	**493**	**0**	**3**	

* Excluding team leaders, medics, and drivers. ** Excluding vegetation cutters and sifters.
BAC = Battle area clearance MTT= Mobile multi-tasking team MDT= Manual demining team.

UNMAS, through its implementing partner Ukroboronservice, deployed six manual demining teams (MDTs) which are trained to carry out manual demining, and technical survey. Two additional manual demining teams have commenced operations in 2021.[95]

In 2019, HALO Somalia only conducted BAC. In 2020, there was a large increase in anti-personnel mine clearance personnel. In addition, HALO Trust deployed 14 non-technical survey teams totalling 59 personnel. In 2021, there might be an increase in

clearance and non-technical survey capacity dependent on funding.[96] The HALO Trust reported that there was no significant change in operational capacity in Somaliland between 2019 and 2020.[97] As well as its clearance capacity, HALO Trust also deployed two non-technical survey teams totalling eight personnel.[98]

In 2020, NPA was working in Puntland conducting survey and clearance and capacity building, entering into partnership with the local NGO consortia.[99] NPA's operational capacity decreased by two thirds from 2020 compared to 2019 as a result of completed capacity development of the Galmudug NGO consortia non-technical survey staff. NPA deployed five non-technical survey teams totalling ten personnel and one technical survey team of six personnel in 2020 and plans to increase its non-technical survey and manual clearance capacity by mid-2021.[100]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of 3.36km² of mined area was released in 2020 across Somalia and Somaliland, of which 2.32km² was cleared, 0.90km² was reduced by technical survey, and 0.14km² was cancelled by non-technical survey. A total of 172 anti-personnel mines were found and destroyed, including 22 during EOD spot tasks and four anti-personnel mines that were handed in by the local community.

SURVEY IN 2020

In 2020, a total of 1.03km² was released through survey: 0.14km² was cancelled though non-technical survey (see Table 4) and close to 0.90km² was reduced through technical survey (see Table 5). The vast majority of the area released through survey was in Somaliland totalling nearly 0.91km².[101] This is an increase from 2019 when a total of 0.65km² was released through survey: 0.15km² was cancelled through non-technical survey and close to 0.50km² was reduced through technical survey.[102]

Table 4: Cancellation through non-technical survey in 2020[103]

Province	Operator	Area cancelled (m²)
Somaliland	HALO Trust	138,998
Total		**138,998**

Table 5: Reduction through technical survey in 2020[104]

Province	Operator	Area reduced (m²)
Mudug	NPA	124,297
Somaliland	HALO Trust	770,773
Total		**895,070**

CLEARANCE IN 2020

In 2020, a total of 2.32km² of mined area was cleared with the destruction of 146 anti-personnel mines and 29 anti-vehicle mines. The vast majority of anti-personnel mines were found and destroyed in Somaliland.[105] This is an increase from overall clearance of 1.82km² in 2019, again the majority of which occurred in Somaliland at 1.47km².[106]

Table 6: Mine clearance in 2020[107]

Province	Operator	Area cleared (m²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Mudug	NPA	245,699	0	0	0
Bakool	Ukroboronservice (UNMAS)	2,873	0	4	0
Galgaduud	Ukroboronservice (UNMAS)	1,150	1	0	0
Galgaduud	Ukroboronservice (UNMAS)	1,540	0	1	0
Hiraan	Ukroboronservice (UNMAS)	3,620	0	3	0
Bakool	Ukroboronservice (UNMAS)	21,601	0	0	7
Galgaduud	Ukroboronservice (UNMAS)	249,139	0	0	28
Hiraan	Ukroboronservice (UNMAS)	217,367	0	0	33
Somaliland	HALO Trust	1,394,229	133	7	146
Bakool	HALO Trust	115,337	0	8	183
Hiran	HALO Trust	42,817	0	4	195
Galgaduud	HALO Trust	26,636	6	1	443
Mudug	HALO Trust	0	6	1	1,085
Totals		**2,322,008**	**146**	**29**	**2,120**

AP = Anti-personnel AV = Anti-vehicle

In addition, 13 anti-personnel mines were destroyed during EOD spot tasks by the HALO Trust in Somalia in 2020.[108] In Somaliland, the HALO Trust destroyed 9 anti-personnel mines and 72 anti-vehicle mines during EOD spot tasks.[109]

In 2020, NPA completed seven tasks where it was expected that there would be anti-personnel and anti-vehicle contamination with no anti-personnel mines found with a total of 369,996m^2 cleared and two tasks ongoing at year end.[110] UNMAS cleared 497,290m^2 with only one anti-personnel mine found.[111] The HALO Trust cleared one task in 2020–21 in Somaliland with no mines found, though four anti-personnel mines were handed in on the last day of clearance by locals.[112] In the rest of Somalia, HALO Trust cleared four areas totalling 139,959m^2 that did not contain anti-personnel mines but were contaminated with anti-vehicle mines and other UXO.[113]

UNMAS reported that their increased clearance output from 2019 to 2020 was due to the use of combined tools such as the use of Large Loop Metal Detectors (LLMD) for areas with metallic anti-tank mine evidence.[114] While for NPA the increase in output was because the manual demining team have become more experienced and the deployment of the MDD team increases productivity as their daily productivity is equivalent to that of six to eight manual demining teams.[115] For HALO Trust in Somaliland there was no significant increase or decrease in output in 2020 compared to 2019.[116] In the rest of Somalia, in 2019 the HALO Trust only conducted BAC therefore, 2020 saw a sharp increase in the amount of mined area cleared, cancelled and reduced. The HALO Trust increased its manual mine clearance capacity in 2020 which contributed to the increase of mine clearance compared to 2019.[117]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SOMALIA: 1 OCTOBER 2012

↓

ARTICLE 5 DEADLINE: 1 OCTOBER 2022

↓

FIRST EXTENDED DEADLINE SOUGHT (5-YEAR EXTENSION REQUESTED): 1 OCTOBER 2027

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO, EXTENSION REQUESTED TO 1 OCTOBER 2027
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Table 7: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	2.32
2019	1.82
2018	1.60
2017	0.89
2016	1.14
Total	**7.77**

Under Article 5 of the APMBC, 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 2022. It will not meet this deadline and has submitted a request for an extension of its Article 5 deadline in April 2021, for a period of five years, until 1 October 2027. It is unlikely that Somalia will even be able to meet this new deadline as it is dependent on Somalia securing the requisite capacity, funding, and access. It is also unclear in the extension request whether Somalia intends to fulfil its Article 5 obligations within the five years requested or whether this is an interim request in order to establish a baseline of anti-personnel mine contamination.

Overall land release rose in 2020 compared to the previous year and clearance output increased by 27% although the number of anti-personnel mines is lower than 2019 with 146 anti-personnel mines found during clearance activities, compared to 248 anti-personnel mines found and destroyed in 2019. All operators reported conducting clearance of areas where it was expected that there would be anti-personnel and anti-vehicle contamination with no anti-personnel mines found. This further illustrates the need for Somalia to establish a nationwide baseline of anti-personnel mine contamination, to better understand the nature and extent of anti-personnel mine contamination in areas to which it has access, in order to meaningfully plan for implementation of its Article 5 obligations.

Somalia has identified the lack of resources and continued insecurity as the two major challenges which have impeded its ability to complete clearance by its Article 5 deadline. 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.

As reported by the HALO Trust, there are two main types of security threat that operators face: clan wars and al-Shabaab. Conflicts between clans can put survey and clearance personnel at risk as the operators' staff can be killed for revenge by rival clan members. The group restricts the mobility of goods and people throughout the region, which impacts operational

efficiency and increases the cost of transporting personnel and equipment as road access is not possible so everything must be airlifted. The impact of COVID-19 has increased this threat as all flights have been grounded which makes this more difficult and riskier.[118] In Somaliland, the security situation remained relatively stable throughout 2020 and the outbreak of COVID-19 did not significantly affect operations throughout the year, however, HALO Trust repurposed their ambulances to transfer patients between hospitals and the COVID-19 treatment facility.[119]

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 APMBC 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.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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.[120] Somalia is planning to introduce state-level consortia of local NGOs who will be tasked with dealing with residual contamination.[121] There is no reference to this in Somalia's Article 5 deadline extension request.

1 Email from Dahir Abdirahman Abdulle, National Director General, SEMA, 11 May 2020.

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 Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

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 Article 7 Report (covering 2018), Form J.

8 Interview with Dahir Abdirahman Abdulle, SEMA, 19 August 2020; and email from Claus Nielsen, NPA, 26 May 2021.

9 Email from Mustafa Bawar, UNMAS, 4 July 2021.

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 (no. of CHAs is 18 and total area of CHAs was 6,098,836m^2; no. of SHAs is 11 and total area of SHAs was 10.4km^2 (recorded as only 10.4m^2 in the Art 7 report)), but the overall estimate of contamination and total number of 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 Email from Claus Nielsen, NPA, 14 May 2019; and Lawrie Clapton, HALO Trust, 14 June 2020.

14 Emails from Helen Olafsdottir, Technical Specialist on SSR and Team Leader JSSGP, UNDP, 16 April and 27 May 2021.

15 Article 5 deadline extension request, p. 43-44.

16 Email from Abdullah Alkhasawneh, Country Director, HALO Trust, 16 May 2021.

17 Email from Lawrie Clapton, HALO Trust, 10 July 2020.

18 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

19 Email from Chris Pym, Deputy Head of Region (Africa), HALO Trust, 20 May 2021.

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 LIS covered regions of Somaliland in 2003 and 2007, respectively.

21 Email from Claus Nielsen, NPA, 6 April 2021.

22 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.

23 Emails from Claus Nielsen, NPA, 14 April 2020; and Lawrie Clapton, HALO Trust, 14 June 2020.

24 Email from Claus Nielsen, NPA, 6 April 2021.

25 Email from Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016; and telephone interview with Dahir Abdirahman Abdulle, SEMA, 19 August 2020.

26 Email from Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.

27 Interview with Mohamed Abdulkadir Ahmed, SEMA, in Geneva, 9 April 2014; and email from Kjell Ivar Breili, UNMAS, 12 July 2015.

28 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.

29 Emails from Mohamed Abdulkadir Ahmed, SEMA, 14 June 2016; and Hilde Jørgensen, NPA, 3 May 2017.

30 Emails from Terje Eldøen, Programme Manager, NPA, 22 October 2016; and Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.

31 Email from Claus Nielsen, NPA, 26 May 2021.

32 Emails from Mustafa Bawar, UNMAS, 3 August 2020 and 4 July 2021.

33 Emails from Helen Olafsdottir, UNDP, 16 April, 27 May, and 28 July 2021.

34 Email from Abdullah Alkhasawneh, HALO Trust, 11 August 2021.

35 Email from Chris Pym, HALO Trust, 9 May 2019.

36 Email from Mustafa Bawar, UNMAS, 4 April 2021.

37 Email from Mustafa Bawar, UNMAS, 3 August 2021.

38 Email from Claus Nielsen, NPA, 6 April 2021.

39 Emails from Chris Pym, HALO Trust, 9 May 2019; and Claus Nielsen, NPA, 13 April 2019.

40 Email from Dahir Abdirahman Abdulle, SEMA, 3 July 2021.

41 Email from Claus Nielsen, NPA, 6 April 2021.

42 2021 Article 5 deadline Extension Request, p. 47.

43 Ibid., p. 10.

44 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", p. 9; and email from Claus Nielsen, NPA, 23 July 2020 and 26 May 2021. SEMA has claimed that this NGO is no longer functioning but this information has not been confirmed by operators in the field.

45 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.

46 Email from Chris Pym, HALO Trust, 9 May 2019.

47 Email from Chris Pym, HALO Trust, 2 June 2019.

48 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

49 SEMA, "Somalia National Strategic Plan, 2019", pp. 21–22.

50 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

51 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.

52 Ibid.

53 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

54 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.

55 Emails from Mustafa Bawar, UNMAS, 17 March 2020; Claus Nielsen, NPA, 14 April 2020; and Lawrie Clapton, HALO Trust, 14 June 2020.

56 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

57 Ibid.

58 Email from Claus Nielsen, NPA, 6 April 2021.

59 Email from Mustafa Bawar, UNMAS, 4 April 2021.

60 Email from Chris Pym, HALO Trust, 20 May 2021.

61 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021.

62 Email from Mustafa Bawar, UNMAS, 4 July 2021.

63 Email from Claus Nielsen, NPA, 22 March 2018.

64 Email from Claus Nielsen, NPA, 6 April 2021.

65 Interview with Qurat-al-Ain, Head of UNMAS Somalia Programme, UNMAS, in Geneva, 14 February 2020.

66 Interview with Dahir Abdirahman Abdulle, SEMA, 19 August 2020; and email from Claus Nielsen, NPA, 26 May 2021.

67 Email from Mustafa Bawar, UNMAS, 4 July 2021.

68 Email from Mustafa Bawar, UNMAS, 4 April 2021.

69 Emails from Abdullah Alkhasawneh, HALO Trust, 16 May and 11 August 2021.

70 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

71 Emails from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019; and Claus Nielsen, NPA, 13 April 2019.

72 Email from Claus Nielsen, NPA, 26 May 2021.

73 SEMA, "Badbaado Phase II: Meeting the Obligations of the Anti-Personnel Mine Ban Treaty 2018–2022.

74 Interview with Qurat-al-Ain, UNMAS, Geneva, 14 February 2020.

75 Email from Lawrie Clapton, HALO Trust, 10 July 2020.

76 Skype interview with Claus Nielsen, NPA, 10 February 2020; and email, 26 May 2021.

77 Article 5 deadline extension request, p. 10.

78 2021 Article 5 deadline Extension Request, p. 43-44.

79 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

80 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021.

81 Email from Mustafa Bawar, UNMAS, 4 April 2021.

82 Email from Dahir Abdirahman Abdulle, SEMA, 3 July 2021.

83 Email from Claus Nielsen, NPA, 6 April 2021.

84 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

85 Ibid.

86 Email from Terje Eldøen, NPA, 5 June 2016; and response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.

87 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

88 Email from Claus Nielsen, NPA, 6 April 2021.

89 Email from Chris Pym, HALO Trust, 9 May 2019.

90 Email from Claus Nielsen, NPA, 6 April 2021.

91 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021.

92 Email from Chris Pym, HALO Trust, 20 May 2021.

93 DDG and MAG continued to operate in Somalia and Somaliland in 2020, but did not carry out demining.

94 Emails from Mustafa Bawar, UNMAS, 4 April 2021; Claus Nielsen, NPA, 6 April 2021; Abdullah Alkhasawneh, HALO Trust, 16 May 2021; and Chris Pym, HALO Trust, 20 May 2021.

95 Email from Mustafa Bawar, UNMAS, 4 April 2021.

96 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021.

97 Email from Chris Pym, HALO Trust, 20 May 2021.

98 Ibid.

99 Skype interview with Claus Nielsen, NPA, 10 February 2020.

100 Email from Claus Nielsen, NPA, 6 April 2021.

101 Emails from Claus Nielsen, NPA, 6 April 2021; and Chris Pym, HALO Trust, 20 May 2021.

102 Emails from Dahir Abdirahman Abdulle, SEMA, 11 May 2020; and Lawrie Clapton, HALO Trust, 14 June 2020.

103 Email from Chris Pym, HALO Trust, 20 May 2021.

104 Emails from Claus Nielsen, NPA, 6 April 2021; and Chris Pym, HALO Trust, 20 May 2021.

105 Emails from Abdullah Alkhasawneh, HALO Trust, 16 May 2021; and Claus Nielsen, NPA, 6 April 2021; and Mustafa Bawar, UNMAS, 4 April 2021.

106 Emails from Dahir Abdirahman Abdulle, SEMA, 11 May 2020; Lawrie Clapton, HALO Trust, 14 June 2020; Mustafa Bawar, UNMAS, 17 March 2020; and Claus Nielsen, NPA, 14 April 2020.

107 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021; and Claus Nielsen, NPA, 6 April 2021; and Mustafa Bawar, UNMAS, 4 April 2021.

108 Email from Chris Pym, HALO Trust, 20 May 2021.

109 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021.

110 Email from Claus Nielsen, NPA, 6 April 2021.

111 Email from Mustafa Bawar, UNMAS, 4 April 2021.

112 Email from Chris Pym, HALO Trust, 20 May 2021.

113 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021.

114 Email from Mustafa Bawar, UNMAS, 4 April 2021.

115 Email from Claus Nielsen, NPA, 6 April 2021.

116 Email from Chris Pym, HALO Trust, 20 May 2021.

117 Email from Abdullah Alkhasawneh, HALO Trust, 16 May 2021.

118 Email from Lawrie Clapton, HALO Trust, 14 June 2020.

119 Email from Chris Pym, HALO Trust, 20 May 2021.

120 Email from Claus Nielsen, NPA, 14 April 2020.

121 Email from Dahir Abdirahman Abdulle, SEMA, 11 May 2020.

SOUTH SUDAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

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 2020

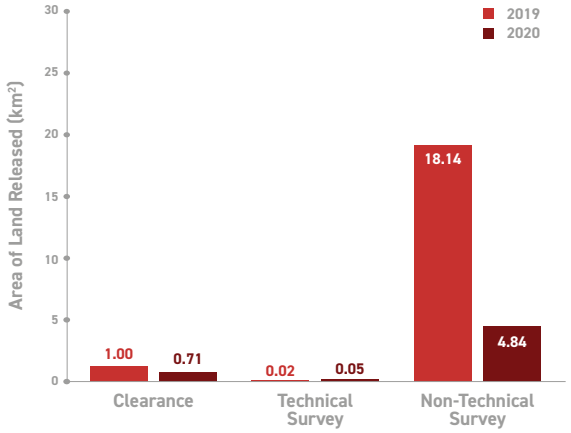
0.71 KM²

AP MINES DESTROYED IN 2020

244

(INCLUDING 13 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Survey and clearance output fell in 2020 compared to 2019 with South Sudan facing a reduced demining season due to COVID-19 restrictions and continued insecurity restricting access to mined areas within the country. A full review of South Sudan's National Technical Standards and Guidelines (NTSGs) was conducted in 2020 with amendments made to ensure the NTSGs were both in line with International Mine Action Standards (IMAS) and adapted to the national context. In 2020, South Sudan was granted a five-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 clearance deadline to July 2026 and intends to clear all types of explosive ordnance contamination within the period of the extension request.

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 and the plans it is putting in place to ensure that diverse needs are considered during the period of the extension request.**
- **South Sudan should ensure that the information management system is nationally owned and can be sustainably managed post-completion.**
- **South Sudan should provide an updated work plan through to 2026 matched with a revised detailed budget, considering the impact of the COVID-19 outbreak and security-related access restrictions.**
- **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.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	8	South Sudan continues to improve its understanding of the extent of anti-personnel mine contamination since targeted re-survey and database review began in 2018. In 2020, South Sudan reduced its overall estimate of anti-personnel mine contamination and increased the proportion of CHAs from 24% of the overall total in 2019 to 40% as at end of 2020. Further re-survey is planned to confirm the true size of the last remaining inflated suspected hazardous areas (SHAs) although access is dependent on 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 2020, with the United Nations Mine Action Service (UNMAS) still assuming that function. In 2020, South Sudan received sufficient funding for mine action, but this may decrease if there are changes to the mandate of the UN Mission in South Sudan (UNMISS) as the largest donor.
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 and there were no major changes in the proportion of women working in mine action from 2019.
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. South Sudan submitted a timely and accurate Article 7 report covering 2020 which disaggregates by type of contamination and land release methodology and provides updates on progress.
PLANNING AND TASKING (10% of overall score)	6	7	South Sudan has a National Mine Action Strategy 2018–2022, which underwent a mid-term review in January 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, but it was not able to meet them in 2020.
LAND RELEASE SYSTEM (20% of overall score)	8	7	All South Sudan's NTSGs were reviewed in 2020 to conform with IMAS, with revisions made to the NTSGs on survey and road clearance. Demining teams began to be reconfigured in 2020 from eight-lane to ten- or fifteen-lane teams in order to increase clearance efficiency.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	7	South Sudan's land release output fell dramatically in 2020 due to the COVID-19 restrictions and continued insecurity across the country. In 2020, South Sudan was granted a five-year extension to its Article 5 deadline and plans to address all types of explosive ordnance contamination within this timeframe. This may be overambitious when ongoing challenges to access to contaminated areas are considered.
Average Score	**6.9**	**6.8**	**Overall Programme Performance: AVERAGE**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Mine Action Authority (NMAA)

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- Danish Church Aid (DCA)
- Danish Demining Group (DDG) (now Danish Refugee Council's Humanitarian Disarmament and Peacebuilding Sector)
- G4S Ordnance Management (G4S)
- Mines Advisory Group (MAG)
- The Development Initiative (TDI)

OTHER ACTORS

- UN Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

As at the end of 2020, South Sudan had a combined total of 118 areas confirmed and suspected to contain anti-personnel mines covering a total area of almost 7.3km^2 (see Table 1).[1] This is a decrease from the 126 areas confirmed and suspected to contain anti-personnel mines covering a total area of almost 12.2km^2 at the end of 2019.[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, including more than 73km^2 cancelled through non-technical survey in 2018–20.[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 45,000m^2, one suspected hazardous area (SHA) in Jonglei has an estimated size of nearly 1.98km^2.[4]

According to the United Nations Mine Action Service (UNMAS), at the end of 2020 South Sudan, also had 69 suspected and confirmed anti-vehicle mined areas, covering just over 4.6km^2 (see Table 2).[5]

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 may have been over-reported. UNMAS consequently initiated a process of targeted re-survey aimed at better defining the estimated 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 2020, survey teams identified five previously unrecorded minefields totalling 54,941m^2. One former anti-personnel minefield was reclassified as an anti-vehicle mined area and one former anti-tank minefield was reclassified as containing anti-personnel mines while reducing the contamination estimate by 217,904m^2. In addition, eight tasks undergoing clearance were revised and expanded by a total of 686,004m^2.[6]

South Sudan is contaminated by anti-personnel and anti-vehicle mines as well as explosive remnants of war (ERW), including 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. 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.[7] However, the security situation remains fluid with both banditry and politically motivated violence affecting survey and clearance operations in 2020.[8] 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.[9]

Table 1: Anti-personnel mined area by state (at end 2020)[10]

State	CHAs	Area (m^2)	SHAs	Area (m^2)	Total SHA/CHA	Total area (m^2)
Central Equatoria	39	1,506,060	31	238,936	70	1,744,996
Eastern Equatoria	15	745,547	7	49,186	22	794,733
Jonglei	5	213,829	8	3,596,842	13	3,810,671
North Bahr El Ghazal	0	0	1	113,862	1	113,862
Upper Nile	2	66,246	0	0	2	66,246
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	**63**	**2,828,870**	**55**	**4,449,636**	**118**	**7,278,506**

Table 2: Mined area (at end 2020)[11]

Type of contamination	CHAs	Area (m^2)	SHAs	Area (m^2)
Anti-personnel mines	63	2,828,870	55	4,449,636
Anti-vehicle mines	40	1,838,693	29	2,803,378
Totals	**103**	**4,667,563**	**84**	**7,253,014**

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The South Sudan Demining Authority (SSDA)—since renamed the 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] No national mine action legislation has been adopted in South Sudan.[13]

In 2011, UN Security Council Resolution 1996 tasked UNMAS with supporting South Sudan in demining and strengthening the capacity of the NMAA. UNMAS (with the NMAA) has been overseeing mine action across the country through its main office in Juba, and sub-offices in Bentiu, Bor, Malakal, and Wau. Together, UNMAS and 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 conduct data collection and the mapping of new hazardous areas.[14]

While it is planned that the NMAA will eventually assume full responsibility for all mine action activities, according to UNMAS the NMAA continued to face serious financial and technical limitations in 2020 preventing it from doing so effectively.[15] Despite a decade of international assistance, the NMAA requires further provision of substantial resources and capacity-building assistance if it is to manage the mine action programme.[16] UNMAS continued with capacity development of the NMAA during 2020 as NMAA officers were supported in conducting joint quality assurance (QA) visits with UNMAS during which each individual received "on the job training" and was assessed. Two NMAA officers also received sustained training in operations management, which was due to end in 2021. A resource mobilisation strategy is under development and there are plans to deploy one operational team from the NMAA to conduct explosive ordnance disposal (EOD) to manage residual contamination.[17]

Mines Advisory Group (MAG) also conducted capacity development of the NMAA during 2020 by supporting with project management, planning and resource mobilisation activities and providing opportunities for NMAA staff to work on demining teams to gain field experience and develop QA skills.[18]

In 2020, UNMAS and Danish Demining Group (DDG) were the co-coordinators of the mine action subcluster with MAG replacing DDG (now renamed Danish Refugee Council's Humanitarian Disarmament and Peacebuilding Sector) in March 2021.[19] The subcluster coordinates with the national- and state-level Inter-Cluster Working Groups. This enables information to be shared on mines and unexploded ordnance (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.[20]

In 2020, the Government of South Sudan funded the costs of NMAA staff salaries and its suboffices across the country, in Malakal, Wau, and Yei. As at April 2021, use of the Yei office continued to be suspended due to the security situation.[21] The NMAA did not, however, provide any funding for survey or clearance. The government's total support was reported as US$75,000 for the year.[22]

In South Sudan's revised 2020 APMBC Article 5 deadline extension request, completing all mine clearance by July 2026 was estimated to cost US$148 million.[23] In 2020, South Sudan received more than US$40 million for mine action, which exceeds the costs needed if current levels of support are maintained. It is worth noting, however, that much of the funding received by UNMAS, which on average has contributed around 75% of all sectoral financial assistance, is used to support the UN Mission in South Sudan (UNMISS).[24] This has played an important role in the overall mine action effort, as more than 4,000km of road have been verified as being free of mines to support the mandate of UNMISS, under Security Council Resolution 2514 (2020). But it does impact prioritisation as mine action teams are deployed in the interest of UNMISS rather than to those areas that are most contaminated by mines and UXO. Going forward, as the role of UNMISS changes, it may further reduce the resources channelled to the implementation of the mine clearance effort.[25]

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.[26] UNMAS reported that the programme was also implementing the UN Gender Guidelines for Mine Action, monitored by a gender focal point.[27]

South Sudan's NTSGs contain provisions requiring 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.[28] 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, taking local cultural practices into consideration.[29] 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.[30] Ethnic identity is considered within survey and clearance teams to ensure safe access and acceptance by the respective local communities.[31]

In 2019–20, UNMAS led 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 ensuring the mainstreaming of GBV prevention practices in mine action and promoting equal opportunity in decision-making.[32] As of April 2021, effective gender mainstreaming had been impeded by the COVID-19 pandemic and the related restrictions.[33]

UNMAS has said that, in theory, there is equal access in employment opportunities for qualified men and women in survey and clearance teams across the organisations

operating in South Sudan. However, redressing the gender balance is a long-term challenge and is dependent on whether new vacancies arise.[34] 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.[35] In 2020, only 7% of staff in operational roles were women, and this proportion fell to only 5% of managerial or supervisory positions among international staff, with no woman occupying a national managerial position. This situation was unchanged from 2019.[36]

All of MAG's community liaison teams 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 May 2020, two international staff members who hold managerial positions within MAG were women as were four national staff. Within survey and clearance operations there were three female community liaison personnel (out of six) while 20 deminers were women.

In 2021, MAG, as part of its efforts to improve the gender balance within its teams, held its second basic deminer course for women with 16 women graduating who will become part of MAG's demining teams. MAG has noticed that communities very often nominate men as community focal points and MAG has worked with community representatives to increase the number of female and youth community focal points. In 2020 and 2021, MAG trained 39 men, 15 boys, 44 women, and 5 girls as community focal points.[37]

DCA reported having a gender and diversity policy and implementation plan in place and says there is equal access to employment for qualified men and women including for managerial level/supervisory positions. As at April 2021, there were two women deminers out of a total of nine, as well as one female medic and one female community liaison officer. When conducting survey and community liaison, a local translator enables DCA staff to present information in different languages/dialects.[38]

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 that are thought to be exaggerated or erroneously recorded. Through the database review it was found that past efforts to upgrade the IMSMA software package led to serious data loss, which inhibited efforts to present an entirely accurate record of the history of mine action in South Sudan. The ongoing database review has 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, and other ERW-contaminated areas, including spot tasks.[39]

As at May 2021, MAG and UNMAS were in the process of upgrading to tablet based electronic reporting, using Survey123. However, limited internet speeds in the field as well as in Juba have delayed the roll-out of the new system.[40]

South Sudan submitted a timely and accurate Article 7 report covering 2020 which disaggregated by type of contamination and provided an update on progress in land release during 2020. In addition, it submitted an initial Article 5 deadline extension request in March 2020, and a revised extension request in August 2020, which includes information on all types of explosive ordnance contamination in South Sudan, and a plan to complete clearance of all contamination by 2026. While there is some disaggregation by type of contamination and method of land release, the detailed work plan does not disaggregate by SHA and CHA and their size or by type of mined area.

PLANNING AND TASKING

South Sudan's most recent National Mine Action Strategy 2018–2022, developed with support from the Geneva International Centre for Humanitarian Demining (GICHD) and with funding from Japan, was officially launched in September 2018.[41]

According to UNMAS, the strategy has three strategic 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 the plan, goals, and objectives was conducted in January 2020.[43] The results of the review were considered when elaborating the operational clearance plan for 2020–21. The operational focus for 2020–21 was on road clearance, with a view to creating safe access and facilitating freedom of movement, along with clearance of CMR and large anti-personnel mined areas for the benefit of returnees.[44]

In its revised 2020 extension request South Sudan presents a work plan through to 2026, split by region and with data disaggregated by type of contamination and classified into SHAs and CHAs. South Sudan has classified each of the remaining tasks into the proposed clearance methodology (manual clearance, mechanical clearance, road clearance,

or re-survey). In the milestones for completion section, targets for mine clearance are separated into manual and mechanical clearance but are not disaggregated by type of mine nor is there any mention of the extensive re-survey that is required.[45] In addition, there is a lack of clarity in the difference between tasks, minefields, and hazardous areas.[46]

South Sudan's Article 7 report (covering 2019) contains annual targets for release of all areas containing anti-personnel mines to 2026. The projected land release target for 2020 was 5.93km^2 with South Sudan releasing 5.63km^2 despite the effects of COVID-19.[47]

South Sudan intends 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 is 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.[48]

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 IMAS and tailored to the local context. The NTSGs are annually reviewed and revised by UNMAS and the implementing partners and then approved by the NMAA.[49]

In 2020, a review was conducted of all NTSGs to ensure they conform with the IMAS. Amendments were made in consultation with implementing partners. The NTSG on survey was updated to recognise that guidance around technical survey was not applicable in an environment where most minefields are characterised by nuisance minelaying rather than the more predictable minelaying that is required for "targeted" survey to be successful. Revisions were also made to the NTSG on road clearance to reflect the increased reliance on ground-penetrating radar and technical survey mine detection dogs (MDDs).[50]

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.[51] In 2020, improvements were made to the QA/QC process with reporting migrated onto the online Survey123 IMSMA platform and standardised scoring matrices developed for accreditation of team leaders and teams. Ten NMAA officers took part in joint QA visits with UNMAS during which each individual received "on-the-job training" and was assessed. Two NMAA officers also received advanced on-the-job training in operations management, which was due to end in 2021.[52]

OPERATORS AND OPERATIONAL TOOLS

Operators in South Sudan in 2020 included three international demining non-governmental organisations (MAG, DDG and DCA), and two commercial companies who are UNMAS's implementing partners (G4S Ordnance Management (G4S), and The Development Initiative (TDI)). UNMAS estimated the number of operational personnel involved in anti-personnel mine survey and clearance at peak capacity at 276 during the year (see Table 4). The teams were not deployed exclusively onto anti-personnel mine they also conducted EOD, manual mine clearance and/or non-technical survey.[53]

Table 3: Operational clearance capacities deployed in 2020[54]

Operator	Manual clearance teams	Total clearance personnel	No. of dog teams (dogs and handlers)	Mechanical assets
G4S QRT	6	48	0	0
G4S MTT	2	16	0	0
G4S MTT 2	8	120	0	0
G4S ICC	2	20	0	2
TDI MTT	8	64	0	0
TDI RACC	2	30	6	0
TDI ICC	2	20	0	2
MAG ICC	1	10	0	0
MAG MTT	5	40	0	2
DCA MTT	1	8	0	0
DDG MTT	1	10	0	0
Totals	**38 (25*)**	**386 (276*)**	**6**	**6 (4*)**

MTT = Multi-Task teams QRT = Quick Response Teams ICC = Integrated Clearance Capacity RACC = Route Assessment and Clearance Capacity
* Total numbers at peak capacity

South Sudan's revised extension request provides a detailed breakdown of the capacity that will be needed to achieve completion of clearance. South Sudan plans to deploy the full demining toolbox to address the remaining contamination, including light and heavy machines, MDDs, and manual deminers equipped with appropriate detectors. 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.[55] 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.[56] In 2021, UNMAS is contracting an additional eight 15-lane demining teams bringing to total to sixteen, exceeding its target in the revised extension request. However, these teams are not exclusively dedicated to manual anti-personnel mine clearance.[57]

South Sudan has disaggregated its mine clearance projections in its extension request into manual and mechanical clearance. The manual clearance teams of 15-lane demining teams are expected to clear 300m^2 per team per day, which equates to 52,800m^2 per team per year. It is expected that the manual clearance teams will clear 2.94km^2 plus 10% additional clearance through to 2026 to account for newly identified tasks and the impacts of other unforeseen circumstances.[58] Mechanical clearance teams cleared 3,500m^2 each per day for 200 days a year during a recent commercial contract deploying a MineWolf 370. It is expected that mechanical clearance teams will clear 2,000m^2 per day during the period of the extension request.[59] They are projected to clear 46 tasks totalling 2.41km^2 in total plus 10% area as a margin of safety.[60]

In 2020, UNMAS reported that South Sudan increased its use of dual-detection systems that combine ground-penetrating radar and metal-detection technologies. South Sudan also reportedly conducted research into more efficient clearance of mined roads.[61]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of just over 5.63km^2 of anti-personnel mine contaminated area was released through survey and clearance in 2020. Of this, 4.88km^2 was cancelled through non-technical survey, 0.05km^2 was reduced through technical survey, and 0.7km^2 was cleared.

SURVEY IN 2020

In 2020, a total of 4.84km^2 was cancelled though non-technical survey activities in 2020 (see Table 4).[62] This is a 73% decrease in output from the 18.14km^2 cancelled in 2019.[63] 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.[64]

Reduction through technical survey rose from 19,946m^2 in 2019 to 48,140m^2 in 2020 (see Table 5).[65]

CLEARANCE IN 2020

A total of just over 0.7km^2 was cleared in 2020 with the destruction of 231 anti-personnel mines (see Table 6).[66] This is a 29% decrease from the just over 1km^2 that was cleared in 2019 when 405 anti-personnel mines were found and destroyed.[67] Clearance activities were suspended from April to November 2020 due to the COVID-19 outbreak reducing the demining period in 2020 to just five months.[68]

Table 4: Cancellation through non-technical survey in 2020[69]

State	Operator	Area cancelled (m²)
Central Equatoria	G4S	6,000
Eastern Equatoria	G4S	400
Jonglei	TDI	133,207
Northern Bahr El Ghazal	UNMAS	0
Upper Nile	G4S	4,700,000
Total		**4,839,607**

Table 5: Reduction through technical survey in 2020[70]

State	Operator	Area reduced (m²)
Central Equatoria	G4S	18,344
Eastern Equatoria	G4S	3,671
Eastern Equatoria	MAG	4,229
Northern Bahr El Ghazal	TDI	21,896
Total		**48,140**

Table 6: Mine clearance in 2020[71]

State	Operator	Area cleared (m²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Central Equatoria	G4S	203,090	98	0	15
Central Equatoria	MAG	155,419	67	2	62
Eastern Equatoria	G4S	216,962	41	0	80
Eastern Equatoria	MAG	97,744	22	0	125
Northern Bahr El Ghazal	TDI	34,979	3	0	2
Totals		**708,194**	**231**	**2**	**284**

AP = Anti-personnel AV = Anti-vehicle

In addition, 12 anti-personnel mines were destroyed by G4S and another by MAG during EOD spot tasks in 2020.[72]

UNMAS reported that in 2020 one area of 2,530m² was cleared with no mines found.[73]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SOUTH SUDAN: 9 JULY 2011

↓

ORIGINAL ARTICLE 5 DEADLINE: 9 JULY 2021

↓

FIRST EXTENSION REQUEST DEADLINE (5-YEARS): 9 JULY 2026

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC, 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 struggle to meet this 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 the banditry that is prevalent in areas that lack rule of law, has persistently inhibited the deployment of mine clearance teams and has been an obstacle to a countrywide survey.[74] In 2020, there were outbreaks of fighting across the country, but the impact was most severe in Jonglei and across Greater Equatoria, which prevented clearance teams from deploying to known tasks.[75]

The Commission on Human Rights in South Sudan reported in February 2021 that while there had been a reduction in hostilities at the national level there had been a massive escalation in violence locally which threatens to spiral out of control across several regions in the country.[76] Clearance output was further impacted in 2021 when all demining operations were suspended for security reasons in April in four key areas across Greater Equatoria.[77]

South Sudan has also been affected by the COVID-19 outbreak, which led the government to impose severe restrictions on travel, both domestic and international. The demining programme was suspended from April 2020 for three months. This reduction in the demining period is particularly significant for South Sudan as during the four-month rainy season demining operations cannot take place. This meant that only five months of 2020 were operational.[78] It is unclear what the effects of the COVID-19 pandemic will be in 2021 and whether South Sudan will need to implement new restrictions. A partial lockdown was introduced from February to April, but this did not affect clearance operations.[79] There are also concerns that funding for mine action in South Sudan may be reduced as a result of the pandemic as funds are diverted to COVID-19 relief efforts both within donor countries and abroad.[80]

Since the database review and re-survey began in 2018, South Sudan has cancelled more than 73km² and now has the most accurate assessment so far of the extent of its anti-personnel mine contamination and the clearance required to achieve completion. Total land release from 2019 to 2020 fell by more than 70%, with demining operations impacted by COVID-19 restrictions and continued insecurity. There was also a large drop in cancellation through non-technical survey output which is expected as there are fewer errant data on the national database with an increasing proportion of areas recorded actually containing contamination. South Sudan plans to address all contamination (i.e. including anti-vehicle mines, on roads, from CMR, and other UXO) by 2026. As at May 2021, mine contamination was estimated at 11.4km² from a total contaminated area of 18.3km².[81]

Currently it looks unlikely that South Sudan will meet its Article 5 deadline of July 2026. While there have been some positive developments that are in line with the commitments set out in the extension request, such as an increase in the number of 15-lane demining teams deployed, the implementation of land release targets is reliant on access to contaminated areas. There are also major assumptions

and risk factors in the extension request: that few additional minefields are recorded; that the largest recorded hazardous areas are cancelled, or drastically reduced, through re-survey; that one deminer will clear on average 20m^2 per day; that the reconfigured demining teams will clear 300m^2 per day; and that mechanical clearance teams will clear 2,000m^2 per day. Furthermore, the methodology previously used to clear roads was flawed with several mines discovered on roads that had been declared safe and resulting in the need for re-clearance. This has diverted resources from clearance of anti-personnel mines.[82]

Table 7: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0.71
2019	1.00
2018	2.08
2017	1.71
2016	2.65
Total	**8.15**

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

UNMAS reported it has been working with the NMAA to develop plans for a national capacity that will be responsible for clearing residual contamination.[83] As at April 2021, funding had been secured for a pilot project to develop the EOD response capacity within the NMAA, national police, and partner organisations to manage residual contamination.[84]

1 Article 7 Report (covering 2020), pp. 1–2; and email from Richard Boulter, Senior Programme Manager, UNMAS, 11 April 2021.

2 Article 7 Report (covering 2019), Form 4.

3 Revised Article 5 extension request, p. 11.

4 Article 7 Report (covering 2020), p. 2.

5 Email from Richard Boulter, UNMAS, 11 April 2021.

6 Article 7 Report (covering 2020), p. 3.

7 Revised 2020 Article 5 deadline Extension Request, p. 52.

8 Article 7 Report (covering 2020), p. 4.

9 Emails from Brendan Ramshaw, Operations Manager, Danish Church Aid (DCA), 22 April 2021; and Lisa Mueller-Dormann, Programme Officer, MAG, 9 May 2021.

10 Article 7 Report (covering 2020), pp. 1–2; and email from Richard Boulter, UNMAS, 11 April 2021.

11 Email from Richard Boulter, UNMAS, 11 April 2021.

12 "South Sudan De-Mining Authority", undated, at: http://bit.ly/2Y5Eb4o.

13 Email from Ayaka Amano, UNMAS, 2 May 2019; Article 7 Report (for 2020), p. 1.

14 UNMAS, "Mine Action Portfolio 2019".

15 Interview with Richard Boulter, UNMAS at the NDM-UN23 in Geneva, 14 February 2020; and email, 30 May 2019; and emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.

16 Ibid.

17 Email from Richard Boulter, UNMAS, 11 April 2021.

18 Email from Lisa Mueller-Dormann, MAG, 9 May 2021.

19 Ibid.

20 UNMAS, "Mine Action Portfolio 2019".

21 Email from Richard Boulter, UNMAS, 11 April 2021.

22 Article 7 Report (covering 2020), Form I.

23 Revised 2020 Article 5 deadline extension request, p. 75.

24 UNMAS, "Mine Action Portfolio 2019", pp. 20–21; and email from Richard Boulter, UNMAS, 11 April 2021.

25 2020 Revised Article 5 deadline Extension Request, pp. 20–21.

26 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.

27 Email from Ayaka Amano, UNMAS, 2 May 2019.

28 Ibid.

29 Ibid.

30 Ibid.

31 Email from Richard Boulter, UNMAS, 8 July 2020.

32 UNMAS "Mine Action Portfolio 2019".

33 Email from Richard Boulter, UNMAS, 11 April 2021.

34 Email from Ayaka Amano, UNMAS, 2 May 2019.

35 Email from Richard Boulter, UNMAS, 11 June 2021.

36 Email from Richard Boulter, UNMAS, 11 April 2021.

37 Email from Lisa Mueller-Dormann, MAG, 9 May 2021.

38 Email from Brendan Ramshaw, DCA, 22 April 2021.

39 Email from Ayaka Amano, UNMAS, 2 May 2019; and 2020 Article 5 deadline Extension Request, p. 9.

40 Email from Lisa Mueller-Dormann, MAG, 9 May 2021.

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 "South Sudan – Achieving Article Five compliance, and Delivering a Long-Term Solution", NDM-UN23, 12 February 2020.

44 Email from Richard Boulter, UNMAS, 11 April 2021.

45 2020 Revised Article 5 deadline extension request, pp. 72–74.

46 2020 Ibid., pp. 55–65.

47 Article 7 Report (covering 2019), Form 4.

48 2020 Article 5 deadline Extension Request, p. 64.

49 Article 7 Report (covering 2019), Form 4.

50 Email from Richard Boulter, UNMAS, 11 April 2021; and Article 7 Report (covering 2020), p. 5.

51 Email from Ayaka Amano, UNMAS, 2 May 2019.

52 Email from Richard Boulter, UNMAS, 11 April 2021.

53 Ibid.

54 Ibid. The two G4S MTTs were contracted until June 2020 and then from July 2020 the eight G4S MTTs were deployed. Three of the mechanical assets (one from MAG and two from G4S) were only contracted until June 2020. TDI's mechanical assets were contracted to start in November.

55 Email from Lisa Mueller-Dormann, MAG, 5 August 2021.

56 Revised Article 5 deadline extension request, p. 7.

57 Email from Richard Boulter, UNMAS, 11 April 2021.

58 Revised Article 5 deadline extension request, pp. 72–73.

59 Email from Richard Boulter, UNMAS, 26 August 2020.

60 2020 Article 5 deadline Extension Request, p. 63.

61 Email from Richard Boulter, UNMAS, 11 April 2021.

62 Article 7 Report (covering 2020), p. 12.

63 Article 7 Report (covering 2019), Form 4; and emails from Richard Boulter, UNMAS, 8 July 2020; and Katie Shaw, MAG, 29 June 2020.

64 Presentation by Richard Boulter, UNMAS, "South Sudan – Achieving Article Five compliance, and Delivering a Long-Term Solution", NDM-UN23, 12 February 2020.

65 Emails from Richard Boulter, UNMAS, 11 April 2021 and Lisa Mueller-Dormann, MAG, 9 May 2021; Article 7 Report (covering 2019), Form 4; and emails from Richard Boulter, UNMAS, 22 July 2019; and Katie Shaw, MAG, 19 July 2019.

66 Article 7 Report (covering 2020), p. 12; and email from Richard Boulter, UNMAS, 11 April 2021.

67 Article 7 Report (covering 2019), Form 4; and emails from Richard Boulter, UNMAS, 22 July 2019; and Katie Shaw, MAG, 19 July 2019.

68 Email from Richard Boulter, UNMAS, 11 April 2021.

69 Article 7 Report (covering 2020), p. 12; and email from Richard Boulter, UNMAS, 11 April 2021.

70 Emails from Richard Boulter, UNMAS, 11 April 2021; and Lisa Mueller-Dormann, MAG, 9 May 2021. In South Sudan's Article 7 report covering 2020 technical survey output is reported as 11,564m^2.

71 Article 7 Report (covering 2020), p. 12; and emails from Richard Boulter, UNMAS, 11 April 2021; and Lisa Mueller-Dormann, MAG, 9 May 2021.

72 Emails from Richard Boulter, UNMAS, 11 April 2021; and Lisa Mueller-Dormann, MAG, 9 May 2021.

73 Email from Richard Boulter, UNMAS, 11 April 2021.

74 2020 Revised Article 5 deadline Extension Request, p. 16.

75 Email from Richard Boulter, UNMAS, 11 April 2021.

76 UNHCR, "Despite renewed political commitment, staggering levels of violence continued across South Sudan for the second successive year, UN experts note", 19 February 2021, at: https://bit.ly/3yU0eyx

77 Article 7 Report (covering 2020), p. 4-5.

78 Ibid.

79 Email from Richard Boulter, UNMAS, 11 April 2021.

80 Email from Lisa Mueller-Dormann, MAG, 9 May 2021.

81 UNMAS, "South Sudan - IMSMA Monthly Report", May 2021, at: https://bit.ly/3gQ9V9T.

82 2020 Revised Article 5 deadline Extension Request, pp. 52–54.

83 Emails from Richard Boulter, UNMAS, 22 July 2019 and 8 July 2020.

84 Email from Richard Boulter, UNMAS, 11 April 2021.

SRI LANKA

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 JUNE 2028
ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

10KM²

AP MINE CLEARANCE IN 2020

4.59KM²

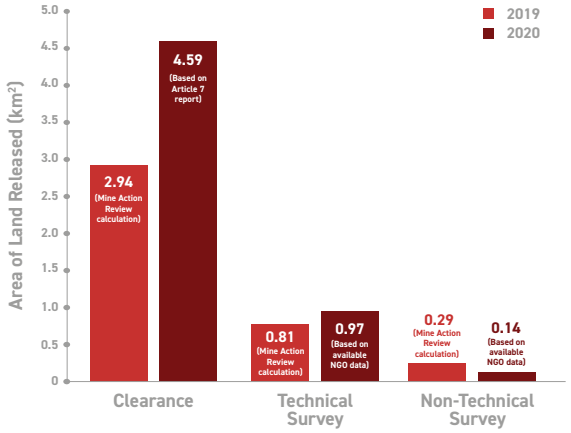
(BASED ON ARTICLE 7 REPORT)

AP MINES DESTROYED IN 2020

43,157

(BASED ON ARTICLE 7 REPORT)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Sri Lanka had hoped to complete mine clearance by the end of 2020, an overly ambitious target which was contingent on securing additional funding and increasing demining capacity. However, while demining capacity did steadily increase during 2019 and into 2020, it was not sufficient to meet the 2020 completion target.

Furthermore, while a significant amount of mined area was cleared in 2020, new, previously undiscovered contamination continues to be discovered. Additional survey is therefore needed to ensure that Sri Lanka has made every effort to identify all remaining mined areas and address them in its planning for fulfilment of Article 5 of the Anti-Personnel Mine Ban Convention (APMBC).

RECOMMENDATIONS FOR ACTION

- **The National Mine Action Centre (NMAC) should conduct survey/re-survey in mine-contaminated districts to ensure that every effort is made to identify remaining mined areas and include them in its completion strategy.**
- **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 the 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 adopt, without further delay, the revised national mine action standards (NMAS), which were developed with support from the Geneva International Centre for Humanitarian Demining Centre (GICHD) and input from clearance operators in 2018.**
- **The NMAC should elaborate a new National Mine Action Strategy to replace the existing strategy which expired at the end of 2020.**

- **The 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.**
- **Sri Lanka should develop plans for the management of mine contamination found after fulfilment of Article 5 (i.e. residual contamination), including ensuring a sustainable long-term national capacity for survey, clearance, and information management.**
- **Based on clear timelines for completion, the Sri Lankan government should 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.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	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, new, previously unknown mined areas continue to be discovered and additional survey/re-survey is still required to ensure that Sri Lanka has made every effort to identify remaining mine contamination.
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, which increased in 2020, compared to the previous year, and significant contribution from the Armed Forces in the dedicated demining units. The NMAC suffers from frequent leadership changes, which impedes good governance and reduces its effectiveness. Following parliamentary elections in August 2020, the NMAC sits under the Ministry of Rural Home Construction and Building Material Industry Promotion.
GENDER AND DIVERSITY (10% of overall score)	7	8	Following a mid-term review in 2018, Sri Lanka's National Mine Action Strategy 2016–2020 contains a section on gender and diversity as cross-cutting themes for all mine action. It reflects awareness of the cultural context of gendered employment in mine action specific to Sri Lanka, with a focus on women's empowerment. NMAC reported in 2020, that 25% of its employees are female, including 12.5% of managerial level positions. However, none of the Army's Humanitarian Demining Units (HDUs)' s 450 employees in 2020 was a woman.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	A number of efforts are ongoing to help strengthen information management in Sri Lanka's mine action programme. While some progress can be seen, data reporting between operators and the NMAC continued to reflect a number of disparities and inconsistencies, which are also apparent in Article 7 reports. Sri Lanka did report annual clearance output in 2020, but did not report the amount of mined area cancelled through non-technical survey or reduced through technical survey, or the amount of previously unrecorded mined area added to the database during the year.
PLANNING AND TASKING (10% of overall score)	7	8	Sri Lanka's National Mine Action Strategy 2016–2020, which was reviewed in 2018 with the support of the GICHD, elaborates the national planning and tasking criteria, which are centred around resettlement and urgent livelihood priorities for displaced and returning civilians. Elaboration of a new National Mine Action Strategy was hindered by COVID-19 and general elections in Sri Lanka, but was planned to take place in 2021 in collaboration with all relevant stakeholders.
LAND RELEASE SYSTEM (20% of overall score)	7	7	Revisions to Sri Lanka's NMAS in 2017 and in 2018 through an extensive review process with input from operators and support from the GICHD had still to be approved and adopted as at June 2021. Clearance capacity increased significantly in 2020, including with respect to mechanical demining, thanks to increased donor funding.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	7	In its Article 7 report covering 2020, Sri Lanka reported clearance of almost 4.6km^2, an increase on the previous year. However, no information was made available by the national authorities on the number of mined areas cancelled through non-technical survey or reduced through technical survey in 2020, or on the amount of new, previously unrecorded mined area, discovered during 2020, despite reports from operators that this occurred. Until a resurvey (also referred to as a "completion survey") has been conducted to ensure every effort has been made to identify remaining mined area, it is not possible to accurately forecast when Sri Lanka will fulfil its Article 5 commitments.
Average Score	**7.0**	**7.0**	**Overall Programme Performance: GOOD**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Ministry of Rural Home Construction and Building Material Industry Promotion (responsible line ministry following August 2020 Parliamentary elections, which was previously the Ministry of Community Empowerment and Estate Infrastructure Development)
- 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 March 2021, total mined area in Sri Lanka stood at 12.8km^2 across 304 mined areas: of which there was 11.4km^2 across 295 confirmed hazardous areas (CHA) and 1.4km^2 across 9 suspected hazardous areas (SHAs) (see Table 1).[1] Similarly, at the APMBC Intersessional meetings in June 2021, Sri Lanka said there was a total of 13km^2 of mined area remaining.[2] This is a significant reduction in the baseline of mined area compared to the situation at the end of 2019.

But there were inconsistencies in Sri Lanka's reporting of its previous baseline of mined area. In one section of its Article 7 report (covering 2019), Sri Lanka put the remaining hazardous area as at 30 September 2020 at 15.70km^2.[3] Later in the same Article 7 report, however, Sri Lanka variously put the size of remaining mined area (as at July 2020) at 22.2km^2 and 15.97km^2 (as at end-September 2020).[4] An international clearance operator clarified that the 22.2km^2 refers to the area remaining on IMSMA inclusive of clearance conducted on open/ongoing/suspended tasks, and that 15.97km^2 is the area on IMSMA less the total area covered by open/ongoing/suspended tasks.[5]

Sri Lanka was once extensively contaminated by mines and explosive remnants of war (ERW). Most remaining contamination is in the north, the focus of three decades of armed conflict between the government and the Liberation Tigers of Tamil Eelam (LTTE), which ended in May 2009. Much progress in land release has been achieved over the course of the last decade.[6]

Estimates of total contamination have fallen sharply: down from 506km^2 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 42km^2 of mined area and helped provide greater clarity on the extent of remaining contamination.[7] The Northern province is still by far the most affected, as set out in Table 1.[8] However, while significant progress is being made in releasing mined areas through survey and clearance, previously unknown contamination continues to be identified and added to the national database. Contamination is often discovered when communities return, settle, and try to rebuild their livelihoods.[9] In last year's Article 7 report (covering 2019), Sri Lanka reported that a total of nearly 24.5km^2 of newly identified mined area had been added to the database between 2015 and 2020.[10]

Table 1: Mined area (at end March 2021)[11]

Province	District	CHAs	Area (m^2)	SHAs	Area (m^2)	Total SHAs and CHAs	Total area (m^2)
Northern	Jaffna	21	1,021,472	0	0	21	1,021,472
	Kilinochchi	51	3,172,248	0	0	51	3,172,248
	Mannar	85	1,250,712	2	74,165	87	1,324,877
	Mullaitivu	97	4,960,349	5	566,128	102	5,526,477
	Vavuniya	25	629,786	2	713,471	27	1,343,257
Subtotals		**279**	**11,034,567**	**9**	**1,353,764**	**288**	**12,388,331**
Eastern	Batticaloa	1	683	0	0	1	683
	Trincomalee	12	306,351	0	0	12	306,351
Subtotals		**13**	**307,034**	**0**	**0**	**13**	**307,034**
North Central	Anuradhapura	2	89,828	0	0	2	89,828
	Polonnaruwa	1	12,700	0	0	1	12,700
Subtotals		**3**	**102,528**	**0**	**0**	**3**	**102,528**
Totals		**295**	**11,444,129**	**9**	**1,353,764**	**304**	**12,797,893**

The NMAC did not report on the amount of previously unrecorded mine contamination added to Sri Lanka's national information management database in 2020. However, international non-governmental organisations (NGOs) The HALO Trust and Mines Advisory Group (MAG), and national NGO, Delvon Assistance for Social Harmony (DASH), reported identifying a combined total of almost 2.6km^2 of previously unrecorded mined area in 2020.[12] National operator SHARP reported that it did not identify previously unrecorded mined area in 2020.[13]

Further survey/re-survey is still required to ensure that all mined areas have been identified.[14] In Jaffna, where the minefields were laid by the Sri Lankan Army (SLA), the extent of contamination is well understood, with the exception of the remaining military-controlled High Security Zone area.[15] However, 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.[16] Typically, LTTE minelaying was less predictable and more sporadic, added to which, many of the minefields the group laid are in jungle areas, where limited human activity occurs.[17]

Furthermore, additional survey is required due to the relocation of contaminated land for construction. For example, in February 2020 gravel from a quarry in Kilinochchi was delivered to a sports club in Jaffna. While levelling the gravel, workers found landmines and HALO was subsequently called to survey and clear the area.[18]

HALO Trust continues to urge the development of a unified "end state" strategy for the sector.[19] In 2019, the sector began liaising with the NMAC to urge the development of a "completion survey", delivered through a village-by-village assessment, to locate any remaining evidence of contamination, prior to any district being officially declared as cleared. International NGOs (INGOs) consider this essential to accurately identifying the remaining mine contamination and what resources are required to address it, and to inform other key elements of Sri Lanka's completion strategy.[20]

In August 2020, NMAC confirmed it planned to conduct a completion survey in conflict-affected areas together with demining organisations, in order to update its strategy.[21]

The 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.[22]

Most remaining contamination is located in Sri Lanka's five northern districts. Both sides made extensive use of mines, including belts of P4 Mk I and Mk II blast anti-personnel mines laid by the 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.[23] Indian peacekeeping forces also used mines during their presence from July 1987 to January 1990.[24]

The SLA used both anti-personnel and anti-vehicle mines, with all minelaying said to have been recorded[25] and made available to the national mine action programme.[26] 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.[27] Almost all the mines they used were manufactured by the LTTE themselves.[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]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Following the parliamentary elections in August 2020, the NMAC sits under the Ministry of Rural Home Construction and Building Material Industry Promotion, under new leadership personnel.[31] Prior to this the NMAC had sat under the Ministry of Community Empowerment and Estate Infrastructure Development following the November 2019 presidential election;[32] and prior to that under the Ministry of National Policies, Economic Affairs, Resettlement, Rehabilitation, Northern Development, Vocational Training, Skills Development, and Youth Affairs. The 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.[33]

The NMAC suffers from frequent leadership changes, including under which ministry within the Sri Lankan government the Centre sits, while the Director of the NMAC is a political appointee by the secretary of the ministry in question. Lack of consistent leadership can impede management of the mine action centre and reduce its effectiveness. In the last six years, there are thought to have been four different ministerial secretaries/directors of the NMAC. This latest change in 2020 only adds to confusion and impedes efficiency.

Clearance operations are coordinated, tasked, and quality managed by a Regional Mine Action Office (RMAO) in Kilinochchi, working in consultation with District Steering Committees for Mine Action. The Committees are chaired by government agents heading district authorities.[34] NMAC and RMAO also suffer from the impact of high staff turnover, following national elections and also as military personnel are seconded and generally rotate fairly quickly.[35]

In 2021, Sri Lanka committed US$2 million towards coordination and monitoring the national mine action programme and the SLA HDU mine clearance operations.[36] This is a significant increase on the previous year, when Sri Lanka reported contributed 1.5 million Sri Lankan rupees (approx. US$8,000) towards the NMAC and 149.5 million Sri Lankan rupees (approx. US$800,000) towards survey and clearance of mined areas in 2019.[37]

Sri Lanka estimated that the annual funding requirement of its national mine action programme is approx. US$20 million to sustain its operations at the existing level, including

priority setting, the information management system, QA/QC, coordination with demining organisations and cooperation with partners, and establishing policy and standards.[38]

Sri Lanka said previously that it intended to provide a detailed project proposal for the donor community, outlining its funding needs and the predicted results for implementation of Article 5.[39]

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.[40]

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.[41] However, since the NGO secretariat (responsible for issuing visas to NGO personnel) was moved under the Ministry of Defence following the appointment of the current government, the constant review of the application process for international staff is reported to have become extremely cumbersome.[42]

HALO Trust continued to provide capacity development support to NMAC in 2020, as part of its support rolling out the predictions information management tool.[43]

NMAC and the five operators (DASH, HALO Trust, MAG, Skavita Humanitarian Assistance and Relief Project (SHARP), and the SLA) maintained a positive relationship throughout 2020. This was achieved despite a challenging year due to COVID-19, government offices having to close for large portions of the year, and national elections and subsequent line ministry changes. 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.[44] In 2020, the GICHD supported coordination efforts, chairing a coordination meeting with NMAC and operators in July 2020.[45]

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 revised 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. The strategy pledges to ensure that all mine action activities, from survey and clearance to victim assistance, are conducted in a targeted manner to ensure the equal participation of all age and gender groups, and that all data collected is disaggregated by sex and age. 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.[46] In 2019, the GICHD carried out a study examining the socio-economic impact of the employment of female deminers. The key findings of the study were published in 2020.[47]

NMAC reported in 2020, that 25% of its employees are female, including 12.5% of managerial level positions.[48] However, none of the SLA HDU's 450 employees was a woman.[49]

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.[50]

DASH considers gender equality and employment of women important to its programme. As at July 2021, 24% of DASH's total employees were female, with women holding 22% of managerial/supervisory level positions and 24% of operations positions.[51]

SHARP employs a total of 14 women, which represents 13% of its workforce. Three women at SHARP hold managerial/supervisory positions and 11 women hold operations positions.[52]

International operators The HALO Trust and MAG confirmed that each organisation has 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.[53] Both organisations reported increasing efforts to encourage women to apply for operational, as well as managerial positions, and positive trends in the increasing number of women employed in their respective programmes as a result.[54]

The HALO Trust reported that as at May 2021, 40% of its total staff in Sri Lanka were women. This included 43% of all operations staff and 28% of managerial/supervisory level positions.[55] 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 had dependents at home were 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.[56]

MAG reported that as at April 2021, 22% of its total staff in Sri Lanka were female, including 22% of operational staff and 13% of managerial/supervisory positions.[57] MAG continues to consider how more female staff could be recruited. Following the mitigation measures introduced in response to COVID-19 pandemic in Sri Lanka, MAG shifted to a non-camping approach in June 2020 and launched a specific recruitment

campaign for female deminers, which led to a 20% increase of female staff in operations.[58]

MAG stated that overcoming barriers which inhibited participation by women, girls, people with disabilities, ethnic minorities, and other marginalised groups was an essential focus for its programme operations in order to ensure that programme delivery is inclusive, both in terms of internal staff composition and external programme outreach. As such, it reported that internal training and awareness-raising ensure that staff working with communities recognise the importance of gender and diversity and understand tools and approaches to enable inclusive participation.[59] MAG has been assessing the need to establish a community reporting mechanism, which it planned to roll out in July 2020.[60]

COVID-19 caused a slight delay in the roll-out of the community reporting mechanism, but as at April 2021, an external consultant had trained the Community Liaison team, who in turn carried out several community awareness sessions and had distributed MAG's hotline number for feedback and complaints. Furthermore, MAG was in the process of liaising with local government officials to set up complaint and feedback boxes and to train community focal points.[61]

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.[62] Since that time, operators have reported that significant efforts have been exerted by all stakeholders to correct erroneous data entered into the IMSMA database and to update it on the basis of re-survey, leading to a more accurate representation of remaining contamination.[63] A transition to upgrade to the use of IMSMA Core software with assistance from the GICHD had been planned for 2020, but was delayed due to staff changes at NMAC[64] and the impact of the COVID-19 pandemic.[65] The IMSMA installation is now planned for 2022.[66] 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 the NMAC and RMAO, as military personnel are seconded and generally rotate fairly quickly.[67]

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 has offered support to NMAC to make the required minor changes to the database.[68] 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 IDP resettlement and return of land to productive use as quickly as possible, but also has the benefit of helping improve progress monitoring in IMSMA.[69]

One of the objectives of Sri Lanka's National Mine Action Strategy is that the Sri Lanka's mine action sector "can access good quality information for its strategic and operational decision-making.[70]

The HALO Trust reported it was submitting reports every two weeks to NMAC and that a review of IMSMA data was usually held on a quarterly basis.[71] HALO Trust's predictions tool is designed to help assess when clearance operators are likely to complete clearance and to analyse operator capacities in order to inform decision making regarding task reallocation, completion strategy, and demobilisation. In 2020, the tool was handed over to the NMAC and shared with other operators. HALO conducted two group training sessions and one-to-one training sessions with each operator to set up the staging areas to link the tool to IMSMA. HALO remains 'on call' to support the sector with regards to the tool, as and when queries arise and to support new NMAC personnel on how to make best use of the tool.[72]

While NMAC officers have been trained by GICHD to enter data into IMSMA, and also trained by HALO in 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 the NMAC to generate reports much easier and will allow them more time to focus on the quality of the data.[73]

During 2019, MAG began rolling out its new ESRI-based global operational management information system (OMIS) in Sri Lanka. The system and processes were put in place to update information and support tracking of land release and community liaison activities conducted by MAG staff in real time. Following planned training of staff in July 2020, the OMIS system was due to become operational in August 2020.[74] It was subsequently postponed to August 2021 due to the COVID-19 related restrictions preventing required travel for training and implementation.[75]

PLANNING AND TASKING

NMAC's current strategy was developed before Sri Lanka acceded to the APMBC in 2017. At the request of the NMAC, Sri Lanka's National Mine Action Strategy for 2016–20 was reviewed in April 2018 in a multi-stakeholder workshop facilitated by the GICHD, and in consultation with operators and the SLA. The reviewed strategy, which was formally approved by the government in March 2019, is guided by the vision of Sri Lanka to become "set 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".

The strategic vision is based around the following objectives:

- The remaining mine/ERW problem is addressed using the most appropriate methodologies and tools.
- Mine/ERW safe behaviour among women, girls, boys and men is promoted.
- The needs of mine/ERW victims are determined and met and victims are integrated into society.
- Sri Lanka complies with its international convention obligations.
- Long-term residual contamination is effectively managed with appropriate and sustainable national capacities.
- Sri Lanka mine action sector can access good quality information for its strategic and operational decision-making.[76]

The initial strategy set an initial target of the release of 6.5km^2 of contamination by clearance and technical survey per year.[77] This target increased to 9km^2 released through clearance and technical survey per year in the revised version of the strategy.[78] The revised strategy states 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".[79] However, according to Sri Lanka, 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 unrecorded mined areas following an increase in livelihood activities of those resettled.[80] The COVID-19 pandemic has also raised additional obstacles. The vision of the strategy has therefore not been achieved and a strategy beyond 2020 was being elaborated in 2021.[81]

GICHD support for the development of the new national mine action strategy has now been twice postponed, first due to the ministerial reshuffle following the November 2019 election and in the Spring of 2020 owing to the COVID-19 pandemic. GICHD remains ready to support the development of the new strategy,[82] which was now planned to take place in the course of 2021, in collaboration with international operators and the mine action sector in Sri Lanka.[83] The NMAC also develops annual work plans for survey and clearance.[84]

International operators reported that ongoing talks and collaborative discussions have ensured progress is being made towards revising the national strategy, with respect to task reallocation, a completion survey, demobilisation of demining personnel, and management of residual risk remaining the focus points of all discussions. Operators remained fully engaged in the strategy process and were regularly consulted by the national authorities on sector issues.[85]

Sri Lanka's mine action programme has a well-developed prioritisation system, outlined in NMAC's existing national mine action strategy. 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.[86] According to the 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.[87]

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, as at July 2021, the expected revised version of the NMAS had yet to be approved and adopted, and the previous version remained in place. In August 2020, the 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).[88] No updates were made to the NMAS in 2020.[89]

OPERATORS AND OPERATIONAL TOOLS

In 2020, demining operations continued to be conducted by the SLA; national NGOs, DASH and SHARP; and INGOs, The HALO Trust and MAG.

Table 2: Operational clearance capacities deployed in 2020[90]

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
DASH	13	278	0	0	DASH increased its clearance capacity by one team, from February 2020. 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 1 Team Leader, 3 Section Leaders, 2 Paramedics, and 21–24 Deminers.
HALO Trust	71	537	0	10 front loaders, 12 excavators, 2 JCBs, 1 Beach Tech sand cleaner, 1 PrimeTech tiller machine, and 4 tractors with various attachments.	Based on the average annual number of clearance teams and deminers in 2020. Mechanical demining capacity increased significantly in 2020.
MAG	45	528	0	0	Mine Action Teams (MATs) also conduct technical survey as part of the standard land release process.
SHARP	4	88	0	0	
SLA HDU	8	320	8	13	Based on information reported to Mine Action Review by the NMAC in 2020.
Partial totals	**141**	**Approx. 1,751**	**8**		

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

DASH increased its manual clearance capacity by one team in February 2020, bringing the total number of teams to 13. DASH does not receive funding from the Sri Lankan government and is entirely reliant on international donors. It planned to form an additional survey team to help contribute to national efforts for a planned completion survey.[91]

HALO's clearance capacity increased in 2020, in particular with respect to mechanical clearance capacity which increased significantly throughout the year. In 2019, the total number of staff in HALO's Sri Lanka programme peaked at 934. This then increased to 1,062 by 2020, due to additional funding. As at April 2021 it stood at 1,217 and was expected to further increase to 1,350 staff during the course of 2021.[92]

In 2020, MAG increased the number of clearance teams and recruited the shortfall of approximately 250 staff to fully deploy the teams. MAG didn't plan any further expansion in 2021.[93]

SHARP's capacity in 2020 was consistent with the previous year, but it planned to increase clearance capacity by two teams and add an additional survey section in 2021.[94]

With regards to survey capacity, the SLA HDU deployed four non-technical survey teams totalling twenty personnel. Technical survey personnel are deminers and are included as part of the clearance capacity summarised in Table 2.[95] DASH deployed two non-technical survey teams in 2020, totalling four personnel, and thirteen technical-survey teams, totalling up to 24 personnel. Technical survey personnel also conduct clearance.[96] The HALO Trust deployed three non-technical survey teams in 2020, totalling nine personnel. Technical survey personnel are deminers and included in HALO's clearance capacity in Table 2.[97] MAG deployed two non-technical survey teams in 2020, totalling six personnel.[98] SHARP deployed one technical survey section in 2020, totalling 10 personnel.[99]

DEMINER SAFETY

The HALO Trust reported one demining accident in 2020, involving a P4-MK1 anti-personnel mine during clearance. The accident resulted in minor injuries to one casualty, who made a full recovery. The accident was fully investigated, with involvement from the NMAC, and all operators and donors were informed, and the accident report shared.[100]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

According to Sri Lanka's Article 7 report covering 2020, a total of 4.59km² of mined area was cleared in 2020, in addition to 2.09km² of battle area clearance (BAC). In total, during the mine clearance and BAC operations in 2020, 43,157 anti-personnel mines, 45 anti-vehicle mines, and 5,430 items of UXO were destroyed (see Table 5).[101]

Sri Lanka did not, however, report on the total amount of mined area cancelled through non-technical survey or reduced through technical survey, nor the amount of previously unrecorded mined area discovered in 2020. DASH, The HALO Trust, MAG, and SHARP reported collectively cancelling 0.14km² through non-technical survey in 2020 and reducing 0.97km² through technical survey. DASH, HALO, and MAG also reported identifying a combined total of nearly 2.6km² of previously unrecorded mined area in 2020. No data had been made available on the amount of mined area cancelled or reduced by SHARP or the SLA HDUs.

SURVEY IN 2020

Sri Lanka did not report the annual amount cancelled through non-technical survey or reduced through technical survey in 2020. It also did not report the amount of previously unrecorded mined area added to Sri Lanka's database in 2020.

NGOs, DASH, the HALO Trust, MAG, and SHARP reported to Mine Action Review, cancelling through non-technical survey a combined total of nearly 0.14km² (see Table 3) and reducing through technical survey a combined total of more than 0.97km² (see Table 4).[102]

DASH, HALO, and MAG also reported identifying a combined total of nearly 2.6km² of previously unrecorded mined area in 2020. Of this, DASH reported identifying nearly 0.2km² of previously unrecorded mined area across 10 CHAs in Kilinochchi and Mullaitivu districts in 2020.[103] HALO reported identifying nearly 0.8km² of previously unrecorded mined area across 30 CHAs and over 0.1km² across 3 SHAs in Kilinochchi, Jaffna, and Mullaitivu districts in 2020, slightly more than the previous year.[104] MAG reported that it found an additional 1.5km² of previously unrecorded mined area across 121 CHAs in 2020,[105] an increase on the 1.1km² found in 2019.[106]

Table 3: Cancellation through non-technical survey by DASH, HALO, and MAG in 2020 (based on operator data)[107]

District	Operator	Area cancelled (m²)
Jaffna	DASH	9,693
Kilinochchi	DASH	13,417
Kilinochchi	HALO Trust	76,157
Mannar	MAG	9,945
Mullaitivu	DASH	21,568
Mullaitivu	MAG	962
Trincomalee	MAG	4,956
Vavuniya	MAG	1,415
Total		**138,113**

Table 4: Reduction through technical survey by DASH, HALO Trust, and MAG in 2020 (based on operator data)[108]

District	Operator	Area reduced (m²)
Jaffna	DASH	12,636
Jaffna	HALO Trust	2,471
Kilinochchi	DASH	65,752
Kilinochchi	HALO Trust	8,164
Kilinochchi	SHARP	2,930
Mannar	MAG	119,180
	DASH	269,744
Mullaitivu	HALO Trust	48,982
	MAG	15,775
Trincomalee	MAG	9,343
Vavuniya	MAG	416,301
Total		**971,278**

CLEARANCE IN 2020

According to Sri Lanka's Article 7 report covering 2020, a total of nearly 4.6km^2 of mined area was cleared in 2020. In total, during mine clearance and BAC in 2020, 43,157 anti-personnel mines, 45 anti-vehicle mines, and 5,430 items of UXO were destroying during the year (see Table 5).[109]

This is a huge increase in annual clearance compared to 2019, when NMAC reported to Mine Action Review clearance of more than 1.2km^2 in 2019, with the destruction of 9,000 anti-personnel mines and 5 anti-vehicle mines.[110] However, the 2019 clearance data excluded national operator, SHARP, which was not reported by NMAC. Furthermore, INGOs, HALO Trust and MAG alone reported a clearing a combined total of nearly 2.46km^2 of mined area in 2019, with a total of 13,820 anti-personnel mines, and 37 anti-vehicle mines destroyed – significantly more than reported by NMAC.[111] This was most likely due to a number of reasons, including a database issue that currently prevents NMAC from reporting release of partially cleared polygons; and NMAC appearing to only report tasks completed in 2019, whereas operator data includes all clearance that was conducted in 2019.[112]

All anti-personnel mines were 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.[113]

Despite the impact of the COVID-19 lockdown on operations in 2020, the total amount of mined area released by DASH during the year, was an increase on 2019. DASH cleared 593,056m^2 in 2020, compared to 545,905m^2 in 2019; reduced 348,132m^2 through technical survey in 2020, compared to 241,851m^2 in 2019; and cancelled 44,678m^2 through non-technical survey in 2020, compared to zero cancellation in 2019. The increase in clearance was due to an extra manual clearance team becoming operational from February 2020. DASH also reported that all its clearance tasks in 2020 were found to contain mines.[114]

HALO's clearance output in 2020 was nearly 20% higher than the previous year, primarily due to the expansion of clearance teams, in particular mechanical teams. Of the 14 mined areas cleared by HALO Trust in 2020, only one (of 12,462m^2 in size) contained no mines. This task was surveyed by another operator and reallocated to HALO by the NMAC, as part of reallocation of tasks. The task is thought to have been the site of a munitions factory, rather than an area where mines were laid.[115]

HALO trialled and developed a new mechanical clearance methodology, the "wet soil bucket", in late 2019. The attachment filters the soil very finely, making clearance more efficient by removing the need for "back blading", where teams of deminers manually rake through excavated soil. HALO deployed seven excavators and one front loader with wet bucket technology. Due to the success of this model, HALO deployed four adapted "potato pickers" in 2020, which are originally intended for the agricultural sector, and which use a similar mechanism to the wet buckets to finely sift soil. Initial results showed an increase of 15% efficiency gains compared to standard mechanical assets.[116]

The total area released by MAG in 2020 was also an increase on the previous year, due to expansion of its clearance capacity. No mines or UXO were found during clearance of three of MAG's tasks in 2020: a 2,168m^2 clearance task in Mannar district, and two clearance tasks in Vavuniya district, one covering 1,168m^2 and the other 1,003m^2, of a total of 64 tasks totalling over 1.62km^2 released. All of MAG's other clearance tasks contained mines.[117]

Table 5: Mine clearance in 2020[118]

District	Mine clearance (m^2)	BAC(m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
Amuradhapura	36,579	0	209	0	4
Batticaloa	12,854	0	506	0	0
Jaffna	161,508	0	9,377	1	160
Kilinochchi	2,073,379	1,181,773	15,440	34	3,401
Mannar	666,121	0	5,685	2	150
Mullaitivu	893,384	917,413	8,697	8	725
Polonnaruwa	8,325	0	93	0	0
Trincomalee	71,287	0	226	0	926
Vavuniya	668,052	0	2,924	0	64
Totals	**4,591,489**	**2,099,186**	**43,157**	**45**	**5,430**

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): MEDIUM

Table 6: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	4.59
2019	*2.94
2018	3.46
2017	3.25
2016	2.35
Total	**16.59**

***Mine Action Review calculation**

Under Article 5 of the APMBC, 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 and may even fulfil its Article 5 obligations by the end of 2025, but this depends on how much previously unrecorded mined area continues to be discovered and if Sri Lanka can accurately identify and release all remaining mined area, in line with its treaty obligations, by this date.

Sri Lanka's 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,[119] 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.

According to international operators, despite challenges such as the constitutional crisis, terrorist attacks in 2019, and COVID-19 pandemic in 2020, the Sri Lankan government is still committed to complete mine clearance before 2025, but it needs sustained political and financial support from the international community to achieve the target.[120]

The re-launch of the National Mine Action Strategy in March 2019 and the Government of Sri Lanka's renewed commitment to becoming mine free, has however, attracted new attention from the international donor community and operators reported receiving increased funding.[121] As a result of additional funding, HALO and MAG both increased their clearance capacity in 2020.[122]

HALO Trust was due to complete clearance of all HALO allocated tasks before the end of 2020 with a capacity of 700 staff. In contrast, two other operators had too many tasks allocated to them which would see mine clearance continue for many more years. Considering this mismatch, and HALO's recent increase in capacity to over 1,000 staff, the NMAC allocated additional minefield tasks to HALO and particularly those minefields where the terrain is better suited to mechanical clearance. This additional tasking being added to HALO's overall clearance plan is crucial in helping Sri Lanka fulfil its Article 5 commitment as soon as possible, by ensuring that all operators are working at maximum capacity up to completion.[123]

HALO, in coordination with NMAC and its RMAO, has now cleared the majority of accessible SLA-laid minefields in Jaffna district. While 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.[124] The SLA is currently conducting clearance within the High Security Zone, but it is not known how much mined area remains within the zone.

At the same time, HALO Trust was continuing to focus operations on the Muhamalai minefield, along with other tasks in southern Kilinochchi district, northern Mullaitivu district, and expanding operations in East Mullaitivu district.[125]

Newly identified and previously unrecorded mined areas continue to be discovered. HALO Trust believes that until the end-state/completion survey has been conducted it is not possible to accurately forecast when Sri Lanka will fulfil its Article 5 commitments. A forecasting tool has been developed, which now just requires data from the completion survey and from operators on their anticipated capacity/clearance rates. In the absence of the latter, the tool uses average clearance rates from previous months, adjusting for periods when operations were suspended due to COVID-19.[126]

Providing donors continue current levels of funding for mine clearance and the NMAC allocates minefield tasks proportionally to demining operator capacity, HALO is confident Sri Lanka could be mine free before the end of 2025.[127]

During the last task reallocation meeting in February 2021, a plan for completion of all known minefields registered on IMSMA was put in place to complete by 2023. However, this does not include the planned completion survey and the potential discovery of additional CHAs, nor does it take into account the potential reallocation of a large number of tasks allocated to the Sri Lankan Army. This might extend the completion timeline to 2025.[128]

In agreement with NMAC, in early 2020 MAG introduced a pilot for a district-level "completion survey" with the aim of conducting a final survey of a district to identify any as yet unrecorded areas of mine contamination.[129] It was agreed with NMAC and other operators that the process would include: a desktop assessment, meetings with District Secretariats (DS) and Grama Niladari (GN) authorities, and group interviews with communities at village level to determine whether there is further knowledge of any

remaining hazardous areas (HAs) and/or explosive ordnance. According to MAG, "if any such report is made, standard non-technical survey activities will be conducted, to identify any remaining evidence through key informant interviews and a field visit. If required, new SHAs/CHAs will be then recorded on the IMSMA database and technical survey and clearance operations will be conducted as per normal tasking procedures." According to MAG, upon completion of this process, NMAC would be able to inform GNs, the DS, and Government Administrator (GA) that "all reasonable effort" had been applied to identify and release all mined area.[130] As at April 2021, the NMAC was discussing procedures and processes for the completion survey, to feed into the national strategy review planned for September 2021.[131]

The full impact of COVID-19 on Sri Lanka's Article 5 implementation is not yet known, in particular with regards to the activities of the SLA HDUs. Due to COVID-19, HALO Trust and MAG stopped land release operations in Sri Lanka on 18 March 2020. With the permission of national authorities and with COVID-19 mitigation measures in place and staggered deployment, HALO Trust resumed demining operations on 30 April 2020, with 45% of teams deployed, rising to 100% by mid-May.[132] DASH reported that it lost 37 operational days due to the COVID-19 lockdown, but that it recovered some of the lost productivity through working an extra 30 mins every day following lockdown.[133] SHARP suspended operations from mid-March to mid-April 2020 due to COVID-19, but was able to make up lost work days by readjusting its work programme during the remainder of the year.[134]

MAG recommenced its operations on 23 May 2020, staggering deployment to adhere to physical distancing rules.[135] The HALO Trust reported losing 36 operational days due to COVID-19 overall in 2020. The pandemic also reduced the amount of survey/EOD callouts that would be conducted, due to restricted movements across and within districts.[136] MAG reported that no operations could be conducted during the 6–8 week lockdown, and that it had subsequently adjusted its methodology to meet government restrictions. MAG moved to a non-camping methodology, where staff returned home at the end of each day, rather than camping nearby on a three-week work cycle.[137] The GICHD reported very limited communication from NMAC in 2020 due to COVID-19, and that planned trips were cancelled due to travel restrictions.[138]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Sri Lanka's current Mine Action strategy commits the government of Sri Lanka to ensure that relevant plans are in place to ensure effective management of residual contamination.[139] It sets out that the 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. It also commits 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.[140] According to Sri Lanka's Article 7 report covering 2019, there were approximately 2,500 clearance, survey, and QA staff across the SLA HDU and clearance operators.[141]

On completion of clearance operations, the SLA will be responsible for dealing with residual contamination.[142] 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. The 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, ambulances etc. 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.[143]

Sri Lanka has also highlighted the importance of establishing a suitable demobilisation process for local personnel employed in demining and for SLA HDUs.[144] NMAC has initiated a pilot survey, with the support of MAG, to identify the capacity of deminers currently employed, with a view to develop a demobilisation plan. Based on the findings of the needs assessment survey, NMAC expects to facilitate demining staff to provide relevant livelihood training after completion of the demining.[145]

1 APMBC Article 7 Report (covering 2020), Form 5.
2 Statement of Sri Lanka on clearance, APMBC intersessional meetings (virtual meeting), 22–24 June 2021.
3 Article 7 Report (covering 2019), Form 2.
4 Ibid., Form 5.
5 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 9 September 2021.
6 Emails from Belinda Vause, Programme Manager, HALO Trust, 3 April 2020; Valentina Stivanello, Country Director, MAG, 6 April 2020; and GICHD, 13 May 2020. MAG informed Mine Action Review that the SHAs in Mannar are in fact CHAs, but that they were captured by NMAC as SHAs in IMSMA by mistake.
7 Emails from Belinda Vause, HALO Trust, 3 April 2020; Valentina Stivanello, MAG, 6 April 2020; and GICHD, 13 May 2020.
8 Email from V. Premachanthiran, Deputy Director, National Mine Action Centre (NMAC), 25 August 2020.
9 Emails from Valentina Stivanello, MAG, 6 April 2020 and 19 April 2019; and Article 7 Report (covering 2019), Form 2.
10 Article 7 Report (covering 2019), Form 2.
11 Article 7 Report (covering 2020), Form 5.
12 Emails from Eleanor Porritt, HALO Trust, 2 May 2021; Valentina Stivanello, MAG, 19 April 2021; and Brig. (ret.) Ananda Chandrasiri, Director, DASH, 20 July 2021. Of the total 2.6km^2 of previously unrecorded mined areas identified in 2020, DASH reported identifying nearly 0.2km^2 across 10 CHAs in Kilinochchi and Mullaitivu districts in 2020; HALO reported identifying nearly 0.8km^2 across 30 CHAs and over 0.1km^2 across 3 SHAs in Kilinochchi, Jaffna, and Mullaitivu districts in 2020, slightly more than the previous year; and MAG reported that it recorded, confirmed, and generated 1.5km^2 across 121 CHAs in 2020, also slightly more than the previous year.
13 Email from Lt.-Col. (ret.) Sarath Jayawardhana, Director, Skavita Humanitarian Assistance and Relief Project (SHARP), 9 September 2021.
14 Emails from Belinda Vause, HALO Trust, 3 April 2020; and Valentina Stivanello, MAG, 6 April 2020.
15 Email from Belinda Vause, HALO Trust, 3 April 2020.
16 Email from Belinda Vause, HALO Trust, 3 April 2020; and Statement of Sri Lanka, Fourth APMBC Review Conference, Oslo, 29 November 2020.
17 Email from Belinda Vause, HALO Trust, 3 April 2020.
18 Ibid.
19 Ibid.
20 Emails from Belinda Vause, HALO Trust, 3 April 2020; and Valentina Stivanello, MAG, 6 April 2020.
21 Email from V. Premachanthiran, NMAC, 25 August 2020.
22 Ibid.
23 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.
24 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.
25 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.
26 Article 7 Report (covering 2020), Form 1.
27 Email from Valon Kumnova, HALO Trust, 11 April 2014; and "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6.
28 Article 7 Report (covering 2019), Form 1.
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.
31 Email from Belinda Vause, HALO Trust, 2 September 2020.
32 Email from Belinda Vause, HALO Trust, 3 April 2020.
33 Article 7 Report, submitted in 2019, p. 12.
34 "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 9.
35 Email from GICHD, 13 May 2020.
36 Article 7 Report (covering 2020), Form 5.
37 Email from V. Premachanthiran, NMAC, 25 August 2020.
38 Article 7 Report (covering 2019), Form 5.
39 Ibid.
40 Email from Eleanor Porritt, Programme Manager, HALO Trust, 2 May 2021.
41 Emails from Eleanor Porritt, HALO Trust, 2 May 2021; and Valentina Stivanello, MAG, 19 April 2021.
42 Email from Valentina Stivanello, MAG, 19 April 2021.
43 Email from Eleanor Porritt, HALO Trust, 2 May 2021.
44 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.
45 Email from GICHD, 30 April 2021.
46 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 6.
47 GICHD, "The Socioeconomic Impact of Employing Female Deminers in Sri Lanka", July 2020, available at: http://bit.ly/33aAIGb.
48 Email from V. Premachanthiran, NMAC, 25 August 2020.
49 Ibid.; and Article 7 Report (covering 2019), Form 2.
50 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 6; and Article 7 Report (covering 2020), Form 5.
51 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021.
52 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 9 September 2021.
53 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.
54 Emails from Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July 2019.
55 Email from Eleanor Porritt, HALO Trust, 2 May 2021.
56 Email from Belinda Vause, HALO Trust, 9 August 2019.
57 Email from Valentina Stivanello, MAG, 19 April 2021.
58 Emails from Valentina Stivanello, MAG, 23 June 2020; and Simon Rea, MAG, 3 September 2020.
59 Emails from Beth Lomas, MAG, 26 July 2019; and Valentina Stivanello, MAG, 6 April 2020.
60 Emails from Valentina Stivanello, MAG, 6 April and 23 June 2020.
61 Email from Valentina Stivanello, MAG, 19 April 2021.
62 Email from Alistair Moir, MAG, 8 August 2018.
63 Emails from Bartholomew Digby, HALO Trust, 5 March 2018; Alistair Moir, MAG, 8 August 2018 and 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017.
64 Email from Asa Massleberg, GICHD, 23 June 2020.
65 Email from V. Premachanthiran, NMAC, 25 August 2020.
66 Email from GICHD, 23 July 2021.
67 Email from GICHD, 13 May 2020.
68 Email from Asa Massleberg, GICHD, 23 June 2020.
69 Email from Eleanor Porritt, HALO Trust, 2 May 2021.
70 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 11.
71 Email from Belinda Vause, HALO Trust, 9 August 2019.
72 Email from Eleanor Porritt, HALO Trust, 2 May 2021.
73 Email from Belinda Vause, HALO Trust, 3 April 2020.
74 Email from Valentina Stivanello, MAG, 23 June 2020.
75 Email from Valentina Stivanello, MAG, 19 April 2021.
76 "Sri Lanka National Mine Action Strategy 2016–2020", Revised version, September 2018, p. 11.
77 Ibid., p. 13.
78 Ibid., p. 11.
79 "Sri Lanka National Mine Action Strategy 2016–2020", Revised version, September 2018, p. 4.
80 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.
81 Article 7 Report (covering 2020), Form 2.
82 Email from GICHD, 13 May 2020.
83 Email from Belinda Vause, HALO Trust, 14 July 2020.
84 Email from V. Premachanthiran, NMAC, 25 August 2020.
85 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

86 Email from Belinda Vause, HALO Trust, 3 April 2020.

87 Article 7 Report, submitted in 2019, p. 3.

88 Email from V. Premachanthiran, NMAC, 25 August 2020.

89 Emails from Eleanor Porritt, HALO Trust, 2 May 2021; Valentina Stivanello, MAG, 19 April 2021; and GICHD, 30 April 2021.

90 Emails from V. Premachanthiran, NMAC, 25 August 2020; 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.

91 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021.

92 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

93 Email from Valentina Stivanello, MAG, 19 April 2021.

94 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 9 September 2021.

95 Email from V. Premachanthiran, NMAC, 25 August 2020.

96 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021.

97 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

98 Email from Valentina Stivanello, MAG, 19 April 2021.

99 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 9 September 2021.

100 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

101 APMBC Article 7 Report (covering 2020), Form 5.

102 Emails from Eleanor Porritt, HALO Trust, 2 May 2021; and Valentina Stivanello, MAG, 19 April 2021.

103 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021.

104 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

105 Email from Valentina Stivanello, MAG, 19 April 2021.

106 Email from Valentina Stivanello, MAG, 6 April 2020.

107 Emails from Eleanor Porritt, HALO Trust, 2 May 2021; Valentina Stivanello, MAG, 19 April 2021; and Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021. SHARP reported that it did not cancel any mined area in 2020 (email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 9 September 2021.

108 Ibid.

109 Article 7 Report (covering 2020), Form 5.

110 Email from V. Premachanthiran, NMAC, 25 August 2020.

111 Emails from Belinda Vause, HALO Trust, 3 April 2020; and Valentina Stivanello, MAG, 6 April 2020.

112 Emails from Belinda Vause, HALO Trust, 2 September 2020; and Simon Rea, MAG, 3 September 2020.

113 Email from Valentina Stivanello, MAG, 6 April 2020.

114 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021.

115 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

116 Ibid.

117 Email from Valentina Stivanello, MAG, 19 April 2021.

118 Article 7 Report (covering 2020), Form 5. It appears that there may be discrepancies between the clearance data reported by NMAC and that reported by operators. DASH reported clearing a total of 593,056m^2 of mined area with the destruction of 10,115 anti-personnel mines, 14 anti-vehicle mines, and 562 UXO, in Jaffna, Kilinochchi, and Mullaitivu districts (email from Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021). HALO Trust reported clearing a total of 1,903,622m^2 of mined area with the destruction of 11,272 anti-personnel mines, 16 anti-vehicle mines, and 2,348 UXO, in Jaffna, Kilinochchi, and Mullaitivu districts. HALO also cleared a further 34 anti-personnel mines during EOD spot tasks. In addition, HALO reported destroying a further 94 IEDs during clearance, which due to the clearance methodology (for example mechanical clearance), it was not possible for HALO to identify the method of initiation. Degradation of items, particularly LTTE-laid devices in jungle areas, also contributes to this challenge. (Emails from Eleanor Porritt, HALO Trust, 2 May 2021 and Belinda Vause, 4 September 2021). MAG reported clearing a total of 1,598,775m^2 of mined area with the destruction of 9,592 anti-personnel mines, 2 anti-vehicle mines, and 1,312 UXO, in Mannar, Mullaitivu, Trincomalee, and Vavuniya districts. Of the 9,592 mines destroyed in 2020, two were of an improvised nature (email from Valentina Stivanello, MAG, 19 April 2021). SHARP reported clearing a total of 171,084m^2 of mined area with the destruction of 2,471 anti-personnel mines, 14 anti-vehicle mines, and 758 UXO, in Kilinochchi district (email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 9 September 2021).

119 Email from Belinda Vause, HALO Trust, 9 August 2019.

120 Email from Valentina Stivanello, MAG, 6 April 2020.

121 Emails from V. Premachanthiran, NMAC, 25 August 2020; Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July 2019.

122 Emails from Belinda Vause, HALO Trust, 3 April 2020; and Valentina Stivanello, MAG, 6 April 2020.

123 Emails from Belinda Vause, HALO Trust, 3 April 2020; and V. Premachanthiran, NMAC, 25 August 2020.

124 Emails from Belinda Vause, HALO Trust, 14 July 2020; and Eleanor Porritt, HALO Trust, 2 May 2021.

125 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

126 Email from Belinda Vause, HALO Trust, 18 September 2021.

127 Email from Belinda Vause, HALO Trust, 3 April 2020.

128 Email from Valentina Stivanello, MAG, 19 April 2021.

129 Emails from V. Premachanthiran, NMAC, 25 August 2020; Belinda Vause, HALO Trust, 3 April 2020; and Valentina Stivanello, MAG, 6 April 2020.

130 Email from Simon Rea, MAG, 3 September 2020.

131 Email from Valentina Stivanello, MAG, 18 August 2021.

132 Email from Belinda Vause, HALO Trust, 14 July 2020.

133 Email from Brig. (ret.) Ananda Chandrasiri, DASH, 20 July 2021.

134 Email from Lt.-Col. (ret.) Sarath Jayawardhana, SHARP, 9 September 2021.

135 Email from Valentina Stivanello, MAG, 23 June 2020.

136 Email from Eleanor Porritt, HALO Trust, 2 May 2021.

137 Email from Valentina Stivanello, MAG, 19 April 2021.

138 Email from GICHD, 30 April 2021.

139 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 1.

140 Ibid, p. 17.

141 Article 7 Report (covering 2019), Form 2.

142 Article 7 Report (covering 2020), Form 5.

143 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.

144 Ibid.

145 Article 7 Report (covering 2020), Form 5.

SUDAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 APRIL 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

10KM²

AP MINE CLEARANCE IN 2020

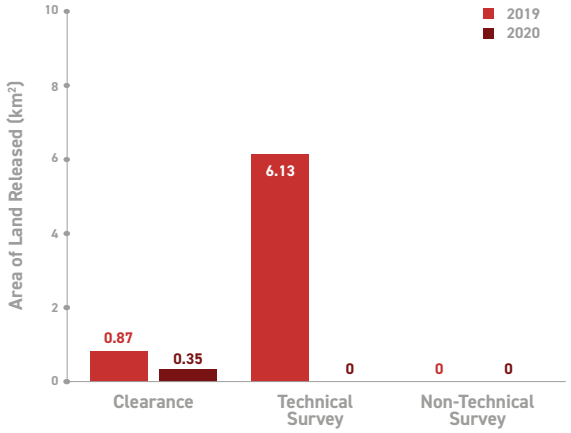
0.35KM²

AP MINES DESTROYED IN 2020

42

(INCLUDING 8 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Sudan's land release output decreased in 2020, with no survey taking place during the year. The security situation continued to be an impediment to operations, although there are signs this may be improving, with access granted to humanitarian agencies to Blue Nile and South Kordofan states during the year. While Sudan initiated a baseline survey in 2019, progress has stalled and it is unlikely that it will be completed by the end of 2021.

RECOMMENDATIONS FOR ACTION

- **Sudan should ensure it only clears land where there is firm evidence of the presence of mines.**
- **Sudan should clarify land release targets and ensure that reported land release and contamination figures are accurate and are disaggregated by contamination type.**
- **Sudan should provide updated work plans as the baseline survey progresses and a better understanding of remaining contamination is secured.**
- **Sudan should endorse the national mine action strategic plan for 2019–23.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	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. The survey continued in early 2020 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	7	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 mine action sub-cluster meetings and a Country Coordination Forum. The government has provided consistent funding for mine action reported at US$2 million per year. Sudan projects that $33 million is required for land release from 2020 to 2023.
GENDER AND DIVERSITY (10% of overall score)	6	6	Gender is said to be mainstreamed in the national mine action strategic plan for 2019–23 and in the national mine action standards, with an emphasis on gender-balanced survey teams and the employment of women. At the same time, Sudan acknowledges difficulties in employing women in operational roles due to local customs and traditions. In 2020, 30% of managerial staff in the NMAC were women, but the corresponding figure for operational roles was only 20%.
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 planned to occur by mid 2021. Sudan submits timely Article 7 reports and provides regular updates on progress in Article 5 implementation at the annual meetings of States Parties, although there are often discrepancies in the data.
PLANNING AND TASKING (10% of overall score)	6	7	A new national mine action strategic plan for 2019–23 has been finalised and, as at May 2021, is still awaiting approval. Sudan has provided updated annual land release targets in its latest Article 7 report, although this has not been disaggregated by type of ordnance. As with previous targets, most land release is projected to come from cancellation through non-technical survey.
LAND RELEASE SYSTEM (20% of overall score)	7	6	Sudan reported that its National Mine Action Standards have now been reviewed and endorsed. Operational capacity increased during 2020 with the introduction of a new international operator although personnel were not deployed until December due to delays caused by COVID-19. A mechanical capacity for road clearance was developed in 2020 with planned deployment in 2021.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	6	There was a large reduction in land release output from 2019 to 2020, although the number of anti-personnel mines destroyed remained stable. No non-technical survey took place in 2018–20 with Sudan citing security and lack of access as major impediments to mine action operations. Following the signing of a preliminary peace deal, the Sudan National Mine Action Centre (NMAC) has been able to deploy teams to facilitate the delivery of humanitarian assistance to Blue Nile state and there were signs access may be improving there.
Average Score	**6.5**	**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
- Friends for Peace and Development Organization (FDPO)
- Global Aid Hand

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2020, Sudan reported a total of 97 areas suspected or confirmed to contain anti-personnel mines, covering a total area of just over 13km^2. According to the Sudanese National Mine Action Centre (NMAC), of this total, 56 areas covering 2.2km^2 are confirmed hazardous areas (CHAs), while a further 41 areas covering almost 10.8km^2 are suspected hazardous areas (SHAs).[1] This is a decrease from the almost 13.3km^2 of total anti-personnel mined area reported for the end of 2019.[2] The total at the end of 2020 is hard to reconcile given that during the year a total of 155,892m^2 of previously unrecorded legacy anti-personnel mine contamination across eleven mined areas was added to the database.[3]

South Kordofan is believed to be the most heavily contaminated of the three affected states, as set out in Table 1.[4] No mines have been reported in Darfur, where the main threat is from explosive remnants of war (ERW).[5] The extent of mine and 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.[6] An additional 42 areas covering nearly 12km^2 are suspected to contain only anti-vehicle mines, as set out in Table 2.[7]

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.[8] 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 which continued until 2016. It is expected that more areas will be found to be contaminated with explosive ordnance including anti-personnel mines. There have been "ad hoc" reports of additional mined and ERW-contaminated areas which have been 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.[9]

NMAC reported that significant survey is required to more accurately determine the actual extent of anti-personnel mine contamination in Sudan.[10] NMAC initiated non-technical survey in November 2019, across Blue Nile, South Kordofan, West Kordofan, and the five federal Darfur states to establish evidence-based, accurate baselines of contamination for all explosive ordnance.[11] NMAC predicts that up to 90% of existing SHAs will be cancelled, based on historical Information Management System for Mine Action (IMSMA) data.[12] Once surveys have been completed, a revised clearance plan will be shared with States Parties to the Anti-Personnel Mine Ban Convention (APMBC).[13]

NMAC had planned to complete all necessary survey by the end of 2021, but insecurity and lack of access have impeded completion as most of the known impacted communities in Blue Nile, South Kordofan, and Jebel Merra in Darfur are still inaccessible.[14] 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.

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). While no mines have been found in Darfur, ERW there include unexploded air-dropped bombs, rockets, artillery and mortar shells, and grenades.[15] According to the United Nations-African Union Mission in Darfur (UNAMID), 81 localities in Darfur are highly affected by ERW, along with 431 localities in the medium-impact category and 84 localities that have low impacts from contamination.[16]

Table 1: Anti-personnel mined area by state (at end 2020)[17]

State	CHAs	Area (m^2)	SHAs	Area (m^2)	Total SHA/CHA	Total area (m^2)
Blue Nile	3	35,766	7	840,889	10	876,655
South Kordofan	53	2,219,623	31	9,972,666	84	12,192,289
Western Kordofan	0	0	3	21,991	3	21,991
Totals	**56**	**2,255,389**	**41**	**10,835,546**	**97**	**13,090,935**

Table 2: Mined area (at end 2020)[18]

Type of contamination	CHAs	Area (m^2)	SHAs	Area (m^2)	Total SHA/CHA	Total area (m^2)
Anti-personnel mines	56	2,255,389	41	10,835,546	97	13,090,935
Anti-vehicle mines	11	219,777	31	11,698,805	42	11,918,582
Totals	**67**	**2,475,166**	**72**	**22,534,351**	**139**	**25,009,517**

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Sudanese National Mine Action Authority (NMAA) and NMAC manage Sudan's mine action programme. Following South Sudan's independence, 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. Sudan passed a Mine Action Bill under Presidential Decree No. 51 of March 2010. The 2010 Mine Action Act comprises 29 articles across four chapters. Chapter four covers Sudan's APMBC obligations, such as clearance of contaminated 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 activities in Sudan in 2015, following an invitation from the Sudanese Government, in an advisory and support capacity, to further enhance the national mine action capacity and support the nation to meet its APMBC obligations.[20] As part of its mandate, UNMAS provides organisational and individual capacity development to NMAC.[21] In 2020, UNMAS supported the IMSMA migration process; delivered training courses in quality management, project management, tasking procedures, and gender and diversity; supported the review and finalisation of national mine action standards (NMAS) and the development of standing operating procedures (SOPs) based on the new NMAS; and supported the establishment of the mine action training centre.[22] In 2020, the Geneva International Centre for Humanitarian Demining (GICHD) also supported the IMSMA database migration process.[23]

As the United Nations Interim Security Force for Abyei (UNISFA) does not have a mandate to conduct mine clearance, 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 through its implementing partners, 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 $10.75 million for its activities in Abyei from 1 July 2020 to 30 June 2021.[24]

In Darfur, under the umbrella of UNAMID, UNMAS works under the name of the Ordnance Disposal Office (ODO) in direct support of UNAMID priorities.[25] The UN Security Council was expected to bring UNAMID to an end by the end of 2021.[26] In 2020, UNMAS deployed four multitask teams to undertake survey and clearance operations in Darfur, to cover the areas outside the scope of the ODO teams while UNAMID started to drawdown. As at April 2021, UNAMID was in the process of drawing down its operations with closure expected to be completed in June. UNMAS Sudan, which had already started non-technical survey operations, will begin explosive ordnance clearance.[27]

In June 2020, the United Nations Integrated Transition Mission in Sudan (UNITAMS) was established with the mandate to support Sudan's democratic transition and help effect a comprehensive peace. Mine action was stipulated in support of a strategic objective on peacebuilding. UNMAS Sudan is closely coordinating with UNITAMS to provide mine action operations in support of the Mission's activities.[28]

In 2020, the Government of Sudan contributed a total of US$2 million to the running costs of NMAC and for demining activities. It has consistently funded the national mine action programme at this level for the past five years.[29] In addition, international donors contributed US$5.2 million through UNMAS to undertake mine action activities. UNMAS reported that, in 2020, a total of $15.8 million would be required to meet mine action needs in the country, including demining in South Kordofan and Blue Nile states and ERW response in Darfur.[30]

Sudan's resource mobilisation strategy aims to increase donations from existing donors, broaden the list of donors, and increase the amount of the government's contribution. This includes identifying new donors, including Gulf States; emerging economies receptive to becoming "donor" governments; and "non-conventional" partners such as philanthropists, private individuals and foundations; and commercial companies and corresponding funding modalities and mechanisms. Sudan has estimated in its 2020–23 work plan that $33.7 million will be required to complete land release. In 2020, Sudan reported that sufficient funding was in place for the year but that if currently inaccessible areas open up the programme would need additional funds for an emergency post-conflict mine action response.[31]

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.[32] In addition, NMAC hold a Country Coordination Forum with all stakeholders twice a year though only one took place in 2020 due to the COVID-19 pandemic.[33]

GENDER AND DIVERSITY

NMAC reported having a gender and diversity policy in place and says that gender is mainstreamed in the national mine action strategic plan for 2019–23 and in the NMAS for explosive ordnance risk education (EORE), survey, clearance, and victim assistance. Under those standards, all survey and community liaison teams are to be gender balanced, and women and children must be duly 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.[34]

Mine action data are disaggregated by sex and age.[35] 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.[36] New reporting tools were added to the system

and new reporting formats were developed for the NGOs to include this information.[37]

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 include all affected groups within a community including ethnic minorities.[38]

NMAC says it always encourages women to apply for employment in the national programme, whether at the office level or in the field. In 2020, 30% of NMAC staff employed at the managerial or supervisory levels were women as were 20% of staff in operational positions.[39]

UNMAS reported that, as at April 2021, around half of the members of non-technical survey teams were women. UNMAS Sudan has twelve staff members, of whom two programme officers are women. In addition, in field roles there is a female operations officer, quality assurance manager, finance manager, EORE manager, and victim assistance manager. The first woman deminer was employed in late 2019, and it is hoped that the number of female deminers will increase in the future.[40] NMAC acknowledged that there are obstacles to hiring women due to "local customs and traditions".[41]

INFORMATION MANAGEMENT AND REPORTING

In 2018, NMAC began upgrading the IMSMA software to the newer New Generation version, with assistance from the GICHD. Significant efforts to correct errors in the database were also undertaken.[42] In 2019, IMSMA training was delivered to the suboffices and operators on the new reporting system and reporting forms.[43] In 2020, GICHD and UNMAS continued to support the information management department within NMAC and it was planned that the data would be migrated to IMSMA Core by the middle of 2021.[44]

The database contains out-of-date information about the situation in the disputed Abyei area.[45] 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 also providing a monthly report to NMAC on activities in Abyei.[46]

Sudan submits timely Article 7 transparency reports and gives regular statements on progress at the meetings of States Parties to the APMBC. In 2020, Sudan submitted an updated work plan for 2020 to 2023, as per the 2018 extension request decision, which contains annual targets for completion although there are some inconsistencies in the total amounts of survey and clearance output projections.[47]

PLANNING AND TASKING

In May 2021, NMAC reported that the national mine action strategic plan for 2019–23 had been finalised but was still awaiting approval.[48] The plan aims to fulfil Sudan's APMBC obligations, and was developed in coordination with the GICHD to replace its previous national strategy for 2016–19.[49] NMAC stated that detailed annual work plans had been developed for each year under the new strategic plan.[50]

Sudan's 2018 extension request contained a detailed work plan with annual survey and clearance projections on a state-by-state basis with a total planned release for all types of ordnance of 224 hazardous areas with a size of 26.5km^2 by 1 April 2023 (see Table 3).

Table 3: Annual land release targets (2017–23)[51]

Year	SHAs	CHAs	Cancelled through NTS (m^2)	Released through TS/clearance (m^2)	Total SHAs/CHAs	Total area (m^2)
2017–18	80	3	3,783,116	420,346	83	4,203,462
2018–19	54	3	11,944,390	1,327,154	57	13,271,544
2019–20	16	2	4,943,930	549,326	18	5,493,256
2020–21	4	16	1,045,828	116,203	20	1,162,031
2021–22	13	7	1,054,315	117,146	20	1,171,461
2022–23	4	22	1,044,614	116,068	26	1,160,682
Totals	**171**	**53**	**23,816,193**	**2,646,243**	**224**	**26,462,436**

NTS = Non-technical survey TS = Technical survey

Sudan has not been meeting these targets but it submitted an updated work plan in 2020 for the period 1 March 2020–31 March 2023, in accordance with the terms of its latest Article 5 extension, with revised estimates of contamination, annual targets for land release, and budgetary requirements. Sudan included updated annual projections of land release through to 2023, although again this was not disaggregated by type of ordnance (see Table 4).

Table 4: Annual land release targets (2019–23)[52]

Year	SHAs	CHAs	Cancelled through NTS (m^2)	Released through TS/clearance (m^2)	Total SHAs/CHAs	Total area (m^2)
2019–20	50	8	5,486,687	147,267	58	5,633,954
2020–21	69	16	10,332,944	147,153	85	10,480,097
2021–22	66	19	7,785,727	1,457,643	85	9,243,370
2022–23	22	8	1,450,916	462,678	30	1,913,594
Totals	**207**	**51**	**25,056,274**	**2,214,741**	**258**	**27,271,015**

NTS = Non-technical survey TS = Technical survey

In its latest Article 7 report, Sudan submitted yet another revised work plan with annual land release projections for all 219 hazardous areas with a total size of 26.4km^2 but again did not disaggregate by type of ordnance.[53] During 2020, Sudan cleared just under 0.22km^2, which surpassed the clearance targets in the extension request and updated work plan, but no cancellation through non-technical survey was achieved, which is projected to account for the vast majority of land release output.

UNMAS reported that all task dossiers relating to survey and clearance are issued in accordance with agreed criteria and prioritisation while working with NMAC on improving planning and tasking processes.[54] A systematic prioritisation system will be 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.[55] This was due to be implemented in the course of 2021.[56] During prioritisation, in addition to taking the affected communities needs into account, all other stakeholders are consulted. NMAC expects the prioritisation process to be more effective once the baseline survey has been completed.[57]

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 have now been endorsed.[58] 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-ODO. The NMAS will be uploaded on the NMAC website and all mine action operators will need to ensure their SOPs comply with the new NMAS.[59]

In 2020, NMAC completed 32 accreditations, 3 re-assessments, and 11 quality assurance visits. NMAC also took part in a training on quality management that was delivered by UNMAS.[60]

OPERATORS AND OPERATIONAL TOOLS

National operators that conducted demining operations in Sudan in 2020 were JASMAR for Human Security (JASMAR), National Units for Mine Action and Development (NUMAD), and Global Aid Hand.[61] In 2020, Sudan contracted two teams from SafeLane Global (SLG) whose planned arrival in March was delayed by the COVID-19 outbreak. Both teams arrived in November and were deployed in December 2020.[62]

Table 5: Operational clearance capacities deployed in 2020[63]

Operator	Manual clearance teams (MCTs)/ Multi-task teams (MTTs)	Total deminers*	Dogs and handlers	Machines
NUMAD	4 MCTs 9 MTTs	36 36	9 dogs and 9 handlers	0
JASMAR	2 MTTs	8	0	0
SLG	2 MTTs	10	0	0
Totals	**17**	**90**	**9 dogs and 9 handlers**	**0**

* Excluding team leaders, medics, and drivers.

Table 6: Operational survey capacities deployed in 2020[64]

Operator	NTS teams	Total NTS personnel*	TS teams	Total TS personnel*
JASMAR	3	12	2	8
NUMAD	0	0	8	32
Global Aid Hand	7	28	0	0
Totals	**10**	**40**	**10**	**40**

NTS = Non-technical survey TS = Technical survey

A significant increase in operational capacity occurred in 2020 following the addition of non-technical survey capacity in November 2019 by JASMAR and Global Aid Hand.[65] A further increase in capacity was planned for 2021 as new areas with suspected contamination from anti-personnel mines, anti-vehicle mines, and ERW have become accessible in Blue Nile and South Kordofan following peace talks with the SPLM-N. There is also a need to clear roads for the delivery of humanitarian assistance to these areas.[66]

Demining in Sudan is carried out primarily using manual clearance, though mine detection dog (MDD) teams are also used. No machines are employed in demining. In 2019, a mine action training centre was established, MDD training and accreditation sites were re-established with increased number of training and accreditation boxes, and two non-technical survey training courses were delivered.[67] In 2021, NMAC was continuing to work with UNMAS to fully establish the training centre both to fulfil the training needs of the mine action programme and to provide support to neighbouring countries where needed.[68] 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 logistical issues deployment of the asset was delayed until late October or early November, depending on the end of the rainy season.[69]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of 0.35km^2 of anti-personnel mined area was released through clearance in 2020 with a total of 42 anti-personnel mines found and destroyed. No areas were released through survey in 2020.

SURVEY IN 2020

No areas were reported cancelled through non-technical survey in 2019 or 2020. The NMAC reported that technical survey is integrated with clearance during the land release process, but no technical survey of anti-personnel mined area was conducted in 2020. A total of 68,000m^2 was reduced through technical survey of anti-vehicle mined area using mine detection dogs (MDDs).[70] This is a massive reduction from the 6,127,357m^2 of mined area reduced through technical survey by NUMAD in South Kordofan in 2019.[71]

CLEARANCE IN 2020

In 2020, a total of 353,799m^2 was cleared by NUMAD and JASMAR in Blue Nile, South Kordofan, and Kassala.[72] This is a 60% decrease in clearance output from the 874,068m^2 cleared in 2019. However, the number of anti-personnel mines found and destroyed increased from just one in 2019, indicating better targeting of clearance.[73]

Table 7: Mine clearance in 2020[74]

State	Operator	Area cleared (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
Blue Nile	NUMAD	67,328	3	0	581
	SafeLane	0	0	0	5
	JASMAR	0	8	0	702
Southern Kordofan	NUMAD	281,203	19	15	1,596
	JASMAR	768	12	1	37
Kassala	NUMAD	4,500	0	0	167
Totals		**353,799**	**42**	**16**	**3,088**

AP = Anti-personnel AV = Anti-vehicle UXO = Unexploded ordnance

The eight anti-personnel mines destroyed by JASMAR during explosive ordnance disposal (EOD) spot tasks in 2020 are included in Table 7.[75]

UNMAS reported that four areas surveyed as containing anti-personnel mine contamination totalling 225,759m^2 were also cleared which proved to contain no anti-personnel mines just items of unexploded ordnance (UXO).[76] Overall there was a significant decrease in the amount of land released in 2020 due to the security situation when approaching the "grey areas" (cross-line areas in which control and influence belongs to neither the Government nor the SPLM-N) and that most of the land released in 2020 was from battle area clearance (BAC) with double the output from the previous year.[77] All teams from national operators were deployed in accordance with COVID-19 guidelines and were able to continue operations during 2020. Two teams from an international operator were contracted to start in March 2020 but this was delayed due to the pandemic and both teams were final deployed in December.[78]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SUDAN: 1 APRIL 2004

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 APRIL 2014

↓

FIRST EXTENDED DEADLINE (5-YEAR EXTENSION): 1 APRIL 2019

↓

SECOND EXTENDED DEADLINE (4-YEAR EXTENSION): 1 APRIL 2023

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): MEDIUM

Table 8: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0.35
2019	0.87
2018	0.98
2017	0.71
2016	1.04
Total	**3.95**

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 is not on track to meet this deadline.

Sudan's land release output dropped in 2020 with no areas released through survey following a massive reduction through technical survey in 2019. Sudan was not able to meet its updated work plan target for 2020 and going forward it is planned that the majority of land will be released through cancellation despite no non-technical survey taking place in 2018-20. Despite a reduction in overall area cleared in 2020 there was an increase in the number of anti-personnel mines found and destroyed during clearance from one in 2019 to 42 in 2020.

One of the main impediments to mine action operations is the security situation and the lack of access to most of the known impacted communities in Blue Nile and South Kordofan states.[79] 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.[80] 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.[81] 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.[82]

In addition, Sudan reported that obstacles to completion include inadequate funding for mine action, rising inflation in Sudan, lack of sufficient demining equipment, the ongoing COVID-19 pandemic, and the impact of climate change on extended rainy seasons.[83]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Sudan has a plan to deal with residual risk and liability post-completion.[84] As at May 2021, NMAC have trained a few teams to deal with any residual contamination in the eastern states. However, it is planned that in the long term Sudan will establish a sustainable national capacity within the military or police.[85]

1 Email from Hatim Khamis Rahama, Technical Advisor, NMAC, 19 May 2021; and Article 7 Report (for 2020), Form C.

2 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

3 Emails from Hatim Khamis Rahama, NMAC, 19 May 2021; and Aimal Safi, Senior Operations and QM Advisor, UNMAS, 12 April 2021.

4 According to NMAC, however, as these two states have been inaccessible due to insecurity for many years, the information recorded in the database for these states may no longer be accurate, and survey will be carried out as soon as the security situation permits. NMAC, "Updated Work Plan to Meet Anti-Personnel Mine Ban Convention Article Five Extended Deadline by April 2019", 30 April 2017.

5 Article 7 Report (covering 2015), Forms C and F.

6 UNMAS, "2019 Portfolio of Mine Action Projects, Sudan".

7 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

8 Email from Ahmed Elser Ahmed Ali, Chief of Operations, NMAC, 9 May 2016.

9 Article 5 deadline Extension Request, Executive Summary, 25 November 2013, pp. 2–3.

10 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

11 Ibid.; and Sudan Multiyear Operational Plan 2020 to 2023, p. 17.

12 Sudan Multiyear Operational Plan 2020 to 2023, p. 22.

13 Ibid., p. 23.

14 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

15 UNMAS, "2018 Portfolio of Mine Action Projects, Sudan", at: http://bit.ly/2GjD3nm.

16 UNMAS, "2019 Portfolio of Mine Action Projects, Sudan", at: http://bit.ly/3d0FtVH.

17 Email from Hatim Khamis Rahama, NMAC, 19 May 2021; and Article 7 Report (for 2020), Form C.

18 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

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, UNMAS, 31 May 2020.

22 Emails from Aimal Safi, UNMAS, 12 April 2021; and Hatim Khamis Rahama, NMAC, 19 May 2021.

23 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

24 UMAS, "Where we work: Abyei", at: https://bit.ly/3waA8Fr

25 UNMAS, "2017 Portfolio of Mine Action Projects, Sudan".

26 UNMAS, "Sudan (excluding Darfur)", Updated October 2020, at: http://bit.ly/3c7Lb9y

27 Email from Aimal Safi, UNMAS, 12 April 2021.

28 UNMAS, "Sudan (excluding Darfur)", Updated October 2020.

29 Ibid.

30 Ibid.

31 Sudan Multiyear Operational Plan 2020 to 2023, p. 15.

32 UNMAS, "2019 Portfolio of Mine Action Projects, Sudan" at: http://bit.ly/3d0FtVH; and email from Hatim Khamis Rahama, NMAC, 9 April 2020.

33 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

34 Ibid.

35 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

36 Email from Aimal Safi, UNMAS, 31 May 2020.

37 Email from Aimal Safi, UNMAS, 22 July 2020.

38 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

39 Ibid.

40 Email from Aimal Safi, UNMAS, 12 April 2021.

41 Emails from Hatim Khamis Rahama, NMAC, 1 May 2019 and 10 September 2020.

42 Emails from Ahmed Elser Ahmed Ali, NMAC, 9 May and 8 June 2016; and Third APMBC Article 5 deadline Extension Request, March 2018, pp. 37–38.

43 Email from Hatim Khamis Rahama, NMAC, 10 September 2020.

44 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

45 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

46 Email from Dandan Xu, Associate Programme Management Officer, UNMAS, 28 June 2019.

47 In Sudan's Multiyear Operational Plan 2020 to 2023, Table 4 (p. 11) and Table 6 (p. 12) purport to show the same information but have differing land release figures. Likewise, Table 5 does not match with land release figures in Tables 4 or 6 or with figures provided by NMAC to Mine Action Review on land release of anti-personnel mines in 2018 to 2019. Remaining anti-personnel mine contamination on p. 15 does not match the figures in Table 9, and neither figure matches reported land release. In Table 13 on p. 21, area cancelled through NTS and area released through TS/clearance do not add up to total area released and do not match figures in operations plan by state (pp. 22–26). Projected land release figures to 2023 in the Article 7 Report (covering 2019) do not match the projections in the work plan.

48 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

49 Emails from Hatim Khamis Rahama, NMAC, 1 May 2019 and 13 May 2018.

50 Email from Hatim Khamis Rahama, NMAC, 1 May 2019.

51 2018 Article 5 deadline Extension Request Detailed Narrative, 17 August 2018, Table 14, p. 18.

52 Sudan Multiyear Operational Plan 2020 to 2023, p. 21.

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

54 Email from Aimal Safi, UNMAS, 31 May 2020.

55 Sudan Multiyear Operational Plan 2020 to 2023, p. 14.

56 Email from Aimal Safi, UNMAS, 12 April 2021.

57 Sudan Multiyear Operational Plan 2020 to 2023, p. 30.

58 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

59 Article 7 Report (covering 2019), Form F.

60 Email from Hatim Khamis Rahama, NMAC, 19 May 2021; and APMBC Article 7 Report (for 2020), Form 2.2.

61 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

62 Ibid.

63 Ibid.

64 Ibid.

65 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

66 Emails from Aimal Safi, UNMAS, 12 April 2021; and Hatim Khamis Rahama, NMAC, 19 May 2021.

67 Email from Aimal Safi, UNMAS, 31 May 2020.

68 Emails from Aimal Safi, UNMAS, 12 April 2021; and Hatim Khamis Rahama, NMAC, 19 May 2021.

69 Emails from Aimal Safi, UNMAS, 12 April 2021; and Hatim Khamis Rahama, NMAC, 19 May and 5 August 2021.

70 Ibid.

71 Emails from Hatim Khamis Rahama, NMAC, 9 April 2020; and Aimal Safi, UNMAS, 31 May 2020; and Article 7 Report (covering 2019), Form F.

72 Email from Hatim Khamis Rahama, NMAC, 5 August 2021; and Article 7 Report (covering 2020), Form F.

73 Emails from Hatim Khamis Rahama, NMAC, 9 April 2020; and Aimal Safi, UNMAS, 31 May 2020; and Article 7 Report (covering 2019), Form F.

74 Email from Hatim Khamis Rahama, NMAC, 5 August 2021; and Article 7 Report (covering 2020), Form F.

75 Emails from Hatim Khamis Rahama, NMAC, 19 May 2021; and Aimal Safi, UNMAS, 12 April 2021.

76 Email from Aimal Safi, UNMAS, 12 April 2021.

77 Emails from Aimal Safi, UNMAS, 12 April 2021; and Hatim Khamis Rahama, NMAC, 19 May 2021.

78 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

79 Sudan Multiyear Operational Plan 2020 to 2023, p. 14.

80 Statement of Sudan on Article 5, APMBC Eighteenth Meeting of States Parties, 16–20 November 2020.

81 Statement of Sudan on Cooperation and Assistance, APMBC Eighteenth Meeting of States Parties, 16–20 November 2020.

82 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.

83 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

84 Email from Hatim Khamis Rahama, NMAC, 9 April 2020.

85 Email from Hatim Khamis Rahama, NMAC, 19 May 2021.

TAJIKISTAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

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

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

NATIONAL AUTHORITY ESTIMATE

11.8KM²

AP MINE CLEARANCE IN 2020

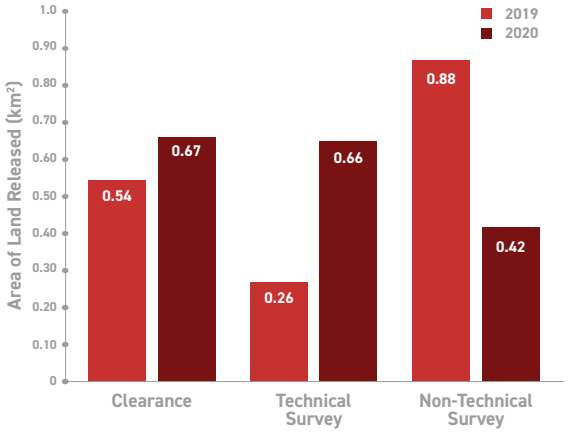
0.67KM²

AP MINES DESTROYED IN 2020

5,336

(INCLUDING 3 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

The Ministry of Defence's Humanitarian Demining Company expanded capacity in 2020, adding two demining teams to the five multi-task teams already operating as well as two more survey teams. Tajikistan released almost 1.7km² through survey and clearance in 2020, almost the same level as the previous year. The Tajikistan National Mine Action Centre (TNMAC) also recruited an information management specialist to develop and manage the national Information Management System for Mine Action (IMSMA) Core database.

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.**
- **TNMAC should set up a Survey Working Group to expedite planning and prioritisation of accelerated survey to reach a clear national baseline estimate of contamination, as outlined in information supporting Tajikistan's last Article 5 deadline extension request.**
- **Tajikistan should clarify its resource mobilisation strategy and report on the progress of consultations with key national and international stakeholders.**
- **TNMAC should develop plans for establishing sustainable demining capacity to tackle residual risk identified after completion.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	5	Tajikistan lacks a clear baseline estimate of contamination, with 20 areas previously recorded as mined that had yet to be surveyed, some of them including several minefields, and another three SHAs; 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 TNMAC and implemented primarily by Ministry of Defence 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 IMSMA Core in 2019 and has continued efforts to streamline and improve the accuracy of data by modifying reporting forms. 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	7	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 donor funding, which appears unlikely, particularly since the onset of the COVID-19 pandemic. TNMAC has yet to draw up plans for clearance of residual contamination found after completion.
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). They 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.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	7	Land released in 2020 sustained the progress in 2019 but Tajikistan will need to accelerate clearance or it will not meet its 2025 completion deadline. In 2020, the Ministry of Defence's Humanitarian Demining Company expanded capacity, adding two demining teams to the five multi-task teams already operating as well as two more survey teams.
Average Score	**6.2**	**6.3**	**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

- Ministry of Defence (MoD), Humanitarian Demining Company (HDC)
- Union of Sappers Tajikistan (UST)
- Border Guards
- 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 2020, consisting of 145 confirmed hazardous areas (CHAs) covering 7km² and 84 suspected hazardous areas (SHAs) affecting 4.8km² (see Table 1). Tajikistan reported releasing more than 1km² of mined area in 2020 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 12km², though regional contamination estimates have shifted.[1]

More than 70% 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 operations in the region reduced the estimate of its contamination there by 0.9km² in 2020. Survey in the Gorno-Badakhshan Autonomous Region's Darvoz district, which borders Afghanistan, added two SHAs covering a total of 0.6km².[2]

Tajikistan still lacks a clear baseline estimate of its mined areas. By early 2021, Tajikistan still had 20 areas previously recorded as mined that had yet to be surveyed, some of them including several minefields, and another three SHAs. Two are in the Central Region while the remainder are in districts on the Afghan border, roughly estimated to affect 1.5km². In addition, two-thirds of Tajikistan's SHAs totalling 3.25km² are on the border with Uzbekistan, parts of which have still to be demarcated and have yet to be surveyed for contamination.[3]

Table 1: Anti-personnel mined area by province (at end 2020)[4]

		CHA		SHA		
Province	**District**	**No.**	**Area (m²)**	**No.**	**Area (m²)**	**Total area (m²)**
Gorno-Badakhshan Autonomous Region	Darvoz	14	957,410	5	928,852	1,886,262
	Vanj	6	908,119	0	0	908,119
	Shugnan	3	56,000	0	0	56,000
	Ishkoshi	0	0	1	5,000	5,000
Subtotals		**23**	**1,921,529**	**6**	**933,852**	**2,855,381**
Khatlon	Farkhor	6	96,800	1	8,000	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
	Shamsiddin Shohin	80	3,221,110	0	0	3,221,110
	Kabodiyon	1	5,184	0	0	5,184
	Shahritus	1	30,000	0	0	30,000
	Khovaling	1	80,000	1	30,000	110,000
Subtotals		**121**	**5,049,574**	**22**	**545,000**	**5,594,574**
Sughd Region (Uzbek border)	Asht	0	0	11	610,000	610,000
	Ayni	0	0	5	535,000	535,000
	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**
Central Region	Sangvor	1	50,000	2	50,000	100,000
Subtotals		**1**	**50,000**	**2**	**50,000**	**100,000**
Totals		**145**	**7,021,103**	**84**	**4,778,852**	**11,799,955**

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 of Tajikistan was contaminated as a result of the 1992–97 civil war.[5]

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.[6] Tajikistan later concluded the results were unreliable due to lack of

experience among the initial survey teams, as well as the absence of minefield records and other important information and poor equipment. As a result, the size of SHAs were miscalculated and their descriptions not clearly recorded.[7] 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.[8]

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 as there are no established roads or tracks to access the minefields for survey or clearance.[9] 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.[10]

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.[11] Although most of the mines are believed to be on Uzbek territory,[12] there is a possibility that some mines may have been displaced downhill into Tajikistan due to landslides or flooding.[13] The 3.25km^2 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 but by mid-2021 there was no report that it had been set up.[14]

There are also mined areas on two islands in the Panj river on the Tajik-Afghan border, one of which is 538,500m^2 in size and the other 30,000m^2, 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.[15]

Tajikistan acknowledges the urgency and importance of establishing a clear baseline of anti-personnel mine contamination as soon as possible, and in August 2019 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.[16] As of June 2021, however, the working group had not been established.[17]

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.[18]

TNMAC is the executive arm of CIIHL and the body coordinating mine action, responsible for issuing task orders, information management and quality assurance/quality control.[19] 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-owed programme.[20] 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.[21]

The Ministry of Defence (MoD) plays a major role in Tajikistan's mine action sector, in particular by providing personnel that comprise Tajikistan's main demining capacity.[22] 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."[23]

A technical working group chaired by TNMAC and meeting monthly coordinates mine action stakeholders.[24] Tajikistan informed the States Parties to the Anti-Personnel Mine Ban Convention (APMBC) in 2019 that it planned to establish a management working group involving key stakeholders to develop a working plan for implementation of its Article 5 extension request as well as a survey technical working group to promote survey planning and prioritisation.[25] As at mid 2021, neither group had yet met. TNMAC reported it had delivered a "General Land Release Operation Plan 2021–2025" to the Article 5 Committee.[26]

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 Geneva International Centre for Humanitarian Demining, GICHD) and is committed to improving the situation of women in the mine action sector.[27] A United Nations Development Programme (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 MRE was gender balanced, introducing female quality assurance (QA)/quality control (QC) officers, and developing a code of conduct and complaints mechanisms.[28]

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 because most people serving in the military, which provides most mine action personnel, are predominantly male. At the same time, it noted Norwegian People's Aid (NPA)'s successful employment of female deminers and said the government would address gender issues in Tajikistan's mine action programme.[29] 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.[30]

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. TNMAC reported employing seven women staff in 2020 and did not plan to open additional positions in 2021. None of its female staff worked in operations.[31] TNMAC coordinated with NPA to convene meetings of a gender working group in early 2020 but the meetings lapsed with the onset of the COVID-19 pandemic.[32]

NPA has a gender and diversity policy integrated into its Tajikistan programme and in 2020 had a total of 18 female employees making up one-fifth of its total staff and 43% of management and support staff. It expected the number of women employees to remain unchanged in 2021. Fifteen of its female staff work in the field, making up 17% of NPA's operations staff, slightly less than the 22% in 2019, but they included 11 female deminers. NPA reported awareness of their work was making it easier to attract female candidates for jobs even though NPA has still to achieve gender balance in its two survey teams.[33]

INFORMATION MANAGEMENT AND REPORTING

TNMAC upgraded its national mine action database to IMSMA Core in 2019, making it easier to input, edit, and retrieve data. TNMAC also introduced new data collection forms intended to simplify data entry and improve data quality.[34] In 2020, it hired an information management specialist to maintain and develop the system, filling a gap left by the closure of UNDP's support programme in 2019 and the resultant loss of trained staff.[35] TNMAC and its implementing partners worked to fine tune the system in 2020 and made a number of adjustments to reporting forms. In 2021, they planned to focus more on analysis of the data in the system.[36]

TNMAC also planned to launch a performance monitoring tool in the course of 2021, which it hoped would help to make planning more efficient and effective while also helping to facilitate resource mobilisation.[37]

PLANNING AND TASKING

Tajikistan laid out a framework for mine action in the Article 5 deadline extension request submitted in March 2019, which 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.[38] It aimed to complete work on the Central region and complete survey of the Tajik-Afghan border by 2023. No timeline is set for survey or clearance on the Tajik-Uzbek border. Tajikistan and Uzbekistan agreed in 2018 to set up a joint commission to arrange survey and clearance of border areas. Tajikistan said it would keep States Parties to the APMBC informed of developments but has yet to report follow-up action.[39]

The request identifies areas of agricultural and tourist importance as the main priorities. It called for annual release of approximately 1.3km^2. Annual targets set out in the request were revised in the "General Land Release Operation Plan 2021-2025" issued in January 2021 which provides for release of 1.71km^2 in 2021, 1.69km^2 in 2022, 1.64km^2 in 2023, 1.73km^2 in 2024, and 1.78km^2 in 2025.[40] The annual land release targets total 8.55km^2 which, even if met, will not address all of the existing contamination recorded by TNMAC by the end of 2025.

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.[41]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Tajikistan's revised National Mine Action Standards (TNMAS) were approved by decree on 1 April 2017 and are available in Russian and English.[42] The standards were developed as general guidelines allowing implementing partners scope to develop their own standing operating procedures (SOPs).[43] TNMAC says it regularly updates and amend standards to address particular challenges.

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.[44] This approach is particularly useful dealing with minefield records that are incomplete or inconsistent due to incorrect coordinates and grid numbering or lack of

landmarks/reference points, or when there are often few local people to ask about evidence of mines or accidents as people have moved away. In addition, mines are sometimes displaced due to landslides, rock falls, or flooding.[45]

TNMAC reports it has supplemented NMAS by issuing additional guidelines in 2020 including a manual on "Testing and Evaluation of Mechanical assets in the Accreditation Process". TNMAC said it had also set up a site for testing mechanical assets in Khatlon region's Pyani district, which was operational in May 2020.[46]

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 180 and in 2020 it took initial steps in that direction while also raising survey and mechanical capacity.

The MoD HDC, which provides Tajikistan's main mine action capacity, started 2020 with five multi-task teams and fifty deminers. They included three teams financed by the OSCE and two by the United States.[47] By the end of 2020 it had six manual demining teams with a total of 107 personnel, including four teams with 65 HDC personnel, one team from the Committee for Emergency Situations (23 staff) and one team from the Border Guard (19 staff).[48] TNMAC had discussed standing up five more teams and previously reported the government had agreed to pay their salaries but it has since stated it will only be able to establish the other demining teams when it receives further donor support.[49]

NPA provided the other main demining capacity, operating five manual clearance teams with forty-one deminers and two teams conducting non-technical survey. NPA employs mainly civilian staff but also has 13 Border Guard Force personnel seconded through TNMAC conducting land release operations. It expected to keep the same number of staff in 2021. NPA reactivated a Mini MineWolf in 2020, which is being used to support clearance by both MoD and NPA and it planned to bring into service an MV-4 flail for use in areas inaccessible to the larger MineWolf.[50] TNMAC said mechanical assets were used to prepare a total of 135,520m^2 for manual clearance in 2020.[51]

UST, a national not-for-profit organisation, provides additional capacity with potential for development. UST started 2020 with two teams accredited only for non-technical and technical survey and victim assistance and added two more NTS/TS teams with a total of 14 personnel. In 2021, UST continued to operate with four teams but added seven more staff. TNMAC planned to accredit UST for clearance in the course of 2021.[52] Tajikistan has not spelled out plans for UST but 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.[53]

DEMINER SAFETY

Two MoD HDC deminers were injured in 2020 by an anti-personnel mine detonation in the course of clearance operations. TNMAC identified the mine that exploded as a Russian-made POM-2 but provided no other details.[54]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

TNMAC reported land release through survey and clearance totalling 1,722,688m^2 in 2020, representing a small increase (3%) over the previous year.[55] Revised figures for area reduced through technical survey raised the total to 1,748,179m^2. Land release was heavily concentrated in two districts on the Tajik-Afghan border, Shamsiddin Shohin and Panj, which together accounted for just under 80% of the total.[56]

SURVEY IN 2020

Tajikistan's Article 5 deadline extension request noted that the progress of survey was slowing because survey teams have already tacked areas that are most accessible to the local population and were increasingly left with hazardous areas in remote and rugged terrain.[57] Results in 2020, however, were almost the same as the previous year. TNMAC reported a total of 1,080,892m^2 through survey in 2020, a little less than the 1,138,210m^2 released in 2019.[58]

The 0.4km^2 cancelled by non-technical survey (see Table 2) was roughly half the area cancelled in 2019 and 60% of it was accounted for by the Ministry of Defence's Humanitarian Demining Companies.

Table 2: Cancellation through non-technical survey in 2020[59]

District	Operator	Area cancelled (m^2)
Panj	NPA	90,000
Sh. Shohin	UST	45,000
Darvoz	UST	16,100
Sh. Shohin	MoD	271,158
Total		**422,258**

The amount of land reduced through technical survey in 2020 (see Table 3) was more than double the 2019 figure, with NPA accounting for 330,724m² or 50% of the total.[60]

Of these 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.[61]

Table 3: Reduction through technical survey in 2020[62]

District	Operator	Area reduced (m²)
Panj	UST	9,630
Sh. Shohin	UST	48,579
Darvoz	UST	103,304
Darvoz	NPA	134,534
Sh. Shohin	NPA	36,858
Panj	NPA	121,976
Khovaling	NPA	37,356
Sh. Shohin	MoD	87,569
Panj	MoD	78,828
Total		**658,634**

CLEARANCE IN 2020

Tajikistan cleared 0.67km² in 2020, 70% released by MoD HDC teams working in Panj and Shamsiddin Shohin (see Table 4). TNMAC reported operations resulted in destruction of 5,333 anti-personnel mines. A further three anti-personnel mines and 14 anti-vehicle mines were destroyed in EOD spot tasks.[63] UST was not accredited for clearance in 2020 and the 22,715m² of clearance attributed to UST are thought to represent technical survey.

Table 4: Mine clearance in 2020 by operator[64]

Operator	District	Area cleared (m²)	AP mines destroyed	UXO destroyed
NPA	Darvos	71,560	18	196
	Panj	69,691	306	0
	Sh. Shohin	30,511	248	7
	Khovaling	9,247	1	0
MoD HDC	Panj	205,377	1,110	13
	Sh. Shohin	258,186	3,650	53
UST	Darvoz	15,924	0	0
	Panj	2,370	0	0
	Sh. Shohin	4,421	0	0
Totals		**667,287**	**5,333**	**269**

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR TAJIKISTAN: 1 APRIL 2000

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 APRIL 2010

↓

FIRST EXTENSION REQUEST DEADLINE (10-YEAR EXTENSION): 1 APRIL 2020

↓

SECOND EXTENSION REQUEST DEADLINE (5-YEAR, 9-MONTH EXTENSION): 31 DECEMBER 2025

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC (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 2020, MoD HDC and NPA together mustered 117 deminers. TNMAC has expanded the role of 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 CoES. But Tajikistan is looking to international donors to cover the non-salary costs and it was unclear what additional capacity could be mobilised for clearance and in what period of time.[65]

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.[66] TNMAC has received support from Norway and the OSCE[67] but funding has been heavily dependant on the US Department of State and TNMAC has acknowledged it will need to attract other donors.[68] Tajikistan conducted a workshop with other major 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.[69]

Tajikistan also does not yet know the full extent of the contamination it needs to address. The extension request clearance targets do not cover 31 minefields that are due to be surveyed by 2023, some of them located in remote, mountainous areas where conditions only permit 40 operational days a year. It also does not cover mined areas on the Uzbek border. The existing estimate of SHAs covering 3.25km^2 is based on only partial access. Further survey and clearance are subject to agreement with Uzbekistan.[70] Insecurity on the border with Afghanistan has previously prevented access to some of Tajikistan's most heavily mined districts and adds a further element of uncertainty to the outlook for implementation.[71]

Table 5: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0.67
2019	0.54
2018	0.59
2017	0.62
2016	0.50
Total	**2.92**

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Tajikistan has yet to develop 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. 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 but has not reported further developments.[72] The OSCE, in coordination with TNMAC and the GICHD, drafted terms of reference for the position of Residual Risk Manager in 2020 but TNMAC reportedly did not find a suitable candidate for the post and was continuing the search in 2021.[73]

1 Emails from Muhabbat Ibrohimzoda, Director, TNMAC, 22 April and 17 August 2021; Article 7 Report (covering 2020), Form D.

2 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 April and 12 August 2021.

3 Ibid.

4 Ibid; and Article 7 Report (covering 2020), Form D.

5 Tajikistan Mine Action Centre (TMAC), "Scope of the Problem", accessed 29 July 2019 at: http://bit.ly/2ZhIFpN.

6 R. Roberts, "Evaluation of United Nations Development Programme Support to the Tajikistan Mine Action Programme", January 2012, p. 11, at: http://bit.ly/2OqRe0B.

7 2009 Article 5 deadline Extension Request, p. 1.

8 Ibid., p. 34.

9 Interview with Muhabbat Ibrohimzoda and Murtazo Gurezov, TNMAC, Dushanbe, 25 May 2018; and Statement of Tajikistan, APMBC 16th Meeting of States Parties, Vienna, 20 December 2017.

10 2019 Article 5 deadline Extension Request, p. 33; interview with Muhabbat Ibrohimzoda and Murtazo Gurezov, TNMAC, Dushanbe, 25 May 2018; and Statement of Tajikistan, APMBC 16th Meeting of States Parties, Vienna, 20 December 2017.

11 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018.

12 Statement of Tajikistan, APMBC 16th Meeting of States Parties, Vienna, 20 December 2017.

13 "National Strategy of the Republic of Tajikistan on Humanitarian Mine Action for 2017–2020", 25 February 2017.

14 2019 Article 5 deadline Extension Request, p. 16.

15 Interview with Muhabbat Ibrohimzoda and Murtazo Gurezov, TNMAC, Dushanbe, 25 May 2018.

16 2019 Article 5 deadline Extension Request, Additional Information received 3 August 2019.

17 Email from Melissa Andersson, Country Director, Norwegian People's Aid (NPA), 1 June 2020.

18 2019 Article 5 deadline Extension Request, p. 20; and 2009 Article 5 deadline Extension Request, p. 1.

19 2019 Article 5 deadline Extension Request, pp. 20–21.

20 2009 Article 5 deadline Extension Request, p. 1; and TMAC, "About TMAC", 2012, accessed 10 March 2014 at: http://bit.ly/2LvPUb1.

21 Email from Aubrey Sutherland-Pillai, NPA, 18 October 2016; and 2019 Article 5 deadline Extension Request, pp. 20–21.

22 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.

23 Email from Luka Buhin, OSCE Tajikistan, 9 October 2017.

24 Email from Melissa Andersson, NPA, 8 August 2021.

25 Additional information provided for Tajikistan's Article 5 deadline Extension Request, 3 August 2019, pp. 3,7.

26 Email from Muhabbat Ibrohimzoda, TNMAC, 12 August 2021.

27 Email from Muhabbat Ibrohimzoda, TNMAC, 14 June 2019.

28 R. Roberts, "Final Evaluation of Support to the Tajikistan Mine Action Programme", UNDP, 30 December 2019, pp. 17–18.

29 Additional information provided for Tajikistan's Article 5 deadline Extension Request, 3 August 2019, p. 6.

30 Ibid.

31 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

32 Email from Melissa Andersson, NPA, 21 April 2021.

33 Emails from Melissa Andersson, NPA, 11 April 2019, 29 April 2020, and 21 April 2021.

34 Email from Muhabbat Ibrohimzoda, TNMAC, 28 May 2020.

35 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021; R. Roberts, "Final Evaluation of Support to the Tajikistan Mine Action Programme", UNDP, 30 December 2019, p. 15.

36 Email from Melissa Andersson, NPA, 21 April 2021.

37 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

38 2019 Article 5 deadline Extension Request, pp. 34, 42.

39 Ibid., p. 44.

40 Email from Muhabbat Ibrohimzoda, TNMAC, 12 August 2021.

41 Emails from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018 and 22 April 2021; and Melissa Andersson, NPA, 5 April 2018.

42 Article 5 deadline Extension Request, 31 March 2019, p. 21.

43 Email from Melissa Andersson, NPA, 29 April 2020.

44 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.

45 "Non-technical survey/technical intervention", Presentation by Muhabbat Ibrohimzoda, TNMAC, at the 21st International Meeting of National Mine Action Programme Directors and United Nations Advisers, Geneva, 13 –16 February 2018; and interview with Muhabbat Ibrohimzoda, TNMAC, Dushanbe, 25 May 2018.

46 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

47 The OSCE reported providing €250,000 to support three teams in 2020 and 2021. Email from Johan Dahl, Head of Arms Control and Mine Action, OSCE Programme Office in Dushanbe, 9 April 2021.

48 Email from Muhabbat Ibrohimzoda, TNMAC, 12 August 2021.

49 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021; 2019 Article 5 deadline Extension Request, p. 45.

50 Email from Melissa Andersson, NPA, 21 April 2021.

51 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

52 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 April and 12 August 2021.

53 2019 Article 5 deadline Extension Request, p. 36.

54 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

55 Article 7 Report (covering 2020), Form D.

56 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

57 2019 Article 5 deadline Extension Request, p. 47.

58 Article 7 Report (covering 2020), Form D.

59 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

60 Emails from Muhabbat Ibrohimzoda, TNMAC, 12 August 2021; and Melissa Andersson, NPA, 21 April 2021.

61 2019 Article 5 deadline Extension Request, p. 47.

62 Email from Muhabbat Ibrohimzoda, TNMAC, 12 August 2021.

63 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021; Article 7 Report (covering 2020), Form D, recorded destruction of 5,103 anti-personnel mines.

64 Email from Muhabbat Ibrohimzoda, TNMAC, 22 April 2021.

65 2019 Article 5 deadline Extension Request, p. 22; emails from Muhabbat Ibrohimzoda, TNMAC, 22 April and 12 August 2021.

66 2019 Article 5 deadline Extension Request, p. 52; Article 7 Report (covering 2019), Form D.

67 In addition to funding provided to TNMAC to support three MoD HDC teams, 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.

68 Additional information provided for Tajikistan's Article 5 deadline Extension Request, 3 August 2019, p. 7.

69 R. Roberts, "Final Evaluation of Support to the Tajikistan Mine Action Programme", UNDP, 30 December 2019, p. 19.

70 Presentation by Tajikistan on Article 5 deadline Extension Request, Geneva, 23 May 2019.

71 Ibid.

72 Additional information provided for Tajikistan's Article 5 deadline Extension Request, 3 August 2019, p. 8.

73 Email from Johan Dahl, OSCE Programme Office in Dushanbe, 9 April 2021.

THAILAND

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 31 OCTOBER 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: HEAVY

MINE ACTION REVIEW ESTIMATE

OVER **20KM²**

AP MINE CLEARANCE IN 2020

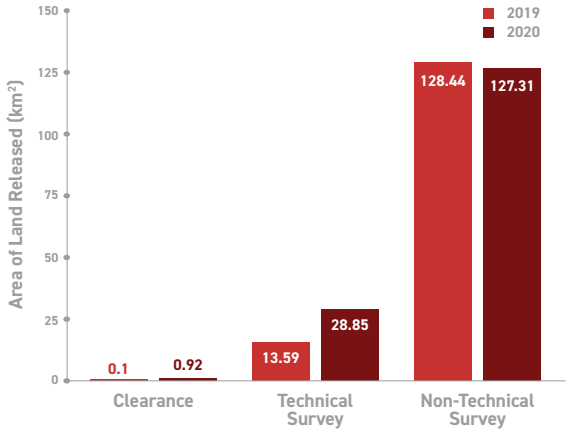
0.92KM²

AP MINES DESTROYED IN 2020

9,355

(INCLUDING 5 DESTROYED IN EOD SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Thailand made good progress in 2020 to re-survey mined areas and more accurately establish its baseline of anti-personnel mine contamination, as part of the first phase (2019–20) of its Five-Year Plan. The Thailand Mine Action Centre (TMAC) exceeded its land release target for 2020 by nearly 9km², mostly as a result of cancellation through non-technical survey. During 2020, the provinces of Chanthaburi and Chumphon were fully cleared of mines. The effort was underpinned by an online information management system that became operational during the year and by effective coordination between TMAC and its implementing partners.

A pilot clearance project between TMAC and Cambodia Mine Action Centre (CMAC) was conducted in March to April 2020, which, it was hoped, could be used as a model for future demining cooperation between Thailand and Cambodia. However, the COVID-19 pandemic imposed travel and physical contact restrictions, and further steps regarding the areas to be demarcated were postponed until the COVID-19 situation is under control. Therefore, aside from the pilot project, all other mined areas in areas with unclear border demarcation along the Thailand-Cambodia border, remained inaccessible in 2020 and could not be re-surveyed.

RECOMMENDATIONS FOR ACTION

- **Thailand and Cambodia should seek to expand the pilot border clearance project, as soon as the COVID-19 situation permits, and should conclude a bilateral cooperation mechanism that would enable both States to survey and clear all mined areas along the shared border.**
- **TMAC should finalise and publish its revised national mine action standards as soon as possible, including new standards and standing operating procedures (SOPs) for the use of mine detection dogs (MDDs)/animal detection systems (ADS) and for the use of mechanical assets. This will help ensure effective and efficient technical survey and clearance methodology is employed during the second Phase of its Five-Year Plan.**
- **Thailand should elaborate a gender policy and supporting implementation plan for mine action.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	7	Thailand has been conducting non-technical survey on all suspected hazardous areas (SHAs), under Phase 1 of its Five-Year Plan, which it completed at the end of 2020, with the exception of those mined areas in areas with unclear border demarcation along the Thailand-Cambodia border which remained inaccessible. During the first phase of the work plan, four provinces have been declared mine-free. While Thailand's inflated baseline of anti-personnel mined area has been significantly reduced through cancellation through non-technical survey, it is thought there is potential to release more uncontaminated areas through technical survey, during the Phase 2 of the Five-Year Plan, which began at the start of 2021.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	7	There is strong national ownership of Thailand's mine action programme, including national funding for TMAC the armed forces personnel which conduct survey and clearance operations, supported by, and in good collaboration with, non-governmental clearance organisations. Regular meetings are convened between TMAC, relevant ministries, and all 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 there were no women in the HMAU demining teams. There were, however, 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	7	TMAC used the Arc Geographic Information System (GIS) online information management system, 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. The Five-Year Plan, submitted in 2019, provides details on remaining challenges, outstanding mine contamination, the prioritisation system, and land release outputs.
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, containing annual targets and detailing prioritisation for the release of mined areas. TMAC exceeded its planned land release target for 2020, releasing 157km^2, primarily through non-technical survey. Thailand has updated its annual land release targets for 2021–23 to take into account the outcomes from Phase 1 of the work plan and the reduced amount of mined area remaining following survey.
LAND RELEASE SYSTEM (20% of overall score)	8	8	TMAC is applying efficient land release methodology, conducting non-technical survey to cancel a significant amount of the inflated SHA in its database and to determine more accurately the location of mine contamination. Technical survey to further reduce uncontaminated area and identify actual contamination for clearance is a key component of Phase 2 of Thailand's work plan. In 2020, TMAC worked on revising its NMAS, to bring them in line with IMAS, and introduce standards for the use of MDD/ADS and mechanical assets. The updated standards were in the process of being trialled and finalised in 2021.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	7	Total land release output in 2020 (157km^2) exceeded that in 2019, and also exceeded TMAC's work plan target for 2020 by nearly 9km^2. TMAC has been achieving the annual land release targets largely through non-technical survey. Technical survey and clearance targets for the second phase of its plan (2021–23) are, however, very ambitious and will require sustained funding, extra capacity, and successful coordination with Cambodia to address all mined areas along the border, including those in areas with unclear border demarcation.
Average Score	**7.7**	**7.1**	**Overall Programme Performance: GOOD**

DEMINING 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

As at 31 December 2020, Thailand estimated that almost 63km^2 of mined area remained in 19 districts across 7 provinces. Mined area comprised 183 confirmed hazardous areas (CHAs) totalling nearly 23.28km^2 and 43 suspected hazardous areas (SHAs) totalling nearly 39.68km^2 (see Table 1 below).[1]

This was a huge decrease of more than 155.24km^2 compared to the 218.19km^2 of mined area remaining in nine provinces in 2019.[2] The decrease is explained by release of an impressive 157km^2 of mined area in 2020, predominantly through non-technical survey; offset slightly by the 1.83km^2 of newly identified mined area (CHAs) confirmed in 2020 (see Table 2).[3]

During 2020, the provinces of Chanthaburi and Chumphon were fully cleared of mines.[4]

Table 1: Anti-personnel mined area by province (at end-December 2020)[5]

Region	Province	CHAs	Area (m^2)	SHAs	Area (m^2)	Total CHAs/SHAs	Total area (m^2)
North	Phitsanulok	0	0	1	13,262,427	1	13,262,427
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	25	2,847,202	7	5,619,517	32	8,466,719
	Buri-Ram	17	1,445,688	0	0	17	1,445,688
East	Sa Kaeo	0	0	10	6,239,286	10	6,239,286
	Trat	41	8,535,688	21	11,926,860	62	20,462,548
Totals		**182**	**23,276,882**	**44**	**39,676,628**	**226**	**62,953,510**

Table 2: Additional anti-personnel mined area identified and confirmed in 2020, by province[6]

Region	Province	Area of CHA confirmed (m^2)
North-East	Buri-Ram	88,890
	Si Sa ket	335,765
	Surin	582,057
	Ubon Ratchathani	594,316
East	Chanthaburi	3,906
	Sa Kaeo	194,577
	Trat	30,200
Totals		**1,829,711**

Since 2016, TMAC and Norwegian People's Aid (NPA) have been working on a pilot project re-surveying the vastly inflated SHA and cancelling area found not to contain mines.[7]

In its "Five-Year Humanitarian Mine Action Plan, 1 November 2018–31 October 2023" (hereafter, Five-Year Plan), published in April 2019, Thailand projected that of the outstanding 360km^2 of contamination, 269km^2 will be cancelled through non-technical survey and nearly 91km^2 of CHA will remain for technical survey and clearance.[8] TMAC therefore focused its efforts in Phase 1 of the work plan's implementation in 2019–20 on cancelling land through non-technical survey, before moving on to technical survey and full clearance for Phase 2 in 2021–23.

Phase 1 was completed at the end of 2020,[9] with the exception of mined areas in areas with unclear border demarcation along the Thailand-Cambodia border, which it was still not possible to survey in 2020 and which has delayed the full completion of the nationwide re-survey. Of Thailand's 43 SHAs (see Table 1), 26 fall under the categories of Areas to be Demarcated or sensitive areas along the border.[10] Thailand has emphasised the vital importance of accessibility to mined areas along the Thailand-Cambodia border areas.[11]

As at the end of Phase 1, Thailand had released even more area than planned, predominantly through non-technical survey, and the total amount of mined area had been reduced down to less than 63km^2, of which nearly 40km^2 was CHA and the remainder SHA.[12] As at 15 June 2021, Thailand's national baseline of mined area had been further reduced to 43km^2, of which 20.2km^2 was SHA (mostly along the border) and 22.8km^2 CHA.[13] Furthermore, NPA estimates that continued survey will result in an even smaller area (in the region of 20km^2) actually requiring clearance. But NPA also foresees a need for further non-technical survey and updating of survey data during technical survey and clearance operations as more information becomes available.[14]

Thailand is affected by mines as well as 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.

In 2020, during the Ruang Phueng demining operations in Ubon Ratchathani province, Thai deminers encountered an old Hungarian-made anti-personnel mine, GYATA 64, for the first time during its demining operations.[15]

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.[16] 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.[17]

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.[18] In reality, however, the Committee has no operational or strategic power and is purely procedural.[19]

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.[20] 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.[21] In order to maintain continuity, TMAC has made a request with the Royal Thai Armed Forces Headquarters that personnel working within TMAC remain in post for at least two years rather than be rotated out on an annual basis. The previous Director had served since October 2017, helping to bring continuity to TMAC and improving its effectiveness. A new Director of TMAC took office on 1 March 2021. While this appointment is the twelfth director since TMAC was established, the new Director had served as Deputy Director of TMAC for two years, prior to being promoted, and before that was Head of Cooperation and Evaluations at TMAC. This is a positive development, which helps to ensure continued institutional knowledge and expertise.

TMAC also requested that personnel working in the Humanitarian Mine Action Units (HMAUs) either 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.[22] Classes taught by US Marine Corps Forces, Pacific (US MARFORPAC) help TMAC to train newly assigned personnel, as well as providing mentorship to operational and staff personnel who can remain at TMAC for several years.[23]

While roles and responsibilities within TMAC are clear and coherent, there have been 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.[24] TMAC has worked to inform the HMAUs, high-ranking generals, and the Chief of Defence Forces on the importance of mine action.[25]

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.[26]

The Royal Thai Government continues to provide the majority of the mine action budget of more than US$7.5 million annually. In addition, it provides funding for the procurement of equipment, which in 2020 included equipment worth nearly US$35,000, including high-performance mountain bikes, handheld GPS, satellite phones, mine detection dogs (MDDs), handheld grass cutting machines, and a grass cutting vehicle, as well as office hardware and printers. In 2021, TMAC is requesting an additional US$43,000 to procure more high-performance mountain bikes, handheld radios, as well as additional drones for aerial survey.[27] Thailand has indicated that it would welcome international assistance for equipment, as well as additional survey teams.[28]

TMAC is reported to be very supportive of 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 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.[29] That said, strict regulations on who can handle explosives in Thailand, means that civilian entities are not permitted to conduct explosive ordnance disposal (EOD)/clearance.[30] However, 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.[31]

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.[32] 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.[33]

TMAC and the Ministry of Foreign Affairs co-organised a "Briefing on Thailand's Progress in Mine Clearance 2020" on 25 November 2020, to announce the progress made and four provinces being declared mine free (Chiang Mai and Mae Hong Son in 2019, and Chumphon and Chanthaburi in 2020). The briefing was attended by high-ranking officials and foreign dignitaries, including the Embassies of Japan, Norway, and the United States, and served as an awareness-raising event with media present.[34]

A partnership between Golden West Humanitarian Foundation (Golden West) and TMAC began in January 2019 when TMAC invited Golden West to provide technical advisory support and interagency cooperation assistance to bolster TMAC's training and operational capabilities. An institutional partnership was formalised in October 2020, with the signing of a memorandum of agreement (MoA). It is hoped that the cooperation will be key in helping Thailand fulfil its Anti-Personnel Mine Ban Convention (APMBC) obligations.[35]

Golden West works closely with US MARFORPAC and US Department of Defense Humanitarian Demining Research and Development (US DOD HDR&D).[36] In 2020, US MARFORPAC provided a range of trainings to TMAC, including in non-technical and technical survey, and international mine action standard-aligned EOD Level 1–3 training, which are supported by Golden West's technical advisors. In conjunction with the EOD Level 3 training programme, which was conducted for the first time in Thailand in 2020, MARFORPAC and US HDR&D also combined efforts for the purchase of a mobile ordnance-cutting system and funding for an EOD Technical Advisor and Mentor position, which were both provided through Golden West.

The Golden West EOD Technical Advisor to TMAC has more than 30 years of EOD experience and is a welcome addition to the TMAC support effort. Following the EOD Level 3 course, which included classes and demonstrations on the mobile cutting system, Golden West deployed the mobile cutting system to two HMAUs. The Level 3 EOD technicians also provided classes and demonstrations of the system's capability to their counterparts, adjacent military and border police units, and civilian populace who encounter ERW/unexploded ordnance (UXO).[37] TMAC reported that it is using the mobile ordnance-cutting system to help in mine and UXO disposal and said it was looking for further potential applications for the technology.[38]

In addition, Exercise COBRA GOLD, the largest Joint/Combined exercise in the US Indo-Pacific Command (INDOPACOM) Area of Operations, included a Landmine Disposal Exercise (LMD Ex) which took place in March 2020. It allowed US and Thai EOD technicians to exchange professional ideas while destroying ordnance recovered from humanitarian demining missions; provided senior-level mentorship sessions between the MARFORPAC humanitarian mine action program managers and select senior TMAC staff officers; and provided an opportunity for TMAC to highlight demining efforts to international partners.[39]

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 2020, approximately 40% of staff at TMAC headquarters were women,[40] unchanged since the previous year. This is, however, an increase on the 27.5% of female staff reported in 2018.[41] Women held 30% of TMAC's managerial/supervisory level positions in 2020.[42] Furthermore, as at March 2020, TMAC had female senior grade officers serving as the deputy chief of special affairs, deputy chief of coordination and evaluation, budget officer, and head of admin and personnel.[43] 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 combatant in such units.[44]

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.[45] All these stakeholders are also present and consulted at the end of the survey, when the results are presented.[46]

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 out of 9 in managerial and supervisory positions; and 5 women (29%) of the 17 in operations positions.[47]

During non-technical survey, the Thai Civilian Deminer Association (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 of the five (40%) managerial level/supervisory positions at TDA, but there was only one women (5%) in TDA's 19 operational positions.[48] 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.[49]

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.[50] 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.[51] 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.[52]

NPA and TDA deem data in Thailand to be accurate and reliable, with data in the national information management system accessible to clearance organisations.[53] 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,[54] which it duly submitted. The Five-Year Plan provides details on remaining challenges, outstanding mine contamination, the prioritisation system, and land release outputs.[55]

PLANNING AND TASKING

Thailand's Five-Year Plan, published in April 2019, is divided into two phases. During the first phase, from 2019–20, the focus was on non-technical survey of outstanding SHAs, with the expected cancellation of more than 269km^2. 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 mine-contaminated areas, including those along its border with Cambodia.[56] Phase 2 in 2021–23 will focus on technical survey and clearance of CHAs, based on the results of the national non-technical survey.[57]

The first phase was completed at the end of 2020, with the exception of survey of those mined areas on the border with Cambodia with border demarcation issues, which had yet to be surveyed as at June 2021. During the first phase of the five-year work plan (2019/2020), four provinces were declared mine-free: Chanthaburi, Chiang Mai, Chumphon, and Mae Hong Son.[58] During the second phase, TMAC expects to release more than 90km^2 of land through technical survey and clearance (although as at end of 2020, overall mined area had been reduced to 63km^2 and by 15 June 2021 it had been further reduced to 43km^2). Thailand is also operating under the assumption that the border demarcation issues will be resolved through bilateral cooperation, allowing the HMAUs to access these areas.[59] As at June 2021, however, the access to mined areas on demarcated parts of the border had yet to be agreed between Thailand and Cambodia, beyond a pilot clearance project between TMAC and CMAC. Of Thailand's 43 SHAs (see Table 1), 26 fall under the categories of Areas to be Demarcated or sensitive areas along the border.[60]

Thailand's Five-Year Plan replaced the annual land release targets detailed in its Second Article 5 deadline Extension request in 2017.[61] In both 2019 and 2020, Thailand exceeded its planned land release outputs as per the revised work plan, releasing mainly through survey a total of 142.13km^2 in 2019, compared to a target of 120.88km^2; and releasing 157.07km^2 in 2020, compared to a target of 148.19km^2.[62]

In line with best practice, land release targets for 2021, 2022, and 2023 have been revised to take into account the outcomes from Phase 1 of the work plan and the reduced amount of mined area remaining following survey. In 2021, Thailand planned to continue land release operations in five provinces (Phitsanulok, Buri Ram, Surin, Si Sa ket, and Ubon Ratchathani) totalling 30.6km^2,[63] and complete clearance in Surin and Buri Ram.[64] In 2022, Thailand plans to release 16km^2 and complete clearance in Phitsanulok and Si Sa ket provinces. And in 2023, Thailand plans to release 15.3km^2 and to complete clearance in Sa Kaeo, Trat, and Ubon Ratchathani. Throughout this period, Thailand said it planned to continue cooperation with Cambodia.[65]

Thailand is prioritising the north-eastern region, the most heavily contaminated area of the country where 61% of SHAs are located, but is also considering resource limitation and access issues in certain areas. Thailand is prioritising clearance according to the following five criteria (in descending order of importance): development potential, the access needs of the local community, proximity to the local population, terrain and environmental challenges, and border and security concerns.[66]

Table 3: Planned land release from Five-Year Plan 2019–23 (m^2)[67]

Region	Province	2019	2020	2021	2022	2023
North	Phitsanulok	9,510,170	9,510,170	9,510,180	LF	LF
	Chiang Mai	1,103,526	0	0	9,308,072	15,203,590
North-east	Buri Ram	15,587,142	0	3,896,786	LF	LF
	Surin	0	21,839,800	5,459,949	LF	LF
	Si Sa Ket	39,495,981	19,210,841	0	14,676,704	LF
	Ubon Ratchathani	21,364,937	59,617,291	0	0	20,245,556
East	Chanthaburi	3,562,113	374,111	LF	LF	LF
	Sa Kaeo	1,724,472	1,695,254	1,669,773	1,490,174	1,117,125
	Trat	26,912,587	34,354,161	3,107,481	3,005,862	2,274,040
South	Chumphon	1,586,760	1,586,760	LF	LF	LF
Totals		**120,847,688**	**148,188,388**	**23,644,169**	**28,480,812**	**38,840,311**

LF = Landmine Free

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 them in June 2012, the year Thailand initiated a land release process.[68] Since then, the NMAS have undergone 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.[69] In 2018, TMAC revised the NMAS on worksite planning and released a new NMAS on the "Cancellation of SHAs by Evidence Based Survey", which has made it easier to cancel previously inflated, largely uncontaminated SHAs.[70] TMAC personnel have also been undergoing training on non-technical survey to improve speed and efficiency.[71]

In 2020, TMAC, with the assistance of Golden West, began to revise both the NMAS and SOPs, in accordance with the latest IMAS, to help ensure efficient operations and reflect changes to the operational environment, technologies, and best practices. Thailand regularly consulted stakeholders and operators during the process. As at July 2021, the revised NMAS and SOPs were being field tested; the final documents will be adjusted according to the needs, conditions, and circumstances.[72]

As part of the revision process, Thailand was drafting a national standard on the use in technical survey and clearance operations of MDDs/animal detection systems (ADS) as well as on the use of mechanical assets, in consultation with its key partners, Golden West, NPA, and TDA.[73]

OPERATORS AND OPERATIONAL TOOLS

Table 4: Operational survey capacities deployed in 2020[74]

Operator	NTS teams	NTS personnel	TS teams	TS personnel
HMAU 1	1	4	1	5
HMAU 2	2	7	2	8
HMAU 3	3	12	3	18
HMAU 4	1	5	1	5
HTMAC	0	0	2	10*
Totals	**7**	**28**	**9**	**46**

* These personnel can conduct both NTS (non-technical survey) and TS (technical survey) operations.

Table 5: Operational clearance capacities deployed in 2020[75]

Operator	Manual teams	Total deminers	Dogs and handlers	Machines
HMAU 1	1	3	1	0
HMAU 2	1 (2)	14	1	4
HMAU 3	1 (3)	10	1	0
HMAU 4	1 (1)	7	1	0
HTMAC	1	2	2	0
Totals	**5**	**36**	**6**	**4**

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.[76] The number of personnel in 2020 was consistent with the previous year, and TMAC expected the number of personnel to remain the same in 2021.[77]

Since the start of 2021, Thailand has been implementing Phase 2 of the five-year work plan, with the focus shifting towards technical survey and clearance, although some non-technical survey will still be conducted. Training on technical/non-technical survey and EOD in 2020 was conducted jointly by US MARFORPAC and the TMAC in-house demining course, with trained personnel equipped to perform all tasks needed in the field.[78]

Personal protective equipment (PPE) has been procured by Thailand, together with new detectors to help ensure maximum technical survey and clearance efficiency.[79]

TMAC now employs a comprehensive toolbox approach, including use of mechanical assets to identify the existence of landmines if the terrain permits,[80] and introduction of new tools, such as testing MDDs for use in technical survey and the use of drones.[81] Thailand has said that unmanned aerial vehicles (UAV) and drone technology have been useful in informing surveying and operational planning, and it planned to procure an additional five drones in 2021.[82]

Only the military can conduct EOD due to national regulations on who can handle explosives and operate demining equipment. However, 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.[83] This reduces efficiency. In some cases, however, military EOD staff are embedded in NPA technical survey teams and for spot tasks, to conduct required EOD on mines and ERW once they have been detected and uncovered.[84]

There may be changes to the regulations in the coming years due to the complications and related security concerns for military personnel entering the border areas. Once the

TMAC/Cambodian Mine Action Centre (CMAC) border pilot project is completed, there may be a possibility that civilian deminers will take part in clearance operations.[85]

NPA has supported TMAC operations since 2011, conducting land release through non-technical and technical survey. In 2020, NPA deployed three non-technical survey teams (totalling nine personnel) and one technical survey team (three personnel), working jointly with ten personnel from HMAUs 2 and 3.[86] The successful piloting of two MDDs for technical survey which began in 2019, continued into 2020. However, MDD operations were then suspended from March 2020 due to the closure of the border between Thailand and Cambodia as a result of the COVID-19 pandemic, which prevented the MDDs and their Khmer dog handlers crossing over to NPA's Cambodia programme. In 2021, NPA continued with the same MDD capacity (two MDDs), which were seconded from TMAC to NPA in Surin province.[87] Due to COVID-19 restrictions NPA was not able to bring additional MDDs from Cambodia to Thailand, but it plans to double capacity to four MDDs as soon as this is possible.[88]

TDA has supported TMAC operations since 2014.[89] In 2020, TDA had 19 field staff, 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.[90]

DEMINER SAFETY

In 2020, four personnel from HMAU 1 were injured by a PMN mine during clearance operations. As per standard practice in Thailand, an internal investigation was carried out by the HMAU and a second investigation by TMAC. Operations were suspended, while personnel underwent training. Lessons learned from accidents are used for TMAC training and for discussion and review for future action.[91]

Furthermore, a TDA deminer stepped on an M14 mine during clearance operations, injuring his left foot. An internal investigation was conducted by TDA and TMAC also investigated the incident. The TDA team was suspended for one month for refresher training.[92]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Thailand released a total of more than 157km^2 in 2020, of which nearly 0.92km^2 was cleared, nearly 28.85km^2 was reduced through technical survey, and nearly 127.31km^2 was cancelled through non-technical survey. In total, 9,355 anti-personnel mines and 497 items of UXO were destroyed in 2020.

In addition, nearly 1.83km^2 of previously unrecorded anti-personnel mine contamination was found and added to the database as CHA in 2020 (see Table 2) in the provinces of Buri-Ram, Chanthaburi, Sa Kaeo, Si Sa ket, Surin, Trat, and Ubon Ratchathani.[93]

SURVEY IN 2020

A total of more than 156.15km^2 was released through survey in 2020: nearly 127.31km^2 through non-technical survey and nearly 28.85km^2 through technical survey (see Tables 6 and 7).

This marked an increase on the 142km^2 released through survey in 2019 (over 128.4km^2 through non-technical survey and nearly 13.6km^2 through technical survey).[94]

In addition, nearly 1.83km^2 of previously unrecorded anti-personnel mine contamination was found and added to the database as CHA in 2020 (see Table 2 above).[95]

Table 6: Cancellation through non-technical survey in 2020[96]

Province	Area cancelled (m^2)
Chanthaburi	2,772,783
Phitsanulok	12,000,577
Sa Kaeo	175,190
Si Sa ket	19,374,269
Surin	19,241,069
Trat	23,924,561
Ubon Ratchathani	49,818,562
Total	**127,307,011**

TDA reported discovering 571,680m^2 of mine contamination in April 2020, in an area which had previously been cancelled. TDA cleared the contamination and destroyed 311 anti-vehicle mines, 1 anti-personnel mine, and 6 items of UXO.[97] EOD of the devices found by TDA is, however, conducted by the military, as national regulations prevent civilian organisations from handling explosives. TDA believes that there is a risk that mined areas might go unrecorded in instances where non-technical survey is conducted by personnel without knowledge of landmine laying patterns and where no technical survey is conducted.[98]

Table 7: Reduction through technical survey in 2020[99]

Province	Area reduced (m^2)
Buri Ram	1,546,462
Chanthaburi	112,042
Sa Kaeo	391,648
Si Sa ket	854,686
Surin	174,018
Trat	833,362
Ubon Ratchathani	24,933,293
Total	**28,845,511**

CLEARANCE IN 2020

A total of nearly 0.92km² was cleared by the five HMAU units and the HTMAC in 2020 (see Table 8).[100] This is an increase on 2019, when 0.1km² was cleared by 3 HMAU units and the HTMAC in 2019. [101] While the focus in 2020 remained on non-technical and technical survey, clearance was conducted in some provinces, including in Chanthaburi and Chumphon which were declared mine-free during the year.

Table 8: Mine clearance in 2020[102]

Province	Area cleared (m²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Buri Ram	54,430	1,420	0	4
Chanthaburi	645,453	541	0	10
Chumphon	48,499	126	0	32
Phitsanulok	0*	5	0	15
Sa Kaeo	154,991	1,880	0	41
Si Sa ket	0	900**	0	36
Surin	0	539**	0	156
Trat	0	424**	0	50
Ubon Ratchathani	14,551	3,520	0	153
Totals	**917,924**	**9,355**	**0**	**497**

AP = Anti-personnel AV = Anti-vehicle * EOD spot task. ** Mines to be destroyed during phase 2 of the work plan, in order to focus on non-technical survey in 2020.

In June–July 2020, Thailand reported that HMAU3 and TDA had successfully released one of the most challenging demining operations to date, in the Rueng Phueng area of Ubon Ratchathani province. The task in question was almost 30km² of CHA and SHA, surrounded by cliffs and mountainous terrain, with no road access, no phone signal, and no water source. The Royal Thai Armed Forces used airlifts to transport personnel and equipment in and out of the area of operation. The mined area was released within one month, during which more than 29km² was cancelled, and the remaining 0.64km² was released through technical survey and clearance. A total of 1,722 anti-personnel mines and 83 items of UXO were destroyed.[103] Thailand expects that mine action in some of the remaining SHAs and CHAs may also be as difficult, due to extreme terrain and weather conditions.[104]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR THAILAND: 1 MAY 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MAY 2009

↓

FIRST EXTENSION REQUEST DEADLINE (9-YEAR, 6-MONTH EXTENSION): 1 NOVEMBER 2018

↓

SECOND EXTENDED DEADLINE (5-YEAR EXTENSION): 31 OCTOBER 2023

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): MEDIUM

Table 9: Five-year summary of AP mine clearance

Year	Area cleared (m²)
2020	917,924
2019	95,278
2018	528,902
2017[105]	427,983
2016	394,238
Total	**2,364,325**

Thailand has made significant improvements to its mine action programme since the Third Review Conference in Maputo in 2014, moving away from an over reliance on clearance to the use of the full range of land release methodologies demonstrated in its Five-Year Plan. During Phase 1 of the plan, which was completed at the end of 2020, Thailand resurveyed all mined areas, with the exception of those in areas of unclear border demarcation on the Thai-Cambodia border. In total, more than 299km² was released during this Phase 1 (142.1km² in 2019 and 157.1km² in 2020), predominantly through non-technical survey used to cancel overinflated polygons. This exceeded Thailand's planned land release of 269km² during Phase 1. The provinces of Chiang Mai and Mae Hong Son were declared mine-free in 2019 and Chanthaburi and Chumphon in 2020. The second phase, which began at the start of 2021, will largely focus on technical survey and clearance to release remaining mined areas.

As at the end of 2020, Thailand's baseline of combined SHA/CHA totalled 63km^2; 27km^2 less than the expected baseline of contamination, due to greater cancellation than planned during Phase 1 of the work plan. TMAC has therefore revised its land release estimates for 2021, 2022, and 2023 to 30.6km^2, 16km^2, and 15.3km^2 respectively.[106] TMAC had previously said that it planned to increase the number personnel during the second phase (2021–23),[107] but the number of personnel in 2021 remained constant. TMAC has, however, instructed demining units to restructure or reorganise the composition of field teams, with varying focus on non-technical survey, technical survey, or clearance, in response to field conditions. NPA and TDA have been advised to shift their focus and restructure to be technical survey-oriented.[108] However, current overall capacity is far from sufficient to meet the clearance targets.

Whether the required upscaling of technical survey and clearance capacity proves possible remains to be seen. NPA believes that Thailand's Article 5 deadline of end October 2023 is too ambitious due to the lack of sufficient clearance capacity to address the CHAs established from the ongoing baseline survey and because the border demarcation issues with Cambodia, which prevent access to certain mined areas and have yet to be resolved.[109] Thailand will need to significantly increase its technical survey and clearance capacity and will need to apply effective and efficient land release methodology in order to reach its current Article 5 deadline. This implies both more staff as well as more equipment, i.e. detectors, personal protective equipment, mechanical assets, and MDDs. With a predicted 20km^2 of actual anti-personnel mine contamination requiring clearance, NPA believes that Thailand would need to more or less double its current capacity (potentially with less deminers if more mechanical assets/MDDs were made available) to reach the current deadline.[110]

Thailand remains committed to completing clearance by its Article 5 deadline of 31 October 2023 and to keeping States Parties informed of its progress and actions.[111] However, it also acknowledges that the sensitivity of the areas along the border with Cambodia, as well as the heavy density of landmines (with an average of 3.8m^2 per mine), and challenging terrain and remote locations of the mined areas expected to be encountered during Phase 2, may force Thailand to adjust the projected outcomes of Phase 2, along with the time and resources needed for Thailand to reach completion.[112] The Thai government provides various logistical support to make the operations possible, including through air transport, when locations are impossible to reach via land access.[113]

TMAC also recognises that cooperation between Thailand and Cambodia is vital in order for Thailand to meet its 2023 Article 5 deadline, including access to sensitive (non-demarcated) mined areas along the Thailand-Cambodia border, which will require close coordination.[114] Areas to be demarcated have been divided into two categories: areas that can be accessed immediately and more complicated areas where access will need to be negotiated. In border areas with Lao PDR, 96% of the boundary has been demarcated and there are no security concerns, while the border areas with Cambodia are still subject to the demarcation process.[115]

Improved relations between Thailand and Cambodia have opened the way for increased contact with Cambodia on border cooperation. The Thailand–Cambodia General Border Committee, chaired by the Deputy Prime Minister and Minister of Defence from both countries, has agreed that TMAC and CMAC can cooperate to conduct demining along the Thai-Cambodian border.[116]

In September 2018, TMAC and CMAC met and agreed to find a task for a pilot border project for landmine clearance: a small area that could be cleared within a month as a symbolic demonstration of two sides working together. On 14 January 2019, TMAC and CMAC held meetings in Sa Kaeo province on the Thai side of the border and Banteay Meanchey province on the Cambodian side to further discuss the demining cooperation project. On 16–17 June 2019, TMAC and CMAC met in Sa Kaeo province, to conduct a survey and assess prospective areas for demining.[117] On 22 and 23 September 2019, TMAC and CMAC, accompanied by senior representatives of the General Border Committee, agreed upon the respective mined areas on a demarcated section of the Thai-Cambodia border, distanced not too far apart.[118]

The selected pilot project area on the Thai side is in Sano-noi Village, Tha-kham Subdistrict, Aranyaprathet District, Sa Kaeo province. The selected area on the Cambodian side is Kilobuan village, Poipet district, Banteay Meanchey province.[119] TMAC and CMAC signed the record for the pilot site survey on 2 March 2020.[120]

Thailand conducted the '"Pilot Project on Demining Cooperation along the Border of Thailand and Cambodia" task in March and April 2020, during which HMAU1 released 95,000m^2 in Sa Kev Province, with the destruction of two items of UXO. After the area was released, Thailand conducted QA and stakeholder meetings in order to comply with the relevant standards, build the confidence for the stakeholders, and raise awareness regarding the landmine and UXO problem along the border.[121] In Cambodia, CMAC's Demining Unit 1 was reported to have released 123,810m^2 in Banteay Meanchey province, under the joint border project. Thailand said, "this pilot project will be used as a model for future demining cooperation between Thailand and Cambodia".[122] However, the COVID-19 pandemic imposed travel and physical contact restrictions, and further steps regarding the areas to be demarcated unfortunately had to be postponed until the COVID-19 situation is under control.[123]

Thailand has, however, also encountered challenges clearing some of its mined areas close to the area undergoing demarcation. Thailand reported that: "During November–December 2020, Thai humanitarian mine action operators were occasionally requested by the local Cambodian authorities to cease demining operations on account of the sensitivity of the area along the border, as well as to comply with the Article V of the MOU between the Government of the Kingdom of Thailand and the Government of the Kingdom of Cambodia on the Survey and Demarcation of Land Boundary (2000), which stipulates that both sides 'shall not carry out any work resulting in changes of environment of the frontier zone, except that which is carried out by the Joint Technical Sub-Commission in the interest of the survey and demarcation'. The HMAU 1 was requested to halt the demining operations in SHA 84-01, SHA 84-02, SHA 11-01, and SHA 119-01. The HMAU 2 was requested to halt the operation in SHA 257-01. Despite the fact that all the demining works were carried out within the Thai territory, the Thai side decided to suspend the said demining in order to avoid unnecessary misunderstanding. Initially, the Unit in the area met with their Cambodian counterparts to discuss the way

forward. At the Mine Action Center level, options for various forms of cooperation and frameworks will be explored in order to move the demining operations forward."[124]

TMAC reported that land release operations in 2020 had not been significantly affected by the COVID-19 pandemic, as operations took place in remote and isolated areas.[125] However, there is a possibility that the Thai government will have to divert funds to cope with the COVID-19 pandemic, if the public health situation deteriorates.[126]

NPA reported that the COVID-19 pandemic resulted in suspension of the MDD operations for much of 2020, as it was not able to bring the MDD and their handlers across from its Cambodia programme, due to the closing of the border between Thailand and Cambodia.[127] TDA reported that in 2020, COVID-19 posed difficulties for logistical support, but did not impact field operations.[128]

Golden West reported that COVID-19 had impacted its work in 2020, resulting in administrative delays to the MoA review process, and to a delayed start of EOD Level 3 training and a knock-on delay to the operational employment of the mobile cutting system. Training programs also took on unexpected expenses for MARFORPAC in 2020, as the teams were required to quarantine for 14 days upon the arrival.[129]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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.[130]

1 Anti-Personnel Mine Ban Convention (APMBC) Article 7 Report (covering 2020), Form 4.
2 Statement of Thailand, Fourth APMBC Review Conference, Oslo, 27 November 2019; Article 7 Report (covering 2018), Form 4; and email from Flt. Lt. Chotiboon Anukulvanich, Interpreter, on behalf of Lt.-Gen. Sittipol Nimnuan, Director General, TMAC, 27 February 2020.
3 Article 7 Report (covering 2020), Form 4.
4 Ibid.
5 Ibid; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.
6 Ibid; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 18 August 2021.
7 Five-Year Humanitarian Mine Action Plan, 1 November 2018–31 October 2023, p. 12 (hereafter, Five-Year Plan), submitted in 2019 alongside Thailand's Article 7 report covering 2018.
8 Five-Year Plan, p. 13.
9 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.
10 Article 7 Report (covering 2020), Form 4.
11 Statement of Thailand, APMBC 18th Meeting of States Parties, virtual meeting, 16–20 November 2020; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.
12 Article 7 Report (covering 2020), Form 4.
13 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.
14 Emails from Aksel Steen-Nilsen, Country Director, NPA, 30 March 2020, and 31 March and 4 July 2021.
15 Article 7 Report (covering 2020), Form 5.
16 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 18 August 2021.
17 Interview with Lt.-Gen. Prasopchai Kongburan, TMAC, in Geneva, 8 June 2017.
18 Five-Year Plan, p. 49.
19 Interview with Shushira Chonhenchob, NPA, Bangkok, 9 April 2019.
20 2017 Article 5 deadline Extension Request, p. 1.
21 Interview with Col. Terdsak Trirattanagool, Assistant Director General, TMAC, Bangkok, 15 May 2017.
22 Email from Flt. Lt. Chotiboon Anukulvanich, Interpreter, TMAC (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 15 August 2019.
23 Email from John Kelsch, Thailand Country Director/Technical Advisor, Golden West, 1 June 2020.
24 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 15 August 2019.
25 Interviews with Shushira Chonhenchob, NPA; and with Lt.-Gen. Sittipol Nimnuan, TMAC, in Bangkok, 9 April 2019.
26 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.
27 Article 7 Report (covering 2020), Form 4; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.
28 Article 7 Report (covering 2020), Form 8.
29 Emails from Aksel Steen-Nilsen, NPA, 30 March 2020 and 31 March 2021.
30 Ibid.
31 Email from Aksel Steen-Nilsen, NPA, 6 August 2021.
32 Emails from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021; and Aksel Steen-Nilsen, NPA, 31 March 2021.
33 Emails from Flt. Lt. Chotiboon Anukulvanich, 27 February 2020 and 1 July 2021.
34 Article 7 Report (covering 2020), Form 4.
35 Email from John Kelsch, Golden West, 23 May 2021; and Article 7 Report (covering 2020), Form 8.
36 Email from John Kelsch, Golden West, 1 June 2020.
37 Email from John Kelsch, Golden West, 23 May 2021; and Article 7 Report (covering 2020), Form 8.
38 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.
39 Email from John Kelsch, Golden West, 23 May 2021; and Article 7 Report (covering 2020), Form 8.
40 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.
41 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
42 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.
43 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.
44 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 18 August 2021.
45 Emails from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020; and Aksel Steen-Nilsen, NPA, 30 March 2020.
46 Email from Aksel Steen-Nilsen, NPA, 30 March 2020.
47 Emails from Aksel Steen-Nilsen, NPA, 31 March and 4 July 2021.
48 Email from Amornchai Sirisai, Director, TDA, 9 March 2021.
49 Email from Amornchai Sirisai, TDA, 9 March 2021.
50 Emails from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019; and Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.
51 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
52 Emails from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019; and Flt. Lt. Chotiboon Anukulvanich, on behalLt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.
53 Emails from Aksel Steen-Nilsen, NPA, 30 March 2020 and 31 March 2021; and Amornchai Sirisai, TDA, 21 March 2019.

54 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.

55 Five-Year Plan, p. 5.

56 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020; and Article 7 Report (covering 2018), Section 4.

57 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.

58 Statement of Thailand, APMBC 18th Meeting of States Parties, virtual meeting, 16–20 November 2020; and Article 7 Report (covering 2020), Form 4.

59 Five-Year Plan, p. 13.

60 Article 7 Report (covering 2020), Form 4.

61 2017 Article 5 deadline Extension Request, p. 5.

62 Article 7 Report (covering 2020), Form 4.

63 Ibid; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

64 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

65 Ibid.

66 Five-Year Plan, p. 45; and email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.

67 Five-Year Plan, p. 13.

68 Thai National Mine Action Standards, 1 April 2015.

69 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.

70 Emails from Aksel Steen-Nilsen, NPA, 28 March 2019; and Flt. Lt. Chotiboon Anukulvanich, TMAC (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 15 August 2019.

71 Statement of Thailand, Committee on Article 5 Implementation, Geneva, 29 November 2018.

72 Article 7 Report (covering 2020), Form 4; and emails from Aksel Steen-Nilsen, NPA, 31 March 2021; and Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

73 Emails from Aksel Steen-Nilsen, NPA, 30 March 2020; and Eva Veble (on behalf of Aksel Steen-Nilsen), NPA, 9 September 2020.

74 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

75 Ibid.

76 Five-Year Plan, p. 11; and email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.

77 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

78 Article 7 Report (covering 2020), Form 4.

79 Ibid.

80 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.

81 Email from Aksel Steen-Nilsen, NPA, 31 March 2021.

82 Article 7 Report (covering 2020), Form 4.

83 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.

84 Email from Aksel Steen-Nilsen, NPA, 30 March 2020.

85 Interview with Lt.-Gen. Sittipol Nimnuan, TMAC, Bangkok, 9 April 2019.

86 Email from Aksel Steen-Nilsen, NPA, 31 March 2021.

87 Ibid.

88 Email from Aksel Steen-Nilsen, NPA, 4 July 2021.

89 Email from Amornchai Sirisai, TDA, 18 July 2020.

90 Email from Amornchai Sirisai, TDA, 9 March 2021.

91 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

92 Email from Amornchai Sirisai, TDA, 9 March 2021.

93 Article 7 Report (covering 2020), Form 4.

94 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.

95 Article 7 Report (covering 2020), Form 4.

96 Article 7 Report (covering 2020), Form 4 and Annex 1; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021. Of this total, NPA reported cancelling nearly 23.26km^2 in 2020, in Chanthaburi, Surin, and Trat provinces (email from Aksel Steen-Nilsen, NPA, 31 March 2021); and TDA reported cancelling nearly 35.08km^2 in Trad and Ubonratchathani provinces (email from Amornchai Sirisai, TDA, 9 March 2021).

97 Email from Amornchai Sirisai, TDA, 9 March 2021. However, according to data reported by TMAC, all mines destroyed in Thailand in 2020 were anti-personnel mines (see Table 2).

98 Ibid.

99 Article 7 Report (covering 2020), Form 4 and Annex 1; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021. Of this total, NPA reported reducing 162,018m^2 in 2020, in Surin province, during which 1 anti-personnel mine and 3 items of UXO were discovered (email from Aksel Steen-Nilsen, NPA, 31 March 2021); and TDA reported reducing more than 17.85km^2 in Trad and Ubonratchathani provinces (email from Amornchai Sirisai, TDA, 9 March 2021).

100 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.

101 Ibid.

102 Article 7 Report (covering 2020), Form 4; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021. Of this total, TDA reported clearing 785,451m^2 in Ubonratchathani province, with the destruction of 2,180 anti-personnel mines, 11 anti-vehicle mines, and 102 items of UXO (email from Amornchai Sirisai, TDA, 9 March 2021). EOD of the devices found by TDA was, however, conducted by the military, as national regulations prevent civilian organisations from handling explosives.

103 Statement of Thailand, APMBC 18th Meeting of States Parties, virtual meeting, 16–20 November 2020; Article 7 Report (covering 2020), Form 4; and emails from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July and 18 August 2021.

104 Article 7 Report (covering 2020), Form 4.

105 Thailand's Article 7 report includes only TMAC's operating results.

106 Five-Year Plan, p. 5.

107 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.

108 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

109 Emails from Aksel Steen-Nilsen, NPA, 30 March 2020 and 31 March 2021.

110 Ibid.

111 Statement of Thailand, APMBC 18th Meeting of States Parties, virtual meeting, 16–20 November 2020.

112 Article 7 Report (covering 2020), Form 4.

113 Ibid.

114 Statement of Thailand, Fourth Review Conference, Oslo, 27 November 2019; and email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, 27 February 2020.

115 Analysis of 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 Convention, 23 October 2017, para. 16.

116 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.

117 Article 7 Report (covering 2018), Section 8.

118 Ibid.; and "CMAC, Thais join forces to clear mines at border provinces", *The Phnom Penh Post*, 24 September 2019, at: http://bit.ly/3ejuyrW.

119 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, on 27 February 2020; and Article 7 Report (covering 2018), Section 8.

120 Cambodian Mine Action Centre (CMAC), "A record of discussions signed between CMAC and TMAC", 3 March 2020, available at: http://bit.ly/34yiUEW.

121 Article 7 Report (covering 2020), Form 8; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

122 Statement of Thailand, APMBC 18th Meeting of States Parties, virtual meeting, 16–20 November 2020; and Article 7 Report (covering 2020), Form 4.

123 Article 7 Report (covering 2020), Form 4; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

124 Article 7 Report (covering 2020), Form 4.

125 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC, 1 July 2021.

126 Ibid.

127 Email from Aksel Steen-Nilsen, NPA, 31 March 2021.

128 Email from Amornchai Sirisai, TDA, 9 March 2021.

129 Ibid.

130 Email from Flt. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, on 27 February 2020.

TURKEY

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2022
INTERIM EXTENSION REQUESTED TO 31 DECEMBER 2025

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: HEAVY

ESTIMATED BY THE NATIONAL AUTHORITY

157 KM²

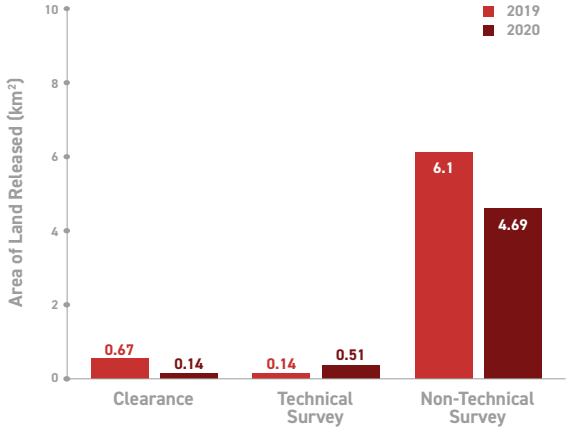
AP MINE CLEARANCE IN 2020

0.14 KM²

AP MINES DESTROYED IN 2020

9,781

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Turkey has published a long-awaited strategic plan for 2020–25 setting out five broad goals, including clearance of all mined areas. This was superseded in February 2021 by Turkey's request for a three-year and nine-month extension of its Article 5 deadline until the end of 2025. This provides for non-technical survey of all mined areas, which it expects to result in cancellation of up to a quarter of current contamination estimates and provide the basis for another extension request preparing for completion of Turkey's Article 5 obligations. The Turkish Mine Action Centre (TURMAC) has issued contracts for Phase 3 survey and clearance along the Eastern Border.

RECOMMENDATIONS FOR ACTION

- **Alongside plans for non-technical survey and expectations of substantial cancellation of hazardous areas Turkey should accelerate clearance, which is unacceptably low.**
- **Turkey should provide details of plans to address the small amount of contamination reported in non-border areas.**
- **Turkey should plan, implement, and report on mine clearance in territories it controls in northern Cyprus and northern Syria.**
- **Turkey should set out plans to promote gender and inclusion in mine action.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	Turkey has good knowledge of its mine contamination since 2019 and has, in theory, confirmed all hazardous areas but now plans to refine that understanding by non-technical survey of all mined areas in the expectation this will shrink the area that actually needs clearance by up to 40%.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	6	Since 2015, Turkey has developed an institutional framework for focused 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 turnover of senior staff.
GENDER AND DIVERSITY (10% of overall score)	4	4	Turkey 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 UNDP gender specialist.
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. Turkey submits comprehensive and timely Article 7 reports.
PLANNING AND TASKING (10% of overall score)	7	6	In 2020, Turkey published a long-awaited strategic plan for 2020–25 that set out five main goals, including becoming mine free by 2025. In This was superseded in February 2021 by Turkey'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	Turkey published 44 chapters of mine action standards in 2019 which it prepared in consultation with the United Nations Development Programme (UNDP) and the Geneva International Centre for Humanitarian Demining (GICHD).
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	6	Turkey has expanded its military demining capacity since 2018 but land release has steadily declined and area clearance in 2020 was the lowest in four years and the number of mines destroyed in 2020 was barely one third of that destroyed in 2019.
Average Score	**6.0**	**6.3**	**Overall Programme Performance: AVERAGE**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Ministry of Defence
- Turkish Mine Action Centre (TURMAC)

NATIONAL OPERATORS

- Altay (national sub-contractor under MECHEM and TDI)
- Turkish Armed Forces

INTERNATIONAL OPERATORS

- Denel MECHEM (up to 2020)
- The Development Initiative (TDI) (from 2021)
- RPS-Explosive Engineering Services (QA and QC of the EU project)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

Turkey reported it has 3,834 mined areas covering a little over 145km^2 at the end of 2020, down from 150.4km^2 a year earlier (see Table 1). Most contamination (85%) is along Turkey's 909-kilometre border with Syria where land release accounted for most of the reduction in contamination in 2020. Despite that progress Turkey's estimate of the number of mines along that border remained almost unchanged from a year earlier. Only the estimate of the area affected on Turkey's border with Armenia remained at the same level as a year earlier.[1]

Survey activities in 2020 did not result in the addition of any hazardous areas to Turkey's contamination database.[2]

Turkey reports mines were first laid along the Syrian border in the 1950s to prevent smuggling and later in south-eastern regions for military security.[3] 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.[4] According to Turkey, these mines, which were marked and fenced, have been progressively cleared since 1998.[5] The mines on Turkey's other borders were mostly laid in 1955–59 and on some sections of the border with Armenia, Iran, and Iraq in 1992–95.[6] Turkey reports that its western borders with Bulgaria and Greece, as well as the border with Georgia, are mine-free.[7]

In addition to mines laid by its security forces, Turkey also reports the presence of mines of an improvised nature that it says were emplaced by non-State armed groups, rendering clearance more challenging.[8] Devices are mostly remote controlled or victim-activated pressure plate (in which case they fall within the definition of an anti-personnel mine under the Anti-Personnel Mine Ban Convention, APMBC). Explosive charges are mostly ammonium nitrate supported with plastic explosives.[9]

The number of mined areas along the Iraqi border, as well as part of the Iranian border, is an estimate, as, according to Turkey, 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.[10]

NORTHERN CYPRUS

Turkey's original Article 5 clearance deadline was 1 March 2014. In 2013, States Parties granted Turkey an eight-year extension until 1 March 2022, for clearance of mines in Turkey, but Turkey did not request additional time for clearance of the areas it controls in northern Cyprus[11] (see the report on Cyprus in this work for further information). This puts into question its compliance with Article 5 of the APMBC.

Table 1: Anti-personnel mined area by region (at end 2020)

Region	CHAs	Area (m^2)	AP mines	AV mines
Syrian border	1,526	123,489,492	411,990	194,615
Iraqi border	874	2,842,935	78,917	0
Iranian border	471	15,098,039	116,115	0
Armenian border	43	1,097,077	20,275	0
Non-border areas	920	2,224,495	33,869	0
Total	**3,834**	**144,752,038**	**661,166**	**194,615**

AP = anti-personnel AV = anti-vehicle

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Turkey adopted Law No. 6586 establishing a national mine action centre under the Ministry of National Defence in February 2015.[12] Its director reports directly to the Undersecretary of the Ministry of National Defence.[13] The law gave the centre, now known as TURMAC, responsibility for the clearance of mines and/or unexploded ordnance (UXO) to humanitarian standards.[14] 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.[15] To strengthen project management, TURMAC planned to establish project offices in the regions where it is operational.[16]

Turkey reports that the formation of TURMAC has led to significantly increased mine action activities and clearance[17] 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 becoming the fourth person to lead TURMAC in five years.[18]

Mine action in Turkey is mostly financed by the state. TURMAC and the Turkish Armed Forces demining units are financed entirely by the government.[19] Turkey reported allocating an annual budget of TRY53.2 million (approximately US$6 million or €5.1 million) for mine action for the years 2020–25.[20] It said it was providing an additional TRY25 million to finance a project in Mardin province bordering Syria in 2022–23.[21]

Turkey's Article 5 deadline extension request submitted in March 2021 provided for even higher levels of spending totalling €104.8 million from 2020 to 2025, including €86.3

million provided by the government and €18.5 million by the European Union (EU). It also provides for funding to buy six additional mechanical assets for Turkey's military demining units.[22]

GENDER AND DIVERSITY

Turkey does 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 Turkey'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.[23]

In a statement to the 2021 Intersessionals, Turkey 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.[24] A United Nations Development Programme (UNDP) gender specialist also provided training for 24 TURMAC staff in 2020 and was due to provide two training sessions on gender mainstreaming for a further 50 TURMAC staff in 2021.[25]

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.[26]

INFORMATION MANAGEMENT AND REPORTING

TURMAC installed the Information Management System for Mine Action (IMSMA) with support from the Geneva International Centre for Mine Action (GICHD) in 2017, and personnel from TURMAC and the armed forces have been trained in its use.[27] Turkey reported the system contains all minefield and mine victim data and is used for all reporting and documentation.[28] TURMAC conducted information management training for new personnel and for military demining units.[29]

Turkey has submitted Article 7 transparency reports annually that are both timely and which provide a comprehensive review of plans and performance.

PLANNING AND TASKING

Turkey 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.[30] In 2020, TURMAC released a 12-page Strategic Mine Action Plan through to the end of 2025 setting out a vision of Turkey 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:[31]

- to clear all of the emplaced anti-personnel mines in Turkey
- 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.

In February 2021, Turkey 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. Turkey aims in particular to use the time to complete non-technical survey of all 3,483 confirmed hazardous areas (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 NTS methodology. Turkey expects non-technical survey will result in cancellation of around 40 square kilometres of hazardous area.[32]

The extension request also sets a target of clearing 183 mined areas covering a little over 10km^2 in three main regions, including 60 mined areas in 10 provinces located on the borders with Iraq and Syria (5.4km^2), 96 mined areas in provinces on the Eastern border (3.6km^2) with Armenia and Iran, and 27 areas in Mardin province (1.1km^2).[33]

BORDERS WITH IRAQ AND SYRIA

Turkey's 2013 Article 5 deadline extension request had projected completing clearance of the Syria border by the end of 2019.[34] Turkish officials have described the Syria border as Turkey's easiest clearance task because the terrain is flat and has experienced minimal mine displacement due to environmental factors and the minefields are mostly marked and fenced and well-known to local populations. Turkey, however, was held back by the Syria conflict[35] and has made little progress clearing the border.

Clearance operations under way since 2018 focused on Hatay and Kilis provinces.[36] The Strategic Plan for 2020-2025 said Turkish demining assets would clear a total of around 3.4km^2

in Gaziantep, Hatay, Kilis, Mardin, Şanlıurfa, and Şırnak provinces on the Syrian border at a cost of TLM55 million (US$8 million) funded from the national budget.[37] In Mardin province, the Ministry of Defence envisages it will start working on clearing 27 areas covering nearly 1.06km^2 in 2022 and the project will last approximately 18 months.[38]

EASTERN BORDERS

Turkey's Eastern Border Mine Clearance project, which started on the Armenian border, is continuing southwards to the borders with Azerbaijan, Iran, and Iraq.[39] The project is supervised by Turkish authorities and implemented in a joint project with UNDP,[40] which is managing and quality assuring the demining.[41] Denel MECHEM (MECHEM) was awarded a contract to conduct demining as part of a consortium in which national operators would be subcontracted by MECHEM.[42]

Phase 1 of the project, implemented between June 2016 and the end of 2017,[43] released a total of almost 3.3km^2 of mined area (much less than the 13.5km^2 envisaged in the Article 5 deadline extension request), destroying in the process 25,667 anti-personnel mines.[44] Phase 2, which started behind schedule in June 2018 and was completed in December 2019,[45] resulted in release of close to 1.7km^2 of land, bringing the total area released in the first two phases to 4.8km^2.[46]

Phase 3 has four components: clearing 4.24 km^2, 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, who are expected to deploy up to 15 manual clearance teams supported by mine detection dogs (MDD). The first three components will be funded by the EU. Turkey will allocate €2.12 million to fund the fourth component involving non-technical survey.[47] After tendering for the third phase during 2020, Turkey 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 mine detection dogs (MDDs).[48]

NON-BORDER AREAS

Turkey had planned to clear all 873 identified mined areas inside the country by 2021, involving release of 3.1km^2 and destruction of 34,410 mines. But the only non-border activity conducted up to 2020 was clearance of 0.3km^2 at a former military range in 2018[49] and Turkey estimated at the end of 2020 that 2.2km^2 remained. The mined areas are scattered and TURMAC considers it more practical for clearance to be conducted by military units though their capacity has so far been limited.[50]

Turkey's Article 5 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.[51]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Turkey issued 44 national mine action standards, including on land release, in February 2019. The standards were prepared with support from UNDP and the GICHD.[52] A separate set of standards specific to the Eastern Border Clearance project were also reviewed in 2019, including regulations and medical standards for private companies.[53]

OPERATORS

Turkey'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. In 2021, Turkey planned to add six Land Forces teams and two Gendarmerie teams, bringing total capacity to 40 teams.[54]

MECHEM, a South African company, is contracted for mine clearance under the EU Eastern Border Mine Clearance Project.[55] In 2019, MECHEM deployed 15 MDD teams, 6 manual clearance teams (approx. 60 deminers), and 1 MineWolf machine.[56] Before 2019, MECHEM had subcontracted its demining to a national company, Altay, but in 2019 it recruited Turkish nationals directly.[57] RPS-Explosive Engineering Services, a United Kingdom-based company, was contracted for quality assurance (QA) and quality control (QC).[58] TURMAC also had oversight of operations on site.[59]

A joint venture between TDI and national organisation Altay won the contract for Phase 3 of the Eastern Border project and will conduct non-technical survey and clearance in the provinces of Ağrı, Ardahan, Kars, and Iğdır. RPS Energy, a United Kingdom-based company won the contract for quality management.[60]

Table 2: Turkish military operational clearance capacities deployed in 2020[61]

Operator	Manual clearance teams	Total deminers	MDD teams	Mechanical assets	Comments
Gendarmerie	6	120	0	0	MDDs will be used in 2021
Turkish Land Forces	26	420	0	0	Machines will be used in 2021
Totals	**32**	**540**	**0**	**0**	

OPERATIONAL TOOLS

Turkey'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 Ministry of Defence 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.[62] It has also exported the machine to Azerbaijan.[63]

Turkish Land Forces are also planning to deploy mine detection dogs. TURMAC said they would be used for verification following clearance and technical survey with mechanical asset.[64]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

Turkey released a total of 5.3km^2 in 2020, 23% less than the previous year. As in previous years, the overwhelming majority of the area released (97% in 2020) was through survey, all of it conducted by TURMAC. Similarly, all clearance in 2020 was conducted by military demining units and the gendarmerie.[65]

SURVEY IN 2020

Turkey released a total of almost 5.2km^2 through survey in 2020. TURMAC teams conducted 60 separate non-technical surveys, which resulted in cancellation of 4,688,325m^2, almost all on the border with Syria, though with a tiny amount (13,517m^2) in non-border areas. A further 505,972m^2 was reduced through technical survey, of which 332,223m^2 was located along the border with Iran and 158,291m^2 in Turkey's interior.[66]

Table 3: Reduction through technical survey in 2020[67]

Operator	Province	Area reduced (m^2)
Gendarmerie	Ağrı	332,223
	Siirt	191
TLF	Ardahan	141,458
	Diyarbakir	16,642
	Hakkari	15,458
Total		**505,972**

CLEARANCE IN 2020

Turkey's military demining capacity increased significantly in 2018 but the amount of land released through clearance has fallen steadily since then (see Table 5). In 2020, Turkey said it cleared 142,073m^2, about one fifth of the area cleared in 2019 and the lowest amount of land released by clearance in the last four years (see Table 4).[68]

The number of mines destroyed, at 9,781 in 2020, was also barely one-third of that destroyed in 2019. Eight Gendarmerie teams working in Ağrı province on the border with Iran and the interior province of Siirt reportedly destroyed a total of 9,544 mines, the vast majority through clearance. Four Army demining teams working in Hakkâri province at the Iraq Border reportedly destroyed 100 mines. Eight military teams working in Hatay and Şanlıurfa provinces along the Syrian border destroyed a total of four anti-personnel mines of which area clearance, apparently, accounted for only a single mine.[69]

Table 4: Mine clearance in 2020[70]

Region	Area cleared (m^2)	AP mines destroyed	AV mines destroyed
Iran border	85,513	9,443	0
Syria border	21,999	1	3
Iraq border	4,442	100	0
Non-border areas	30,119	237	0
Totals	**142,073**	**9,781**	**3**

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR TURKEY: 1 MARCH 2004

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2014

↓

FIRST EXTENSION REQUEST DEADLINE (8-YEAR EXTENSION): 1 MARCH 2022

↓

EXTENSION REQUESTED (3 YEARS AND 9 MONTHS): 31 DECEMBER 2025

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO, INTERIM EXTENSION REQUESTED TO 31 DECEMBER 2025
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC (and in accordance with the eight-year extension granted by states parties in 2013), Turkey 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. Turkey will not meet this deadline.

In March 2021, Turkey submitted a request to extend its deadline until the end of 2025, while making clear that this is only an interim request. The extension 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". Turkey projects mine action costs in this period at €105 million, all funded by national sources except for €18.5 million provided by the European Union for the Eastern Border project.[71]

Turkey plans to clear 10km^2 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. Turkey asserts that non-technical survey by TURMAC between 2016 and 2020 resulted in cancellation of between 25% and 40% of areas surveyed. Based on that experience, it expects the new non-technical survey will result in cancellation of up to 40km^2 or more than a quarter of Turkey's estimated 145km^2 of AP mine contamination. Turkey plans to use the resulting estimate of contamination as the basis for another extension request setting out plans to complete clearance.[72]

The request has a number of gaps. It does not address Turkey'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 improvised explosive devices, including improvised mines, and other unexploded ordnance.[73] 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 roads.[74] Preliminary observations from the Committee on Article 5 Implementation said it would welcome information on a timeline for approving updated national standards.[75]

Turkey 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. Although Turkey's borders with Iraq and Syria were stable, any outbreak of conflict could interfere with humanitarian activities.[76]

Table 5: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0.14
2019	0.67
2018	2.08
2017	*0.82
2016	0.12
Total	**3.83**

* Also included previously unreported clearance output relating to 2016

1 Email from Maj. Şamil Koptekin, Deputy Director, Quality Management Department, TURMAC, 4 May 2021.

2 Ibid.

3 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 1.

4 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

5 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.

6 Article 7 Report (covering 2019), Form D; 2013 Article 5 deadline Extension Request, pp. A-1 and A-5.

7 2021 Article 5 deadline Extension Request, p. 7.

8 2013 Article 5 deadline Extension Request, p. A-5.

9 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

10 Article 7 Report (covering 2015), Form C.

11 2013 Article 5 deadline Extension Request.

12 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.

13 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.

14 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.

15 Article 7 Report (covering 2014), "Workplan for mine clearance activities", Annex 1; and CCW Amended Protocol II Article 13 Report, Form A, 2015.

16 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 8.

17 Article 7 Report (covering 2020), Form A.

18 Ibid.

19 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.

20 Article 7 Reports (covering 2019 and 2020), Form A.

21 Article 7 Report (covering 2020), Form A.

22 2021 Article 5 deadline Extension Request, p. 16.

23 Preliminary Observations, Committee on Article 5 Implementation, APMBC Intersessionals, 22 – 24 June 2021.

24 Turkey statement to the APMBC Intersessionals, 22–24 June 2021.

25 Email from Mark Frankish, Chief Technical Adviser, Demining and Increasing Border Surveillance Capacity at the Eastern Border, UNDP, 24 May 2021.

26 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

27 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.

28 Article 7 Report (covering 2019), Form A.

29 Ibid.

30 Article 7 Report (covering 2020), Form A.

31 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, pp. 7–8, 10.

32 2021 Article 5 deadline Extension Request, p. 19; email from Mark Frankish, UNDP, 24 May 2021.

33 2021 Article 5 deadline Extension Request, pp. 20-29.

34 2013 Article 5 deadline Extension Request, pp. A-2, A-13, and A-14.

35 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.

36 Email from Maj. Can Ceylan, TURMAC, 11 July 2019; Article 7 Report (covering 2019), Form A.

37 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 8.

38 2021 Article 5 deadline Extension Request, p. 27.

39 2013 Article 5 deadline Extension Request, p. A-14.

40 Article 7 Report (for 2014), "Workplan for mine clearance activities", p. 6.

41 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016.

42 Interview with Gen. Celalettin Coban and Col. Ali Güngör, TURMAC, in Geneva, 18 February 2016.

43 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.

44 Statements of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018; and Intersessional Meetings, Geneva, 22 May 2019.

45 Statements of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018; Article 7 Report (covering 2019), Form A.

46 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

47 Email from Maj. Şamil Koptekin, TURMAC, 4 May 2021.

48 2021 Article 5 deadline Extension Request, p. 20; email from Mark Frankish, UNDP, 24 May 2021.

49 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.

50 Email from Maj. Can Ceylan, TURMAC, 24 June 2020.

51 Email from Şamil Koptekin, TURMAC, 4 May 2021.

52 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.

53 Article 7 Report (covering 2019), Form A; email from Maj. Can Ceylan, TURMAC, 24 June 2020.

54 Email from Şamil Koptekin, TURMAC, 4 May 2021.

55 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.

56 Emails from Maj. Can Ceylan, TURMAC, 11 July 2019 and 24 June 2020.

57 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.

58 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.

59 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.

60 Email from Mark Frankish, UNDP, 2 July 2021.

61 Email from Şamil Koptekin, TURMAC, 4 May 2021.

62 Ministry of National Defence Mine Action Centre, Strategic Plan 2020–2025, undated but 2020, p. 7; Article 7 Reports (covering 2019 and 2020), Form A.

63 "Azerbaijan receives new MEMATT mine clearing robots from Turkey", *Global Defense and Security News*, 8 February 2021.

64 Email from Şamil Koptekin, TURMAC, 4 May 2021.

65 Article 7 Report (covering 2020), Forms A and D.

66 Article 7 Report (covering 2020), Form D.

67 Email from Şamil Koptekin, TURMAC, 4 May 2021.

68 Article 7 Report (covering 2020), Form D.

69 Ibid., Forms A and D.

70 Ibid., Form D.

71 2021 Article 5 deadline Extension Request, p. 16.

72 Ibid., pp. 5, 19.

73 Email from Capt. Mustafa Torun, Senior Planning Officer, TURMAC, received 12 August 2021.

74 Email from Capt. Mustafa Torun, TURMAC, received 12 August 2021.

75 Committee on Article 5 Implementation, Preliminary Observations, APMBC Intersessionals Meetings, 22–24 June 2021.

76 2021 Article 5 deadline Extension Request, p. 36.

UKRAINE

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 DECEMBER 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

MINE ACTION REVIEW ESTIMATE

10KM²

AP MINE CLEARANCE IN 2020

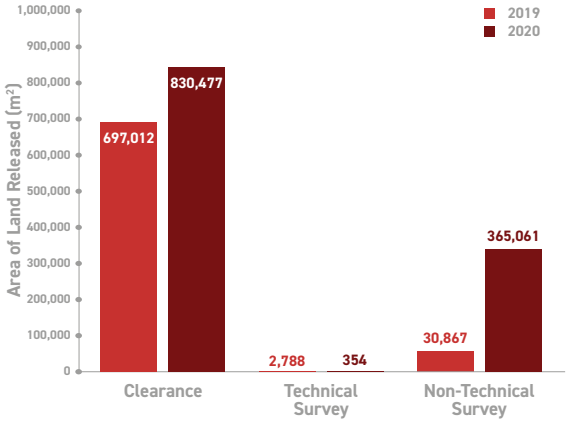
830,477M²

AP MINES DESTROYED IN 2020

5

(INCLUDING 1 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Ukraine's progress in demining remains slow. Long-awaited mine action legislation, pending since 2018 on the grounds of collision with a number of legal acts, was finally signed by the president in December 2020. The legislation foresees the establishment of the structures needed to operationalise a more effective national mine action response in 2021. The new law has largely taken into account recommendations from mine action stakeholders, but further legislative amendments are required to ensure a meaningful mine action programme.

Ukraine is not on track to meet its extended Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline of 1 December 2023 even in areas it controls.

RECOMMENDATIONS FOR ACTION

- **Ukraine should cease all use of landmines.**
- **Ukraine should expedite implementation of the mine action legislation, and create the necessary structures and procedures to allow systematic clearance of anti-personnel mines.**
- **Ukraine should undertake a baseline survey of anti-personnel mine contamination in areas to which it has effective access.**
- **Ukraine should elaborate a national strategic plan for mine action as soon as the National Mine Action Authority (NMAA) is created.**
- **Ukraine should systematically collect data on contamination from mines, cluster munition remnants (CMR) and other explosive remnants of war (ERW), as well as progress in survey and clearance, and establish a centralised database for planning purposes.**
- **Ukraine should report on contamination, survey, and clearance activities, in a manner consistent with the International Mine Action Standards (IMAS).**

- **Ukraine should elaborate standardised national criteria for the prioritisation of anti-personnel mine clearance in consultation with the mine action actors.**
- **Ukraine should elaborate a gender and diversity policy and implementation plan for mine action.**
- **Ukraine should amend the mine action law to allow operators to import dual-use items and to transport and use explosives in planned mine detonations.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	3	3	The extent of anti-personnel mine contamination in Ukraine is not known and while some survey is being conducted it is not being systematically reported upon by Ukraine.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	5	4	The new mine action legislation, adopted in December 2020, foresees the creation of an NMAA and two National Mine Action Centres (NMACs), i) a NMAC sitting under the MoD, and ii) a humanitarian NMAC sitting under the Ministry of Interior (MoI). Responsibilities will be divided territorially. Despite taking into account most of the recommendations put forward by the mine action stakeholders, further amendments are required to allow an effective mine action programme, such as to allow operators to transport and use explosives to destroy mines cleared.
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 is mainstreamed within its programmes. No reference was made to gender or diversity in Ukraine's 2020 Article 5 deadline extension request or in its Article 7 report covering 2020.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	4	There are two Information Management System for Mine Action (IMSMA) databases in Ukraine. In 2019, the databases were transitioned to IMSMA Core. Ukraine submitted its Article 5 deadline extension request in June 2020 and, as with its latest Article 7 report, it continues to report in a manner inconsistent with the IMAS.
PLANNING AND TASKING (10% of overall score)	3	3	There is no national strategic plan for mine action or standardised criteria for prioritising tasks in Ukraine. In August 2020, Ukraine submitted an activity plan, although in truth it was a list of general mine action activities and not an action plan as such.
LAND RELEASE SYSTEM (20% of overall score)	5	5	National mine action standards were published in April 2019 but, as at April 2021, were not fully applied in practice. In 2020, operators convened a working group to review the national mine action standards and submitted recommendations to the national authorities. As of writing, the group had not yet received feedback on the suggested amendments. In August 2020, Ukraine stated that its national standards on mine action management are being tested and that, based on the results of the testing, necessary amendments would be made in due course.
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. It is not known precisely how much anti-personnel mined area was cleared in 2020 across the whole country as Ukraine does not report those figures and the Ukrainian government does not exercise effective control over all mined areas, impeding access for demining. In the area reported as cleared during the year, only four anti-personnel mines were found and destroyed.
Average Score	**4.0**	**3.9**	**Overall Programme Performance: POOR**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- No national mine action authority or mine action centre
- Ministry of Defence (MoD)

NATIONAL OPERATORS

- State Emergency Services of Ukraine (SESU)
- Security Service
- State Special Transport Service (SSTS)
- State Border Service
- Demining Team of Ukraine
- Demining Solutions

INTERNATIONAL OPERATORS

- Danish Refugee Council's (DRC's) Humanitarian Disarmament and Peacebuilding sector (formally known as Danish Demining Group (DDG). Hereafter referred to as DRC
- Swiss Foundation for Mine Action (FSD) – operations resumed in 2020 following a suspension in 2019
- The HALO Trust

OTHER ACTORS

- Organisation for Security and Co-operation in Europe (OSCE) Project Coordinator in Ukraine (PCU)
- 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. The heaviest mine and ERW contamination is believed to be inside the 15km buffer zone on either side of the Line of Contact between the warring parties within the Donetsk and Luhansk regions. [1] The limited access to some areas in the buffer zone hinders the ability to conduct comprehensive survey and clearance.[2]

In 2017, Ukraine estimated, highly improbably, that total contamination by mines and ERW could extend over 7,000km^2.[3] The Ukrainian Ministry of Defence (MoD) accepted that this is a "rough" estimate.[4] In its statement at the May 2019 APMBC Intersessional Meetings, Ukraine estimated, also improbably, that more than 8% of the Donetsk and Luhansk regions have been contaminated by anti-personnel mines.[5] These estimates were also reported in Ukraine's 2020 Article 5 deadline extension request[6] and the claim of explosive contamination covering 7,000km^2 of national territory was repeated in the additional information it submitted in August 2020 in response to comments provided by the Article 5 Committee.[7]

In fact, Ukraine cannot reliably estimate the overall extent of mine contamination until surveys have been completed.[8] While some survey has taken place in the government-controlled areas ongoing conflict means that survey is not possible in the "grey zone": the sliver of territory along both sides of the contact line that divides Ukrainian government-controlled land from separatist-run areas. Ukraine has indicated that nationwide non-technical and technical survey will only be possible once its sovereignty has been fully restored over all territory under its jurisdiction.[9]

Ukraine reported in its latest Article 7 transparency report (covering 2020) that non-technical survey was conducted between 2016 and 2018 by the HALO Trust and the Danish Demining Group (DDG) known as Danish Refugee Council's Humanitarian Disarmament and Peacebuilding sector (DRC) with suspected hazardous areas (SHAs) identified in four districts (see Table 1).

Information was not provided on the number or estimated area of these SHAs and, according to the Geneva International Centre for Humanitarian Demining (GICHD), there is currently no agreed definition for a SHA or confirmed hazardous area (CHA) in Ukraine owing to a lack of implementation of national mine action standards (NMAS).[10]

As at April 2021, The HALO Trust had deployed three non-technical survey teams to determine the extent of mine contamination across the government-controlled area (GCA) in eastern Ukraine.[11] DRC had conducted 19 non-technical survey visits.[12] In 2020, a total area of 6.14km^2 of previously unrecorded anti-personnel mined area was discovered and added to the database. According to information collected during the survey, the mines were laid during the peak of the conflict in 2014–15.[13]

Ukraine is contaminated by anti-personnel mines as a result of the ongoing conflict which broke out in 2014. In the first half of 2014, armed violence erupted between Ukrainian government forces and Russian-backed separatists in the Crimean peninsula and in the east of the country in the Luhansk and Donetsk regions (oblasts). Strong evidence indicates that mines were used in the resultant armed conflicts,[14] including by Ukrainian armed forces, though the full nature and extent of contamination is likely to remain unclear until an effective cessation of hostilities. Prior to the current 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. 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.

Ukraine is also contaminated with CMR, the extent of which is not known, and by considerable quantities of other ERW used during the current conflict (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Ukraine for further information).

Table 1: Anti-personnel mined area region (at end 2020)[15]

Region	District	Location
Donetsk	Sloviansk	Semenovka-1, and Rai-Oleskandrivka
	Lyman	Ozerne-2
	Bakhmut	Novoluhansk-5, and Novoluhansk-13
Luhansk	Stanicho-Luhansk	Chernova Talokva-7, and Chernova Talokva-6

NEW CONTAMINATION

Over the last few years, the Organization 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.[16] A December 2017 report from the Office of the United Nations High Commissioner for Human Rights (OHCHR), covering 16 August to 15 September 2017, stated that: "The parties to the conflict continued the practice of placement of IEDs [improvised explosive devices] and anti-personnel mines in populated areas and near objects of civilian infrastructure."[17] In 2018, the OHCHR called on all parties involved in hostilities to "cease the use of victim-activated devices".[18]

At the May 2019 APMBC Intersessional Meetings, Ukraine claimed that it had not used anti-personnel mines since it acceded to the APMBC in June 2006, and is not planning to do so, 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 Russia has also put mines on the administrative border between Crimea and the rest of Ukraine.[19] Ukraine stated that illegal armed groups had used different types of mines, including those banned by the APMBC and which Ukraine does not possess. The mines which Ukraine alleged have been used by the opposition groups include PMN-1, PMN-2, PMN-4, POM-2R, OZM-72, MES type mines, and MON-50 mines with tripwire.[20]

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 APMBC. According to Ukraine, all mines planted in command-detonated mode are recorded and secured, and access to the area is restricted.[21]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

All areas of mine action in the Donetsk and Luhansk region, including humanitarian demining operations, are currently overseen and coordinated by the MoD which operates the Kamyanets-Podilsky Demining Centre.[22] Operators submit annual plans for MoD's approval.[23] Other national bodies involved in the sector include the Ministry of Interior (MoI), under which sits the State Emergency Services of Ukraine (SESU); the Security Services; the Ministry of Reintegration of the Temporarily Occupied Territories; the State Special Transport Services (SSTS) of the MoD; the National Police; and the State Border Service.[24] The MoD has organisational control of operations, while SESU is generally responsible for conducting clearance.

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] Prior to its adoption, Ukraine did not have any comprehensive legal act regulating the complex set of issues regarding mine action. The Law foresaw the establishment of special governmental institutions to lead the national mine action response in the country. However, the government did not implement the Law on the grounds of collisions with a number of other legal acts. None of the institutions was created, and national mine action response in Ukraine remained uncoordinated. Apart from its non-implementation, the Law also had certain gaps in terms of the victim assistance and safety and efficiency of mine action operators.[26]

Following presidential and parliamentary elections in September 2019, a working group was set up comprised of representatives from relevant government ministries, the United Nations Development Programme (UNDP), the (North Atlantic Treaty Organization) NATO and the OSCE Project Coordinator in Ukraine (PCU) to prepare amendments to the law.

In June 2020, the "Law on the Amendments to the Law on Mine Action in Ukraine" passed its first reading. UNDP, OSCE PCU, The HALO Trust, and DRC came together to prepare an explanatory note suggesting further amendments, with comments on the status of mine victims and their rights; training and insurance of deminers; handover procedure and liability of actors after handover; and importation of dual-usage goods to allow international operators the possibility to use explosives in order to destroy items found during demining, as currently only MoD and SESU can perform that task.

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, including recommendations on the legal status and assistance and compensation of mine victims. The new draft also improved on the safety and efficiency of mine action operators; defined the minimum size of insurance sum for the operators' staff members; removed the requirement of operators providing insurance for damages for a period of ten years after the land release; it also removed the territorial restriction for operators' right to request support from the local authorities.[27]

Nevertheless, 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 explosive ordnance disposal (EOD) procedures, and operators' permit for the importation and use of so-called dual-use items. Additional legislative amendments are required to fully address these two concerns.[28]

The approved Law establishes a framework for humanitarian demining, divides responsibilities among State institutions, and foresees the creation of NMAA. However, it has a peculiarity in that it envisages the creation of two National Mine Action Centres (NMACs). There will be one NMAC under the MoD and one under SESU, which sits under the MoI. The latter centre will be named "Special Humanitarian Demining Centre". The two NMACs will share the remits of information management, quality assurance (QA), monitoring, planning, and certification of the operators and their responsibility will be divided territorially.[29] The SESU NMAC will be in charge of all humanitarian demining across Ukraine with the exception of MoD infrastructure, railways (out to five metres either side of the track), which is the remit of SSTS, and certain specific

areas assigned to other agencies.[30] The decision to create two NMACs as opposed to one comes as a compromise after competition between the MoD and the MoI on who takes the lead on mine action.[31] But it does not augur well for either efficient or effective mine action.

The NMACs will be coordinated by the NMAA, an interagency body made up of the Cabinet of Ministers (CoM), which will be chaired by the MoD while "special conditions" exist in Ukraine and then during peacetime by the MoI. The NMAS and the national mine action strategy will be adopted by the NMAA.[32]

As at May 2021, the Humanitarian Demining Centre has been created in Merefa (east); the MoD NMAC was in an advanced stage in Chernihiv (north) but not yet fully established. The NMAA has not yet been created. It was expected that all these structures would be fully established within the six-month period set by the Law, that is by June 2021.[33] As at July 2021, however, the NMAA was not yet fully established, [34] although the MoD was assuming an NMAA role on a de-facto basis.[35]

Operators participate in monthly mine action sub-cluster meetings, which are attended by representatives of the MoD, SESU, and Ministry of Foreign Affairs (MoFA), and which is chaired by UNDP. There are also regular roundtable meetings organised by OSCE PCU on specific mine action topics and other sectorally relevant discussions.[36] However, exchange and dialogue among stakeholders (non-governmental organisations (NGOs), the International Committee of the Red Cross (ICRC), UN agencies, and government ministries) are said to focus on issues other than progress and challenges in completing clearance by the Article 5 deadline.[37] In October 2020, the working group initiated a separate platform inviting representatives from the national authorities with the aim of assisting the government to properly report on contamination, mine casualties, and to create a centralised national database, which, as of writing, was still lacking.[38]

National funding is provided for clearance of mines and ERW and quality control (QC). The QC inspection teams from the MoD began conducting clearance inspection visits, which enabled an official land handover with the local authorities for the first time in 2019, and a total of 32 inspection visits for HALO Trust took place.[39] Additionally, the MoD and the Civil-Military Cooperation Directorate (CIMIC) of the Armed Forces of Ukraine continued to support survey and clearance activities through regular collaboration on all matters related to security, particularly in relation to HALO teams' deployment in the 15km buffer zone.[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). But operators continue to face difficulties importing armoured equipment and dual-use items. The working group continues to lobby for amendments to the mine action legislation and to clarify these issues.[41]

DRC has a capacity building project that aims to stimulate the SESU involvement in developing and complying with NMAS. In the frame of this project in 2020, DRC supported the SESU in the revision of standing operating procedures (SOPs) and the improvement of the quality and compatibility of the SESU Data Management System. DRC also trained 74 SESU staff members, provided 12 metal detectors, uniforms, Personal Protective Equipment (PPE) units and other supplies for field deployment. As a result, six SESU demining teams and one non-technical survey team deployed for survey and clearance in 2020. As at May 2021, DRC delivered five four-wheel vehicles to SESU, provided deminer training to 29 SESU personnel, field medic training to eight and Microsoft Access training to 60.[42] In 2021, DRC expected to train, equip, and deploy seven SESU demining additional teams in Luhansk region and to create a pool of competent SESU personnel who can independently cover the future training needs of the organisation. With funding from the German Federal Foreign Office (GFFO), DRC will also provide the Regional Operations Centre in Rubizne, Luhansk region with vehicles and communications and demonstration equipment.[43] DRC also trained SESU personnel to enable them to respond to EOD call-outs across Ukraine.[44]

The Swiss Foundation for Mine Action (FSD) purchased two pickups, detectors, PPE units, medical kits, laptops, tablets, and printers, which it will provide to the MOD QA teams. In addition, FSD is planning to organise training for MoD and NMAC staff in 2021 and beyond.[45]

The GICHD has been working with the OSCE PCU and the Geneva Centre for Security Sector Governance (DCAF) to help foster mine action institutions.[46] In 2020, the GICHD supported the OSCE PCU, MoD and SESU in information management; provided a training course on operational efficiency; and contributed to the efforts to update the NMAS and the National Mine Action Law.[47]

In 2020, the HALO Trust conducted five capacity building training courses to 50 SESU staff in order to improve knowledge, skills, and capacity for mine action activities. The training covered the following topics in line with best practises and International Mine Action Standards (IMAS): non-technical and technical survey, information management, first aid, EOD, and mine clearance. As at March 2021, the HALO Trust provided a refresher demining training to 22 SESU personnel.[48] The trained SESU personnel have been deployed to survey and clear minefields with mentorship from HALO.[49] HALO also delivered the following equipment to SESU in 2020: 4 vehicles, 22 detectors, 22 sets of PPE, along with medical kits and radios.[50]

The OSCE PCU has received funding until December 2021 to support Ukraine in establishing an NMAA and an NMAC, national standards and mine action legislation; to develop the International Management System for Mine Action (IMSMA) database in co-operation with the GICHD; to organise training for Ukrainian demining specialists in quality management (QM), non-technical survey, and IMSMA; to procure demining equipment for the MoD and SESU; and to develop mine risk education materials.[51] In 2020, OSCE donated Protective Equipment to the SESU and MoD and printed explosive ordnance risk education (EORE) materials for the Ministry of Reintegration of the Temporarily Occupied Territories.

The UNDP, within the context of the UN Recovery and Peace Building Programme (UN RPP), launched a Mine Action Project "Capacity Development Support for Integrated Mine Action in Eastern Ukraine" in mid 2020. The project aims to support the Government of Ukraine in establishing a comprehensive, coordinated, and gender-sensitive mine action response. Funded by the government of Canada, the project interventions have been focused on a) enhancing mine risks prevention through an improved education framework, b) improving mine action information management through a system of systematic local information gathering on

risk education and victim assistance, and feeding these into IMSMA, c) establishing effective capacities for mines clearance, quality management and assistance to mines' survivors, d) providing advice and capacity building to national mine action institutions when set up, and e) continue effective coordination of mine action operational activities through the mine action sub-cluster, which sits under the protection cluster. Due to the delay in the adoption of the law on mine action, most project activities were postponed to 2021.[52]

GENDER AND DIVERSITY

As at June 2020, 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 Article 7 report covering 2020.[53]

FSD does not have a gender and diversity plan in place but encourages females to apply in its job announcements. Selection and promotion is then based on qualifications. In 2020, 70% of managerial/supervisory positions in FSD were filled by women, including the Deputy Country Director and the Operations Coordinator. 20% of survey and clearance team members were women.[54]

DRC has a gender and diversity policy and implementation plan. It ensures that all affected groups, including women and children, are consulted during survey and community liaison activities. As at April 2021, women represent 75% of the two non-technical survey teams, 19% of clearance teams, and 50% of EORE teams. In addition, 50% of managerial/supervisory positions were filled by women, including the Head of Programme position. In an additional step to improve participation of women and children in survey and clearance activities in 2021, the DRC Ukraine programme was selected for participation in a GICHD assessment that will strengthen capacity and practice on gender, equality, and inclusion.[55]

The HALO Trust uses mixed gender non-technical survey and community liaison teams. HALO Trust began recruiting women for clearance roles in 2017, employing the first female deminers in Ukraine.[56] As at April 2021, 19% of operational survey and clearance staff were women,[57] along with 50% women in non-operational managerial positions.[58]

INFORMATION MANAGEMENT AND REPORTING

There are two functioning IMSMA databases in Ukraine, one managed by SESU and the other by the MoD, both of which collect and analyse contamination and land release data from national operators and NGOs.[59] The databases are, though, claimed to be complementary, as they are separated based on region, thematic area, and operational purpose.[60]

In 2019–20, the GICHD supported IMSMA Core installation and data migration. Both the MoD and SESU have IMSMA core, though the resources available to maintain the system were limited, a problem which might be addressed by the new structure in 2021. The IMSMA receives periodic information from operators, but it is not up to date. The data received are incomplete and further work is needed to ensure they are standardised. The GICHD continues to work with the authorities and stakeholders to develop data forms in line with the IMAS on minimum data requirements.[61]

The GICHD is currently working with its in-country partners to improve the quality of the data. An Information Management (IM) working group was created in 2020, which it chairs. The group plans to discuss the production of appropriate IM forms and processes to improve the efficiency of the national IM system.[62] The group is attended by IM personnel from MoD, SESU, HALO Trust, FSD, and DRC.[63]

In its activity plan presented to the APMBC Eighteenth Meeting of States Parties (18MSP), Ukraine reported that the MoD, with the assistance of the GICHD and OSCE PCU, has developed an interactive map of areas contaminated with mines and explosives. The MoD posted the map on its web-page and made it accessible to all operators. The map highlights areas identified as hazardous or suspected to contain mines or ERW and provides information on the area, type of hazard, date of identification, and the organisation which is responsible for tackling it.[64]

Operators submit survey and clearance data to the MoD on a monthly basis and each submitted a report at the end of 2020 on all survey and clearance data for the year.[65]

The DRC continues to build the competences of SESU with regard to IM and reporting. The second phase of a support programme that started in 2018 and which will continue until August 2024, began in September 2020. During this phase, DRC will help SESU expand its SOPs to cover IM, non-technical survey, QA, and QC. In coordination with the GICHD, the second phase also will aim to improve the quality and compatibility of the SESU data management system to support the integration of IMSMA Core. DRC also plans to train 60 SESU personnel on data collection, processes and organisation and to build the capacity of the IM personnel across all of the 25 regional SESU sub-offices. The data management trainings will contribute to the efforts of the mine action community to unify terminology across the SESU and MoD so that the two databases are compatible and can serve the national mine action programme effectively.[66]

FSD planned an ArcGIS training as part of its capacity building package for MoD QA personnel in 2021.[67]

Ukraine submits Article 7 transparency reports in a timely manner but does not report on its progress in a manner consistent with the IMAS or as treaty practice now requires. In its comments on Ukraine's extension request in October 2020, the committee on Article 5 implementation noted the importance of Ukraine to report on its progress following the IMAS, disaggregating by area cancelled through non-technical survey, reduced through technical survey, and addressed through clearance. Ukraine responded that identification of specific areas will be possible after a complete ceasefire and a "technical inspection of the allegedly contaminated areas along the demarcation

line".[68] Ukraine's subsequent Article 7 report (covering 2020) continued not to be consistent with IMAS and lacks sufficient detail to be meaningful. With respect to Ukraine's Article 7 report of June 2021 and Committee on Article 5 Implementation highlighted the lack of clarity on the classification of hazardous areas, the contamination type, the remaining contamination, and Ukraine's plans to address it.[69]

Ukraine will not meet its APMBC Article 5 deadline of 1 December 2023 even in areas it controls and has declared that meeting this deadline is subject to restoration of Ukraine's control over its territories. In its Article 5 deadline extension request submitted in June 2020, Ukraine stated that "Ukraine is requesting a two year extension... provided completion of hostilities, restoration of the constitutional order and gaining the full control over the occupied territories".[70]

PLANNING AND TASKING

Ukraine does not have a national mine action strategy and, as at April 2021, there were no plans to develop one.[71] The GICHD was invited to a roundtable meeting in March 2020, where it presented the strategic planning process. The national authorities subsequently decided to wait for the implementation of the new Mine Action Law before developing a national strategy.[72] The OSCE plans to support the NMAA, as soon as it is established, in developing a mine action strategy and expects this to be ready in 2022.[73]

According to Ukraine's Article 7 report covering 2020, in 2021 clearance was planned in the Bakhmut, Lyman, and Sloviansk districts of the Donetsk region; and in the Popasna and Stanichno-Luhansk districts of the Luhansk region.[74] In August 2020, Ukraine submitted an "Action Plan" for 2020,[75] although in truth it was a list of general mine action activities and not an action plan as such. In its comments on Ukraine's Article 5 implementation, the Committee observed that Ukraine's action plan was not costed or evidence-based, and that it did not include clear milestones.[76]

There are currently no standardised criteria at national level for task prioritisation.[77] Until an NMAC is fully functional, all tasking of operators is managed by the MoD in line with its annual action plan.[78] Local government have been helping the MoD to prioritise tasks based on humanitarian criteria.[79] The MoD approves annual survey and clearance work plans submitted by operators. Operators prioritise clearance according to humanitarian impact and in discussion with the local community.[80]

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.[81] However, the NMAS did not consider all the inputs from the mine action stakeholders and have not been updated regularly to address new challenges and ensure employment of best practices.[82] The NMAS were published in April 2019 but, as at April 2021, were not fully applied in practice.[83] In May 2020, representatives from the GICHD, OSCE PCU, DRC, and HALO Trust, formed a working group with the objective of revising NMAS to better align it with IMAS. The working group submitted its recommendations to the MoD, which was the acting NMAA at that time. According to DRC, the Ukrainian government set a deadline to finalise the NMAS by August 2021.[84] In April 2019, the CoM approved Resolution 372 on "Regulations on marking mine and ERW hazards", which are said to follow the provisions in the IMAS.[85] The lack of a functional NMAC also means that operators' SOPs are not currently accredited. Operators are therefore working in line with IMAS and donor contractual obligations rather than NMAS.[86]

In August 2020, Ukraine stated that its national standard on mine action management was "being tested" and that, based on the results of the testing, necessary amendments would be made in due course.[87]

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 engineer-sapper units of the Armed Forces of Ukraine; the National Guard of Ukraine; the Ministry of Internal Affairs, which conducts clearance through SESU and also has an engineering department that conducts EOD; the Security Service; the State Special Transport Service, 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.[88] In its 2020 extension request, Ukraine reported that 60 "local administrations" are involved annually in demining in the Donetsk and Luhansk regions (up to 300 people).[89]

Three international demining organisations—DRC, FSD, and The HALO Trust—are operating in Ukraine.[90] In addition, the Ukrainian organisations, Demining Team of Ukraine and Demining Solutions, are active in demining in eastern Ukraine.[91] In 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]

Table 2: Operational clearance capacities deployed in 2020[93]

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
HALO	25	300	0	3	Increased from 2019 by two manual demining teams (24 staff). Mechanical assets are a JCB excavator, Volvo front-loader, and case front-loader.
DRC	5	30	0	0	Increased from 2019 by three manual demining teams (7 staff).[94]
FSD	3	20	0	0	One clearance team operated with only 6 deminers. Medics and drivers are cross trained as deminers, and have therefore been included.
Demining Solutions	1	7	0	0	
Totals	**34**	**357**	**0**	**3**	

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

In 2020, DRC deployed two non-technical survey personnel in one team and five technical survey teams, which also conduct clearance (see Table 2).[95] DRC increased its survey and clearance capacity in line with increased funding and expected to significantly augment its capacity further to nine clearance teams and two non-technical survey teams in the course of 2021.[96]

FSD has resumed its operation in 2020 after a suspension in 2019 due to the lack of funding. In 2020, it deployed four non-technical survey personnel across two teams and seven technical-survey personnel in one team. FSD does not have plans to increase its operational capacity in 2021, but this might change if additional funding becomes available.[97] FSD expects to receive a mechanical ground preparation machine (MV 4) early summer 2021 which will result in the formation of a dedicated mechanical team.[98]

The HALO Trust deployed 12 non-technical survey personnel across three teams and 18 technical survey personnel across three teams.[99] HALO Trust increased its clearance capacity in 2020 compared to the previous year thanks to increased funding. HALO intended to maintain the same capacity of manual, clearance and technical survey in 2021, but might also increase its non-technical survey capacity if funding allows.[100] In 2020, HALO Trust deployed teams using Minehound detectors (with ground-penetrating radar) in conjunction with rapid excavation drills for clearance of minefields with prevalence of plastic anti-vehicle mines. This process involved teams mapping linear bounds with Minehound detectors, whereby the radar enabled clearance teams to identify the density and size of an object without the need to excavate at every metal signal. This has increased productivity rates by 60%.[101]

In 2020, MoD conducted QC of 21 cleared tasks by HALO Trust (eight in Luhansk and thirteen in Donetsk region). HALO Trust handed over 12 tasks to local communities and beneficiaries in 2020 (621,185m^2).[102] In addition, MoD conducted two QCs of the area released in 2018 and 2019 by DRC. Subsequently, DRC handed over two areas of 505,698m^2 to the communities in 2020.[103]

The DRC faced two stand-down periods due to the COVID-19 pandemic. The first one was between mid-March and mid-May following the restrictions announced by the government. The second one, owing to infections among team members, started in November through to the end of 2020, where in any event operations are routinely put on hold during the winter season. The need to observe the number of passengers per vehicle further prolonged transportation of equipment and personnel. These conditions combined have negatively affected DRC's annual outputs.[104]

COVID-19 restrictions meant that FSD had to limit the information-gathering methods of non-technical surveys and to conduct two separate basic clearance operator trainings instead of one in order to implement social distancing measures. This resulted in loss of time and additional costs.[105]

The GICHD cancelled a number of planned activities due to the COVID-19 pandemic, including a non-technical survey course, baseline assessments of national capacities, support to revising NMAS, and IMAS outreach. These were re-scheduled for 2021.[106]

On 12 March 2020, the Ukrainian Government imposed COVID-19 restrictions, and the HALO Trust briefly suspended its operations. Nine days later, teams were redeployed with strict preventative measures. Despite the measures, the operation continued largely uninterrupted after redeployment and the impact on outputs was minimal. During the first few months of the pandemic, HALO Trust reshuffled its activities to limit the contact of non-technical survey teams with the communities and informants. The non-technical survey teams instead focused on re-marking minefields but slowly resumed regular non-technical survey activities by July 2020 while maintaining the safety measures.[107]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of 1.2km² of mined area was released in 2020, of which, 830,477m² was cleared, 354m² was reduced by technical survey, and 365,061m² was cancelled by non-technical survey.[108] Four anti-personnel mines were destroyed. In addition, one anti-personnel mine was found during an EOD call-out and subsequently removed and destroyed by the Ukrainian authorities.[109]

In its Article 7 report to the APMBC, Ukraine reported clearance in Chernova Talikva by The HALO Trust, but without providing details about number of SHAs, areas cleared, or anti-personnel mines destroyed. Ukraine added that the MoD conducted QA in these areas in accordance with IMAS and the NMAS.[110]

In addition, a total of 6.14km² of previously unrecorded anti-personnel mine contamination was discovered and added to the database.

SURVEY IN 2020

In 2020, DRC cancelled 365,061m² of land through non-technical survey (see Table 3). The HALO Trust reduced 354m² of mined area through technical survey (see Table 4).

Table 3: Cancellation through non-technical survey in 2020[111]

Region and District	Village	Operator	Area cancelled (m²)
Luhanska/Popasnianskyi	Myrna Dolyna	DRC	117,874
Luhanska/Popasnianskyi	Myrna Dolyna	DRC	78,162
Luhanska/Popasnianskyi	Hirske	DRC	99,480
Luhanska/Popasnianskyi	Hirske	DRC	69,545
Total			**365,061**

Table 4: Reduction through technical survey in 2020[112]

District/village	Operator	Area reduced (m²)
Stanychno-Luhanskyi/ Krasna Talivka	HALO Trust	354
Total		**354**

In 2019, the HALO Trust cancelled 30,867m² through non-technical survey and reduced 2,788m² through technical survey.[113] There was a significant decrease in the area cancelled and reduced by the HALO Trust in 2020 compared to 2019 as resources shifted to increase clearance operations.

DRC did not cancel or reduce any areas contaminated with anti-personnel mines in 2019.[114] DRC survey operations saw a significant increase in 2020 compared to 2019 thanks to an increased capacity and the creation of an independent non-technical survey team.[115]

As noted above, a total of 6.14km² of previously unrecorded anti-personnel mine contamination was discovered and added to the database. Of this, 3.49km² is of mixed anti-vehicle/ anti-personnel mines or anti-personnel mines/ERW and was discovered by HALO Trust,[116] 0.73km² of anti-personnel minefields were discovered by FSD,[117]and 1.92km² of mixed mined area was discovered by DRC.[118]

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.[119]

CLEARANCE IN 2020

A total of 830,477m² of mined land was cleared in 2020 (see Table 5).

The HALO Trust cleared 772,179m², destroying in the process four anti-personnel mines and thirty-five items of unexploded ordnance (UXO). Of the four destroyed anti-personnel mines, two were of an improvised nature.[120] In 2019, the HALO Trust cleared 697,012m², destroyed eight anti-personnel mines, 27 anti-vehicle mines, and 164 items of other UXO.[121]

DRC cleared 58,298m² of land. No anti-personnel mines were found during the clearance but two items of UXO were destroyed.[122] In 2019, DRC did not conduct any clearance of anti-personnel mined area.[123] The increased clearance output is due to the increased operational demining capacity from two teams in 2019 to five in 2020, which enabled the survey of four sites.[124]

The number of anti-personnel mines found during clearance continues to be very low and, in 2020, the HALO Trust cleared a total of 123,186m² in 13 areas that proved to contain no anti-personnel mines. However, it should be noted that anti-personnel mines were found on two of these thirteen areas in previous years' clearance. DRC cleared four mined areas that proved to have no anti-personnel mines but had not fully finished clearing any of these areas as at April 2021.

In addition, one anti-personnel mine was found during an EOD spot task. The mine was reported by HALO and then removed and destroyed by the MOD and State Emergency Service,[125] as operators are not authorised to conduct EOD in Ukraine.[126]

Table 5: Mine clearance in 2020[127]

District	Village	Operator	Area cleared (m²)	AP mines destroyed	UXO destroyed
Bakhmutskyi	Kodema	HALO Trust	136,467	1	8
Bakhmutskyi	Novoluhanske	HALO Trust	170,274	1	15
Bakhmutskyi	Riznykivka	HALO Trust	19,414	0	0
Bilovodskyi	Pervomaisk	HALO Trust	23,498	0	1
Lymanskyi	Kryva Luka	HALO Trust	3,580	0	1
Lymanskyi	Ozerne	HALO Trust	43,858	0	1
Lymanskyi	Yampil	HALO Trust	86,175	1	3
Mariupolska	Hnutove	HALO Trust	4,247	0	0
Mariupolska	Talakivka	HALO Trust	2,251	0	0
Slovianskyi	Andriivka	HALO Trust	39,579	0	2
Stanychno-Luhanskyi	Krasna Talivka	HALO Trust	85,145	0	0
Stanychno-Luhanskyi	Shyrokyi	HALO Trust	21,690	0	0
Stanychno-Luhanskyi	Kolesnykivka	HALO Trust	5,608	0	1
Stanychno-Luhanskyi	Komyshne	HALO Trust	127,275	1	1
Stanychno-Luhanskyi	Krasnyi Derkul	HALO Trust	3,118	0	2
Popasnianskyi	Komyshuvakha	DRC	26,243	0	0
Popasnianskyi	Myrna Dolyna	DRC	32,055	0	2
Totals			**830,477**	**4**	**37**

AP = Anti-personnel AV = Anti-vehicle

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR UKRAINE: 1 JUNE 2006

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 JUNE 2016

↓

FIRST EXTENDED DEADLINE (5-YEAR EXTENSION): 1 JUNE 2021

↓

SECOND EXTENDED DEADLINE (2-YEAR, 6-MONTH EXTENSION): 1 DECEMBER 2023

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Table 6: Five-year summary of AP mine clearance

Year	Area cleared (m²)
2020	830,477
2019	697,012
2018	391,819
2017	220,887
2016	52,887
Total	**2,193,082**

Ukraine was not on track to meet its extended Article 5 APMBC deadline of 1 June 2021 and, in June 2020, submitted an extension request for two years through to 1 December 2023, although this would actually be a two year and six month extension. It is highly unlikely that Ukraine will meet this request and Ukraine has stated that the fulfilment of this deadline is 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".[128]

The circumstances that made it necessary for Ukraine to request an extension in 2018 remain unchanged.[129] The lack of control over occupied territories in the Donetsk and Luhansk regions and ongoing fighting pose significant challenges for the Ukraine to plan for fulfilment of Article 5. Even if Ukraine were to gain full control of all mined areas on its territory, it is highly improbable that it would be able to complete survey and clearance of all anti-personnel mined areas by December 2023. The extension request should therefore be

viewed as an interim request. Ukraine continues to provide very little information on outstanding mine contamination or the outputs from ongoing survey and clearance activities. This makes it very difficult to know the true extent of mine contamination in Ukraine or track progress in survey and clearance efforts.

The area inside the 15km buffer zone is believed to be heavily contaminated with mines and ERW, but access to the buffer zone for humanitarian survey and clearance operations is severely limited on the government side, and there is no access for humanitarian demining in areas not controlled by the government.[130] Within government-controlled areas, there is limited demining close to the contact line as mined areas are deemed to serve a tactical purpose and will not be demined until there is total de-escalation of the conflict. Despite the agreements between Ukraine and Russia to implement a "full and comprehensive" ceasefire in eastern Ukraine by the end of 2019, the OSCE Special Monitoring Mission to Ukraine continued to record ceasefire violations in 2020.[131]

The amount of area cleared in 2020 was higher than the amount of clearance reported in 2019, though this data is only based on information provided by the HALO Trust, DRC, and FSD as Ukraine did not report clearance data for 2020 or in the previous year 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 planed clearance is very small—just four in 2020 and eight in 2019—, with both The HALO Trust and DRC clearing large areas without finding any anti-personnel mines. Clearance data is 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]

While Russia is not a State Party or signatory to the APMBC it also has obligations under international human rights law to clear 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.

A step forward in 2020 saw the passing of a long-awaited national mine action legislation in December 2020. The legislation provides a framework for humanitarian demining in Ukraine and will foresee the establishment of the NMAA and the NMACs, the implementation of national standards, and development of a national strategy with concrete milestones in place for survey and clearance in Ukraine. As at May 2021, the Special Humanitarian Demining Centre was fully established, the NMAC under the MoD was in its final stages, whereas the NMAA was not yet setup. The new law falls short of addressing two points concern for the mine action stakeholders and further legislative amendments are needed to allow operators to import and use dual-use items and conduct EOD, which would allow a more efficient mine action response.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Ukraine has not provided information on whether it has a plan in place for dealing with residual risk post completion.

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UNITED KINGDOM (FALKLAND ISLANDS)

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2024
REPORTED FULFILMENT OF ARTICLE 5 OBLIGATIONS

KEY DATA

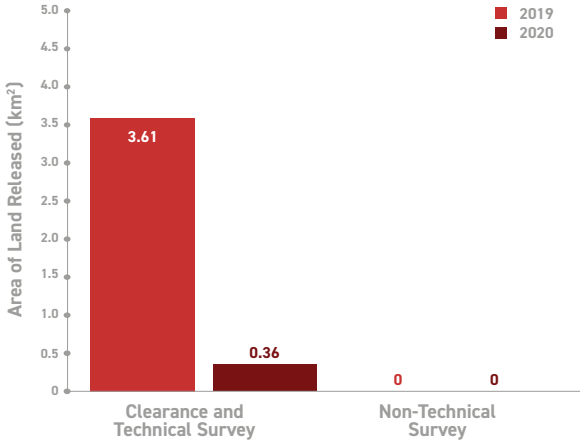
ANTI-PERSONNEL (AP) MINE CONTAMINATION:

COMPLETED CLEARANCE OF ALL KNOWN MINED AREAS

AP MINE CLEARANCE IN 2020
0.36KM²

AP MINES DESTROYED IN 2020
432

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET *(as per the Oslo Action Plan commitment):*
COMPLETED CLEARANCE IN NOVEMBER 2020

KEY DEVELOPMENTS

The United Kingdom has reported fulfilling its Anti-Personnel Mine Ban Convention (APMBC) Article 5 obligations, completing clearance of remaining mined area on the Falkland Islands[1] on 14 November 2020, well in advance of its 1 March 2024 extended deadline.[2]

In April 2020, the United Kingdom published a costed work plan for clearance of the last four mined areas and additional funding was sought to ensure the Programme was fully funded through to completion. Completion was the result of strong national ownership and political will in recent years, supported by national funding and effective planning.

The United Kingdom believes there is a very low risk of previously unknown mine contamination (i.e. residual contamination) being discovered post completion, but if a mine or other item of explosive ordnance is found, it will be addressed by the Explosive Ordnance Disposal (EOD) team from the UK's Royal Air Force Armament Engineering Flight on the Falkland Islands, which has a long-term military presence there.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	9	9	The United Kingdom had established an evidence-based, accurate baseline of anti-personnel mine contamination in the Falkland Islands, including through technical survey. Clearance of all known mined areas was completed on 14 November 2020. The United Kingdom believes there is a very low risk of previously unknown mine contamination being discovered post completion. If a mine or other item of explosive ordnance is found following completion, it will be addressed by the EOD team from the UK Royal Air Force on the Islands, which has a long-term military presence there.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	9	9	There was strong national ownership of mine action on the Falkland Islands, with oversight from a National Mine Action Authority and a Demining Project Office, and 100% national funding for all survey and clearance.
GENDER AND DIVERSITY (10% of overall score)	6	6	Good gender policies and procedures were in place to cover mine action in the Falkland Islands, including at the level of the UK Foreign and Commonwealth Office (FCO), the National Mine Action Authority; the land release contractor (SafeLane Global); and the Demining Project Office (Fenix Insight). While one third of management positions in SafeLane Global in the Falkland Islands were held by women, none of the survey or clearance personnel was female. This was despite claims of equal employment opportunities.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	5	The United Kingdom had a well-functioning information management system that recorded progress in land release operations on the Islands. That said, land released through technical survey was not disaggregated from release through clearance in the United Kingdom's reporting, as international best practice demands.
PLANNING AND TASKING (10% of overall score)	10	9	Phase 5(b), which began in April 2018, proceeded according to schedule up to the end of March 2020. It was then extended to complete clearance of the remaining mined areas. In April 2020, the United Kingdom published a clear and costed work plan for the clearance of the last four mined areas and additional funding was sought to ensure the Programme was fully funded through to completion. Measures are in place to address residual risk, post completion.
LAND RELEASE SYSTEM (20% of overall score)	8	7	The United Kingdom does not have its own national mine action standards, but survey and clearance operations on the Islands were said to meet or exceed the International Mine Action Standards (IMAS). Detailed information from non-technical survey informed land release methodology, which moved between technical survey and clearance in response to new information.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	9	9	The United Kingdom released the remaining 0.36km^2 of mined area in 2020, declaring completion on 14 November, well ahead of its extended 2024 Article 5 deadline.
Average Score	**8.2**	**7.9**	**Overall Programme Performance: VERY GOOD**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Mine Action Authority (chaired by the United Kingdom Foreign, Commonwealth and Development Office (FCDO) and comprising representatives from the Ministry of Defence, the Falkland Islands government, and a strategic advisor)
- Fenix Insight (Demining Project Office)

NATIONAL OPERATORS

- SafeLane Global (formerly Dynasafe BACTEC, and land release contractor)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

The United Kingdom concluded its mine clearance operations in the Falkland Islands on 14 November 2020.[3] The Falkland Islands, in the South Atlantic, had been the only mined area under the jurisdiction or control of the United Kingdom, as a result of armed conflict with Argentina in 1982.[4]

At the end of 2019, contamination had been reduced to six mined areas totalling 391,825m^2.[5] Contamination had been further reduced to four mined areas totalling an estimated 226,958m^2 by the end of March 2020.[6] Clearance of the final four mined areas, which had already been technically surveyed, was completed in November 2020 and totalled 193,816m^2,[7] slightly less than the size estimated.

Some clearance was undertaken in the early 1980s immediately following the Falklands conflict, during which 1,855 mines were removed and destroyed from mined areas.[8] However, between the date the United Kingdom became a State Party to the APMBC (1 March 1999) and the submission of its first Article 5 deadline extension request in 2008, no clearance took place.[9] However, a multi-year joint feasibility study with Argentina was conducted during this period and published in July 2007.[10]

In its 2008 Article 5 extension request, the United Kingdom reported that 117 mined areas remained over an estimated total area of 13km^2, and containing some 20,000 anti-personnel and anti-vehicle mines.[11] On the basis of additional information obtained during demining operations, the estimate for the total contaminated area was increased to 13.5km^2.[12] The total number of mined areas was subsequently revised upwards, from 117 to 122 mined areas, as the earlier feasibility study had combined a small number of separately numbered mined areas.[13]

The first four phases of clearance took place from October 2009 to March 2016) and the fifth and final phase of clearance in the Falkland Islands began in October 2016 and was completed in November 2020.[14] According to the United Kingdom's records, a total of 9,927 anti-personnel mines and 1,694 anti-vehicle mines were cleared during the 11-year programme of clearance that began in October 2009.[15]

The United Kingdom has reported that no civilian has ever been killed or injured by mines on the islands.[16] Over the years, very few civilians have deliberately or inadvertently entered a minefield. It was a criminal offence on the Falkland Islands to enter a minefield.[17]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

A National Mine Action Authority (NMAA) was established in 2009 to regulate, manage, and coordinate mine action on the Falkland Islands. The NMAA was chaired by United Kingdom Foreign, Commonwealth and Development Office (FCDO) and comprised representatives from the Ministry of Defence, the Falkland Islands government, and the programme's strategic advisor. The NMAA ensured mine action was conducted in accordance with United Kingdom and Falkland Islands' legislation, and its approval was required before cleared areas were declared completed. It met at least once every six months, and the land release contractor (SafeLane Global; formerly, Dynasafe BACTEC) and the Demining Project Office (Fenix Insight) were invited to brief the NMAA "as appropriate".[18]

In addition, there was a Suspect Hazardous Area Land Release Committee (SHALARC), which is a non-decision-making body based in the Falkland Islands, composed of local officials and a representative of the British military. SHALARC provided a forum for the contractors to discuss issues of concern or interest to the committee and explain the land release process.[19]

Survey and clearance operations in the Falkland Islands were entirely funded by the UK Government.[20] The total investment in demining of the Falklands was £44 million (approx. US$54 million).[21]

GENDER AND DIVERSITY

The UK reported that it made every effort to ensure that the different needs and perspectives of women, girls, boys, and men were considered in planning and implementation of mine clearance activities on the Falkland Islands.[22]

The UK government and its contractors adhered to an equal opportunities approach to recruitment for the demining programme in the Falkland Islands.[23]

The NMAA required its contractors, SafeLane Global and Fenix Insight, to meet contractual conditions to prevent unlawful discrimination, either directly or indirectly, on the basis of race, colour, ethnic or national origin, disability, sex or sexual orientation, religion or belief, or age. The provisions also stipulated that the Contractor must adhere to the current relevant codes of practice or recommendations published by the Equality and Human Rights Commission.[24]

Fenix Insight has an organisational gender policy which it applies to its demining, though there is limited opportunity to pursue it on the Falklands given the deployed "team" was composed of only one (male) person. SafeLane Global has an equal opportunities policy and selects employees based on qualification and experience, without gender restrictions. Of management level positions employed by SafeLane Global in the Falkland Islands, women occupied one third, but none of the survey or clearance staff was female.[25] According to SafeLane Global no female deminers presented themselves during the recruitment phases for the Falkland Islands operations and only one female applicant applied for a surveyor position, but was unsuccessful as she was not the most qualified candidate for the role.[26]

At the FCDO, the national authority, women were involved in the programme in key positions such as Senior Responsible Officer, Deputy Senior Responsible Officer, and Project Manager.[27]

INFORMATION MANAGEMENT AND REPORTING

The information management system was managed at two levels. The Strategic Advisor maintained the public statement of progress through a "Cumulative Totals" spreadsheet (as demonstrated in the attached annex to the United Kingdom's 2018 Article 5 deadline extension request). This formed the basis of the declarations to the APMBC Meetings of States Parties. Also, the Demining Project Office and the Land Release Contractor used an operational-level planning and information management tool which guided the work and ultimately led to the Handover Certificate at the conclusion of each task.[28]

The United Kingdom did not disaggregate land released through technical survey from land released through clearance in its reporting.[29]

The United Kingdom submits annual Article 7 transparency reports and reported on its progress in Article 5 implementation at the APMBC intersessional meetings and meetings of States Parties.

PLANNING AND TASKING

In early 2016, the Ministry of Defence and the FCO commissioned the United Kingdom's Defence, Science and Technology Laboratory to carry out a study to help prioritise clearance of the remaining minefields in a Phase 5 of demining. The resultant priority list formed the basis of the UK Government's invitation to tender for the contract for Phase 5 demining.[30]

A land release contract set out a task list (the work plan),[31] and the Demining Project Office (Fenix Insight) monitored the Land Release Contractor (SafeLane Global) to ensure that it completed the task list according to the contract standards and completion date. Fenix Insight reported regularly to the FCO, and both Fenix Insight and SafeLane Global reported to the NMAA on progress against timescales.[32]

Phase 5(b), which began in April 2018, proceeded according to schedule up to the end of March 2020.[33] As noted above, this phase was extended to complete clearance of the four remaining mined areas.[34] In April 2020, the United Kingdom published a costed work plan for the clearance of the last four mined areas and additional funding was sought to ensure the Programme would be fully funded through to completion.[35]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The United Kingdom does not have its own national mine action standards, but survey and clearance operations on the Falkland Islands were reported to meet or exceed IMAS, by adapting IMAS to meet the specifics of the situation on the Falkland Islands.[36] Each project's Statement of Requirement contained the standards specific to the tasks being addressed.[37]

The United Kingdom reported that it had followed the principles set out in IMAS 09.10 (Clearance Requirements) and was very conscious of the statement that 'The beneficiaries of humanitarian demining programmes must be confident that cleared and released land is safe for their use. This requires management systems and clearance procedures which are appropriate,

effective, efficient and safe.' The UK and its contractors have used all reasonable effort to achieve the best practicable outcome. On the issue of post clearance safety, the UK continues to use the principles set out in UK Health and Safety legislation to reduce the residual risk to As Low As Reasonably Practicable (ALARP) which is similar to the IMAS concept of 'all reasonable effort'."[38]

Non-technical survey data informed each minefield task. There was no separate technical survey and clearance plan in the Falkland Islands demining operations. Instead, the programme is said to have run a rolling, integrated, information-gathering and decision-making process, where practical activity moved between technical survey and clearance, in response to new information as it became available.[39]

Applicable environmental standards were agreed upon in coordination with the Falkland Islands Government Environmental Planning Department to minimise damage to the fragile environment and to aid remediation.[40] The United Kingdom conducted an environmental impact assessment (EIA) in 2017, which was discussed with the Falkland Islands Government. The EIA identified two particular issues: a) the penguins on the islands; and b) the area at Yorke Bay, which were to be addressed in such a way as to ensure impact to the existing environment is limited to the minimum practically possible.[41] SafeLane Global considered the EIA and wrote a report in response to lay out the planned mitigation measures for sites affected by the EIA. The mitigation measures were then added to each task plan.[42] Clearance tasks were completed with no harm to the penguins.[43]

The UK Government commissioned a mine exploitation study in May 2019 to evaluate the effects of ageing on some of the anti-personnel and anti-vehicle mine types recovered.[44]

SafeLane Global, with input from Fenix Insight, had to devise innovative procedural solutions to deal with the mechanical processing of very large volumes of sand to ensure that there was no cross-contamination and to minimise the loss of sand due to wind action. Recommendations were drawn from the technical survey and applied to the planning for clearance. The technical survey conducted at Yorke Bay allowed for a clearance plan to be developed for technical and commercial analysis and produced a costing for clearance. The technical survey determined where block excavation down to the rock or clay layer could take place, suggesting a combination of techniques (mechanical and manual clearance where necessary), and the types of equipment to use, such as sifting buckets, dump trucks, or screening machines. The survey also provided recommendations to allow for additional time to the programme schedule to take into account local factors such as the likelihood of high tides or flooded excavations.[45]

OPERATORS AND OPERATIONAL TOOLS

The Land Release Contractor in the Falkland Islands was selected by international competitive tender prior to each phase, as required by the European Union. SafeLane Global (formerly Dynasafe BACTEC), was awarded the land release contract in all five phases of demining operations in the Falkland Islands, and demining was conducted by Zimbabwean deminers employed by SafeLane Global.[46]

SafeLane Global's operational capacity in the Falkland Islands in 2019 was seven manual clearance teams totalling 56 manual deminers (excluding team leaders and medics) and 16 mechanical assets, including sifters which are critical to the project.[47] In 2020, as the programme was drawing to a close, SafeLane Global adopted a staggered demobilisation with demining teams leaving the programme throughout the year.[48]

The United Kingdom had noted previously that the Falkland Islands has limited capacity in terms of accommodation and medical/aerial Casevac facilities. Staffing levels reached the maximum that could be safely deployed on the Islands.[49]

The Demining Project Office, which implemented the policies of the NMAA and monitored the land release operations on the Falkland Islands, was also awarded through competitive tender. Fenix Insight was awarded responsibility for the Demining Project Office for all five stages of demining.[50]

SafeLane Global undertook its own internal Quality Assurance (QA) and Quality Control (QC). Fenix Insight monitored this quality management and also conducted its external QA and QC.[51] The size of the sampled areas at each task was decided by the quality contractor based on the guidance set out in IMAS 09.20.[52]

Drones were used for reconnaissance over large areas not accessible behind minefield fences and for aerial mapping. Use of drones to overfly suspected hazardous areas (SHAs) helped to identify mine "dump" locations, row markers, and other evidence that might have otherwise taken a manual team several days to locate.[53] Yorke Bay, where the remaining four mined areas were located, is a very large sandy area with dunes up to 10 metres in height. Aerial drones provided a viewpoint that was not otherwise available.[54]

Technical survey during Phase 5(b) helped determine the most effective clearance methods given the unique conditions of the four remaining minefields at Yorke Bay and informed the clearance plan.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

In 2020, a total of nearly 0.36km^2 of mined area, across six SHAs, was released through clearance and technical survey, with the destruction of 432 anti-personnel mines, 339 anti-vehicle mines, and 21 items of UXO. No mined area was cancelled through non-technical survey.

The United Kingdom officially declared completion of clearance on 14 November 2020.[55]

NON-TECHNICAL SURVEY IN 2020

No areas were cancelled through non-technical survey in 2020.

TECHNICAL SURVEY AND CLEARANCE IN 2020

The United Kingdom does not disaggregate land released through technical survey from land released through clearance, and instead reported technical survey and clearance combined as "land release".

In 2020, a total of nearly 0.36km^2 was released through clearance and technical survey, across six SHAs. During clearance operations completed in November 2020, a total of 432 anti-personnel mines were destroyed in situ (28 FMK-1 mines, 104 No. 4 mines, 16 P4B mines, and 284 SB33 mines), along with 339 anti-vehicle mines, and 15 other items of UXO (see Table 1).[56]

Table 1: Phase 5(b) mine clearance and technical survey (January to November 2020)[57]

Time period	Geographic area	Areas released	Area released (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
January to March 2020	Cluster 4: (007)	1	49,254	175	0	1
	Cluster 5: (MP4)	1	115,613	16	0	0
April to November 2020	SA005A	1	34,814	0	2	3
	SA014	1	102,210	28	54	9
	SA015	1	49,435	197	229	2
	SA017	1	7,357	16	54	0
Totals		**6**	**358,683**	**432**	**339**	**15**

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR THE UNITED KINGDOM: 1 MARCH 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

↓

FIRST EXTENDED DEADLINE (10-YEAR EXTENSION): 1 MARCH 2019

↓

SECOND EXTENDED DEADLINE (5-YEAR EXTENSION): 1 MARCH 2024

REPORTED HAVING FULFILLED ARTICLE 5 OBLIGATIONS ON 14 NOVEMBER 2020

Under Article 5 of the APMBC (and in accordance with the second extension (of five years) granted by States Parties in 2018), the United Kingdom was required to destroy all anti-personnel mines in areas under its jurisdiction or control as soon as possible, but not later than 1 March 2024. The United Kingdom completed clearance of mined areas, thereby fulfilling its Article 5 obligations, on 14 November 2020. In a statement at the APMBC Eighteenth Meeting of States Parties, the United Kingdom said it would shortly submit a voluntary declaration of completion.[58]

The United Kingdom sought and prioritised additional financing to ensure the Programme was fully funded through to completion, despite the current climate.[59] It planned (and achieved) completion of clearance by the end of 2020, well ahead of its deadline.[60]

Challenges to clearance in the Islands during all five phases of clearance included the remote location of mined areas; incomplete Argentine minefield records; concerns about the environmental impact of demining; and limits on the capacity of the Falkland Islands to provide certain facilities for demining, such as accommodation for deminers and medical facilities, including for the evacuation of any casualties.[61]

The fifth and final phase of clearance included tackling the most technically challenging and environmentally sensitive minefields.[62] Additional challenges potentially posed to clearance of the last four minefields included the nature of the terrain and the potential for water logging or flooding after rainfall, which was mitigated through the use of draining and pumps. Due to challenging supply lines to the Falkland Islands, there was also a potential risk if key components of equipment broke down. To mitigate against this, stocks were regularly replenished. Finally, the impact of COVID-19 posed potential challenges to the planned completion by December 2020.[63]

Due to the COVID-19 pandemic, the Falkland Islands clearance programme was suspended between 26 March and 19 May 2020 as part of temporary lockdown measures imposed by the Falkland Islands Government. To ensure that

it could achieve its projected deadline, the United Kingdom reassessed the programme schedule and decided to continue working over the austral winter instead of demobilising in June.[64]

Demining on the Falkland Islands was conducted in phases, which cut across calendar years, though, based on the year in which demining tasks were completed, a total of 7.22km^2 of mined area was released in the last five years (see Table 2), through to completion of clearance in November 2020.

In its 2008 Article 5 extension request, the United Kingdom had originally reported that mined areas in the Falkland Islands contained some 20,000 anti-personnel and anti-vehicle mines.[65] During the five phases of demining operations, a total of 11,621 mines were discovered and destroyed (9,927 anti-personnel mines and 1,694 anti-vehicle mines),[66] leaving a very significant shortfall compared to the number reported in the 2008 extension request. The United Kingdom clarified that there had, in fact, never been a reliable set of figures to work from, for the reasons detailed below.[67]

According to the United Kingdom, the number of mines declared by the Argentinians and referred to in the original feasibility study were not understood to be "exact". Post-operational analysis revealed that many of the records were produced before mines were laid, and some records were anecdotally reported as having been lost soon after the conflict. Some discrepancies occurred either as a result of physical conditions on the ground or because circumstances (such as bombardment by approaching UK forces) interrupted the already recorded mine-laying process. As a result, not everything that appears in the mine records was actually laid. Furthermore, some mines were found in dumps, but even at sites with records, reconciliation of number of mines found in the ground and in dumps against those on the records did not always match. Mines may have been "issued" (and perhaps included in the original declaration), but not actually emplaced. Some of those dumps were found while others may have been destroyed during or soon after the conflict, and the United Kingdom does not have full records addressing all of those issues.[68]

Immediately after the conflict, clearance was carried out by UK forces. The records are sparse and later analysis identified a number of apparent gaps and discrepancies within those records. Additionally, the United Kingdom does not know the number of mines lifted by Argentine forces in Fox Bay East.[69] Furthermore, evidence from bones indicates that large numbers of mines were initiated by wildlife on the Murrell peninsular.[70]

According to the United Kingdom, a substantial number of mines were laid on beaches and in areas immediately inland from the waterline. There have been significant changes to the topography of the beaches in subsequent years. Recent clearance included areas that had been heavily disrupted by the action of tidal streams, watercourses, and erosion. The fact that from time to time mines have washed up, and continue to wash up, on beaches indicates that some quantity of mines were removed by natural forces; some may have been taken out into the open ocean; and some may remain closer offshore. However, the United Kingdom has said it is not possible to assess what those numbers are or where they might be.[71]

The United Kingdom has said that the above factors taken together mean that there was never an "expected" number of mines to compare with the actual number of mines found during clearance. The United Kingdom is confident in the quality of the clearance that has been conducted since 2009. There remains a low residual risk in the Falkland Islands, mostly along the beach line.[72]

Table 2: Five-year summary of AP mine clearance/technical survey

Year	Area released (km^2)*
2020	0.36
2019	3.61
2018	**1.59
2017	1.05
2016	***0.61
Total	**7.22**

* Based on the year in which clearance was completed.
** Previously reported as 1.48m^2, but subsequently corrected based on amended data provided. Excludes a minefield totalling over 5.4km^2 which was released through technical survey in 2018.
*** Previously reported as 0.94km^2, but subsequently corrected based on amended data provided.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Full and accessible records of all survey and clearance undertaken will be retained by national authorities in the Falkland Islands and the United Kingdom.[73] The United Kingdom believes there is a very low risk of previously unknown mine contamination being discovered post completion, but that it remains a possibility as there is no complete record of mines laid on the Islands. According to the United Kingdom, all known and suspected minefields will have been cleared and the contractors have carried out thorough gap analysis work for further assurance.[74] If a mine or other item of explosive ordnance is found following the conclusion of the demining programme, it will be addressed by the EOD team from the UK's Royal Air Force Armament Engineering Flight on the Falkland Islands, which has a long-term military presence there.[75]

1 There is a sovereignty dispute over the Falkland Islands/Malvinas with Argentina, which claims jurisdiction over the Malvinas. Argentina has been granted an extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 clearance deadline until March 2023.

2 Statement of the United Kingdom on Article 5 implementation, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

3 Email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 7 May 2021.

4 2008 APMBC Article 5 deadline Extension Request.

5 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, pp. 3–4; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020.

6 Ibid.

7 Email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 7 May 2021.

8 2018 Article 5 deadline Extension Request, p. 6.

9 Analysis of 2008 Article 5 deadline Extension Request, 18 November 2008.

10 Permanent Mission of the United Kingdom, "The UK Presents: Clearance Completion in the Falklands", 18MSP Side event, 20 November 2020.

11 2008 Article 5 deadline Extension Request, p. 2.

12 Ibid.; and "Preliminary observations of the committee on Article 5 implementation – observations on the implementation of Article 5 by the United Kingdom", 23 June 2015.

13 2018 Article 5 deadline Extension Request, p. 5.

14 APMBC Article 7 Report (covering 2020), Form F.

15 Email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 30 June 2021. There is a slight discrepancy between the total number of mines reported by the FCDO upon completion of demining efforts, and the total sum of the number of mines reported destroyed annually during Phases 1 through 5b (which total 9,306 anti-personnel mines and 1,631 anti-vehicle mines). This difference might result from the calendar-year reporting periods of the Convention and Mine Action Review not always aligning with the Falkland Islands' programme phases.

16 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 4.

17 2018 Article 5 deadline Extension Request, p. 10.

18 Ibid., p. 8; and FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 7.

19 2018 Article 5 deadline Extension Request, p. 9; and FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 7.

20 2018 Article 5 deadline Extension Request.

21 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 4.; and email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 7 May 2021.

22 United Kingdom, "Submission of information for the Convention's website", Intersessional Meetings, 30 June–2 July 2020.

23 Statement of the United Kingdom, APMBC Fourth Review Conference, Oslo, 27 November 2019.

24 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020; and Article 7 Report (covering 2019), "Additional Reporting for 2019".

25 Ibid.

26 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 10 July 2020.

27 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020; and Article 7 Report (covering 2019), "Additional Reporting for 2019".

28 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 21 August 2018.

29 Article 7 Report (covering 2019), Form F; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020.

30 Emails from an official in the Counter Proliferation and Arms Control Centre, FCO, 21 September 2016 and 28 July 2017.

31 Email from an official in the Counter Proliferation and Arms Control Centre of the FCO, 24 April 2019.

32 Ibid.

33 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020.

34 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, pp. 3-4.

35 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020.

36 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 26 June 2018; 2018 Article 5 deadline Extension Request, pp. 3 and 7; APMBC Article 7 Report (covering 2020), Form F; and FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 5.

37 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 15 July 2016.

38 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 5.

39 Permanent Mission of the United Kingdom, "The UK Presents: Clearance Completion in the Falklands", 18 MSP Side event, 20 November 2020.

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

41 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 28 July 2017; 2018 Extension Request, pp. 3 and 11; and Article 7 Reports (covering 2019 and 2020), Form F.

42 Permanent Mission of the United Kingdom, "The UK Presents: Clearance Completion in the Falklands", 18 MSP Side event, 20 November 2020.

43 Ibid.; and Article 7 Report (covering 2020), Form F.

44 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020.

45 Ibid.

46 2018 Article 5 deadline Extension Request, p. 9; and Permanent Mission of the United Kingdom, "The UK Presents: Clearance Completion in the Falklands", 18 MSP Side event, 20 November 2020.

47 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020.

48 Email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 7 May 2021.

49 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 28 July 2017; and 2018 Article 5 deadline Extension Request, p. 3.

50 2018 Article 5 deadline Extension Request, p. 9.

51 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019; and 2018 Article 5 deadline Extension Request, p. 9.

52 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 1 July 2016.

53 Emails from an official in the Counter Proliferation and Arms Control Centre, FCO, 15 July 2016, 28 July 2018, 24 April 2019, and 10 July 2020; and 2018 Article 5 deadline Extension Request, p. 8.

54 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 10 July 2020.

55 Email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 7 May 2021.

56 Article 7 Report (covering 2020), Form G; and emails from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020 and 7 May 2021.

57 Emails from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020 and 7 May 2021.

58 Statement of the United Kingdom on Article 5 implementation, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

59 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, pp. 4–5.

60 Ibid., p. 3; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 18 May 2020.

61 2018 Article 5 deadline Extension Request, p. 3; and Statement of the United Kingdom, Fourth APMBC Review Conference, Oslo, 27 November 2019.

62 Statement of the United Kingdom, Fourth APMBC Review Conference, Oslo, 27 November 2019.

63 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 5.

64 Ibid., p. 4; and email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 10 July 2020 and 7 May 2021.

65 2008 Article 5 deadline Extension Request, p. 2.

66 Email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 30 June 2021. There is a slight discrepancy between the total number of mines reported by the FCDO upon completion of demining efforts, and the total sum of the number of mines reported destroyed annually during Phases 1–5b (9,306 anti-personnel mines and 1,631 anti-vehicle mines).

67 Email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 30 June 2021.

68 Ibid.

69 Email from an official in the Counter Proliferation and Arms Control Centre, FCDO, 30 June 2021.

70 Ibid.

71 Ibid.

72 Ibid.

73 APMBC 2018 Article 5 deadline Extension Request, Additional Information received 6 August 2018; and email from an official in the Counter Proliferation and Arms Control Centre of the FCO, 24 April 2019.

74 FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 5.

75 2018 Article 5 deadline Extension Request, Additional Information received 6 August 2018; email from an official in the Counter Proliferation and Arms Control Centre of the FCO, 24 April 2019; and FCO, Falklands Demining Programme Work Plan under Article (5), 30 April 2020, p. 5.

YEMEN

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 1 MARCH 2023
INTERIM DEADLINE FOR SURVEY, WHICH IS UNLIKELY TO BE CONDUCTED

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION:

HEAVY
(NO CREDIBLE ESTIMATE)

AP MINE CLEARANCE IN 2020

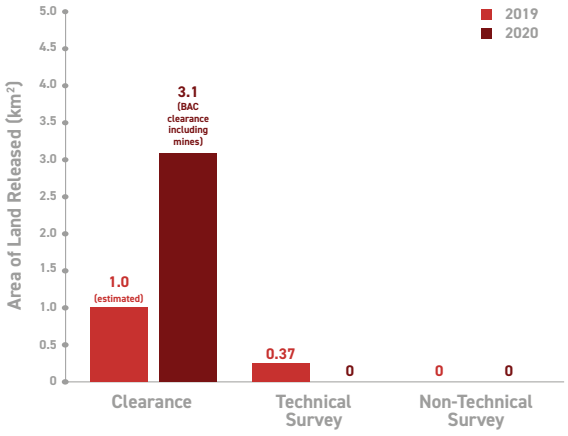
1 KM²

(ESTIMATED FROM 3.1KM² OF BATTLE AREA CLEARANCE)

AP MINES DESTROYED IN 2020

923

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Yemen's Mine Action Coordination Centre (YMACC), established by the Yemen Executive Mine Action Centre (YEMAC), started operating in April 2020 with a mandate to organise and coordinate the work of YEMAC's operational capacity and international operators. YMACC issued the first task orders to international demining NGOs for non-technical survey and explosive ordnance disposal (EOD). YEMAC, which oversees YMACC, installed and started populating an IMSMA [Information Management System for Mine Action] Core database but plans for non-technical survey as part of a baseline survey were obstructed by insecurity, lack of training, and the COVID-19 pandemic, which resulted in the closure of Aden airport and the suspension of some operations. The Development Initiative (TDI) deployed to Yemen in November 2020 under contract to UNDP to start training YEMAC teams.

RECOMMENDATIONS FOR ACTION

- **Yemen should develop a mine action strategy providing a framework and clear targets for tackling survey and clearance of mines and explosive remnants of war (ERW).**
- **YEMAC should conduct systematic non-technical survey in accessible districts to start the process of establishing a baseline estimate of contamination.**
- **YEMAC should live up to its responsibilities as a national authority and require Project Masam to provide regular, detailed reporting of its operations and submit to independent quality control, including investigation of demining accidents.**
- **YEMAC should provide operating results disaggregating data for anti-personnel mines, improvised mines, and improvised explosive devices, and should ensure reporting forms enable collection of these data.**
- **Yemen should remove the bureaucratic obstacles to importing equipment that have hampered implementation of YEMAC plans for non-technical survey and clearance.**

- **YEMAC and YMACC should increase transparency by publishing regular, comprehensive reports on developments in the management, planning, and implementation of mine action.**
- **Yemen should clarify and consolidate the roles and authority of YEMAC and YMACC.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	3	3	YEMAC continues to declare that the extent of anti-personnel mined area is unknown and minimal non-technical survey occurred in 2020 due to conflict, the effects of the COVID-19 pandemic and bureaucratic obstacles in the Ministry of Planning and International Cooperation and other government entities. 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	3	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, weakening its role national role and leaving YEMAC North subject to Coalition sanctions. YEMAC's two components do not coordinate their activities. YEMAC has, though, opened a coordination centre in the south to develop partnerships with international organisations as part of UN-supported moves to strengthen the programme in areas controlled by the internationally-recognised government.
GENDER AND DIVERSITY (10% of overall score)	5	3	Yemen's Article 5 deadline extension request made no reference to gender and efforts by the United Nations Development Programme (UNDP) and other international organisations to widen the participation of women in mine action face cultural barriers. Still, in 2020 YEMAC trained the first female bomb disposal operator and deployed a number of female staff for explosive ordnance risk education (EORE) and non-technical survey. In 2021, YEMAC planned to include 10 women among 30 candidates for non-technical survey training.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	4	3	YEMAC, with support from UNDP and the Geneva International Centre for Humanitarian Demining (GICHD) installed IMSMA Core and replacing a system described by YEMAC as unfit for purpose. Results of survey and clearance are not reported accurately. Yemen has regularly submitted Article 7 transparency reports and its latest report (covering 2020) provided a detailed picture of the progress of mine action. YEMAC North continues to operate the old IMSMA system.
PLANNING AND TASKING (10% of overall score)	5	5	Yemen does not have a national strategy or plan, but continued operations on an emergency basis focused on life-saving interventions and civilian infrastructure hit hard in the conflict.
LAND RELEASE SYSTEM (20% of overall score)	4	4	Yemen's national mine action standards were once IMAS-compliant but are now long out of date. YEMAC has started reviewing its national standards but no revised standards had received approval as of writing.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	6	YEMAC's emergency response targets all forms of explosive hazard and although area clearance and the number of devices destroyed dropped in 2020, non-technical survey and EOD training of YEMAC teams laid a foundation for increased outputs. Conflict and insecurity, however, prevented YEMAC from conducting non-technical survey to establish a baseline estimate of contamination, the main goal of its three-year Article 5 deadline extension plan.
Average Score	**4.4**	**4.0**	**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 Danish Demining Group
- The HALO Trust
- Norwegian People's Aid
- Project Masam/SafeLane/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 reported in 2021, for the third successive year, that the level of AP mine contamination and its impact are unknown. The statement reflected conditions in Yemen in the sixth year of an armed conflict between the internationally recognised government (IRG) based in the south and Ansar Allah known as Houthis who are based in the capital, Sana'a, in the north and referred to as the De Facto Authorities (DFA). The conflict has prevented survey, contaminated new areas, and re-contaminated areas previously cleared.[1]

A Landmine Impact Survey in 2000 found mines in 18 of Yemen's 21 governorates resulting from conflicts in 1962–69 and 1970–83, as well as mines laid in border areas between North and South Yemen before they unified in 1990, and contamination from successive conflicts that erupted since 1994. The Article 5 deadline extension request Yemen submitted in 2014 identified 107 confirmed minefields covering a total of 8.1km^2 and 438 suspected hazardous areas (SHAs) covering 338km^2. By 2017, YEMAC said it had 569 suspected mined areas remaining, which were covering 323km^2.[2] YEMAC believed a significant proportion of this might be released or reduced through survey. However, the United Nations has observed that the conflict which erupted in March 2015 "changed the extent and complexity of contamination dramatically."[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.[4] Houthi officials have acknowledged using landmines[5] and have reportedly laid large numbers of improvised explosive devices, 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.[6] Contamination is especially high along Yemen's west coast 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. 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.[7]

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.[8] 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.[9]

Houthi have reportedly used improvised sea mines since 2016 posing a threat to shipping and the fishing industry in the Red Sea and Arabian Sea. In October 2020, Yemen's Coast Guard located a sea mine as far east as al-Mukalla, which would represent a drift of 1,000 kilometres from Hodeida and coastal areas controlled by Houthis. An Emirati tanker, the Syra, was damaged by a sea mine explosion near Yemen's Al-Nashimah port in October[10] and a Maltese-flagged oil tanker, MT Agrari, was hit by a mine near Shuqaiq, off the coast of Saudi Arabia in November 2020.[11] Containing batteries with a life of six years or more, the UN noted that floating mines released in the past year could remain a threat until 2028 and beyond.[12]

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 Ansar Allah (Houthis) controlling the capital Sana'a and much of the north and west, and the IRG, operationally based in Aden and the south. The Sana'a-based inter-ministerial National Mine Action Committee (NMAC), which previously formulated national mine action policy, is no longer recognised by the IRG. It still exists in the north but no longer plays a meaningful role. In the south, YEMAC has fulfilled the dual role of regulator responsible for policy, planning and standards while also serving as the sole national operator.[13]

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.[14] In practice, however, YEMAC has split into two, centred round Sana'a and Aden. The Sana'a office employed around 500 staff and 30 clearance teams, working in the northern governorates controlled by the Houthi forces. Operations, however, are severely constrained by shortages of equipment, including personal protective equipment (PPE) and detectors, aggravated by controls that the Saudi-led coalition applies to deliveries of any dual-use equipment. YEMAC North is reportedly interested in engaging with international operators but prospects for their meaningful deployment appear slim while coalition sanctions still apply.[15]

From Aden, YEMAC operated with some 550 staff mainly active in Abyan, Aden, Amran, Hadramaut, Lahej, and Taiz governorates. YEMAC also has offices in Mokha and Mukhalla and in 2019 opened offices in Taiz to support operations around Hodeida and in Marib for operations in al-Jawf governorate.[16] Overall, UNDP reported that YEMAC conducted clearance in 19 of Yemen's 21 governorates.[17]

In April 2020, YEMAC opened the Yemen Mine Action Coordination Centre (YMACC) in Aden to strengthen programme management in areas controlled by the IRG. YEMAC's executive director oversees the coordination centre but YMACC is tasked with coordinating YEMAC's operational units. YMACC is intended to facilitate cooperation with international demining organisations and is responsible for accrediting and tasking them. It will also have departments for planning, information management, and quality assurance/quality control.[18] The centre convened its first coordination meeting on 9 April 2020 and by early 2021 it employed 44 people[19] and had set up technical working groups focused on non-technical survey and explosive ordnance risk education.[20] Yemen's Article 7 transparency report said YMACC's accreditation and quality management

(QM) capacity would be developed in 2021 but this was delayed, mainly as a result of the COVID-19 pandemic.[21]

Mine action stakeholders say the creation of YMACC has improved coordination with operators significantly, helped by regular meetings of technical working groups attended by UNDP and implementing partners, but its legal status is unclear, it lacks clear powers to coordinate mine action, and decision-making boundaries between YEMAC and YMACC are opaque. 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 carried out by three international and ten national staff working from a number of different offices. 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. At the end of 2020, its Sana'a office comprised two international staff, including a chief technical adviser, and three national staff; in Aden it had four international and two national staff. UNDP also had national field staff in Hodeida, Mokha, and al-Mukalla.[22] UNDP contracted TDI to provide training courses in non-technical survey and explosive ordnance disposal and hired a Yemeni company, Prodigy Systems, to provide third-party verification of operations.

GENDER AND DIVERSITY

Yemen's Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request submitted in 2019 made no reference to gender and in that year YEMAC rejected a suggestion that women might be included in training for demining teams. YEMAC has since stated it needs and plans to develop the employment of women in mine action, and in 2020 started training female staff for explosive ordnance disposal, non-technical survey, and risk education.[23] UNDP has encouraged YEMAC to mainstream gender principles and to deploy an all-women survey team in areas controlled by the internationally recognised government.[24] Yemen said it understands the different needs of girls, women, men and boys and considers these in its planning.[25]

YEMAC reported employing six women at the beginning of 2020. But YEMAC and YMACC reportedly employed 34 women by the end of 2020, many of them in operational roles. They included the first female bomb disposal expert who was trained in August 2020. At the end of the year, YEMAC had two female EOD operators deployed in Hadramaut and 10 women assigned to non-technical survey. Yemen said it had 15 women working in risk education to ensure the different needs of women and girls, as well as boys and men, were addressed. They included five female emergency risk education staff, with ten other women employed as risk education facilitators in Abyan, Aden, Al Dhale, and Lahej, as well as on the West Coast, and two women employed in administration in Taiz.[26] YEMAC said it planned to recruit 30 additional staff for non-technical survey in 2021, of whom 10 would be women.[27] It also recruited a number of other women in 2021, mainly for administrative jobs, but the first female information management officer was contracted in July 2021.[28]

Among international operators, Danish Refugee Council Humanitarian Disarmament and Peacebuilding Sector (DRC; previously Danish Demining Group, DDG) employed seven women in 2020 in risk education/non-technical survey, three of whom were based in Aden supporting activities in Lahej governorate, with three more in Mokha supporting work in Taiz, and one in Al Khokha supporting activities in Hodeida governorate.[29] The HALO Trust employed six women among its thirty-four national staff, including two in operations with community outreach and risk education teams and four in support roles.[30]

Recruitment of women for jobs in mine action in Yemen's conservative society faces significant cultural obstacles, in part due to their position as responsible for family care, which discourages women from applying for jobs. Operators report cases where husbands have forbidden women applicants from attending interviews. However, the humanitarian crisis in Yemen may also be eroding traditional gender roles by increasing families' dependence on the income contributed by women to family budgets.[31] 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.[32] DRC has found that men often took the lead in field activities overlooking the participation of women colleagues and even women in leadership positions can face bullying and disrespect from male subordinates.[33]

INFORMATION MANAGEMENT AND REPORTING

YEMAC, with support from UNDP and the Geneva International Centre for Humanitarian Demining (GICHD), upgraded its headquarters IMSMA database, installing the latest Core version. UNDP reported it was operational from September 2020 but the capacity to set up different user accounts and create field scenarios or maps was still in development.[34] The system was being installed in YMACC in early 2021.[35] YEMAC's northern office works with an older IMSMA system.[36]

UNDP recruited a full time information management (IM) officer in 2020 through MSB, the Swedish Civil Contingency Agency, and had recruited national IM staff to assist but due to COVID-19 restrictions he had not deployed to his post in Aden as of

mid-2021 and was working remotely with YEMAC and YMACC.[37] GICHD also contracted an IMSMA expert from DRC to support the roll-out of IMSMA Core.[38] HALO Trust supported efforts to strengthen information management, holding one IM workshop for YMACC staff in late 2020 and planning follow-up sessions in 2021.[39]

YEMAC and UNDP had already started preparing data collection forms for risk education, non-technical survey, and EOD spot tasks, which were developed in consultation with participants in an information management technical working group. Initial versions were circulated among operators in late 2020 and early 2021. The forms were still under development as of writing.[40] Yemen described the technical working group as "one of the vital groups within the sector".[41]

The extent of the data available in 2020 was unclear but appears to have been limited. YEMAC had previously acknowledged that contamination data was out of date,[42] and the UN has observed that Yemen's conflict had "changed the extent and complexity of contamination dramatically".[43] The IMSMA Core database incorporates data from non-technical survey and EORE sessions but very little systematic non-technical survey was conducted in 2020. A complicating factor is that a significant proportion of YEMAC personnel have been seconded to work with Project Masam and SafeLane, which have reportedly declined to share data and are not reporting detailed operating results to YEMAC.

PLANNING AND TASKING

Yemen does not have a current strategic plan or annual work plans for tackling mines, cluster munitions, or other ERW. Mine action in 2020 continued to be conducted on an emergency basis.[44] In addition to emergency clearance, YEMAC identified its priorities for 2021 as conducting baseline survey in line with Yemen's latest Article 5 deadline extension request, expanding risk education, improving coordination with humanitarian agencies in identifying operating priorities, and updating standing operating procedures (SOPs) and National Mine Action Standards (NMAS).[45]

YMACC said its priorities in 2021 included planning survey 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.[46]

Yemen reported that UNDP and YEMAC have drawn up a table for prioritising tasks based on the needs of aid organisations in the humanitarian cluster. It said implementing partners are able to request clearance tasks from YEMAC by entering details of the contamination and planned actions, which are then prioritised based on needs identified by local authorities and the UN aid coordination agency.[47] Operators said the matrix system was not operational in 2020 and after the opening of YMACC in April 2020 tasks for international NGOs were largely authorised through direct contact with YMACC.[48]

In the absence of any available survey data, HALO Trust said it determined priorities according to where security conditions permit access, operations can be conducted safely and under supervision of international staff. EOD task orders also needed to be supplemented by permission from the "Security Belt Forces" which control Aden, Lahej, and some other southern areas in order to allow movement of explosive items to demolition sites.[49]

YMACC issued the first task orders for non-technical survey and EORE to DDG in July 2020 and the first task order for clearance to The HALO Trust, marking a significant step toward improved planning and coordination.[50] However, differences between YEMAC and YMACC on some tasks implemented in 2020 pointed to coordination challenges. In addition, Project Masam, the biggest international operator funded by Saudi Arabia, is tasked separately through an opaque process YEMAC described as "joint management" that provided no task details or results accessible to the rest of the mine action sector and occasionally resulted in duplication of effort.[51]

Yemen's bureaucratic procedures are also proving a significant obstacle to progress. Operators are required to conclude a separate sub-agreement with MOPIC for every donor-funded project. Despite the priority YEMAC has given to survey, MOPIC resisted proposals for non-technical survey submitted in 2020 arguing that it was unnecessary and the focus should be on clearance.

Operators were limited in the tasks they could undertake in 2020 because of capacity constraints resulting in part from cumbersome and opaque procedures for importing equipment, including detectors and personal protective equipment (PPE). After initial approval by MOPIC, applications to import equipment are forwarded to a range of government departments including, but not limited to, the ministries of Defence, Foreign Affairs, and Interior and the National Security Agency before returning to YEMAC for technical approval and then to MOPIC for final approval. Implementing partners say the process can take six months, sometimes more, and end without approval without explanation of the decision.

Mine action sector sources say Saudi interference appears on occasion to have been a factor stalling approval for equipment imports.[52] The HALO Trust received permission from MOPIC and the NSA to import ballistic glass and high-hardness steel required for armouring mechanical assets but delivery was held up for six months within the Saudi MOD Evacuation & Humanitarian Operations Centre (EHOC) before eventual approval.[53]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

YEMAC identified issuing new NMAS as a priority in 2021.[54] Yemen's existing NMAS were based on the International Mine Action Standards (IMAS) when they were drawn up in 2007, predating most of Yemen's CMR 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.[55]

YEMAC was in contact with the GICHD in 2020 on developing national standards, focusing on standards for survey and clearance.[56] YMACC, as one of its first acts following its opening in April 2020, started reviewing a draft of interim national standards.[57] Yemen reported it had set up a 14-person committee on in September 2020 to update Yemen's NMAS with support from UNDP, and by late April 2021 it said an Arabic language version was 95% complete.[58] The revised standards include a draft standard for improvised mine and improvised explosive device (IED) disposal.[59] The HALO Trust drafted an NMAS for risk education and helped to update the NMAS for mechanical clearance.[60]

OPERATORS AND OPERATIONAL TOOLS

Yemen is building cooperation with international operators to supplement national capacity and develop capabilities for survey and clearance which it acknowledges have fallen below international standards. Yemen's political and security crisis has hampered the process and it acknowledged in 2021 that "this process is still not fully bedded in" but despite complex bureaucratic hurdles and access difficulties compounded by the Covid-19 pandemic the arrangements agreed with international operators have established a platform YEMAC hoped would help to accelerate movement on its operating priorities.[61]

YEMAC, in addition to its role managing Yemen's mine action, is also the major operator and the only demining organisation with capacity in Houthi-controlled areas of the north. YEMAC's northern operation reportedly employed 494 personnel making up around 30 clearance teams that has operated mainly in Sana'a, the northernmost governorate of Saada, bordering Saudi Arabia, and northern districts of Almran governorate.[62] However, the UN reported YEMAC had limited resources to support operations in the north in 2020 and most assets were concentrated in the south. At the end of 2020, YEMAC reported having a staff of 491 in the south, including 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.[63] YEMAC hoped to deploy the non-technical survey teams in 2021.[64]

In 2019, YEMAC took delivery of 40 pick-up trucks, 16 ambulances, 16 trucks, two back-hoe loaders, and two truck-mounted cranes. Vehicles were divided equally between the Sana'a and Aden programmes.[65] In 2020, YEMAC's southern operation took delivery from UNDP of 300 Italian metal detectors and 36 pick-up trucks[66] but it said it was still challenged by a chronic lack of equipment such as medical kits and vehicles.[67]

Project Masam, implemented by SafeLane/Dynasafe, much the biggest international organisation conducting area clearance in 2020, was supported by annual funding of around US$30 million in 2020 from Saudi Arabia's government provided through the King Salman Relief and Rehabilitation Fund. It has reportedly received US$133 million since it started work in 2018.[68] A similar level of Saudi funding was reportedly under discussion for 2021. In 2020, it operated a total of 32 clearance teams with staff seconded from YEMAC in areas controlled by the IRG, which reportedly included Aden, Taiz, Hodeida, Marib, Shabwah, Al Bayda, Al Jawf, the Al-Kitaf wa Bogee district of Saada, Al Dhale, and Lahej.[69]

DDG (rebranded in 2021 as DRC) concluded a new Memorandum of Understanding with YEMAC in 2020. This allowed it to expand its Aden-based programme to 28 staff in 2020, including four internationals: a programme manager and operations manager based in Aden and two technical field managers in Mokha. Its 24 national staff included 20 risk education/non-technical survey personnel in Aden and Mokha together with 3 medics and an Aden-based information officer recruited with funding from the GICHD to support YMACC's development of IMSMA Core capacity. In 2021, DRC expected to deploy three multi-task teams comprising personnel seconded from YEMAC to conduct risk education, non-technical and technical survey, EOD spot tasks, and small area clearance tasks, subject to being able to import the necessary equipment.[70]

The HALO Trust opened an office in Aden at the start of February 2020 and by the end of the year had 5 international and 34 national staff, including 16 personnel seconded from YEMAC making up 4 multi-task teams as well as a community outreach and risk education team consisting of 4 directly recruited staff. HALO Trust expected to add at least 20 more national staff in 2021, 16 of them in operational roles and 4 in support jobs, with a view to expanding non-technical survey and mechanical clearance. HALO Trust received approval in 2020 to import ballistic glass and specially hardened steel for armouring mechanical assets but eight months after applying to import detectors and PPE HALO had not yet received the necessary clearance.[71]

After long delays caused by security developments and the COVID-19 pandemic, Norwegian People's Aid (NPA) support for YEMAC's mine detection dog (MDD) programme started to move forward in 2020. By mid-2020, NPA had 12 long-leash dogs under training at its centre in Bosnia and Herzegovina pending transfer to Yemen once YEMAC handlers underwent training.[72] NPA had provided technical advice on setting up kennels and an MDD training area at YEMAC's training centre. NPA trainers arrived in Aden in November 2020 and were preparing to start training but in early 2021 were still awaiting completion of registration procedures.[73]

DEMINER SAFETY

YEMAC reported one deminer was killed and four injured in 2020, adding to the already heavy loss of life from explosive hazard management incidents in Yemen in the past three years.[74] It represented a significant fall in casualties from the 20 reported in 2019, mainly as a result of IED detonations, and follows the introduction of IED disposal training provided by UNDP to nine EOD teams.[75]

Project Masam implemented by SafeLane reported a team leader was killed by an anti-personnel mine in western Taiz governorate in April 2020. The project's managing director, Ousama Algosaibi, said at the time that the project, which started operating in May 2018, had "offered until now 21 martyrs and more than 16 wounded, most of whom lost their limbs."[76] Nearly all the more than 37 recorded casualties are believed to have occurred in 2019. They include five international staff killed in a single incident in January 2019.[77] Seven SafeLane deminers were killed in April 2019 by an explosion in a storage area holding mines and ERW for destruction in the port city of Mokha.[78] Project Masam has not undergone independent investigation and verification to inform the sector on circumstances surrounding its casualties, thought to be among the highest recorded by single project.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Against the background of Yemen's continuing conflict, YEMAC is focused on delivering an emergency response to mitigate the threat to civilians posed by all forms of explosive hazard rather than conducting area clearance of minefields.

Mine action sector plans suffered setbacks in 2020 due to internal and external COVID-19 control measures, including a lockdown, movement restrictions, and closure of Aden airport between March and July. As a result, DDG said the majority of its programme's international staff, including the programme manager, operations manager, and two technical field managers were delayed from deploying.[79] HALO Trust reported that the inability of its medevac provider to access Yemen in this period forced suspension of operations that had just started in March 2020 and teams that had undergone EOD, battle area clearance (BAC), and medical training between November 2019 and February 2020 were suspended on full pay.[80]

LAND RELEASE OUTPUTS IN 2020

Yemen reported clearance of a total of 3.13km^2 of battle areas in 2020, fractionally more than the previous year, according to data provided by UNDP (see Table 1), although the number of anti-personnel mines destroyed in 2020 fell by close to 40% from the previous year. Available data did not differentiate between improvised mines and IEDs.[81]

Table 1: YEMAC clearance of mines and ERW (reported by UNDP)[82]

Year	Total 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

SURVEY IN 2020

Yemen's Article 7 transparency report for 2020 showed it did not release any mined area through non-technical or technical survey in 2020. DRC said it received five task orders from YMACC in 2020 to conduct non-technical survey in three governorates, Taiz, Hodeida and Lahej. It reported that it identified 42,448,222m^2 as confirmed hazardous area and another 10km^2 as suspected hazardous areas drawing on evidence ranging from accidents, the presence of explosive ordnance, and previous demining sites to the presence of unused land and damage to infrastructure.[83]

CLEARANCE IN 2020

The 3km^2 reportedly cleared in 2020 included mined areas but consisted mainly of areas targeted for clearance on an emergency basis irrespective of the types of explosive ordnance contaminating them. In the absence of disaggregated data, Mine Action Review calculates from the 'battle' area cleared and number of mines destroyed that Yemen's mine action programme has cleared an area of at least 1km^2 (see Table 3). Averaging the number of anti-personnel mines cleared per square kilometre across five other programmes that cleared between 1km^2 and 3km^2 of land in 2020 would suggest a figure double that of 1km^2, but a conservative estimate has been applied to Yemen.

HALO Trust reported clearing a little over 200,000m^2 of battle area in 2020 resulting in the destruction of 3,274 items of unexploded ordnance but no anti-personnel mines.[84] DRC reported that it was unable to conduct mine clearance or spot-task EOD of mines pending conclusion of sub-agreements and receiving approvals for importing equipment.[85]

The amount of area cleared by Project Masam's 32 teams is not known. Saudi funding for the project is more than double international funding for the rest of Yemen's mine action programme but Project Masam declines to share details of its activities on grounds of commercial confidentiality. Project Masam reports clearing 3,962 anti-personnel mines between July

2018 and July 2021 together with 83,643 anti-vehicle mines, 6,058 explosive devices, and 169,758 items of UXO.[86] These results are not independently verified and are not reflected in official Yemeni reporting. Yemen's Article 7 report attributed clearance of 858 anti-personnel mines to Project Masam in 2020.[87]

YEMAC reported destruction of a total of 1,388 anti-personnel mines in 2020 but this was 50% more than recorded in UNDP data and the basis for this number was not clear. It said YEMAC accounted for clearance of 495 anti-personnel mines and 2,679 anti-vehicle mines in 2020, mostly in Hodeida, Lahej, and Taiz (see Table 2), but gave no indication of mines destroyed by other operators.[88]

In addition, the Saudi-led Coalition also reportedly destroyed 171 sea mines in 2020.[89]

Table 2: YEMAC clearance results (2020)[90]

Governorate	AP mines destroyed	AV mines destroyed	IEDs destroyed	UXO destroyed
Abyan	8	29	16	308
Aden	26	7	5	7,043
Al Dhale	72	4	27	92
Hadramaut	12	4	139	8,751
Hodeida	35	1,721	105	265
Lahej	99	358	53	1,690
Taiz	243	556	48	2,074
Totals	**495**	**2,679**	**393**	**20,223**

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR YEMEN: 1 MARCH 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

↓

FIRST EXTENSION REQUEST DEADLINE (6-YEARS): 1 MARCH 2015

↓

SECOND EXTENSION REQUEST DEADLINE (5-YEARS): 1 MARCH 2020

↓

THIRD EXTENDED DEADLINE (3-YEAR EXTENSION) 1 MARCH 2023

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC (and in accordance with the three-year extension granted 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. But the Article 5 deadline extension request Yemen submitted in 2019 asked for three years as only an interim arrangement to allow implementation of a baseline survey. Yemen proposed to use the data from that survey to submit an evidence-based request for another extension setting out plans for clearance in 2023.

By the start of 2021, YEMAC and its implementing partners had been able to carry out only minimal amounts of survey and, against a background of unabated conflict in Yemen in 2021, there was no realistic prospect that it would be able to complete a nationwide baseline survey within the third extension period.

Helped by increasing international engagement with mine action, Yemen has, however, started to put in place some of the essential elements for implementing a baseline survey and some clearance, at least in areas controlled by the IRG. TDI, under contract to UNDP, arrived in November 2020 and provided YMACC training in issuing task orders and quality management. In 2021, it started delivering non-technical survey training to YEMAC teams.[91] Since the start of 2020, UNDP has run six courses on identification and disposal of IEDs, including improvised mines, generating 18 teams with the capability to tackle improvised devices semi-remotely. By early July 2021, they had removed 369 devices without casualties, freeing up other YEMAC teams in the process to address other explosive hazards.[92]

However, progress in Houthi-controlled areas appears largely contingent on an end to conflict and an elusive political settlement that lifts current sanctions and restrictions on access to equipment. In IRG-controlled areas, limitations on access resulting from the conflict also obstruct progress but institutional weaknesses and capacity constraints have also posed a major obstacle. Poor coordination between government departments and bureaucratic obstacles to bringing in demining equipment have obstructed implementation of the national authority's states policy and plans. Meanwhile, Saudi-backed Project Masam, managed by SafeLane, the most richly-resourced operator in Yemen, also emerged as an increasing source of contention within the mine action sector obstructing efforts

to develop systematic survey and clearance by declining to share information to support the baseline survey or inform other operators of where it has worked.

Yemen's inability even to start a baseline survey that was due for completion by March 2023 has undermined the central objective of its current Article 5 deadline extension request and underscores the need for an updated mine action strategy, clarifying what Yemen aims to achieve with increased capacity and INGO participation. YEMAC received proposals for launching a Yemen Baseline Survey project in a workshop involving UNDP, TDI, DDG, and HALO Trust in early 2021 but has yet to respond.[93] UNDP has assessed that "YEMAC/YMACC seem to be slowly embracing change and realising that existing structures need to change",[94] but they may need to accelerate to compete effectively for donor support.

Table 3: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	*1.0
2019	*1.0
2018	*0.1
2017	*1.0
2016	*3.0
Total	***6.1**

* Mine Action Review estimates

1 Article 7 Report (covering 2020), Form D.

2 Article 7 Report (covering 1 April 2016 to 30 March 2017), Form D.

3 Article 7 Report (covering 2018), Form D.

4 Letter from the Panel of Experts on Yemen to the President of the Security Council (S/2021/79), 25 January 2021, pp. 3, 44.

5 J. Gambrell and M. Harb, "Landmines will be hidden killer decades after war", *Associated Press*, 24 December 2018.

6 UNDP Yemen, "Emergency Mine Action Project – Yemen Phase Five Termination, Evaluation Brief EMA Project", 2 August 2021.

7 "Yemen land mine kills six in convoy carrying defense minister, who is unharmed", *Reuters*, 19 February 2020.

8 Letter from the Panel of Experts on Yemen to the President of the Security Council (S/2021/79), 25 January 2021, p. 44.

9 Email from Gareth Collett, Chief Technical Adviser – Counter IED, UNDP, 6 July 2021; and zoom interview, 20 July 2021.

10 E. Lundquist, "Tanker loading crude damaged by floating mine in Yemen", *Seapower*, 9 October 2020.

11 J. Gambrell, "Mine explodes damaging oil tanker off Saudi Arabia", *Associated Press*, 25 November 2020.

12 Email from Gareth Collett, UNDP, 6 July 2021.

13 Article 7 Report (covering 2018), Form A.

14 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, pp. 7,14.

15 Interview with Ameen Saleh Alaqili, Director, YEMAC, in Geneva, 13 February 2020; Zoom interview with Gareth Collett, UNDP, 20 July 2021.

16 2019 APMBC Article 5 deadline Extension Request, pp. 5 and 22; and email from Stephen Robinson, UNDP, 21 July 2020.

17 UNDP Annual Report 2020, February 2021, p. 9.

18 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 12.

19 Emails from Ameen Saleh Alaqili, YEMAC, 5 May 2021; and Stephen Robinson, Senior Technical Adviser, UNDP, 27 May 2020.

20 UNDP Annual Report 2020, p. 14.

21 Article 7 Report (covering 2020), Form D; email from Stephen Robinson, UNDP, 7 August 2021.

22 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.

23 Email from Ameen Saleh Alaqili, YEMAC, 5 May 2021; UNDP Annual Report 2020, p. 15.

24 UNDP Annual Report 2020, p. 15; UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 21.

25 Article 7 Report (covering 2020), Form D.

26 Email from Ameen Saleh Alaqili, YEMAC, 5 May 2021; UNDP Annual Report 2020, p. 8; and Article 7 Report (covering 2020), Form D.

27 Article 7 Report (covering 2020), Form D.

28 Email from Stephen Robinson, UNDP, 7 August 2021.

29 Email from Esteban Bernal, Programme Manager, Humanitarian Disarmament and Peace Building, DRC, 23 March 2021.

30 Email from Matthew Smith, Programme Manager, HALO Trust, 17 May 2021.

31 Email from Marie-Josée Hamel, Regional Programme Advisor – Middle East, DRC, 9 August 2021.

32 Email from Esteban Bernal, DRC, 23 March 2021.

33 Ibid.; and email from Marie-Josée Hamel, DRC, 16 April 2020.

34 UNDP Annual Report 2020, p. 13; and email from Esteban Bernal, DRC, 23 March 2021.

35 Interview with Stephen Robinson, Senior Technical Adviser, UNDP, Geneva, 23 March 2021.

36 Email from GICHD, 30 April 2020.

37 UNDP Annual Report 2020, p. 13; Article 7 Report (covering 2020), Form D.

38 Email from Stephen Robinson, UNDP, 7 August 2021.

39 Email from Matthew Smith, HALO Trust, 17 May 2021

40 Email from GICHD, 30 April 2020.

41 Article 7 Report (covering 2020), Form D.

42 2018 Article 5 deadline Extension Request, March 2019, p. 19; and APMBC Article 7 Report (covering 2019), Form D.

43 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 21.

44 Ibid.

45 Email from Ameen Saleh Alaqili, YEMAC, 5 May 2021.

46 Ibid.

47 Article 7 Report (covering 2020), Form D.

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49 Email from Matthew Smith, HALO Trust, 17 May 2021.

50 Emails from DRC, 25 March 2021; and Matthew Smith, HALO Trust, 17 May 2021.

51 Email from Ameen Saleh Alaqili, YEMAC, 5 May 2021.

52 Emails from mine action stakeholders, March–May 2021.

53 Email from Matthew Smith, HALO Trust, 17 May 2021.

54 Email from Ameen Saleh Alaqili, YEMAC, 5 May 2021.

55 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 17; and 2019 APMBC Article 5 deadline Extension Request, p. 16.

56 Email from GICHD, 30 April 2021.

57 Email from Stephen Robinson, UNDP, 27 May 2020.

58 Article 7 Report (covering 2020), Form D.

59 Email from Gareth Collett, UNDP, 6 July 2021.

60 Email from Matthew Smith, HALO Trust, 17 May 2021.

61 Article 7 Report (covering 2020), Form D.

62 Interview with Ameen Saleh Alaqili, YEMAC, in Geneva, 13 February 2020; UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 28.

63 Email from Ameen Saleh Alaqili, YEMAC, 5 May 2021.

64 Article 7 Report (covering 2020), Form D.

65 UNDP, "Emergency Mine Action Project, Annual Progress Report 2019", 20 January 2020, p. 15.

66 UNDP Annual Report 2020, p. 12.

67 Article 7 Report (covering 2020), Form D.

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72 Email from Kenan Muftic, Head of Global Training Centre for MDDs/EDDs, NPA, 18 May 2020.

73 UNDP Annual Report 2020, p. 10.

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90 Email from Ameen Saleh Alaqili, YEMAC, 5 May 2021.

91 UNDP Annual Report 2020, p. 13.

92 Email from Gareth Collett, UNDP, 6 July 2021.

93 Email from Matthew Smith, HALO Trust, 17 May 2021.

94 UNDP Annual Report 2020, p. 13.

ZIMBABWE

MINE ACTION REVIEW

CLEARING THE MINES 2021

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
JUST ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MEDIUM

(NATIONAL ESTIMATE)

11 KM²

AP MINE CLEARANCE IN 2020

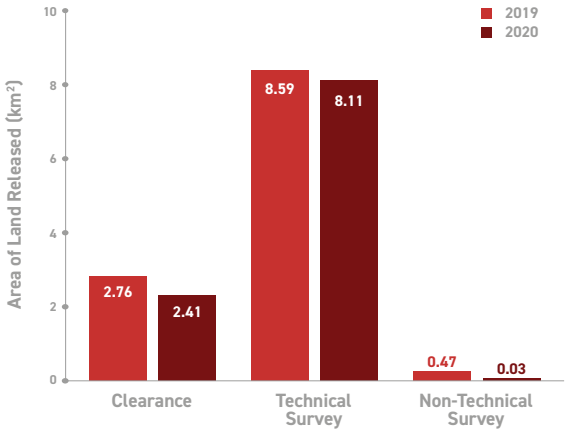
2.41 KM²

AP MINES DESTROYED IN 2020

26,911

(INCLUDING 90 DESTROYED DURING EOD SPOT TASKS)

LAND RELEASE OUTPUT



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

KEY DEVELOPMENTS

Zimbabwe managed to exceed its land release targets for 2020 despite the ongoing challenges posed by the COVID-19 pandemic, although overall land release output declined from its high in 2019. All contaminated areas remaining in Zimbabwe are now confirmed hazardous areas (CHAs). There is strong national ownership and the mine action programme is effectively coordinated by the Zimbabwe Mine Action Centre (ZIMAC). The challenge for Zimbabwe in meeting its Article 5 deadline remains securing the requisite funding from donors in a country with significant competing social and economic challenges.

RECOMMENDATIONS FOR ACTION

- **ZIMAC should increase efforts to secure additional national and international funding to meet its 2025 clearance completion deadline. Greater links between mine action and development, along with enhanced cooperation among government ministries, would assist this endeavour.**
- **Increased resources should be allocated to ZIMAC to enable it to effectively manage a fast-growing national mine action programme.**
- **Zimbabwe should elaborate a gender and diversity policy and implementation plan for mine action.**
- **Zimbabwe should review its procedure for "missed-mine drills", which are executed where gaps in the pattern minefield are found, to establish a more efficient method of clearance.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2020)	Score (2019)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	8	Zimbabwe has a good understanding of remaining mine contamination with only CHAs remaining. ZIMAC estimates that only about 11km^2 of land is actually contaminated with anti-personnel mines and that the rest of the area in the national mine action database (more than 20km^2) can be released by survey.
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 operators. 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 although this was delayed to 2021 due to the COVID-19 pandemic.
GENDER AND DIVERSITY (10% of overall score)	6	6	ZIMAC does not have a gender and diversity policy and implementation plan but the importance of gender is acknowledged in the National Mine Action Strategy. 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, with the support of the Geneva International Centre for Humanitarian Demining (GICHD), continued to make improvements to information management in 2020. ZIMAC met with operators to verify data quality and the GICHD to troubleshoot issues with the database. ZIMAC has improved its information management capabilities in the past few years and submits Article 7 reports annually.
PLANNING AND TASKING (10% of overall score)	8	8	Zimbabwe has a National Mine Action Strategy for 2018–25. 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 increase in capacity across all operators in 2020, and APOPO became operational for the first time with training initiated in November 2020. Greater use of mechanical assets and mine detection dogs (MDDs) has increased efficiency in recent years. However, an ongoing challenge for operators is the extraneous time spent on "missed mine drills", when gaps in the mine pattern are found. Despite this, operators continue to clear tens of thousands of anti-personnel mines annually achieving 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 10.55km^2 of mined area in 2020, exceeding its land release target for the year despite the restrictions imposed by the COVID-19 pandemic response. The majority of this was due to reduction through technical survey with Zimbabwe's clearance output falling from 2019. The challenge will be for Zimbabwe to maintain land release output as land released by survey is expected to decrease. 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**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- National Mine Action Authority of Zimbabwe (NAMAAZ)
- 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

As at the end of 2020, Zimbabwe reported a total of just over 34.1km^2 of confirmed mined area remaining (see Table 1).[1] This is a decrease from the just under 42.7km^2 reported at the end of 2019.[2] Six of the remaining minefields stretch along the borders with Mozambique covering four provinces while one is inland in Matabeleland North province.[3] According to ZIMAC, the baseline of contamination is complete following the completion of significant re-survey in 2016. The baseline was established through inclusive consultation including with women and children.[4] All contaminated areas remaining in Zimbabwe are CHAs, albeit which are, in general, widely drawn. According to operators, Zimbabwe has a good understanding of the problem, with some re-survey of tasks before clearance expected.[5] In fact, as ZIMAC explained to Mine Action Review in August 2021, of the total confirmed mined area, only a little over one third (some 11km^2) is thought to be actually contaminated, with considerable area between mine lines that can be released through survey.[6]

In 2020, a total of 1,969,113m^2 of previously unrecorded legacy contamination was added to the database. These were not new polygons per se but the expansion of existing CHAs as a result of pre-clearance re-survey.[7] Of this, Norwegian People's Aid (NPA) reported that it conducted pre-clearance re-survey of the Rusitu to Muzite minefield which led to changes in the size of the CHA and an addition of 72,492m^2, while Mines Advisory Group (MAG) added 34,507m^2.[8] The HALO Trust stated that several areas of contamination were newly reported during 2020. This included what was previously believed to be a 'gap' in the ploughshare in Rushinga district where locals have been farming but it has since emerged that an anti-personnel mine threat remains in the final third of the area. It is, though, believed that considerable reduction of this hazardous area may be possible. The HALO Trust also reported that it is nearing completion of all known minefields in Mount Darwin district, but a number of final requests for survey have been made by the local community and information provided about a few areas of possible contamination. The total area of previously unrecorded contamination added to the database by HALO Trust was 829,086m^2.[9]

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.[10] 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.[11] Few areas contain anti-vehicle mines and it is thought that the number of such mines remaining is low.[12]

Table 1: Anti-personnel mined area (at end 2020)[13]

Location	CHAs	Area (m^2)
Musengezi To Mazowe	78	6,576,690
Mazowe To Rwenya	52	9,751,263
Mwenezi To Sango Border Post (Corsan)	1	7,196,038
Mwenezi To Sango Border Post Reinforced Ploughshare	1	2,437,629
Lusulu	7	905,537
Risutu to Muzite	22	4,611,555
Sheba to Leacon Hill	10	2,637,513
Totals	**171**	**34,116,225**

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The National Mine Action Authority of Zimbabwe (NAMAAZ) 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 as the focal point and coordination centre of all mine action in the country. ZIMAC is mandated to report to NAMAAZ.[14] In August 2019, ZIMAC's office relocated outside of a military cantonment allowing access to civilian operators.[15]

ZIMAC holds quarterly coordination meetings with all stakeholders; operators report being closely involved in the decision-making process. Communication between ZIMAC and NAMAAZ, operators, and other Zimbabwean government ministries was reported as being good with regular bilateral meetings and visits from the director of ZIMAC.[16] Operators reported that approval processes for international visas for staff and visitors is very slow, normally requiring a minimum of three months, but ZIMAC has provided long-term memorandums of understanding (MOUs) and does its best to assist.[17]

The Geneva International Centre for Humanitarian Demining (GICHD) has been providing information management 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. In 2020, the GICHD continued to provide remote, on-demand support to ZIMAC on information

management. A mid-term review of Zimbabwe's national strategy, supported by the GICHD, had been planned for 2020 but was postponed to 2021 due to COVID-19.[18]

According to ZIMAC's revised mine action work plan for 2020–2025, a total of $65.6 million is required by the mine action programme to meet its extended Article 5 deadline by 2025.[19] In 2020, the Government of Zimbabwe provided US$500,000 towards the operational and administrative costs of both the National Mine Clearance Unit (NMCU) and ZIMAC. The salaries and allowances and transport expenses of staff were covered by the army.[20] ZIMAC informed Mine Action Review that the economic downturn in 2018 was likely to limit the government's potential to increase any funding for mine action, though it expected existing funding levels to be maintained.[21] 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.[22]

With assistance from the GICHD and the International Committee of the Red Cross (ICRC), ZIMAC developed a Communication and Resource Mobilisation Strategy in 2018, which was finalised in the first half of 2019 and due to be officially launched in May 2020. However, due to the COVID-19 pandemic this was delayed until 2021 although the exact date was dependent on how the pandemic developed.[23] ZIMAC informed Mine Action Review that top priorities for which it hoped to procure additional resources included funding for a planned national mine and explosive remnants of war (ERW) victim survey, website hosting, the relocation of the office outside of the military cantonment, replacement detectors and more deminers at the NMCU, and additional funding for the international demining operators to expand their operations.[24]

Zimbabwe participated in the individualised approach during 2017 and 2018 and reported that it ensured that current donors understood more about Zimbabwe's progress to encourage them to continue funding the programme. Since then, a new donor has come forward: the Swiss government.[25]

GENDER AND DIVERSITY

ZIMAC does not have a gender and diversity policy and implementation plan although in its latest Article 7 report it stated it was working to elaborate a policy for the mine action programme.[26] Zimbabwe's National Mine Action Strategy 2018–2025 refers to the importance of addressing gender and diversity considerations.[27] While there is not a specific standard on gender mainstreaming in the National Mine Action Standards (NMAS), reference to gender is contained within the standards, such as NMAS 07 ("Management of Demining Operations"), which requires that "special efforts should be made to ensure gender balance and diversity of background for Community Liaison Officers".[28]

ZIMAC confirmed 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. Operators also make use of schoolteachers and children to further their outreach. All mine action data is disaggregated by sex and age.[29]

ZIMAC reported 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.[30] 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.[31] 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.[32]

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.[33]

According to ZIMAC, women are specifically encouraged to apply for operational positions in job advertisements, and in 2020 30% of managerial and administrative roles were held by women.[34] Yet ZIMAC stated that this fell short of "required" levels and noted that Zimbabwean women were somewhat reluctant to work in mine action. More effort is to be placed on raising awareness among women and ensuring equal opportunities to employment, regardless of gender. 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.[35]

International operators confirmed that each organisation had gender policies in place for their programme staff, 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.[36] All operational organisations reported increasing efforts to encourage women to apply for operational, as well as managerial positions, and noted positive trends in the increasing number of women employed in programmes as a result.[37] MAG reported that in 2020 breastfeeding mothers were given an additional three months of leave after the first three months of maternity leave decided on a case by case basis.[38] The HALO Trust reported that in 2020 they had managed to provide new mothers with a small allowance to cover the costs of childcare in an attempt to help alleviate some of the financial pressures. HALO Trust also hired a female nurse to ensure confidential medical services can be offered to female staff as previously all nurses on programme were male. Key senior management staff have also taken online Gender and Diversity courses.[39]

In 2020, approximately 30% of MAG's operational staff were women as are 20% of staff at managerial level.[40] In NPA, 31% of operational staff and 27% of supervisory/managerial staff are female.[41] In The HALO Trust, 26% of operational staff and 15% of supervisory/managerial staff are women.[42]

INFORMATION MANAGEMENT AND REPORTING

ZIMAC operates an Information Management System for Mine Action (IMSMA) NG database. ZIMAC noted that workshops, trainings, and international expert support for information management had produced significant results and remained important to ensure the ZIMAC database is up to date and accurate.[43] In 2020, a virtual meeting was held with operators' information managers to check data quality. A virtual meeting was held with the GICHD information management advisor in November 2020 to trouble shoot the IMSMA NG system. The plan for 2021 was to have a seminar once the COVID-19 situation eases.[44]

ZIMAC holds monthly meetings with operators to cross-reference data, which according to operators has improved the accuracy and reliability of the database.[45] The HALO Trust have suggested the creation of a live shared database that could be accessed by all operators. This would enable more accurate country-wide mapping, it believes.[46] Operators reported that data collection forms are consistent and enable collection of the necessary data.[47]

Over the past few years, ZIMAC's information management capabilities have increased significantly, with clear evidence of improvement in the quality and accuracy of its reporting, including in its most recent Article 5 deadline extension request, which established an accurate picture of remaining contamination and set, for the first time, a date for the completion of mine clearance. ZIMAC's National Mine Action Strategy and its revised Article 5 work plan demonstrated reporting of a consistently high quality, something that was once a weak point in the national mine action programme. ZIMAC's latest Article 7 report covering 2020 is comprehensive and of generally good quality. However, there were some discrepancies in the land release figures reported by operators and by ZIMAC for 2020 (see section, below, on land release outputs and Article 5 compliance).

PLANNING AND TASKING

In 2018, Zimbabwe launched its first ever national mine action strategy, National Mine Action Strategy 2018–2025. The Strategy was developed by ZIMAC with support from the GICHD and input from government ministries, the NMCU, and international mine action organisations.[48] The strategic plan complements Zimbabwe's Article 5 deadline extension request to 2025, which was approved by States Parties to the Anti-Personnel Mine Ban Convention (APMBC) 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.[49]

In April 2019, Zimbabwe published an updated work plan to support compliance with its Article 5 deadline of 31 December 2025. The work plan was based on revised estimates of remaining contamination and, accounting for progress during 2018, updated annual targets for the remainder of the extension period. These included 8.2km^2 to be addressed in 2019; 8.3km^2 to be addressed in 2020; 8.1km^2 to be addressed in 2021; 8.3km^2 to be addressed in 2022; 8.3km^2 to be addressed in 2023; 6.9km^2 to be addressed in 2024; and the remaining 4.6km^2 to be addressed in 2025.[50]

Zimbabwe exceeded its land release target for 2020 with 10.55km^2 released in total. The Zimbabwean government introduced a mandatory lockdown in April 2020 due to COVID-19 which meant that operators stood down for that month, then in May operators were able to deploy at 90% capacity, and in June they were back to full capacity.[51] Despite this, operators were still able to exceed their land release targets for the year. In its latest Article 7 report ZIMAC has provided revised annual land release targets for the 2021-25 with 9.34km^2 planned to be released in 2021 (see Table 2).[52] Going forward, once an operator has completed clearance of their assigned area their capacity will be redeployed to other minefields.[53]

Clearance is prioritised according to impact, with contaminated areas closest to highly populated areas prioritised first.[54] NPA reported that it uses an impact assessment to prioritise areas for release once they have been allocated by ZIMAC.[55] 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.[56]

Table 2: Annual land release targets 2021–25 (m^2)[57]

Minefield	2021	2022	2023	2024	2025	Totals
Musengezi to Mazowe (HALO)	1,700,000	1,500,000	1,500,000	1,300,000	576,690	**6,576,690**
Mazowe to Rwenya River (MAG)	1,200,000	1,200,000	1,335,653	2,900,000	3,115,610	**9,751,263**
Crooks Corner to Sango Border (Reinforced Ploughshare) (NMC)	2,437,629					**2,437,629**
Crooks Corner to Sango Border (Cordon Sanitaire) (APOPO)	1,000,000	2,000,000	3,000,000	1,196,038		**7,196,038**
Rusitu to Muzite Mission (NPA)	1,400,000	1,611,555	1,600,000			**4,611,555**
Sheba Forest to Leacon Hill (NPA)	1,300,000	1,337,513				**2,637,513**
Lusulu (NMCU)	305,537	250,000	300,000	50,000		**905,537**
Totals	**9,343,166**	**7,899,068**	**7,735,653**	**5,446,038**	**3,626,300**	**34,116,225**

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 national mine action standards (NMAS) every three years in line with updates to international mine action standards (IMAS).[58] ZIMAC plans to review the NMAS in 2021 with input from operators to keep them in line with new developments in the IMAS.[59]

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 ("MMDs"), when gaps in the mine pattern are found.[60] According to operators, MMDs should be reviewed to establish a more efficient method of conducting them as they are time consuming and seemingly ineffective as mines are only found very rarely.[61] Operators reported that no progress was made in resolving this issue in 2020 as opportunities for field visits and coordination meetings were severely limited due to COVID-19.[62] In 2021, NPA reported that they had initiated discussion about the possible use of mine detection dogs (MDDs) for MMDs.[63]

ZIMAC conducts regular quality assurance (QA), and an independent quality control (QC) team was dispatched to conduct QC by sampling a minimum of 10% of completed tasks.[64] Operators 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.[65] 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 NMAS.[66]

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 2017, but were not accredited or operational until December 2020 when they began training their first demining teams.[67]

Table 3: Operational clearance capacities deployed in 2020[68]

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
HALO Trust	32	270	0	2	14% increase from 2019
NPA	8	79	2 dogs/2 handlers	0	MDDs are conducting technical survey only
MAG	3	27-35	0	0	Additional 7 deminers added in January–March and October–December
NMCU	15	150	0	1	Unchanged from 2018
Totals	**58**	**526–534**	**2 dogs/2 handlers**	**3**	

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

There was a 6% increase overall in manual capacity across all operators from 505 in 2019 to 534 in 2020. This was the result of an increase in donor funding. In 2021, uncertainties in funding from the United Kingdom (FCDO) and the United States (DoS) lead to a reduction in capacity of three teams from NPA and two team from HALO.[69] However, APOPO, which managed to secure funding for 2021, has recruited 40 deminers.[70]

APOPO reported it is tasked to survey and clear a 7km^2 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.[71] APOPO managed to secure funding in late 2020 to begin its operations in this minefield. In November and December, APOPO conducted its initial training and began deployment with clearance starting in January 2021.[72]

In 2020, NPA used its two MDDs to conduct technical survey.[73] The NCMU has one mechanical asset and the HALO Trust has two machines, which are mainly used on tasks where mines are found at deeper levels, or in patches where soil mineralisation makes use of detectors difficult. In 2020, the HALO Trust trialled a new mechanical asset: a mobile sizer/crushing unit, which processes minefield spoil without the need for subsequent physical inspection. It hopes this will increase the efficiency of mechanical operations but full trials of the machine were limited due to COVID-19.[74] MAG does not currently use any mechanical assets or MDDs in its operations but, in 2020, was exploring the possibility of procuring a mechanical asset to support the programme.[75]

DEMINER SAFETY

ZIMAC reported that four HALO Trust deminers were injured during 2020.[76] The HALO Trust stated that each accident involved excavation of R2M2 anti-personnel mines and all the deminers sustained injuries only to their hand. Investigations were conducted of all the incidents by senior operations management from within the HALO Trust with oversight and participation

from ZIMAC. Full reports were prepared for ZIMAC, while a summary of the lessons learned was shared with the other operators through a report and briefing at a coordination meeting.[77] ZIMAC established a board of inquiry after each accident which included a representative from the mine action centre with retraining taking place with the affected operator. Lessons learnt were then shared with other operators during National Mine Action Stakeholders Coordinating Meetings.[78]

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2020

A total of 10.55km² of mined area was released in 2020, of which more than 2.41km² was cleared, more than 8.1km² was reduced through technical survey, and almost 0.03km² was cancelled through non-technical survey. A total of 26,911 anti-personnel mines were found and destroyed. In addition, 1.97km² of previously unrecorded legacy contamination was added to the database in 2020.

SURVEY IN 2020

In 2020, a total of 8.11km² was released by survey, of which 0.03km² was cancelled through non-technical survey (see Table 4) and more than 8.1km² was reduced through technical survey (see Table 5).[79] There was a 94% decrease in non-technical survey output from 0.47km² cancelled in 2019 and a 6% decrease in the amount of technical survey, from 8.59km² the previous year.[80]

NPA reported that the significant decrease in area cancelled through non-technical survey in 2020 was due to there being fewer cultivated areas within CHAs to cancel.[81] The HALO Trust notes that the reduction was expected in 2020 as the planned number of ploughshare tasks in 2020 was less than in 2019. Going forward the HALO Trust has completed all known ploughshare minefields in Mount Darwin, and while they still have a considerable number of cordon-sanitaire minefields remaining, they are getting closer to completing all known ploughshare tasks. 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 etc. The HALO Trust is therefore not expecting reduction levels to remain as high as they have been.[82]

Table 4: Cancellation through non-technical survey in 2020[83]

Area	Operator	Area cancelled (m²)
Musengezi to Mazowe	HALO Trust	14,743
Mazowe to Rwenya	MAG	13,309
Risutu to Muzite	NPA	895
Total		**28,947**

Table 5: Reduction through technical survey in 2020[84]

Area	Operator	Area reduced (m²)
Musengezi to Mazowe	HALO Trust	454,451
Mazowe to Rwenya	MAG	220,531
Mwenezi to Sango Border Post	NMCU	5,532,643
Risutu to Muzite	NPA	1,059,641
Sheba to Leacon Hill	NPA	838,669
Total		**8,105,935**

CLEARANCE IN 2020

In 2020, a total of 2.41km² of mined area was released through clearance with 26,911 anti-personnel mines were found and destroyed.[85] This is a 13% decrease from the 2.76km² cleared in 2019 and a 31% decrease in the number of anti-personnel mines found.[86] In 2020, on average 90m² was cleared for each mine found, while in 2019 it was 70m². The reduction in clearance output can be directly attributed to the reduced deployment of operational teams due to the COVID-19 pandemic.[87]

Table 6: Mine clearance in 2020[88]

Area	Operator	Area cleared (m²)	Anti-personnel mines destroyed
Musengezi to Mazowe	HALO Trust	1,155,768	24,740
Mazowe to Rwenya	MAG	184,164	125
Mwenezi to Sango Border Post	NMCU	132,472	1,243
Risutu to Muzite	NPA	546,001	355
Sheba to Leacon Hill	NPA	392,267	448
Totals		**2,410,672**	**26,911**

In 2020, 90 mines were destroyed during spot tasks by the HALO Trust, which are included in the figures reported in Table 6 above.[89]

Operators reported that no areas were cleared in 2020 without anti-personnel mines being found and destroyed.[90]

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR ZIMBABWE: 1 MARCH 1999

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 MARCH 2009

↓

FIRST TO THIRD EXTENDED DEADLINES (COMBINED 5-YEAR, 10 MONTH EXTENSION): 1 JANUARY 2015

↓

FOURTH EXTENDED DEADLINE (3-YEAR EXTENSION): 1 JANUARY 2018

↓

FIFTH EXTENDED DEADLINE (ALMOST 8-YEAR EXTENSION): 31 DECEMBER 2025

ON TRACK TO MEET ARTICLE 5 DEADLINE: JUST ON TRACK
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): HIGH

Table 7: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	2.41
2019	2.76
2018	2.11
2017	1.66
2016	1.67
Total	**10.61**

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. It is just on track to meet this deadline, although progress in Article 5 implementation may be impacted by the COVID-19 pandemic and political and economic instability internally and will require sustained international funding through to completion.

Zimbabwe exceeded its land release targets for 2020 despite the challenges posed by COVID-19 and the overall 11% decline in land release output from the previous year. ZIMAC remains optimistic that it can meet its Article 5 deadline and predicts there will be an increase in land release during 2021 as APOPO begin its clearance operations. However, the amount of area reduced through technical survey is likely to fall as the remaining polygons are narrow which means that operators will need to significantly increase their clearance output.[91]

The COVID-19 pandemic caused operations to be suspended in April 2020 due to government lockdown restrictions. It then took about three months for operators to return to full clearance capacity.[92] The first two months of 2021 also impacted demining operations as the Zimbabwe was fighting the second wave of the pandemic.[93] 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.[94]

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 $60 million to reach its target at a rate of about $11 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.[95]

The HALO Trust emphasised that the more teams that can be put on the ground now will save additional costs and expenditure on equipment needed in the future. In 2020, The HALO Trust managed to obtain some demining equipment from Mozambique which it had been holding for four and a half years after Mozambique had declared completion of its Article 5 obligations. Once the equipment has been restored to full working order, productivity should increase. By August 2021, the HALO Trust had imported all the equipment that has been released by Mozambique.[96]

There are many positive aspects of Zimbabwe's mine action programme, such as having a strong, nationally-owned mine action centre led by experienced and dedicated staff members; a realistic estimate of the remaining problem and national mine action strategy; and a collaborative working environment in which operators can quickly ramp up capacity and output, putting additional funds immediately to use towards an achievable goal.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

On the matter of potential "residual" contamination that might be found after completion of major clearance operations, ZIMAC informed Mine Action Review that plans are in place. 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.[97] It is planned that the NMCU will develop a strategy on the management of residual contamination by 2022.[98]

1 Email from Maj. Cainos Tamanikwa, Operations Officer, ZIMAC, 27 April 2021.

2 Email from Capt. Cainos Tamanikwa, Director, ZIMAC, 6 April 2020.

3 Article 7 Report (covering 2020), p. 2.

4 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

5 Emails from Chimwemwe Tembo, Programme Manager, NPA, 25 March 2020; Sam Fricker, Programme Manager, HALO Trust, 17 April 2020; and Peter Avenell, Country Director, MAG, 20 May 2020.

6 Email from Maj. Cainos Tamanikwa,, ZIMAC, 19 August 2021.

7 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; and Article 7 Report (covering 2020), p. 2.

8 Emails from Peter Avenell, MAG, 15 April 2021; and Chimwemwe Tembo, NPA, 16 April 2021.

9 Email from Sam Fricker, Programme Manager, HALO Trust, 13 April 2021.

10 2013 Article 5 deadline Extension Request, Executive Summary, p. 1; and email from Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017.

11 HALO Trust, "Zimbabwe, History of Minelaying", accessed 10 February 2014; 2013 Article 5 deadline Extension Request, Executive Summary; and Analysis of Zimbabwe's 2013 Article 5 deadline Extension Request, submitted by the President of the 13th Meeting of States Parties on behalf of the States Parties mandated to analyse requests for extensions, 18 June 2014, p. 3.

12 Email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

13 Email from Maj. Cainos Tamanikwa, Operations Officer, ZIMAC, 27 April 2021; and Article 7 Report (covering 2020), p. 5.

14 2013 Article 5 deadline Extension Request, p. 7.

15 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

16 Emails from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; Chimwemwe Tembo, NPA, 25 March 2020; Sam Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.

17 Emails from Sam Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.

18 Email from GICHD, 30 April 2021.

19 Article 7 Report (for 2019), Annex A.

20 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

21 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.

22 Article 7 Report (covering 2017), Form D.

23 Emails from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; and (now as Major), 27 April 2021.

24 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.

25 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

26 Article 7 Report (covering 2020), p. 16.

27 Email from Tom Dibb, HALO Trust, 22 February 2018.

28 Email from Sam Fricker, HALO Trust, 20 July 2019.

29 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020.

30 Ibid.

31 Emails from Sam Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, Regional Director West Africa and Latin America, MAG, 1 August 2019.

32 Email from Sam Fricker, HALO Trust, 20 July 2019.

33 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

34 Ibid.

35 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020.

36 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 6 April 2020; Sam Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, Programme Manager, NPA, 15 July 2019.

37 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; Sam Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, NPA, 15 July 2019.

38 Email from Peter Avenell, MAG, 15 April 2021.

39 Email from Sam Fricker, HALO Trust, 13 April 2021.

40 Email from Peter Avenell, MAG, 15 April 2021.

41 Email from Chimwemwe Tembo, NPA, 16 April 2021.

42 Email from Sam Fricker, HALO Trust, 13 April 2021.

43 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.

44 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

45 Emails from Chimwemwe Tembo, NPA, 25 March 2020; Sam Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.

46 Email from Sam Fricker, HALO Trust, 17 April 2020.

47 Emails from Chimwemwe Tembo, NPA, 25 March 2020; Sam Fricker, HALO Trust, 17 April 2020; and Peter Avenell, MAG, 20 May 2020.

48 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.

49 Email from Sam Fricker, HALO Trust, 20 July 2019.

50 Article 7 Report (covering 2018), p. 36.

51 Email from Capt. Cainos Tamanikwa, ZIMAC, 28 July 2020.

52 Article 7 Report (covering 2020), p. 37.

53 Ibid., p. 36.

54 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

55 Email from Chimwemwe Tembo, NPA, 25 March 2020.

56 Email from Sam Fricker, HALO Trust, 17 April 2020.

57 Article 7 Report (covering 2020), pp. 36-37; and email from Maj. Cainos Tamanikwa, ZIMAC, 20 September 2021. There were some minor corrections to the figures which were provided by ZIMAC.

58 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

59 Article 7 Report (covering 2020), p. 35.

60 Emails from Sam Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, MAG, 1 August 2019.

61 Emails from Sam Fricker, HALO Trust, 5 August 2021; and Peter Avenell, MAG, 20 May 2020.

62 Email from Sam Fricker, HALO Trust, 13 April 2021.

63 Email from Chimwemwe Tembo, NPA, 16 April 2021.

64 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 12 June 2018.

65 Email from Sam Fricker, HALO Trust, 20 July 2019.

66 Email from Sam Fricker, HALO Trust, 17 April 2020.

67 Article 7 Report (covering 2020), p. 15; and email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

68 Emails from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; Sam Fricker, HALO Trust, 13 April 2021; Peter Avenell, MAG, 15 April 2021; and Chimwemwe Tembo, NPA, 16 April 2021.

69 Emails from Sam Fricker, HALO Trust, 13 April 2021; Chimwemwe Tembo, NPA, 16 April 2021; and Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

70 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

71 Emails from Ashley Fitzpatrick, APOPO Zimbabwe, 27 July 2019 and 9 August 2020.

72 Article 7 Report (covering 2020), p. 31.

73 Email from Chimwemwe Tembo, NPA, 16 April 2021.

74 Emails from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; and Sam Fricker, HALO Trust, 17 April 2020 and 13 April 2021.

75 Email from Peter Avenell, MAG, 24 July 2020.

76 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021. ZIMAC also reported that one MAG deminer was injured but MAG have no record of this.

77 Email from Sam Fricker, HALO Trust, 13 April 2021.

78 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

79 Ibid.; and Article 7 Report (covering 2020), p. 5.

80 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

81 Email from Chimwemwe Tembo, NPA, 16 April 2021.

82 Email from Sam Fricker, HALO Trust, 13 April 2021.

83 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; and Article 7 Report (covering 2020), p. 5. The HALO Trust reported cancelling 145,242m^2 Musengezi to Mazowe

84 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; and Article 7 Report (covering 2020), p. 5. NPA reported reducing 1,317,810m^2 in Risutu to Muzite, and 926,540m^2 in Sheba to Leacon Hill.

85 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; and Article 7 Report (covering 2020), p. 5.

86 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020; Article 7 Report (covering 2019), Form D

87 Email from Sam Fricker, HALO Trust, 13 April 2021; and Peter Avenell, MAG, 15 April 2021.

88 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021; and Article 7 Report (covering 2020), p. 5. The HALO Trust reported finding 24,660 anti-personnel mines in Musengezi to Mazowe; NPA reported clearing 287,832m^2 and finding 402 anti-personnel mines in Risutu to Muzite and clearing 304,396m^2 in Sheba to Leacon Hill.

89 Email from Maj. Cainos Tamanikwa, ZIMAC, 27 April 2021.

90 Emails from Sam Fricker, HALO Trust, 13 April 2021; and Peter Avenell, MAG, 15 April 2021; and Chimwemwe Tembo, NPA, 16 April 2021.

91 Article 7 Report (covering 2020), p. 19

92 Emails from Sam Fricker, HALO Trust, 13 April 2021; and Chimwemwe Tembo, NPA, 16 April 2021.

93 Article 7 Report (covering 2020), p. 35.

94 Ibid.

95 Article 7 Report (covering 2020), p. 36.

96 Emails from Sam Fricker, HALO Trust, 24 July 2020 and 5 August 2021.

97 Email from Capt. Cainos Tamanikwa, ZIMAC, 6 April 2020.

98 Email from Maj. Cainos Tamanikwa, ZIMAC, 19 August 2021.

STATES NOT PARTY

ARMENIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

RECOMMENDATIONS FOR ACTION

- **Armenia 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 the completion of operations.**

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2020, Armenia had more than 5.69km^2 of confirmed mined area and a further 3.83km^2 of suspected mined area, as set out in Table 1.[1] The mined areas contained anti-personnel mines, anti-vehicle mines, or a combination of both, as well as unexploded ordnance (UXO).[2] Of 94 confirmed hazardous areas (CHAs), 55 contain anti-personnel mines, totalling just under 2.9km^2, and the remaining 2.8km^2 contains anti-vehicle mines. Three of the six suspected hazardous areas (SHAs), totalling just over 0.1km^2, are thought to be contaminated by anti-personnel mines, with the remaining 3.7km^2 thought to contain only anti-vehicle mines.[3]

Table 1: Mined area (at end 2020)[4]

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 provinces still 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.[5] The total area contaminated by mines and exploded ordnance (UXO) reported at the end of 2020 is the same as that reported at the end of 2019 as no land was released during the intervening twelve months.

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 26km^2 and 114 CHAs that covered 21km^2 in four districts bordering Azerbaijan. Thirteen of these areas, totalling 1.8km^2, contained only UXO and not mines.[6] In 2019, the Centre for Humanitarian Demining and Expertise (CHDE) conducted non-technical survey in Syunik province but military-restricted zones continued to be off limits for survey and clearance.[7]

Table 2: Mined area by province (at end 2020)[8]

Province	Type of contamination	CHAs	Area (m²)	SHAs	Area (m²)
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**

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 a six-week conflict that took place between September and November 2020. The reclaimed territory, which is no longer under Armenia's control, 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.[9]

Armenia's border with Georgia has been cleared of mines, whereas the border with Turkey, also mined during the Soviet era, is still contaminated.[10] While non-technical survey in 2012–13 by the FSD did not find evidence of mines outside the buffer zones in Ararat province, which borders Turkey, certain areas on that border remain unsurveyed because they are controlled by Russian border troops.[11] The LIS conducted under UNDP auspices in 2005 had identified Ararat province as contaminated with anti-personnel mines but this is not confirmed by the data provided from CHDE.[12]

Armenia also reported new contamination with cluster munition remnants (CMR) and other explosive ordnance (EO) in Gegharkunik, Syunik, and Tavush provinces as a result of the conflict with Azerbaijan in 2020.[13]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The CHDE was established by the Armenian government in 2011 as a civilian, 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).[14] The CHDE can negotiate with international demining organisations, accept international funding, sign contracts, and receive international assistance.[15] The CHDE has an advisory board, composed of representatives from the Ministries of Defence, Emergency Situations, Territorial Administration, Education, and Justice.[16]

In 2013, in conformity with a government decree, the CHDE began developing national mine action legislation. The CHDE began drafting the law in 2015[17] with the support of the Organization for Security and Co-operation in Europe (OSCE) office in Yerevan.[18] 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.[19] As at April 2021, however, no progress towards the adoption of the mine action law had been reported.[20]

In 2020, the government allocated AMD208 million (approx. US$400,000) to cover the costs of the CHDE and AMD130 million (approx. $250,000) for survey and clearance operations.[21]

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.[22]

The CHDE receives capacity development support from the Geneva International Centre for Humanitarian Demining (GICHD). CHDE staff have been trained in land release and information management.[23]

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. The CHDE is said to offer equal employment opportunities for both men and women. Two of the department heads within the CHDE are female and out of a total of 47 employees, 17 are women (36%), most of whom occupy senior or specialist roles. In addition, two women work in the non-technical survey teams, but there are no women deminers.[24]

INFORMATION MANAGEMENT AND REPORTING

With FSD's support, the CHDE set up and manages the national Information Management System for Mine Action (IMSMA) database.[25] The CHDE had been planning to install IMSMA Core in 2019 but as at April 2021, this had been delayed for an unspecified amount of time due to the outbreak of COVID-19. In 2020, the CHDE elaborated quality assurance (QA) and quality control (QC) forms using KoboCollect Software to improve data collection in the field. Once IMSMA Core is installed, it will be possible to import the data into the database using KoboCollect forms.[26]

PLANNING AND TASKING

The draft National Strategic Plan on Mine Action was presented for the approval to the Armenian Government in 2018, however, as at April 2021, it was being reconsidered due to the emergence of new challenges (primarily the contamination relating to the 2020 conflict over Nagorno-Karabakh).[27] The main objectives of the draft Plan are 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.[28]

Priority 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.[29]

Armenia's annual work plan of 2021 envisaged the following activities: battle area clearance (BAC) of 45,000m^2 of CMR and EO contamination in Kornidzor area of Tegh community (Syunik province); technical survey and clearance of 15,000m^2 of EO contaminated land in Davit Bek of Kapan community (Syunik province); and non-technical survey in Syunik, Gegharkunik and Tavush provinces. CHDE noted that survey and clearance foreseen in Gegharkunik, Syunik, and Tavush provinces will target new contamination that resulted from the 2020 conflict with Azerbaijan.[30]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In 2013, with the assistance of FSD, the CHDE developed the Armenian National Mine Action Standards (NMAS) and submitted them for government approval. The NMAS were approved by the government in April 2014.[31] In 2018, amendments were made to the NMAS for mine risk education, accreditation of demining organisations, and mine detection dogs (MDDs). No amendments were made to the NMAS in 2020. According to CHDE, reviews of the NMAS are conducted following the International Mine Action Standards (IMAS) and international best practice.[32]

The CHDE has been developing standard operating procedures (SOPs) for several years.[33] SOPs on manual mine clearance, BAC, marking of hazardous areas, and medical support were elaborated by 2018.[34] In 2020, the CHDE elaborated SOPs on Information Management (IM), non-technical survey, technical survey, explosive ordnance disposal (EOD) and quality management (QM).[35]

OPERATORS AND OPERATIONAL TOOLS

Armenia only conducted BAC and EO clearance in 2020, all of which was all performed by the Foundation for Demining and Demolition. The CHDE deployed one non-technical survey team of three personnel while the Foundation for Demining and Demolition deployed three clearance teams totalling 18 deminers.[36]

CHDE had been planning to add one manual clearance team, one mechanical demining team, and one non-technical survey team to its demining capacity for 2020. The envisaged increase did not happen, however, and survey and clearance capacity remained constant. CHDE's plans to acquire mechanical clearance equipment also did not materialise due to changes in domestic law, which have impeded procurement.[37] Currently all clearance is conducted manually following the failure of six MDDs to obtain accreditation in 2017 following which they were "demobilised".[38] The CHDE has foreseen an increase of capacity of one non-technical survey team and one to two demining teams in 2021.[39]

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.[40] QC is conducted once clearance of the land has been completed, but prior to handover.[41]

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE

No anti-personnel mined area was surveyed or cleared in 2020.

A total of 16,180m^2 of anti-personnel mined area was cleared in 2019, with two anti-personnel mines found and destroyed.[42] Clearance of the 'Davit Bek' CHA that started in 2018, was completed in 2019 and the land was handed over to the community. Davit Bek was however re-contaminated with CMR and other EO following the recent conflict with Azerbaijan in September-December 2020.[43]

The inability to procure mechanical clearance services, as noted above, has precluded progress in clearing anti-personnel and anti-vehicle mined areas in the Yeghvard area of Kapan community (Syunik Province), as had been set out in the 2020 work plan.[44]

No target date has been set for the completion of mine clearance in Armenia, due to the uncertainty over future capacity and funding.[45] Moreover, due to the new CMR and EO contamination that resulted from the 2020 conflict with Azerbaijan, the CHDE will prioritise non-technical survey in the newly contaminated provinces of Gegharkunik, Syunik, and Tavush. The 2021 annual work plan does not foresee clearance of anti-personnel mined areas.

Over the past five years, demining in Armenia has been slow and productivity rates low, as Table 3 illustrates. Very little demining has taken place in the last five years. 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.[46] Going forward, Armenia will not complete clearance without a significant increase in funding and capacity.

Table 3: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0
2019	*0.02
2018	*0.01
2017	0
2016	0.02
Total	**0.05**

* Area rounded up

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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.[47]

1 Email from Margaret Lazyan, Head of Mine Risk Education and Victim Assistance, Centre for Humanitarian Demining and Expertise (CHDE), 26 April 2021.

2 Ibid.

3 Ibid.

4 Ibid.

5 Ibid.

6 CHDE, "FSD non-technical mine action survey", Yerevan, 2013, p. 12.

7 Emails from Margaret Lazyan, CHDE, 19 April 2019 and 25 June 2020.

8 Emails from Margaret Lazyan, CHDE, 26 April 2021.

9 See Mine Action Review's Clearing the Mines 2021 report on Azerbaijan for further information.

10 Emails from Ruben Arakelyan, CHDE, 19 March 2014 and 28 April 2017, and interview in Geneva, 1 April 2014.

11 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.

12 "Landmine Impact Survey", UNDP, 2005, at: http://bit.ly/3tfQtr0, p. 29.

13 Email from Margaret Lazyan, CHDE, 26 April 2021.

14 Emails from Ruben Arakelyan, CHDE, 8 June 2015; and Margaret Lazyan, CHDE, 10 August 2020.

15 Armenian Ministry of Defence, "The New Legal Status of the Humanitarian De-Mining Centre", 13 February 2014; and email from Margaret Lazyan, CHDE, 26 September 2018.

16 Email from Margaret Lazyan, CHDE, 27 September 2018.

17 Email from Varsine Miskaryan, CHDE, 8 August 2016.

18 Email from Ruben Arakelyan, CHDE, 28 April 2017.

19 Email from Margaret Lazyan, CHDE, 19 April 2019.

20 Email from Margaret Lazyan, CHDE, 26 April 2021.

21 Ibid.

22 Ibid.

23 Ibid.

24 Emails from Margaret Lazyan, CHDE, 25 June 2020 and 26 April 2021.

25 Email from Ruben Arakelyan, CHDE, 19 March 2014.

26 Emails from Margaret Lazyan, CHDE, 25 June 2020 and 26 April 2021.

27 Emails from Margaret Lazyan, CHDE, 10 August 2020 and 26 April 2021.

28 Email from Margaret Lazyan, CHDE, 19 April 2019.

29 Email from Ruben Arakelyan, CHDE, 28 April 2017.

30 Emails from Margaret Lazyan, CHDE, 26 April 2021.

31 Email from Margaret Lazyan, CHDE, 19 April 2019.

32 Emails from Margaret Lazyan, CHDE, 19 April 2019 and 26 April 2021.

33 Email from Varsine Miskaryan, CHDE, 8 August 2016.

34 Email from Margaret Lazyan, CHDE, 8 August 2018.

35 Email from Margaret Lazyan, CHDE, 26 April 2021.

36 Ibid.

37 Ibid.

38 Emails from Margaret Lazyan, CHDE, 19 April 2019, 25 June 2020, and 26 April 2021.

39 Email from Margaret Lazyan, CHDE, 26 April 2021.

40 Email from Ruben Arakelyan, CHDE, 8 June 2015.

41 Email from Margaret Lazyan, CHDE, 8 August 2018.

42 Email from Margaret Lazyan, CHDE, 25 June 2020.

43 Email from Margaret Lazyan, CHDE, 26 April 2021.

44 Ibid.

45 Emails from Margaret Lazyan, CHDE, 19 April 2019 and 26 April 2021.

46 Emails from Margaret Lazyan, CHDE, 10 August 2020; and Ruben Arakelyan, CHDE, 28 April 2017.

47 Emails from Margaret Lazyan, CHDE, 25 June 2020 and 26 April 2021.

AZERBAIJAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

KEY DEVELOPMENTS

The six-week armed conflict between Armenia and Azerbaijan over the Nagorno-Karabakh region that broke out in September 2020 ended with Azerbaijan regaining control over seven districts of its internationally recognised territory, in addition to 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 jurisdiction and control. A huge clearance effort is underway involving the Army, the Ministry of Interior (MoI), and the Mine Action Agency of the Republic of Azerbaijan (ANAMA, formerly the Azerbaijan National Agency for Mine Action).

RECOMMENDATIONS FOR ACTION

- **Azerbaijan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.**
- **Azerbaijan 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.**
- **Azerbaijan should mobilise funds to enable survey and clearance of all mined areas as quickly as possible.**
- **ANAMA should work to establish a robust nationwide baseline of mined area using evidence-based non-technical and technical survey.**
- **Azerbaijan should reinforce the necessary national structures to oversee efficient and safe mine action in the mined areas recently returned to its control. This process should be underpinned by the adoption or revision of national mine action legislation that reflects the International Mine Action Standards (IMAS).**
- **ANAMA should ensure that mined areas are released in accordance with international best practice, by ensuring that clearance is only conducted in areas where there is clear evidence of contamination.**
- **ANAMA should ensure that National Mine Action Standards (NMAS) are updated in line with IMAS.**
- **ANAMA should draft a new mine action strategy, to replace the one expired in 2018, reflecting the significant increase in explosive ordnance (EO) contamination now under Azerbaijan's control.**
- **ANAMA should complete the transition to Information Management System for Mine Action (IMSMA) Core as soon as possible.**
- **Azerbaijan should systematically collect and report publicly on data on contaminated areas as well as progress in survey and clearance.**
- **ANAMA should elaborate a gender and diversity policy for mine action and an associated implementation plan.**

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 300km-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 estimated to vary between 3km and 7km in depth, contain massive quantities of both anti-personnel and anti-vehicle mines, and is now recognised as one of the largest mined areas in the world.[1] The LOC has been heavily mined over the three decades since 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.

In 2018, ANAMA had estimated that mine contamination in areas occupied by Armenia covered between 350km^2 and 830km^2, and contained between 50,000 and 100,000 mines.[3] The figure, however, is now believed to be a significant underestimate. According to a mine map of Aghdam provided by Armenia in June 2021, Aghdam district alone contains 97,000 anti-personnel and anti-vehicles mines.[4] That is only one of the total seven districts reclaimed by Azerbaijan in 2020.

In July 2020, fighting broke out on the international borders between Armenia and Azerbaijan, and in September 2020, Azerbaijan launched a fully-fledged military operation. Fierce fighting for six weeks was brought to an end on 8 November 2020 by a Russian-brokered ceasefire agreement. Under the terms of the "trilateral statement", Azerbaijan took full control of the five major cities of Fuzuli, Gubadi, Jabrail, Shusha, and Zangilan. Armenian troops also left the districts of Agdam, Kalbajar, and Lachin, handing them back to Azerbaijani control by 1 December 2020.[5] Azerbaijan also gained control of a substantial part of Nagorno-Karabakh

where a new LOC is patrolled by Russian peacekeeping forces with the Nagorno-Karabakh local authorities retaining the north of the region.[6]

Azerbaijan claimed that Armenia emplaced new mines in the Kalbajar district before withdrawing following the November 2020 agreement.[7] Armenia denied the claims stating that the retreating Armenian forces had scarcely enough time to evacuate the bodies of the 1,500 Armenian soldiers who had been killed during the fighting.[8] Since November 2020, more than 140 persons have been killed or injured by mines in the territories reclaimed by Azerbaijan.[9]

At the end of 2020, Azerbaijan reported only 21 mined areas in the regions previously under its control covering an estimated total of 19.2km^2. Of this total, 6.7km^2 was anti-personnel mine contamination and 12.5km^2 anti-vehicle mine contamination (see Table 1). Eleven confirmed hazardous areas (CHAs) covered a total of 5.9km^2 while two suspected hazardous areas (SHAs) totalled 0.8km^2.

The full extent of contamination across Azerbaijan will only be better known after completion of a countrywide re-survey that includes the areas it has newly regained. As at May 2021, the nationwide survey had not yet begun though it was expected to be initiated before the end of the year.[10]

Table 2 summarises estimated contamination by region outside the LOC and surrounding areas.[11]

Following extensive international mediation, Armenia provided a first mine map of Aghdam district to Azerbaijan in June 2021.[12] Azerbaijan continues to request "the immediate release of information by Armenia on the location of the remaining minefields".[13] Armenia maintains that most of the mines were emplaced by Azerbaijan since the early years of the conflict to deter the Nagorno-Karabakh forces.[14]

Azerbaijan began large-scale clearance of mines and explosive remnants of war (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".[15] Reportedly, many military personnel, deminers, as well as civilian returnees have been killed or wounded by different forms of explosive ordnance.[16] There are also the bodies of Armenian soldiers in minefields, which are being torn apart by jackals.[17]

Mine contamination in Azerbaijan is 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.[18] The most heavily contaminated areas are along the borders and confrontation lines between Armenia and Azerbaijan, including the area in and around Nagorno-Karabakh.

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).

Table 1: Mined area by contamination type (at end 2020) excluding the LOC[19]

Contamination	CHAs	Area (km^2)	SHAs	Estimated area (km^2)	Total SHAs/CHAs	Total area (km^2)
Anti-personnel mines	11	5.9	2	0.8	13	6.7
Anti-vehicle mines	7	12.0	1	0.5	8	12.5
Totals	**18**	**17.9**	**3**	**1.3**	**21**	**19.2**

CHAs = Confirmed hazardous areas SHAs = Suspected hazardous areas

Table 2: Anti-personnel mined area by region (at end 2020) excluding the LOC[20]

Districts	CHAs	Area (m^2)	SHAs	Area (m^2)	Total SHA/CHA	Total area (m^2)
Agdam	2	2,000,000	0	0	2	2,000,000
Aghjabadi	1	500,000	0	0	1	500,000
Fuzuli	3	1,200,000	0	0	3	1,200,000
Gazakh	0	0	1	300,000	1	300,000
Goygol	0	0	1	500,000	1	500,000
Gubadlı	2	1,000,000	0	0	2	1,000,000
Jabrail	2	800,000	0	0	2	800,000
Zangilan	1	400,000	0	0	1	400,000
Totals	**11**	**5,900,000**	**2**	**800,000**	**13**	**6,700,000**

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

ANAMA, was established by Presidential Decree 854 in 1999 as the National Agency for Mine Action to plan, coordinate, manage, and monitor mine action in the country. Prior to the 2020 conflict, ANAMA had been conducting demining operations, along with two national operators it contracts: 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.[21] Following the 2020 conflict, clearance operations were rapidly scaled up with the involvement of the Army and MoI to address the significant mine and ERW contamination now under Azerbaijan's control.

In mid-January 2021, by Presidential decree, ANAMA was restructured and given a status of a public legal entity as the Mine Action Agency of the Republic of Azerbaijan.[22]

The United Nations Development Programme (UNDP) provides capacity development to ANAMA. In 2020, the capacity development project was extended to 2023.[23] The five main project activities were: maximising the socio-economic impact of clearance; supporting the institutional capacity of ANAMA for mine/UXO clearance according to international and national mine action standards; promoting ANAMA as an international mine action centre; procurement and upgrading of equipment; and introducing a gender-sensitive approach to mine action to Azerbaijan.[24] According to ANAMA, as at June 2020, project outputs included improvements to ANAMA's regional structure, enhanced international training services, better training equipment, and support for the training centre.[25]

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 scale up its support to ANAMA and provide funds and international expertise to conduct a mine action needs assessment, assist in the prioritisation of clearance of mined areas, develop heat maps for mine detection, and procure mine action equipment and mine detection dogs (MDDs).[26]

In its Article 7 report to the APMBC (covering 2020), Turkey reported it had donated US$200,000 to Azerbaijan for mine and UXO clearance of approximately 22km^2 in Azerbaijan. A cooperation agreement for demining planned to be signed with Azerbaijan in 2020 was postponed to 2021 due to the COVID-19 restrictions in place in both countries.[27] According to media reports, Turkey exported seven remote-controlled demining machines to Azerbaijan between February and May 2021.[28] In addition, 140 personnel from Turkey's Special Mine Detection and Clearance Teams were deployed to assist in clearance operations in Azerbaijan.[29] Media sources also reported support from Russia in mine clearance. As at April 2021, 100 Russian military personnel were said to be using IMP-52 mine detectors and Uran-6 robotic systems in the region.[30]

As at May 2021, a draft national mine action law was being considered by the cabinet of ministers (CoM).[31] The process of elaborating the law has been ongoing for seven years. Once adopted, the legislation will regulate mine action in Azerbaijan, governing issues such as licensing, accreditation, quality assurance (QA), and tender procedures.[32]

In 2019, the Azerbaijani government funded 90% of ANAMA's operating costs and 90% of all survey and clearance in Azerbaijan.[33] The proportion of international contribution to ANAMA's budget is believed to have significantly increased since 2020. But despite the resources allocated by the government, ANAMA remains significantly underfunded and understaffed when compared to the huge needs resulting from the additional contamination in the territories regained in 2020. ANAMA is seeking international funds to be able to clear the mined and ERW-contaminated areas in a timely manner and in compliance with the NMAS and IMAS.

GENDER AND DIVERSITY

ANAMA does not have a gender and diversity policy in place. While women made up 30% of managerial and supervisory positions at ANAMA in 2020, as at May 2021, no women were working in operational roles. ANAMA was planning to deploy a ten-strong all-woman demining team by the middle of 2021, but as at July 2021, the process was still ongoing.[34] The rapid upscaling of ANAMA's mine action operations currently taking place provides an 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.[35] This is defined as delivering train-the-trainer sessions to mine action staff on a gender-sensitive approach to working with affected populations and the development of an accompanying training manual. In 2020, ANAMA deployed a network of volunteers to deliver Explosive Ordnance Risk Education (EORE). The teams distributed EORE material to communities residing alongside the LOC.[36] Women participate in risk education sessions and are said to be consulted during survey.[37]

INFORMATION MANAGEMENT AND REPORTING

As at May 2021, 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 quality control (QC) were created and translated into Azeri. ANAMA intended to launch the new system for testing by August 2021.[38]

ANAMA reports that it regularly checks the quality of data in its database. This checking is carried out first at regional level and then at headquarters. With the significant increase in the scale of operations and area of responsibilities in 2020, the progress reporting period was reduced from 15 days to one week and, as at May 2021, it was planned to generate daily progress reports.[39]

PLANNING AND TASKING

The existing 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.[40] The strategy expired at the end of 2018 and has not yet been replaced. As at May 2021, ANAMA reported that a new strategy was being developed with the assistance of a UNDP Chief Technical Advisor deployed to Azerbaijan.[41]

ANAMA is integrated into the State Social and Economic Development programme and mine action is reported to be an integral part of the new State socio-economic development plan developed for 2019–22.[42] In the absence of a new multiyear strategic plan, tasks were being prioritised according to the State development plan and instructions from the government.[43] Since the 2020 conflict, however, and according to a secondary data review, ANAMA was prioritising clearance in former settlements in the newly-gained territories in preparation for population resettlement and despite surrounding areas being potentially highly contaminated and thus off-limits.[44]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Azerbaijan has its own NMAS, which were adopted in 2001 and subsequently revised in 2003, 2004, and 2010 in accordance with IMAS and best practice.[45] No major modifications to the standards were made in 2020.[46] ANAMA periodically conducts meetings with stakeholders to discuss and make relevant changes to NMAS and standing operating procedures (SOPs).[47]

OPERATORS AND OPERATIONAL TOOLS

ANAMA had a total capacity of 300 deminers, 6 machines, and 40 MDDs in 2020 and was planning to significantly increase the numbers of its non-technical and technical survey personnel in 2021 in order to implement its countrywide survey and resurvey operation.[48] According to media reports, ANAMA was undergoing a huge restructuring with plans to increase its capacity from 500 to between 12,000 and 15,000 employees in 2021. ANAMA was planning to deploy its deminers mainly in the regions around Nagorno-Karabakh.[49]

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 needs 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 envisages strengthening its role as a national mine action centre.[50]

In 2019, the Azerbaijan mine action programme had more than 300 deminers/explosive ordnance disposal (EOD) personnel, 32 MDDs, and an 18-man team operating six machines.[51] MDDs and mechanical assets were used to support release through technical survey and manual clearance. [52]

DEMINER SAFETY

On 2 November 2020, an ANAMA deminer was struck by the blast of an anti-personnel mine while on duty. Reportedly, the mine was buried by the Armenian armed forces in Jabrail region. As a result of the explosion, the deminer's left leg was amputated at the ankle.[53] A second ANAMA staff member was injured while on duty in the city of Horadiz, Fuzuli district, in an artillery shell explosion. The employee, who received three shrapnel wounds, was hospitalised.[54]

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2020

ANAMA released a total of 100,977m^2 of mined area through survey and clearance in 2020.[55] The breakdown of land release through survey as opposed to clearance was not reported. ANAMA reported the same area of cluster munition-contaminated land released in 2020,[56] indicating that the 0.1km^2 figure includes clearance of all EO, and not only mined area. 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.[57]

In its statement to the APMBC intersessional meetings in July 2021, Azerbaijan declared that ANAMA has cleared about 30km^2 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.[58] The 30km^2 of contaminated area cleared is thought to include clearance of all EO contamination, and not only mined area.

A total of 2.01km^2 of mined area was released in 2019, of which 1.01km^2 was cleared and 0.99km^2 was reduced through technical survey.

SURVEY IN 2020

ANAMA released a total of 100,977m^2 of mined area through survey and clearance in 2020. The breakdown of land release through survey as opposed to clearance was not made available.[59]

In 2019, nearly 1km^2 of anti-personnel mined area was reduced through technical survey across three regions. There was no cancellation through non-technical survey in 2019.[60]

CLEARANCE IN 2020

ANAMA did not formally clear anti-personnel mined area in 2020, though it conducted more than 1,600 spot tasks between September 2020 and May 2021.[61] A total of 100,977m^2 of land was released through survey and clearance combined in 2020.[62] ANAMA reported it had destroyed 5,669 anti-personnel mines, 4,563 anti-vehicle mines, and 3,281 items of UXO during spot tasks in 2020.[63]

According to the regular operational reports published on ANAMA's website, a total of 2,891 anti-personnel mines were found and destroyed in spot tasks between 7 November and 16 December 2020,[64] of which, 2,581 anti-personnel mines were found between 12 and 14 November 2020 alone.[65]

In its statement to the APMBC intersessional meetings in June 2021, Azerbaijan declared that ANAMA has cleared about 30km^2 since the start of the demining operation in its recently claimed territories, destroying in the process 8,256 anti-personnel mines, 3,792 anti-tank mines and 9,211 items of UXO.[66] This is thought to include all EO contamination, and not only mined areas.

Azerbaijan submitted voluntary APMBC Article 7 transparency reports in 2008 and 2009 but has not submitted a report in the last ten years. Over the last five years, 6.19km^2 of mined area has been reportedly cleared in Azerbaijan. Accuracy of reporting of contamination, survey, and clearance data, though, 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. In June 2020, one month before the start of the military operation, ANAMA stated that mine clearance could only be completed once it has access to territories currently occupied by Armenia.[67]

In the span of four months (September to December 2020), the size of anti-personnel mine contamination falling under Azerbaijan's control and jurisdiction has magnified exponentially. Regular operational reports published on ANAMA's website attest to the scale of the needs with tens of UXO-related emergency call-outs received and responded to on daily basis.[68] Two decades of mine and ERW clearance potentially beckon given the scale of the task.

In a statement to the APMBC intersessional meetings in June 2021, Azerbaijan called on all States Parties to support its mine action efforts. According to its statement: "despite the huge resources allocated by Azerbaijan, the [demining operation] still requires more resources given the size of the contaminated areas. Azerbaijan urgently seeks broad international donor support, also in terms of funds and provision of technical equipment required to continue its demining efforts".[69]

Table 3: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0.10
2019	1.01
2018	0.35
2017	*4.00
2016	0.83
Total	**6.29**

* A further 3.7km^2 was cleared but was found not to contain mines.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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.[70] As at May 2021, updated plans for the management of residual risk had yet to be reported.

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 ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 5.

4 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.

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CHINA

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.**

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.

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, 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 58km^2 of mined area on its borders with Vietnam and Myanmar and "enclosed" 25km^2 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 40km^2. 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 5.15km^2.[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 proceeded 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 18.4km^2 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. China also reported that it had carried out technical research related to mine clearance and destruction, and completed research on mine detection dog training, operational procedures, and on the impact of post-war mine clearance methods on the environment.[19] 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).[20]

China said that it sent experts to participate in the review and revision of international mine action standards (IMAS) and that "China subscribes to the purposes of the Ottawa Convention and supports the ultimate goal of comprehensive landmine ban".[21]

LAND RELEASE

Media accounts reported that mine clearance resumed in November 2017 in the Yunnan border area and in the Guangxi Zhuang Autonomous Region.[22] Clearance was reportedly completed in November 2018, with 2,300 explosive items found and destroyed across 1.5km^2 in Guangxi province.[23] In Yunnan province an estimated 200,000 explosive items were found and destroyed in over 50km^2 of mined area between November 2015 and November 2018.[24]

In its 2020 CCW Amended Protocol II report (covering 2019), China reported that Chinese military and public security departments cooperated closely to dispose of 600 mines in 2019.[25]

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.

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 300km^2.

4 Interview with Shen Jian, Ministry of Foreign Affairs, Beijing, 1 April 2008; and Huizi and 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 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/2OWbdVe.

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 Statement of China, Fourth APMBC Review Conference, Oslo, 27 November 2019.

21 Statement of China, Security Council Open Debate on Mine Action, 8 April 2021.

22 "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.

23 "China's Guangxi completes de-mining mission along Sino-Vietnam border", *China Daily*, 26 November 2018.

24 "Yunnan completes de-mining mission along Sino-Vietnamese border", *Xinhua*, 16 November 2018, at: https://bit.ly/2yYXXnL.

25 CCW Amended Protocol II Article 13 Report (covering 2019), Form B.

CUBA

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.**

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 Certain Conventional Weapons (CCW) Amended Protocol II Meeting of Experts.[3] The Landmine Monitor lists Cuba as one of only a handful of States that still producing anti-personnel mines.[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

Cuba has not conducted clearance in its minefields around the US naval base at Guantánamo over the last ten years.

1 "People of Guantanamo live under the danger of anti-personnel mines", *Radiotelevisionmarti*, 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.

3 Statement of the Directorate of Multilateral Affairs, Ministry of Foreign Affairs, 19 June 2000.

4 *Landmine Monitor Report 2020*, at: https://bit.ly/2Qw7lLy, p. 5.

5 "Marines unload deactivated land mines for destruction at Guantanamo Bay, Cuba", US Department of Defence archives, at: https://bit.ly/3x3BBOf; 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.

EGYPT

MINE ACTION REVIEW

CLEARING THE MINES 2021

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.**

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 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.

Most of the Western Desert contamination occurred around the location of Second World War battles that took place between the Quattara 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.[4] 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.[5] 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.[6]

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 528km^2) of land around El Alamein.[7] Either the figure is inaccurate or the UK government actually meant release.

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.[8] 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.[9] In this regard, in October 2017, it was reported by the European Union (EU)'s ambassador to Egypt that 2,680km^2 of land in the North West Coast was claimed to still be contaminated.[10]

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 38km^2 in five areas, leaving "more than 16 million mines" covering an estimated area of 248km^2.[11] 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 2,182km^2 in El Alamein, without elaborating further.[12] 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 105km^2 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 completion of the project one-fifth of the Western Desert had been cleared.[13]

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.[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.

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 comprises: i) the National committee for the Supervision of Mine Clearance and the Development of the North West Coast; ii) The Executive Secretariat for the Demining and Development of the North West Coast (ESDD), and iii) The Corps of Military Engineers who has the overall responsibility to undertake deming 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 600km^2 of land in the North West Cost.[19]

A joint project between the United Nations Development Programme (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 2,182km^2 of land has been demined (released) from 5,100km^2 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 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 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.[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]

LAND RELEASE

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 inconsistent with its obligations under international law.

1 "Sinai landmine kills three soldiers", *News24*, 9 March 2015, at: http://bit.ly/31LTzVp.

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/2Qw7lLy, p. 1.

4 A. Nayder, "Helping Landmine Victims in Marsa Matrouh-And Preventing More", *Because*, 3 November 2016, at: http://bit.ly/2Hbsl2V.

5 Egypt and Libya: Land Mines: Written question – 122961, 16 January 2018, at: http://bit.ly/2Z4gJsB.

6 "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.

7 Egypt and Libya: Land Mines: Written question – 122961, 16 January 2018.

8 State Information Services, "Landmines in Egypt", 20 July 2009; M. Abdel Salam, "First phase of demining in Egypt complete", *Bikyamasr* (blog), 18 April 2010.

9 UN Mine Action Team, "Egypt Mine Action Inter-agency Assessment", 14–18 April 2009, p. 11.

10 "Egypt battles landmines 75 years after El Alamein", *Agence France-Presse*, 28 October 2017, at: http://bit.ly/2H92GYA.

11 "Egypt Mine Action Project Northwest Coast: Phase I Accomplishments", Presentation by Amb. Fathy El Shazly, Director, Executive Secretariat, Cairo, August 2010.

12 "Clearance of over 2000km^2 of landmines in El Alamein", *Al-Mal news*, 14 November 2019, at: http://bit.ly/3ebFEjm.

13 N. al Behairy, "20% of the Sahara in West Egypt cleared of landmines", *Daily News*, 20 March 2013.

14 Egypt Mine Ban Policy, Landmine Monitor, 15 October 2020, at: http://bit.ly/3trc5kb

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.

18 UNDP Project Document, p. 6, at: http://bit.ly/3ghRon1.

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.

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/2Z9kl8K.

GEORGIA

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 political dialogue with Azerbaijan, to enable full clearance of the Red Bridge border minefield.**
- **Georgia should grant access to The HALO Trust to complete survey and clearance of the remaining mined areas.**
- **Georgia should develop a resource mobilisation strategy and engage with donors to secure the resources needed to complete clearance.**

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 estimates, as set out in Table 1, Georgia has 2.79km^2 of contamination across six mined areas in the Tbilisi Administered Territory (TAT),[1] although the size of two areas is not reported. Contamination comprises both anti-personnel and, in one area, also anti-vehicle mines.[2]

The Humanitarian Demining Control Division (HDCD) of Georgia considers this baseline to be evidence-based and accurate.[3] However, The HALO Trust cautions that technical and non-technical survey are required in all sites to determine the size of contaminated areas more accurately.[4]

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 mined. The Khojali includes 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. HALO received permission to survey and conduct clearance of Kadoeti and Khojali in May 2019 but could not secure the necessary funds. HALO planned to resubmit the proposals for funding to the Japanese Embassy's Grassroots Grants Programme (GGP) in September 2021 and to seek further donors.[5]

In Barisakho, two mined areas are 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, mines were laid around the perimeter of an ammunition storage area to defend the position in an event of an invasion.[6]

The Red Bridge minefield is an unfenced 7km-long minefield consisting of densely packed lines of anti-personnel and anti-vehicle mines at the "Red Bridge" border crossing between Azerbaijan and Georgia. Laid in 1991 by Azerbaijan during the Nagorno-Karabakh war, it is Georgia's largest minefield and the last major minefield not in the vicinity of a functioning military establishment. As at May 2021, there had been 88 incidents: 22 involving humans and 66 involving livestock and HALO had not been granted permission to conduct clearance in the Red Bridge.[7]

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 has planned to conduct non-technical survey in South Ossetia, but to date, has not been granted access. South Ossetia is effectively subject to Russian control and is inaccessible to both Georgian authorities and international non-governmental organisation (NGO) demining operators.[8]

Table 1: Mined area in the TAT (at end 2020)[9]

Region	District/ Municipality	Village	Contamination	Mined areas	Area (m^2)
Kvemo Kartli	Marneuli	Kirach-Muganlo (Red Bridge)	AP/ AV mines	1	2,738,730
Mtskheta-Mtianeti	Dusheti	Barisakho	AP mines	2	28,058
Mtskheta-Mtianeti	Dusheti	Kadoeti	AP mines	1	24,000
Shida Kartli	Kashuri	Osiauri (Military zone)	AP mines	1	N/K
Samegrelo Zemo Svaneti	Mestia	Khojali	AP mines	1	N/K
Totals				**6**	**2,790,788**

AP = Anti-personnel AV = Anti-vehicle N/K = Not known

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 in 2019. As at April 2021, the presence of the minefields had been confirmed and their area estimated at a total of 10,300m^2. HALO secured the necessary funding to clear four of these tasks totalling 9,900m^2 through the Embassy of Norway in April 2021 and planned to clear them between June and December 2021. The remaining task will be cleared by HALO's core explosive ordnance disposal (EOD) teams in 2021.[10]

HALO Trust was not made aware of any additional mined areas in Abkhazia. However, as demonstrated by the discovery of four confirmed mined areas by HALO Abkhazia's roving EOD teams in 2019, there is the possibility of a continued residual mine threat in the territory.[11]

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).[12] Georgia remains contaminated by other unexploded ordnance (UXO), likely in South Ossetia and also within Georgia in former firing ranges.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The HDCD, renamed after a reorganisation in January 2019, sits under the State Military Scientific Technical Centre, known as DELTA, within the Ministry of Defence (MoD).[13] 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).[14]

For all mine action-related issues, The HALO Trust communicates with DELTA.[15] 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. As at May 2021, the HALO Trust had received permission to begin clearing two of the six remaining minefields, at Khojali and Kadoeti, respectively, but does not have sufficient funding to complete these tasks. Permissions for the remaining three minefields have not yet been granted and HALO does not anticipate permissions for Barisako 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.[16]

The Georgian government funds the running costs of the HDCD as well as the Engineering Brigade, which carries out some survey and battle area clearance (BAC).[17]

The national authority has received capacity development support from HALO Trust and the Geneva International Centre for Humanitarian Demining (GICHD). The HALO Trust has provided training on IMAS, geographic information systems (GIS), clearance and survey techniques, and, in 2018, donated a mine action vehicle to the HDCD.[18] The GICHD has provided training for HDCD staff on the Information Management System for Mine Action (IMSMA) Core database, ammunition storage, and technical survey.[19] In 2020, one HDCD staff member conducted an online course on IMAS and Compliance organised by the GICHD.[20]

In 2019, the Georgian government joined the Landmine Free South Caucasus Campaign (LMFSC), which brings together governments and civil society from all three states in the South Caucasus (Armenia, Azerbaijan, and Georgia) on an annual basis to encourage cooperation and dialogue on the clearance of mines and UXO in the region.[21] Due to the COVID-19 pandemic, the 2020 annual roundtable that was to be hosted in Tbilisi was cancelled, though the campaign continued to broadcast messaging through a quarterly newsletter.[22]

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.[23] 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.[24] HALO Trust's EOD teams in Abkhazia are mixed ethnic Georgian and ethnic Abkhaz.[25]

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 2020 staff, one of seven members–the GIS/IMSMA specialist–was a woman. No women are employed in operational roles or in managerial/supervisory positions.[26]

In Abkhazia, The HALO Trust works with local women's organisations to increase the visibility of its work to female audience. As at May 2021, HALO had increased the percentage of women in the Abkhazia programme to 36%. A total of 43% of HALO's administrative/managerial staff and 42% of its operational staff in Abkhazia were women.[27]

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 Brigade. 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.[28] 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).[29] In 2020, one HDCD staff member conducted an online course on IMAS and Compliance organised by the GICHD.[30]

The data in the national information management system are accessible to the HALO Trust.[31] 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.[32]

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 explosive remnants of war (ERW).[33] With respect to the 2020 annual operation plan, DELTA prioritises clearance in areas of high risk to the population.[34] 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 number of beneficiaries, and the economic impact on beneficiaries.[35]

HALO did not carry out any activities in TAT in 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. In Abkhazia, HALO's operations continued in Primorsky and responding to EOD call-outs. HALO secured three-year funding for its EOD work in Abkhazia and will maintain this capacity until at least 2023.[36]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

As at April 2021, Georgian NMAS and National Technical Standards and Guidelines were still under development. The International Ammunition Technical Guidelines (IATG) have been translated to Georgian but the IMAS translation was still ongoing.[37] HALO expected Georgia's NMAS and non-technical survey guidelines to be finalised in the course of 2021.[38]

HALO was in the process of updating its standing operating procedures (SOPs) for clearance of the four minefield tasks in Abkhazia, slated for clearance in June–December 2021.[39]

OPERATORS AND OPERATIONAL TOOLS

DELTA retains a small demining and EOD capacity in TAT. In 2020, all mine clearance activities were suspended in TAT due to the COVID-19 pandemic but the Georgian State Security Service (SSS) EOD team continued to respond to call-outs and EOD spot tasks.[40] In Abkhazia, the emergency services (EMERCOM) have a small EOD capacity, though HALO Trust is generally relied upon to deal with all items of UXO.[41]

The HALO Trust, which is the only international operator working in the country, conducts survey and both BAC and mine clearance.[42] In 2020, as in the previous year, the HALO Trust did not conduct survey or clearance of anti-personnel mined areas in TAT.

In Abkhazia, HALO's clearance operations in Primorsky continued alongside responding to EOD call-outs. In 2020, HALO deployed two four-strong EOD teams and two four-strong mechanical and mechanical support teams, along with 53 personnel across 6 teams for BAC.[43] HALO secured three-year funding for its EOD work in Abkhazia and will maintain this capacity until at least 2023. Further, HALO has been responding to the COVID-19 crisis in Abkhazia through the deployment of four HALO ambulances providing transportation to COVID-19 patients and medical personnel. HALO was planning to deploy one four-strong manual clearance team to conduct clearance of the four minefield tasks in Abkhazia from June to December 2021.[44]

In TAT, quality management (QM) is conducted by DELTA. In Abkhazia, The HALO Trust is responsible for its own QM.[45]

There were no demining accidents in 2020 in Georgia, but a hand grenade exploded killed one teenager and injured another.[46]

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2020

A total of almost 0.8km^2 of land was released through clearance in Abkhazia in 2020 destroying in the process 155 anti-personnel mines and 3 anti-vehicle mines (see Table 2). In addition, 93 anti-personnel mines and 11 anti-vehicle mines were destroyed in EOD spot tasks by HALO and the Georgian State Security Service SSS EOD teams.[47]

No land was released through technical or non-technical survey in TAT or in Abkhazia in 2020.

SURVEY IN 2020

No mined area was released through survey in 2020 or in 2019 in TAT or in Abkhazia.

CLEARANCE IN 2020

In 2020, HALO cleared 753,903m^2 of hazardous area in Primorsky, Abkhazia, destroying in the process 155 anti-personnel mines, 3 anti-vehicle mines, and 12,208 items of UXOs. The anti-personnel mines destroyed in Primorsky were the result of BAC and mechanical clearance of an ammunition storage area explosion in August 2017. The mines were scattered across the landscape as a result of the explosion and had not been emplaced. In addition, The HALO Trust destroyed 28 anti-personnel mines and 3 anti-vehicle mines and 1,037 items of UXO. in Abkhazia during EOD spot tasks in 2020. None of the mines destroyed in Gali and Sukhumi had been laid but were either stored in personal stockpiles or had been discarded in uninhabited areas.[48]

The Georgian SSS EOD teams responded to EOD spot tasks in TAT in 2020 and destroyed 65 anti-personnel mines and 5 anti-vehicle mines.[49]

No target date has been set for completion of anti-personnel mine clearance in Georgia. The Red Bridge minefield is Georgia's largest, clearance of which has been identified as one of its key strategic mine action priorities.[50] 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.[51] The HALO Trust conducted non-technical survey between 1 and 3 July, and then began technical survey on 4 July 2015. The following month, however, the Azerbaijani military demanded that technical survey operations be halted.[52]

During 2018, Georgia reported further discussions with Azerbaijan regarding the clearance of Red Bridge minefield.[53] As at May 2021, however, The HALO Trust had not been granted permission to restart clearance there.[54] HALO currently maintains residual presence in TAT as, while permissions have been granted to conduct clearance in Kadoeti and Khojali, the programme does not have the funding in place. This arrangement is anticipated to be maintained regardless of having active projects in TAT so long as operations continue in Abkhazia. In the meantime, HALO continues to seek donor funding for clearance of Kadoeti and Khojali.[55]

For The HALO Trust, the main priority in Abkhazia is the clearance of the site at Primorsky, where an explosion in 2017 contaminated the surrounding territory with mines and UXO. In 2020, HALO received additional funding from the Slovak Government through SlovakAid and has been seeking to extend the Swiss Federal Department of Foreign Affairs (FDFA) funds beyond May 2021 to finish the remaining contamination. With adequate funding, HALO Trust hoped to finish the clearance of Primorsky by December 2021.[56]

According to DELTA, the mine clearance completion date is highly dependent on funding given that there is only one international operator in Georgia, which is reliant on donor funding. The engineering brigade of the MoD assumes its responsibility to conduct humanitarian mine clearance but its resources are insufficient to the meet the demand. Georgia's engineering brigade also requires technical support, training, and modern equipment to be able to conduct operations according to the standards.[57]

Table 2: Mine clearance in 2020[58]

Region	Village	Operator	Area cleared (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
Abkhazia	Gali	HALO Trust	0	20	2	977
Abkhazia	Primorsky	HALO Trust	753,903	155	3	12,208
Abkhazia	Sukhumi	HALO Trust	0	8	1	60
TAT Georgia		SSS EOD Teams	0	65	5	315
Total			**753,903**	**248**	**11**	**13,560**

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

The engineering brigade of the MoD has been trained to carry out EOD, demining, and BAC by the NATO Partnership for Peace and has the capacity to deal with any residual contamination once all the known minefields have been cleared.[59]

1 The Tbilisi Administered Territory (TAT) does not include the autonomous republics of Abkhazia, and South Ossetia, which are outside of Georgia's effective control.

2 Email from Oleg Gochashvili, Head of Division, DELTA, 12 May 2020.

3 Email from Oleg Gochashvili, Head of Division, DELTA, 28 April 2021.

4 Email from Michael Montafi, Programme Officer, HALO Trust, 30 April 2021.

5 Email from Michael Montafi, HALO Trust, 30 April 2021.

6 Ibid.

7 Email from Michael Montafi, HALO Trust, 8 May 2020.

8 Ibid.

9 Email from Oleg Gochashvili, DELTA, 28 April 2021.

10 Email from Michael Montafi, HALO Trust, 30 April 2021.

11 Ibid.

12 Emails from Oleg Gochashvili, DELTA, 12 May 2020; and Michael Montafi, HALO Trust, 8 May 2020.

13 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.

14 Email from Oleg Gochashvili, DELTA, 6 July 2015.

15 Email from Michael Montafi, HALO Trust, 21 June 2019.

16 Email from Michael Montafi, HALO Trust, 30 April 2021.

17 Email from Oleg Gochashvili, DELTA, 12 May 2020.

18 Emails from Matthew Walker, 8 April 2019; Michael Montafi, HALO Trust, 8 May 2020; and Oleg Gochashvili, DELTA, 10 June 2019.

19 Email from Oleg Gochashvili, DELTA, 12 May 2020.

20 Email from Oleg Gochashvili, DELTA, 28 April 2021.

21 Email from Michael Montafi, HALO Trust, 8 May 2020.

22 Email from Michael Montafi, HALO Trust, 30 April 2021.

23 Email from Matthew Walker, HALO Trust, 8 April 2019.

24 Email from Matthew Walker, HALO Trust, 8 April 2019.

25 Email from Michael Montafi, HALO Trust, 8 May 2020.

26 Email from Oleg Gochashvili, DELTA, 28 April 2021.

27 Email from Michael Montafi, HALO Trust, 30 May 2021.

28 Email from Michael Montafi, HALO Trust, 8 May 2020.

29 Email from Oleg Gochashvili, DELTA, 12 May 2020.

30 Email from Oleg Gochashvili, DELTA, 28 April 2021.

31 Email from Matthew Walker, HALO Trust, 8 April 2019.

32 Emails from Oleg Gochashvili, DELTA, 28 March 2019; and Michael Montafi, HALO Trust, 8 May 2020.

33 Email from Oleg Gochashvili, DELTA, 28 March 2019.

34 Email from Oleg Gochashvili, DELTA, 28 April 2021.

35 Email from Michael Montafi, HALO Trust, 30 April 2021.

36 Email from Michael Montafi, HALO Trust, 30 April 2021.

37 Email from Oleg Gochashvili, DELTA, 28 April 2021.

38 Email from Michael Montafi, HALO Trust, 30 April 2021.

39 Ibid.

40 Email from Oleg Gochashvili, DELTA, 28 April 2021.

41 Emails from Oleg Gochashvili, DELTA, 28 March 2019 and 12 May 2020; and Matthew Walker, HALO Trust, 8 April 2019.

42 Email from Irakli Chitanava, HALO Trust, 2 May 2017.

43 Email from Sian McGee, Field Officer, HALO Trust, 19 May 2021; HALO deployed four BAC teams from January to May 2021 then increased to six teams from June to December.

44 Email from Michael Montafi, HALO Trust, 30 April 2021.

45 Email from Oleg Gochashvili, DELTA, 28 March 2019.

46 Email from Oleg Gochashvili, DELTA, 28 April 2021.

47 Emails from Oleg Gochashvili, DELTA, 28 April 2021; and Michael Montafi, HALO Trust, 30 April 2021.

48 Email from Michael Montafi, HALO Trust, 28 April 2021.

49 Email from Oleg Gochashvili, DELTA, 28 April 2021.

50 Email from Oleg Gochashvili, DELTA, 3 April 2017.

51 Interview with George Dolidze, Ministry of Foreign Affairs, in Geneva, 28 May 2009; and response to Mine Action Review questionnaire by Oleg Gochashvili, DELTA, 3 June 2015.

52 Emails from Andrew Moore, HALO Trust, 18 October 2016; Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.

53 Email from Oleg Gochashvili, DELTA, 28 March 2019.

54 Email from Michael Montafi, HALO Trust, 8 May 2020.

55 Email from Michael Montafi, HALO Trust, 30 April 2021.

56 Ibid.

57 Email from Oleg Gochashvili, DELTA, 28 April 2021.

58 Emails from Oleg Gochashvili, DELTA, 28 April 2021; and Michael Montafi, HALO Trust, 30 April 2021.

59 Emails from Oleg Gochashvili, DELTA, 28 April 2021; and Michael Montafi, HALO Trust, 30 April 2021.

INDIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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.**

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 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 20km^2 of irrigated land was still mined in the Akhnoor sector of the 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 Parakaram 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]

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.[6] However, mine types are usually not specified and may include command-detonated explosive devices as well as mines (i.e. victim-activated explosive devices).[7] 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.[8]

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.

LAND RELEASE

There is no publicly available official information on land release in 2020 as in previous years in India.

The Army Corps of Engineers is responsible for clearing mines placed by non-State armed groups.[9] 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.[10] 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.[11]

India has not reported any mine clearance in its CCW Amended Protocol II Article 13 transparency reports since 2006.[12] No target date has been set for the completion of mine clearance. In a statement delivered at Fourth Review Conference of the 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 II. Post operations, these mines are cleared by trained troops".[13]

1 Recent Landmine Use by India and Pakistan, Human Rights Watch Backgrounder, May 2002, at: http://bit.ly/3srXtQz, p. 3.

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://tmsnrt.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/2Z1AJIl.

5 Recent Landmine Use by India and Pakistan, Human Rights Watch Backgrounder, May 2002, p. 3.

6 "Jawans unearth 15 landmines on rebel turf", *The Telegraph India*, 6 July 2018, at: http://bit.ly/33ycUeu.

7 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.

8 "Andhra Pradesh, Maoists offer apologies for landmine blast", *The Times of India*, 11 August 2020, at: http://bit.ly/3wWdnGh.

9 Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (covering 2006), Form B.

10 "Advanced tech to help soldiers map minefields", *The Times of India*, 10 July 2017, at: http://bit.ly/2KyoVt7.

11 "IEDs pose huge challenge in efforts to counter Naxals: Police", *The Indian Express*, 24 July 2017, at: http://bit.ly/2MgNRrb.

12 CCW Amended Protocol II Article 13 Report (for 1 April 2019 to 31 March 2020), Form B.

13 Statement of India, Fourth APMBC Review Conference, Oslo, 26 November 2019.

IRAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

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.**

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 42,000km^2 (Ilam Province, 17,000km^2; Kermanshah Province, 7,000km^2; Khuzestan Province, 15,000km^2; Kurdistan Province, 1,500km^2; and West Azerbaijan, 1,500km^2); which by February 2020 had reportedly been reduced by "90%".[1] For example, the Minister of Defence Hossein Dehghan said in 2014 that the 4,500km^2 of mines and explosive remnants of war (ERW) left by the Iran-Iraq war in the five western provinces had been reduced to 280km^2.[2] In February 2014, IRMAC reported that the five Western provinces had remaining contamination totalling 250km^2.[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.

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 reclearing of the area.[6]

Iran is also believed to have cluster munition remnant 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.[7] 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.[8]

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.[9]

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.

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.

IRMAC reported that it has a Geographic Information System (GIS) web-based, information management system, which integrates information on quality, safety, and the environment.[10]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

IRMAC undertakes two main types of clearance activity: shallow clearance and deep clearance.[11] 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.[12] 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. [13]

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 reclearing the area. An Iranian parliamentarian commented that the clearance had not respected the minimum depth set in national standards.[14]

OPERATORS AND OPERATIONAL TOOLS

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.[15]

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.[16]

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 quality assurance/quality control (QA/QC).[17]

Petroleum Engineering and Development Company (PEDEC), the development arm of the National Iranian Oil Company (NIOC), 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.[18]

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.

International operators are not believed to have been active in Iran since 2008.

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.[19]

LAND RELEASE

No data were available from IRMAC on any mine survey or clearance in 2020, as was the case 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.

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 unexploded ordnance (UXO) displaced by flooding; displacement of mines to bottom layers of soil (up to 6 metres); the transformation [degradation] of mines, and vegetation.[20]

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 Ibid.

7 IRMAC PowerPoint Presentation, Tehran, 9 February 2014; and IRMAC, "Presentation of IRMAC".

8 "Tehran hosts international roundtable on humanitarian mine action", *Mehr news agency*, 12 March 2019, at: http://bit.ly/2Z4LslE; and ICRC, "International roundtable on "humanitarian mine action: challenges and best practices", 15 March 2019, at: http://bit.ly/2QH3cR6.

9 "1st International Humanitarian Demining Training Center opens in Tehran", *Mehr News Agency*, 12 November 2019, available at: http://bit.ly/2C7wRzG.

10 IRMAC PowerPoint presentation; and presentation by Mr Pourbagher, Deputy Director of IRMAC, National Directors Meeting, Geneva, 12 February 2020.

11 IRMAC PowerPoint presentation, 2020, p. 5.

12 IRMAC PowerPoint presentation, 2020; and presentation by Mr Pourbagher, Deputy Director of IRMAC, National Directors Meeting, Geneva, 12 February 2020.

13 "Horrible Facts About Landmines", *ISNA news*, at: http://bit.ly/3a7i0Uc.

14 "Landmines Still a Major Menace in Iran", *Atlantic Council*, 25 August 2016.

15 Information provided by Reza Amaninasab, Director, Ambassadors for development without borders, September 2019.

16 Information provided by Reza Amaninasab, Ambassadors for development without borders, September 2019.

17 Ibid.

18 Information provided by mine action expert on condition of anonymity.

19 IRMAC PowerPoint presentation, 2020; and presentation by Mr Pourbagher, Deputy Director of IRMAC, National Directors Meeting, Geneva, 12 February 2020.

20 Ibid.

ISRAEL

MINE ACTION REVIEW

CLEARING THE MINES 2021

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 its anti-personnel mined areas, including those considered essential to its security.**

UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of mine contamination in Israel is not known. Israel reported 41.58km^2 of confirmed mined area and a further 48.51km^2 of suspected mined area, as at the end of 2017,[1] but has not provided updated contamination data since. The combined 90km^2 as at end 2017, represents only the area affected by mines that are not deemed essential to Israel's security. The size of other mined areas is not made public.

The total figure includes 18.38km^2 of mined area in the Jordan Valley (11.84km^2 of anti-personnel mined area, 6.19km^2 of anti-vehicle mined area, and 0.35km^2 of mixed mined area) and in the West Bank.[2] Since the last updated contamination data (end of 2017) and through to the end of 2020, The HALO Trust cleared a total of 37,466m^2 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* report on Palestine in this work for further information).

The head of the Israeli Mine Action Authorities (INMAA) told media in 2020 that INMAA estimates a total of 200km^2 of mined areas in Israel. Of this, some 100km^2 are deemed essential to Israel's national security while the remaining 100km^2 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.[3] 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.[4]

In the Golan Heights, the extent of mines laid by Syrian forces remains largely unknown although certain areas have been fenced off by the Israel Defense Forces (IDF). However, according to an online media report, fencing is not always properly maintained with warning signs, and civilians occasionally cross into minefields looking for edible plants.[5]

Table 1: Mined area (at end 2017)[6]

Type of contamination	CHAs	Area (km^2)	SHAs	Area (km^2)
AP mines only	201	19.93	5	39.54
AV mines only	29	17.00	8	1.17
AP and AV mines	2	4.65	9	7.80
Totals	**232**	**41.58**	**22**	**48.51**

AP = Anti-personnel AV = Anti-vehicle CHA = Confirmed hazardous area SHA = Suspected hazardous area

PROGRAMME MANAGEMENT

A March 2011 law on minefield clearance established the INMAA to undertake a "comprehensive programme of mine clearing projects inside Israel".[7] 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."[8]

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.[9]

In February 2019, the Director of INMAA reported that new legislation had been passed, in the form of a regional law, giving 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.[10]

INMAA was established within the MoD with ministry staff responsible for planning mine action.[11] INMAA is in charge of clearance operations and land release intended for civilian use.[12] 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.[13]

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.[14] 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 2020.[15]

INMAA provided funding to support mandatory quality assurance (QA) covering the last two months of HALO Trust clearance operations at the Arraba minefield in the West Bank. The clearance operation at the Baptism Site that started in March 2018 was funded by the Israeli MoD from July 2019 until its completion in April 2020.[16] (See the *Clearing the Mines* report on Palestine for further information).

GENDER AND DIVERSITY

It is not clear whether or to what extent gender and diversity are mainstreamed in Israel's mine action programme. Israel stated that its mine risk education (MRE) material are all produced in both Hebrew and Arabic.[17]

INFORMATION MANAGEMENT

According to Israel, in 2020, the IDF's Engineering Corps continued its activities to promote an improved minefield GPS recording and GIS capacity "building an accurate archive of manually-emplaced minefields".[18] In addition, INMAA manages a "minefield information bank" that is open for public queries concerning demining plans and programmes.[19] Israel reported in 2020 that the IDF continued its programme to preserve the minefields history, including in digital records, and that the Israeli Mapping Centre (IMC) produces "commercially available" land maps that contain clear markings of minefields.[20]

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".[21] 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.[22]

In 2020, INMAA approved annual and perennial mine clearance plans which are executed by "civilian local operators".[23] 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.[24] Information on the priorities of the updated mine clearance plan were not made available but INMAA's website contains tenders for mechanical and manual clearance in 2020 of nearly 0.17km^2 across three minefields in Ramat Gan (west) in addition to 0.19km^2 in Naama Bell in the Jordan valley.[25]

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.[26] INMAA has been studying the social and economic impacts of land released over the last four years, as well as on the potential impact for future clearance sites.[27]

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".[28] 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.[29]

OPERATORS AND OPERATIONAL TOOLS

Commercial companies are contracted to conduct clearance as well as QA and quality control (QC).

In 2017, 106 demining personnel and 36 machines were deployed for clearance operations.[30] In 2020, INMAA had seven approved mine clearance companies.[31]

The IDF also conduct 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.[32] 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.[33] In 2020, Israel reported that the IDF conducted hundreds of inspections of the fencing and marking of minefields, made significant progress in re-surveying mine affected areas, and in examining the possibility of area cancelation following non-technical survey.[34]

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.[35] Some of these operations are conducted by Israel directly, while others are performed by contractors.[36]

Throughout 2019, INMAA continued to be supported by GICHD in developing its animal detection system capacity.[37] A pilot project using mine detection dogs (MDDs) conducted in 2017[38] had concluded that dogs would not be a valuable tool.[39] However, after investigating and conducting further research into animal detection and behaviour, INMAA planned to conduct further trials.[40]

According to its website, part of INMAA's plan for 20200 was to conduct mechanical and manual clearance of nearly 0.17km^2 across three minefields in Ramat Gan (west), and to 0.19km^2 in Naama Bell in the Jordan valley.[41] As at March 2021, clearance in Naama Bell area was underway.[42]

LAND RELEASE

LAND RELEASE OUTPUTS IN 2020

In reporting under Convention on Certain Conventional Weapons (CCW) Amended Protocol II, Israel stated that, in 2020, INMAA completed clearance of approximately 1.28km^2, destroying 1,200 mines and explosive remnants of war (ERW). In addition, funded by donor countries and carried out by The HALO Trust, INMAA cleared 216,930m^2 in the West Bank, destroying in the process 1,200 mines and ERW.[43] INMAA reported precisely the same number of anti-personnel mines (1,200) as destroyed in 2019.[44] There was no disaggregation on what proportion of the land release was of mined area (as opposed to battle area). The total cleared area in the West Bank includes 18,269m^2 of anti-personnel mined area cleared by HALO Trust in the West Bank in 2020, as reported by HALO Trust to Mine Action Review.[45]

In addition, according to Israel, in 2020, the IDF's Engineering Corps cleared an area of 0.18km^2, destroying a combined total of 243 mines and ERW in the process.[46]

The HALO Trust continued its clearance of minefields in Area C of the West Bank in 2020, working under the auspices of both INMAA and PMAC. In April 2020, HALO completed the clearance operation at the Baptism Site with international and Israeli funding (see the *Clearing the Mines* report on Palestine for further information).

Based on the clearance rates of the past few years, it will take many decades to clear remaining anti-personnel mine contamination in Israel, even only in areas deemed not essential to Israel's security today.

1 Email from Michael Heiman, formerly Director of Technology and Knowledge Management, Israeli National Mine Action Authority (INMAA), 26 May 2018.

2 Email from Michael Heiman, formerly INMAA, 26 May 2018.

3 "Below the surface: Israel's mine map is exposed", *N12*, 19 September 2020, (Hebrew), at: https://bit.ly/3xfQ9KV.

4 "Israel army plants new mines along Syria border", *Associated Press*, 13 August 2011.

5 "New Golan mine-clearing project to begin this summer", *Jerusalem Post*, 16 March 2017, at: http://bit.ly/2MyEKBc.

6 Email from Michael Heiman, formerly INMAA, 26 May 2018.

7 Minefield Clearance Law 5771-2011 of March 2011, unofficial translation at: http://bit.ly/2GDOQgJ; Convention on Certain Conventional Weapons (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.

8 Minefield Clearance Law 2011 (MCL 5771-2011).

9 CCW Amended Protocol II Article 13 Report submitted in 2020 (covering 2019), Form D.

10 Interview with Marcel Aviv, Director, INMAA, in Geneva, 7 February 2019.

11 Email from Michael Heiman, formerly INMAA, 26 May 2018.

12 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.

13 Israel Ministry of Defence (IDF) website, "Israel National Mine Action Authority", accessed on 5 July 2021, at: https://bit.ly/3hEpi4y.

14 Email from Michael Heiman, formerly INMAA, 26 May 2018.

15 CCW Amended Protocol II Article 13 Report (covering 2020), Form E.

16 Emails from Ronen Shimoni, Programme Manager, HALO Trust, 20 April, 18 June 2020 and 23 April 2021.

17 CCW Amended Protocol II Article 13 Report (covering 2020), Form A.

18 CCW Amended Protocol II Article 13 Report (covering 2019), Form B.

19 CCW Amended Protocol II Article 13 Report (covering 2020), Forms A and B.

20 Ibid., Form A.

21 CCW Amended Protocol II Article 13 Report (covering 2019), Form D.

22 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.

23 Ibid.

24 Email from Michael Heiman, formerly of INMAA, 26 May 2018.

25 Israel's National Mine Action Authority (INMAA's) website, accessed on 6 July 2021 (Hebrew text), at: https://bit.ly/3hhUyaA, https://bit.ly/2SOuIBB, https://bit.ly/3jJkCgw, and https://bit.ly/36g5Eqm.

26 Email from Michael Heiman, INMAA, 23 July 2017.

27 Email from Michael Heiman, INMAA, 19 September 2016.

28 CCW Amended Protocol II Article 13 Report (covering 2020), Form B; and INMAA's website, accessed on 6 July 2021, (Hebrew), at: https://bit.ly/3ysdUj3j.

29 CCW Amended Protocol II Article 13 Report (covering 2020), Form D.

30 Email from Michael Heiman, formerly of INMAA, 26 May 2018.

31 CCW Amended Protocol II Article 13 Report (covering 2020), Form G.

32 Email from Eran Yuvan, Ministry of Foreign Affairs, 29 April 2014; and CCW Amended Protocol II Article 13 Report (covering 2019), Form B.

33 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.

34 Ibid.

35 CCW Amended Protocol II Article 13 Report (covering 2020), Form C.

36 Email from Michael Heiman, INMAA, 23 July 2017.

37 CCW Amended Protocol II Article 13 Report (covering 2019), Form E.

38 Email from Michael Heiman, INMAA, 23 July 2017.

39 Email from Michael Heiman, formerly INMAA, 26 May 2018.

40 Interview with Marcel Aviv, INMAA, Geneva, 7 February 2019.

41 Israel's National Mine Action Authority (INMAA's) website, accessed on 6 July 2021.

42 "Watch: Minefield clearance near Jericho Israel today", *The Limited Times*, 30 March 2021, at: https://bit.ly/3wu6Wc9.

43 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.

44 Ibid.

45 Email from Ronen Shimoni, HALO Trust, 23 April 2021.

46 CCW Amended Protocol II Article 13 Report (covering 2020), Form B.

KYRGYZSTAN

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.**

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, 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 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]

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.[6] In June 2011, a government official confirmed: "We do not have any minefields on the territory of Kyrgyzstan."[7]

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 Ministry of Defence of the Kyrgyz Republic.[8] 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.[9]

PROGRAMME MANAGEMENT

Kyrgyzstan has no functioning mine action programme. Clearance of explosive remnants of war (ERW) is carried out by the Ministry of Defence (MoD).[10]

LAND RELEASE

There are no reports of any survey or clearance of mined areas occurring in 2020.

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, Issue 41, 29 June 2004.

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 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.

7 Letter from Amb. G. Isakova, Permanent Mission of Kyrgyzstan to the UN in Geneva, 29 June 2011.

8 ITF, "Kyrgyz Republic", accessed 10 October 2015, at: http://bit.ly/31Fwd44.

9 Ibid.

10 "Border guards of Kyrgyzstan begin clearance on the border with Tajikistan", *EurAsia Daily*, 4 May 2021, (Russian), at: https://bit.ly/3dbirOT.

LAO PDR

MINE ACTION REVIEW

CLEARING THE MINES 2021

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), the National Regulatory Authority (NRA) should consider convening a sector-wide meeting to discuss National Standards, accreditation, and procedures for addressing all mine (both anti-personnel and anti-vehicle) 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 facilitate the development, together with inclusive participation from all operators and other relevant mine action stakeholders, of a new Safe Path Forward III strategy for the sector for 2021–30.**

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* 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 2021, HI had identified 46 suspected minefields in 20 villages, in Houamuang 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 92,299 items of explosive ordnance destroyed in 2019, only 32 (less than 0.04%) 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]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The NRA, created by government decree in 2004 and active since mid 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] A new Director of the NRA was appointed in 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, albeit at a reduced capacity compared to previous years.[13] Further capacity development in information management (IM), quality management (QM), and operations support, is provided primarily to UXO Lao, and to a lesser extent the NRA, through a US-funded contractor, Tetra Tech.[14]

In 2020, the Geneva International Centre for Humanitarian Demining (GICHD) was supporting the development of Lao's new national strategy, as well as mine action IM and risk management.[15] Norwegian People's Aid (NPA) provided capacity development to the NRA, primarily on IM, under the United Kingdom's Foreign and Commonwealth Development Office (FCDO, previously the Department for International Development (DFID)) project, until the project's conclusion at the end of March 2020.[16] HI provides capacity development support to the provincial NRA in Houaphanh province.

GENDER AND DIVERSITY

For details regarding gender and diversity in Lao PDR's survey and clearance programme, please see the *Clearing Cluster Munition Remnants* report on Lao PDR.

INFORMATION MANAGEMENT AND REPORTING

In November 2019, Lao PDR stated at the Fourth Review Conference of the APMBC in Oslo, that it was in the process of preparing a voluntary APMBC Article 7 report.[17] However, as at 1 August 2021, a voluntary report had yet to be submitted. The only voluntary Article 7 report submitted previously by Lao PDR, was in 2011.

PLANNING AND TASKING

The Lao Government's national strategy, "Safe Path Forward II, 2011–20", was reviewed in June 2015, when the NRA set a number of specific targets for the remaining five years up to 2020.[18] There is a corresponding multi-year work plan 2016–20 for implementation of the Safe Path Forward II strategy,[19] but both Safe Path Forward II and the corresponding work plan predominantly focus on CMR and other ERW, and do not include a strategy or plans for addressing mined areas. However, discovery of mines during CMRS will impede CMR survey and clearance operations.[20]

A new national strategic plan for the UXO Sector is being elaborated for 10 years, in line with SDG 18 under the 2030 SDG agenda.[21] A GICHD-facilitated strategy stakeholder workshop, planned for March 2020 in Vientiane, unfortunately had to be postponed due to the COVID-19 outbreak. A GICHD-led online/hybrid strategy stakeholder workshop was scheduled for November 2020, but was cancelled at the last minute by the NRA.[22]

Lao PDR said in November 2020 that it planned to adopt the new National Strategy for the UXO Sector (2021–30), "The Safe Path Forward III", in 2021.[23] As of early 2021, UNDP was supporting the development of Safe Path Forward III, and had informed operators that an initial draft would be developed by June 2021.[24] As at June 2021, the NRA reported that the new strategy was in the process of being drafted.[25] On 23 July 2021, the NRA convened an online consultation meeting on SPF III with national and international operators.[26] Through its funding of the agreement between Tetra Tech and the NRA, the United States is continuing 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."[27] The HALO Trust, Mines Advisory Group (MAG), NPA, and the US Embassy met with UNDP in March 2021 to discuss sector priorities.[28]

It is not known to what extent the new "Safe Path Forward III", which was being elaborated during 2021, 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."[29] As such, the National Standard on UXO clearance only relates to UXO clearance operations and not to mine clearance operations.[30] Furthermore, while dated 2012, the National Standards are believed to have been drafted several years before, and are in need of being brought up to date in accordance with the latest International Mine Action Standards (IMAS).

NRA has said that the national standards related to anti-personnel mines are being reviewed.[31]

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."[32]

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."[33]

However, 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. Therefore, at the July 2019 technical working group meeting on clearance, HI proposed an addendum to the standard to help address this.[34] Landmines have been a regular topic of discussion in subsequent technical working group meetings, and HI believed it would be useful to have a technical working group with the NRA and interested operators, specifically for landmines, as had been suggested by the NRA at one point.[35]

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 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",[36] as well as whether mines discovered by members of the local community had been moved.

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]

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]

Non-governmental organisation (NGO) clearance operators in Lao are not currently accredited for mine clearance,[39] and national standards would need revising in order for NGO to conduct mine clearance.[40]

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.[41]

The HALO Trust Laos programme continues to raise concerns over the mine threat in Savannakhet province with the NRA. HALO has drafted a mine clearance standing operating procedure (SOP) and submitted for approval to the NRA.[42]

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.[43] HI said that it had been working on a concept note with UNDP, Lao People's Army humanitarian demining unit (Unit 58), and NRA for a project that, if approved, would include mine clearance in 2021.[44]

LAND RELEASE

The NRA reported to Mine Action Review that planned clearance of a number of mined areas was conducted during 2020, led by the NRA.[45] However, no additional details were provided except that 32 mines were destroyed[46] from a total of 92,299 items of explosive ordnance.[47] This compares to 40 mines in 101,512 items of UXO destroyed in 2019.[48]

According to data reported to Mine Action Review by clearance operators, a total of 21 anti-personnel mines and 2 anti-vehicle mines were cleared in 2021. A further nine anti-personnel mines and one anti-vehicle mine that had not been emplaced were also discovered (see Table 1).

Table 1: Mines discovered in 2020 (based on operator data)[49]

Clearance operator	Emplaced anti-personnel mines	Emplaced anti-vehicle mines	Comments
HALO Trust	2	0	
HI	13	1	A further 8 anti-personnel mines and 1 anti-vehicle mine were discovered which had been excavated and moved by villagers
MAG	0	0	1 non-emplaced anti-personnel mine
NPA	5	1	
UXO Lao	7	0	
Totals	**27**	**2**	

While the NRA reported that the 32 mines destroyed during 2020 were anti-personnel mines,[50] data from HI and NPA showed they each destroyed one anti-vehicle mine in 2021.[51] As yet, no distinction is made in the IMSMA database in the NRA between anti-personnel mines and anti-vehicle mines.[52] Data in the "NRA Annual Project Progress Report to UNDP for 2020 reporting period" regarding the number of mines discovered and destroyed during 2020[53] also varied slightly from the data reported directly by The HALO Trust, HI, MAG, NPA, and UXO Lao (see details in Table 1 and below).

In 2020, The HALO Trust discovered and destroyed two anti-personnel mines in Savannakhet province, one in Vilabouly district and the other in Xonbuly district. The mine in Vilabouly district was found during CMRS and the mine in Xonbuly district during an explosive ordnance disposal (EOD) call-out.[54] HALO Trust had planned to start mine clearance operations in 2020 in Phalanxai district,[55] subject to accreditation and necessary amendments being made to the National Standards, but due to COVID-19 this has been delayed to 2021.[56]

In 2020, HI discovered and destroyed 13 emplaced anti-personnel mines and 1 anti-vehicle mine during CMR clearance operations in Houaphanh province and a further eight anti-personnel mines and one anti-vehicle mine which had been excavated and moved by villagers.[57] 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.[58] If mines are discovered during cluster munition remnant 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.[59]

As at March 2021, HI had identified 46 suspected minefields in 20 villages, in Houamuang district, in Houaphanh province.[60] In addition, HI reported that it had received a report of a mine discovered since it stood down operations at the end of December 2020, while awaiting amendment of its memorandum of understanding (MOU). HI reported this to the provincial NRA, but the mine was not immediately destroyed and was reportedly moved by a villager a couple of weeks later before it could be destroyed. Assistance was again requested by the village to HI, who informed the provincial NRA. HI would like to be granted temporary accreditation to manage urgent requests such as these.[61]

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.[62]

MAG did not discover or destroy any emplaced mines in 2020, but it did find and destroy a non-emplaced anti-personnel mine in Phaivat village, Khoun district, Xiengkhouang province.[63]

In 2020, NPA discovered and destroyed a total of five anti-personnel mines, during roving spot tasks in Nongboua-Gnai village, Saravane district, Saravan province. In addition, one anti-vehicle mine was found as part of a roving task in Houayset village, Paksong district, Champasak province.[64]

UXO Lao, the oldest and largest clearance operator in Lao PDR, is a government organisation working under the Ministry of Labour and Social Welfare,[65] operating in nine provinces (Attapeu, Champasak, Houaphanh, Khammouane, Luang Prabang, Savannakhet, Saravan, Xekong, and Xiengkhouang).[66] UXO LAO found and destroyed seven anti-personnel mines in 2020, during cluster munition operations in Champasak, Xekong, Luang Prabang and Xiengkhouang provinces.[67]

1 NRA website, "UXO types: Mines", accessed 9 March 2020.

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, on behalf of Yvon Le Chevanton, Technical Survey/Clearance Operations Manager, HI, 16 March 2021.

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 2020), Form A; Convention on Cluster Munitions (CCM) Article 7 Report (covering 2020), Form F; and email from Chomyaeng Phengthongsawat, Director General, NRA, 21 June 2021.

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 PMWRA, 29 September 2020.

12 Email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

13 Interview with Olivier Bauduin, UNDP, Vientiane, 2 May 2018; and email, 10 July 2018.

14 Email from Nigel Orr, Technical Advisor Survey and Clearance, Tetra Tech, 14 June 2019; 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 Robert White, Advisor, Strategic Management & Residual Contamination, GICHD, 22 July 2020.

16 Email from Katherine Harrison, Program Coordinator, NPA, 19 June 2021.

17 Statement of Lao PDR, Fourth APMBC Review Conference, Oslo, 29 November 2019.

18 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 4 May 2016.

19 CCM Extension Request 2019, Part B, Detailed Narrative, p. 26.

20 Email from Julien Kempeneers, HI, 22 March 2019.

21 Email from Olivier Bauduin, US PMWRA, 29 September 2020.

22 Emails from Katherine Harrison, NPA, 22 March 2021; and Rebecca Letven, Country Director, MAG, 26 March 2021.

23 Statement of Lao PDR on National Implementation Measures, CCM Second Review Conference (Part 1, virtual meeting), 25–27 November 2020.

24 Email from Katherine Harrison, NPA, 22 March 2021.

25 Email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

26 Email from Rebecca Letven, MAG, 3 August 2021.

27 "US Renews Partnership with Lao PDR to Build Capacity in UXO Sector", US Embassy in Lao PDR, 31 January 2020.

28 Email from Katherine Harrison, NPA, 22 March 2021.

29 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 0: Introduction and Glossary", accessed on NRA website on 29 July 2021, p. xi.

30 Lao PDR NS, "Chapter 7: UXO Clearance Operations", accessed on NRA website on 29 July 2021, p. 5.

31 Email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

32 Lao PDR NS, "Chapter 12: Mine Clearance Operations", accessed on NRA website on 29 July 2021, p. 5.

33 Lao PDR NS, "Chapter 7: UXO Clearance Operations", p. 13.

34 Email from Julien Kempeneers, HI, 27 August 2019.

35 Email from Julien Kempeneers, HI, 16 March 2021.

36 Emails from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020; and Minla Nanthavong, HI, 2 August 2021.

37 Lao PDR NS, "Chapter 12: Mine Clearance Operations", accessed on NRA website on 29 July 2021, p. 5, note 1.

38 Lao PDR NS, "Chapter 12: Mine Clearance Operations", accessed on NRA website on 29 July 2021, p. 5.

39 Emails from Julien Kempeneers, HI, 25 March 2020; Cameron Imber, Programme Manager, HALO, 7 April 2020; Katherine Harrison, NPA, 6 May 2020; and Rebecca Letven, MAG, 26 March 2021.

40 Emails from Julien Kempeneers, HI, 25 March 2020; and Cameron Imber, HALO, 7 April 2020.

41 Email from Rebecca Letven, MAG, 26 March 2021.

42 Email from Cameron Imber, HALO, 14 March 2021.

43 Email from Julien Kempeneers, HI, 25 March 2020.

44 Emails from Julien Kempeneers, HI, 16 March 2021; and Minla Nanthavong, HI, 2 August 2021.

45 Email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

46 Ibid.

47 CCW Protocol V Article 10 Report (covering 2020), Form A; CCM Article 7 Report (covering 2020), Form F; and email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

48 CCW Protocol V Article 10 Report (covering 2019), Form A; and CCM Article 7 Report (covering 2019), Form F.

49 Emails from Cameron Imber, HALO, 14 March and 1 August 2021; Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 16 March 2021; Rebecca Letven, Programme Manager, MAG, 26 March 2021; Katherine Harrison, NPA, 22 March 2021; and Saomany Manivong, UXO Lao, 11 May 2021.

50 Email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

51 Emails from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 16 March 2021; and Katherine Harrison, NPA, 22 March 2021.

52 Email from Mark Frankish, UNDP, 26 August 2020.

53 NRA Annual Project Progress Report to UNDP for 2020 reporting period, pp. 16 and 17. According to the annual progress report, a total of 32 mines were destroyed during clearance operations in 2020: 1 by Lao People's Army Unit 58; 11 by HI, 1 by MAG, 12 by NPA, and 7 by UXO Lao. In addition, one mine was reported as destroyed during technical survey in 2020, by HI.

54 Emails from Cameron Imber, HALO, 14 March and 1 August 2021.

55 Email from Cameron Imber, HALO, 7 April 2020.

56 Email from Cameron Imber, HALO, 1 August 2021.

57 Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 16 March 2021.

58 Email from Julien Kempeneers, HI, 25 March 2020.

59 Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020.

60 Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 16 March 2021.

61 Ibid.

62 Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020.

63 Email from Rebecca Letven, Programme Manager, MAG, 26 March 2021.

64 Email from Katherine Harrison, NPA, 22 March 2021.

65 Presentation by Saomany Manivong, UXO Lao, Vientiane, 2 May 2018.

66 Email from Saomany Manivong, UXO Lao, 11 May 2021.

67 Ibid.

LEBANON

MINE ACTION REVIEW

CLEARING THE MINES 2021

KEY DEVELOPMENTS

The Lebanon Mine Action Centre (LMAC) and its national and international partners continued to make progress in mine clearance in 2020, although annual clearance output was down on the previous year, in part because of the challenges posed by COVID-19. In a positive development, on 30 January 2020, the United Nations Interim Force In Lebanon (UNIFIL) and LMAC signed a memorandum of understanding (MoU) on demining, with UNIFIL commencing clearance for humanitarian purposes for the first time from June 2020, in addition to its ongoing standard demarcation operations on the Blue Line. Lebanon seemingly moved closer to accession to the Anti-Personnel Mine Ban Convention (APMBC) in 2020. In another positive development, LMAC commissioned an external study on operational efficiency in 2020, and plans to review and adopt the recommendations from the study, especially those calling for increased emphasis on evidence-based technical survey prior to clearance.

RECOMMENDATIONS FOR ACTION

- **Lebanon should accede to the 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.**

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2020, Lebanon had nearly 18.23km^2 of confirmed mined area, including along the Blue Line, across 1,256 confirmed hazardous areas (CHAs) (see Table 1).[1] A total of 41,241m^2 of previously unrecorded anti-personnel mine contamination was added to the database in 2020.[2]

This is a small reduction of estimated contamination compared to the end of 2019, when Lebanon had more than 18.65km^2 of confirmed mined area, including along the Blue Line, across 1,353 CHAs.[3] LMAC also cleaned up contamination data in its database in 2020, in preparation for the planned migration to IMSMA Core.[4]

Table 1: Mined area by province (at end 2020)[5]

Province	CHAs	Area (m^2)*
Al Beqaa	53	991,178
Al Janoub and Al Nabatiyeh (south Lebanon)	902	7,611,521
Jabal Loubnan (Mount Lebanon)	261	9,406,774
Al Shimal (north Lebanon)	40	218,107
Totals	**1,256**	**18,227,580**

* Includes 406,548m^2 containing anti-personnel mines of an improvised nature at in Al Beqaa in north-east Lebanon.

In addition, as at end of 2020, "Dangerous Areas" totalling more than 812,000m^2 were suspected to contain booby-traps and which required non-technical survey.[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 where 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 0.41km^2 and located in north-east Lebanon in Al Bekaa province.[10]

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 Arsal" on the north-east border with Syria, resulting from spill-over of the Syrian conflict onto Lebanese territory in 2014–17.[11] 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 CMR and other ERW.[12]

The LAF continue to play a major role in this northern region, as the number of rapid-response missions remains high. The increased number of returnees for economic purposes has led to more ERW being found.[13] Furthermore, in its annual report for 2019, LMAC noted that it has had to address the challenge posed by contamination from mines migrating from the north Syrian border, through floods and river beads, to new areas in Wadi Khaled and Wadi Nahle in the north.[14] This continued to represent a continued concern and challenge for LMAC, as 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 the 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]

A study on operational efficiency, conducted in 2020 by an international consultant, highlighted the need for greater emphasis on technical survey as part of the land release process in Lebanon, in order to reduce land found not to be contaminated, including in the fade-out, and thereby to prevent unnecessary clearance.[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 in 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 mine action centre, RMAC-RB, was established in the north-east of Lebanon in the village of Ras Baalbek, 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 in 2020 and approved on 9 November 2020. The SOP specifies the roles of each section of LMAC and clarifies the responsibilities and cooperation between sections. It is hoped that this 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, Information Management System for Mine Action (IMSMA) database entry, community liaison, and quality assurance (QA). In 2020, there was one team of seven UNDP personnel supporting LMAC.[23]

EU funding for UNDP institutional support to LMAC, which had been due to finish at the end of 2019, but which would have resulted in a gap in capacity development,[24] was extended. During this period, UNDP was providing expertise and support on operational efficiency, prioritisation, research into clearance in difficult terrains, and risk education for Syrian refugees.[25] UNDP also mobilised funds in 2020 from the Norwegian Embassy, and developed a three-year project proposal for 2020–23 in order to: assist with the strengthening of national capacity to document and prioritise clearance operations in line with Mine Action Forum recommendations; help LMAC to meet its national, regional, and international obligations and coordination functions and ensure follow-up of Mine Action Forum action points; and support LMAC in effectively communicating its results and establishing partnerships.[26] In April 2021, the Netherlands signed a three-year contract with UNDP for international funding to support LMAC in capacity building and institutional support.[27]

A "Mine Action Forum" has been established in Lebanon in close partnership between LMAC and Norway. It provides an informal platform for LMAC to continue open dialogue and information sharing between the national authorities, implementing partners, and donors, on priorities and needs

for the survey and clearance of cluster munition remnants and landmines in the country.[28] Through the forum, the LMAA is "promoting a transparent and inclusive partnership with all HMA stakeholders".[29] The forum meets twice a year, with UNDP designated as the secretariat to follow up on action points and develop progress reports.[30] It is an example of what a "Country Coalition" under the Convention on Cluster Munitions (CCM) could look like, but in the case of Lebanon it was agreed the forum should be broadened to include landmines, and not just CMR. The Mine Action Forum in Lebanon is said to have resulted in better coordination and greater transparency as well as on enhancements to land release methodology, enshrined in the revised national mine action standards (NMAS).[31]

As of writing, the most recent Mine Action Forum was held on 22 January 2020, during which LMAC presented and discussed the new 2020–25 national mine action strategy, operational efficiencies, and a new explosive ordnance risk education (EORE) project.[32] An open air Mine Action Forum meeting had been planned for November 2020, but could not take place because of COVID-19 restrictions. The meeting will take place in 2021, if the situation permits.[33]

There is good coordination and collaboration between LMAC/the RMAC and clearance operators, with the operators said to be consulted before key decisions are taken.[34] International clearance operators reported that an enabling environment exists for mine action in Lebanon, with no obstacles regarding visas for international staff, approval of MoUs, or the importation of equipment.[35]

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.[36] The TWG had been meeting quarterly, but due to the impact of COVID-19, TWG meetings were postponed during the first two quarters of 2020 before resuming in September 2020.[37]

As in the previous year, Lebanon reported contributing US$9 million annually in 2020 towards mine action in Lebanon (for both mine- and CMR-related work): to support costs associated with the running of LMAC (facilities and staff); the LAF Engineering Regiment companies working in demining (four teams, two of which work on CMR; in addition to mechanical and MDD support); risk education; victim assistance, and training. However, LMAC noted that the devaluation of the Lebanese Pound and the economic crisis Lebanon is facing will affect this amount.[38]

A Regional School for Humanitarian Demining in Lebanon (RSHDL) was established in partnership between Lebanon and France.[39] 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.[40]

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.[41]

LMAC reported that it 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.[42] In agreement with LMAC, the Geneva International Centre for Humanitarian Demining (GICHD) conducted a gender and diversity capacity assessment mission to Lebanon in July 2019. The aim was to reinforce a sustainable national capacity for gender and diversity mainstreaming in the LMAC and contribute to the achievement of gender equality and inclusion.[43] In August 2019, LMAC reported that it had appointed a new gender focal point, who will help mainstream gender-sensitive policies and procedures and monitor their implementation in the mine action centre and across the national programme.[44] LMAC's gender focal point participated in the Remote regional Arab Regional Cooperation Programme (ARCP) Gender Equality and Inclusion (GEI) capacity development programme held online from November 2020 to March 2021.[45]

Lebanon's new National Mine Action Strategy 2020–25, approved by the LMAA in June 2020, includes considerations on gender and diversity.[46] 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".[47] According to its strategic implementation plan, LMAC is working on a draft code of conduct regarding gender, diversity, and inclusion which it planned to share with all stakeholders in 2021. Furthermore, national mine action standards will be updated no later than the end of 2022, to reflect a gender-sensitive approach and to comply with international standards.[48]

Of LMAC's 175 personnel, 19 (11%) are women, a slight increase on the 16 reported for the previous year. With respect to operational roles, four women work for the operations section (double the number previously reported), one woman is a member of the non-technical survey team, and two women work in the Mine Risk Education section. With respect to managerial/supervisory level positions at LMAC, the head of the admin section is a woman.[49] 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.[50] 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.[51]

Humanity and Inclusion (HI), Mines Advisory Group (MAG), and Norwegian People's Aid (NPA) all reported having gender policies in place.[52]

DanChurchAid (DCA) reported that 18% of its total staff in Lebanon are female, with women filling only 3% of managerial/supervisory positions and 9% of all operations positions.[53] DCA delivers gender and diversity training to its staff, which is based on the GICHD training package, and is making efforts to recruit more female staff when positions are advertised. As at July 2021, of the four recent DCA staff posts, three were filled by female staff.[54]

HI disaggregates relevant mine action data by sex and age. HI also ensures that all population groups, including women and children, are consulted during its survey and community liaison activities. Of HI's total employees in Lebanon, 7% are women, but only 2% of HI managerial/supervisory positions are held by women and only 2% of its survey and clearance staff are female.[55]

Prior to the organisation ceasing land release operations in Lebanon in August 2020, women had been employed in LAMINDA's clearance teams and one female staff member had been in a managerial position, as clearance team leader.[56]

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 and age. Overall, women account for 18% of MAG's Lebanon programme, including 16% of operational roles in MAG's survey and clearance teams in Lebanon, and 13% of managerial level/supervisory positions.[57] 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.[58]

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 also conducted training in gender equality, safeguarding, and its code of conduct in 2020. As at June 2021, following restructuring due to funding losses, NPA reported that 30% of its employees are women, including 23% of employees in operational roles, 50% of support staff, and 50% of senior management.[59] NPA disaggregates data by sex and age.[60]

Both UNIFIL's Troop Contributing Countries (Cambodia and China) have female deminers and team leaders and in total there are seven women (11% of the total demining personnel).[61]

Women, girls, boys, and men are said to be consulted during survey and community liaison activities.[62] 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.[63]

INFORMATION MANAGEMENT AND REPORTING

LMAC is in the process of migrating from its current version of IMSMA (New Generation) to IMSMA Core, which it hopes will help facilitate the production of clearer reports that can be translated into dashboards for stakeholders, including donors, to monitor and follow.[64] As at March 2021, the risk education data had been migrated and was due to be tested, along with the non-technical survey data in the coming months. The remaining data will be migrated once it has been confirmed that the system is operating as planned and meets LMAC's needs.[65]

In the process of migrating to IMSMA Core, LMAC discovered some overlap between its contamination records, which were checked by non-technical survey teams on the ground and the database clean-up was completed in July 2020.[66] The main causes for the duplications included that Israeli booby-trap lists and some minefield records were received twice on different dates and with different names, and were therefore entered into the database as two groups of dangerous areas. In addition, areas considered as suspected and provided by the Israeli army turned out to be overlapping with Israeli-laid minefields. And finally, there was also some overlap between minefields and cluster munition strikes.[67]

The GICHD also provides support to LMAC under its Information Management Capacity Development Framework and conducted IM training sessions and workshops in 2020.[68]

Some clearance tasks result in a clearance output in excess of the task size originally recorded in IMSMA, often due to fade-out. LMAC has reported that the system for database entry now more accurately reflects operational data.[69] Now, any area cleared in excess of the original task size is no longer recorded as additional tasks in the database, but as "productivity".[70]

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.[71] LMAC has said that non-technical survey will be extremely important for these scattered minefields.[72]

DCA has been using Tiramisu Information Management Tool (T-IMS) for the past three years.[73] MAG is in the process of launching "Survey123" software in Lebanon. It has completed the design stage and prepared training material, but training and implementation had to be postponed to mid-2021, due to the impact of COVID-19.[74] In May 2021, MAG's global IM coordinator visited the programme for two months, during which the second phase of the development of the Operations Information Management System (OMIS) was completed and training provided to all relevant operational staff. Agreement was also reached on historic data to be included in the migration. The migration and launch was planned for August 2021. MAG also discussed with LMAC the possibility of integrating reporting mechanisms between MAG's internal system and LMAC's database, which could help eliminate double reporting and reduce errors.[75]

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.[76]

In the Lebanon Mine Action Strategy 2020–25, and the accompanying implementation plan, LMAC states that it will initiate voluntary APMBC Article 7 reporting.[77] In its Annual Report for 2020 (published in 2021), LMAC again said that it would initiate the process for voluntary reporting to the APMBC.[78] However, as at June 2021, 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.[79] 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 EU funded UNDP project, in a participatory approach with national and international implementing agencies, mine action non-governmental organisations (NGOs), UN agencies, and donors.[80] 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.[81] 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.[82] 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.[83] The implementation plan will be revised annually by LMAC, the Institutional Support Programme (UNDP at present), and in consultation with humanitarian clearance operators.[84] LMAC also plans to develop annual work plans.[85]

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.[86] LMAC therefore conducted a study, the results of which 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.[87] The re-prioritisation of clearance tasks was planned to start in 2021 based on the new system and corresponding criteria. LMAC will adopt a district-by-district prioritisation approach. Large districts may also be subdivided into sub-districts depending on size.[88] LMAC planned to release 10% of contaminated districts each year.[89]

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. Most of the remaining demining tasks in the area in which HI has been operating since 2011 are in contaminated cedar forests at high altitude.[90]

In 2020, MAG received task dossiers and maps for minefields in Blida, Houla, Meiss El Jabal, Markaba, Amra, and Arab El Louaize on the Blue Line 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.[91]

Prior to 2016, demining along the border with Israel had been said to depend on "political developments",[92] but the Lebanese government subsequently took the decision to initiate larger-scale, planned clearance on the Blue Line.[93] Clearance by humanitarian demining operators, which began in November 2016,[94] was still ongoing as of writing.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Lebanon developed its first NMAS in 2010.[95] In 2017, LMAC revised and harmonised national standards with IMAS and added a number of new modules.[96] The revised NMAS, formally approved in March 2018 and made effective from 1 January 2019, have a solid focus on land release and evidence-based decision-making, in line with the IMAS, and 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.[97]

Further updates were made to the NMAS in late 2019 and a full review of the standards was completed at the beginning of 2020[98] and released to implementing partners in July 2020.[99] 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.[100] 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.[101] 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.[102]

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).[103]

At present, however, technical and non-technical survey activities are still not a routine part of the toolbox for all NGO operators for the release of tasks.[104] Instead, non-technical survey is assigned by LMAC, and a decision on the need for technical survey is based on the recommendations resulting from the results of non-technical survey. NGOs can also request permission from LMAC to conduct non-technical survey and technical survey.[105] This is particularly relevant to hazardous areas in the north-east that contain improvised mines.[106] International NGOs see collaboration between LMAC and clearance operators on application of evidence-based non-technical survey and technical survey, where needed, as being essential to targeted clearance.[107]

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.[108] As at May 2021, further updates to the NMAS on technical survey, battle area clearance (BAC), and minefield clearance were discussed in the TWG in 2021, shared with operators for feedback, and subsequently adopted by LMAC. LMAC has requested that operators review their SOPs in conformity with the changes made.[109]

An external international consultant was contracted by LMAC in 2020, with UNDP's support and EU funding, to conduct a study on operational efficiency.[110] The outcomes of the study recommended a comprehensive and in-depth harmonised understanding of, and training on, land release across stakeholders, with an emphasis on the importance of the use of evidence-based technical survey before moving into clearance.[111] Training was subsequently conducted in April 2021.[112] National land release standards need to be revised accordingly. Recommendations included allowing a more flexible marking system based on the NMAS (for CMR); extending the time slot for demolitions (for mines and CMR); and improving and expanding the role of animal detection systems (ADS) (for mines and CMR).[113] The study also noted that the NMAS generally places heavy limitations on how mine action operators are able to operate and that this drastically affects efficiency. This was particularly evident in the north-east, where full clearance has to be undertaken although more appropriate methods of land release could be used.[114]

A final review of the recommendations made by LMAC's contracted consultant and proposed by mine action operators was scheduled for January 2021, but as at time of writing had been postponed due to COVID-19.[115] LMAC planned to test the recommendations of the operational efficiency study in 2021 and apply them across the whole sector.[116] As at June 2021, LMAC had updated its strategic implementation plan to reflect the increased focus on technical survey.[117]

Mined areas in pattern minefields/along the Blue Line have been reclassified 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.[118] In its annual report for 2020, LMAC said that the TWG has agreed that in minefields on the Blue Line in which mines are laid in an identifiable pattern, the area outside the rows of mines is LTHA that can be technically surveyed.[119] International operators confirmed that the NMAS had been amended in April 2021 with regard to technical survey, including in LTHA.[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]

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.[125] 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.[126] HI reported that following discussions in the TWG, the changes made to NMAS with respect to technical survey will improve efficiency and accelerate the clearance process, in particular with respect to addressing scattered minefields.[127]

MAG believes the daily time window for demolitions, and the number of items permitted to be destroyed in each demolition, negatively impact the number of anti-personnel mines disposed of daily.[128]

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.[129] 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.[130] 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 United Nations Mine Action Service (UNMAS)-owned dual sensor equipment in 2020 to conduct missed-mine checks.[131] COVID-19 lockdowns and evacuation of relevant UNMAS personnel, resulted in a delay of the planned trial in 2020. As at July 2021 NPA had received the detectors from UNMAS and was planning to trial them, and if successful, seek LMAC's approval to use the detectors in place of full excavation when there are missing mines.[132] 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.[133]

NPA also recommends that LMAC continues to review its requirement for "metal-free" in the north-east, with a view to enhancing clearance efficiency while also maintaining safety.[134] MAG also said that the mandatory metal-free rule for the areas which have already been cleared, but which need to be re-checked for metal debris after demolitions, negatively impacted efficiency.[135]

OPERATORS AND OPERATIONAL TOOLS

In 2020, manual mine clearance was conducted by international operators DCA, HI, LAMINDA, MAG, and NPA, along with the Engineering Regiment of the LAF. In addition, from June 2020, UNIFIL began conducting clearance for humanitarian purposes for the first time, in addition to its regular demining operations for demarcation purposes on the Blue Line.

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.[136] The LAF has seven MDD teams[137] for technical survey and for use as a secondary asset supporting clearance of mined areas. Through the Engineering Regiment, LMAC provides mechanical assistance to clearance operators that lack this capacity.[138]

Table 2: NGO Operational clearance capacities deployed in 2020[139]

Operator	Manual teams	Total clearance personnel*	Dogs and handlers	Machines**	Comments***
DCA	3	24	0	0	Combined mine and BAC capacity.
HI	3	24	0	0	Clearance personnel also conduct technical survey when required.
LAMINDA	2	N/K	N/K	N/K	LAMINDA ceased land release operations in Lebanon in August 2020.[140]
MAG	7	70	0	12	This represents six full teams and one smaller team. LMAC reported MAG as having eight mine clearance teams, most likely splitting the six large teams into subteams.
NPA	7	18	0	0	Clearance personnel also conduct technical survey when required. LMAC reported NPA as having 8 manual mine clearance teams. NPA reported it had three teams on minefields along the Blue Line and four more manual clearance teams operating on IED tasks in north-east Lebanon, which also worked on CMR tasks.
UNIFIL	2	124	0	1	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	**24**	**260**	**0**	**13**	

* Clearance personnel may also conduct technical survey. ** Excluding vegetation cutters and sifters. *** Clearance teams also work on technical survey tasks.
N/K = not known.

In addition, in 2020, clearance capacity was also provided by two UNIFIL Troop Contributing Countries, Cambodia and

China. Operational capacities and capabilities of UNIFIL are determined by operational need. UNIFIL capacity in 2020 remained the same as the previous year and comprised five manual clearance teams, two EOD teams, and one mechanical team, totalling 124 persons in total. Capacity was expected to remain the same in 2021. UNMAS provided refresher training, validation of the teams, and QA during UNIFIL demining operations in 2020. UNMAS also carries out confirmatory training with UNIFIL demining units when they rotate into the country.[141]

UNIFIL was established in 1978[142] 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.[143] 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,[144] 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 an 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).[145] According to LMAC, UNIFIL Engineering Units subsequently started humanitarian demining in June 2020, with two teams.[146] As per the MoU, LMAC joined UNMAS in the accreditation of the UNIFIL teams and QA visits. The total number of visits executed in 2020 was 39, and the number of "unacceptable" reports was two.[147]

With respect to non-technical survey capacity, in 2020, there were five non-technical survey teams deployed for both mines and CMR: LMAC had two teams (totalling four personnel);[148] Humanity and Inclusion (HI) had one team of three personnel (one team leader, one surveyor, and one driver/surveyor);[149] and MAG had one team of two personnel. [150]

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.[151]

HI's demining personnel decreased from four clearance teams in 2019 to three teams in 2020, due to reduced funding, but it expected clearance capacity to remain constant in 2021.[152] 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.[153] Likewise, due to large and abrupt funding cuts at the start of 2021 (UK FCDO, EU, and United States (US)) and depending on the success of new fund applications, major changes were expected in the number of NPA personnel in Lebanon 2021. NPA will no longer operate its base in north-east Lebanon as a result of these funding cuts, and as at June 2021, NPA had lost 51 operations staff due to the funding losses.[154]

NPA has moved to a multi-task 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 in the event the site supervisor tests positive for COVID-19.[155]

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.[156] Often, however, the terrain is not suitable for machines. In its annual report for 2020, LMAC said the role of machines, including strengths and limitations, had not been fully explored, but there was evidence to suggest a 50% increase in efficiency when machines are deployed in the fade-out zone on the Blue Line.[157] DCA reported a significant increase in release of mined areas in 2020 compared to 2019, due to the deployment of a mechanical asset (DCA mini excavator, LAF excavator).[158]

MAG introduced new technologies, which depending on funding could be deployed in 2021, such as the procurement of a new mechanical asset, GCS-200 mini flail, which will be deployed predominantly on the Blue Line to conduct technical survey in the areas between anti-personnel and anti-vehicle minefields. The use of the GCS-200 machine is expected to increase the area reduction in suspected hazardous areas and efficiently define high-threat areas.[159]

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, and proved very helpful in helping inform survey efforts according to LMAC.[160]

At present, the NMAS restrict the use of the explosive detection dog (EDD) team operations to technical survey, but NPA believes the EDD team could also be used in clearance.[161]

DEMINER SAFETY

There was one demining accident in 2020, during which a female DCA deminer was injured by a N4 anti-personnel mine during clearance operations in South Lebanon in Alma Shaab village on the Blue Line.[162] DCA conducted an internal investigation and LMAC conducted an external investigation, and both investigations concluded that there had been no breach of NMAS.[163] DCA did, however, amend its SOP to help ensure this sort of incident would be further mitigated and the impact would be much less if this type of accident occurred again. DCA provided psycho-social support to all teams. Lessons identified were shared with other operators during the TWG meeting.[164]

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2020

A total of 673,449m² of mined area (i.e. area suspected or confirmed to contain anti-personnel mines) was released in 2020, of which 347,109m² was cleared, 226,562m² was reduced through technical survey, and 99,778m² was cancelled through non-technical survey.

A total of 41,241m² of unrecorded anti-personnel mine contamination was added to the database in 2020.[165]

SURVEY IN 2020

In 2020, 99,778m² of mined area was cancelled through non-technical survey and 226,562m² was reduced through technical survey (see Tables 3 and 4).[166] This is a reduction compared to the 204,343m² of mined area cancelled through non-technical survey in 2019 and an increase on the 109,191m² reduced through technical survey in 2019.[167]

A total of 41,241m² of unrecorded anti-personnel mine contamination was added to the database in 2020.[168]

HI conducted non-technical survey activities for the first time in 2020, surveying three previously unrecorded mined areas in the cedars reserve of Hadath El Jebbeh in north Lebanon, during which it identified 10,800m² of contaminated area.[169]

MAG increased the amount of mined area it reduced through technical survey in 2020, compared to the previous year, due to use of technical survey on the Blue Line. MAG also received approval to commence non-technical survey in 2020, specifically in Chouf (Mount Lebanon), leading to cancellation outputs in 2020, compared to none in 2019.[170]

Table 3: Cancellation through non-technical survey in 2020[171]

Province	Operator	Area cancelled (m²)
South Lebanon	MAG	2,424
Mount Lebanon	LMAC and MAG	94,354
North Lebanon	HI	3,000
Total		**99,778**

Table 4: Reduction through technical survey in 2020[172]

Operator	Area reduced (m²)
DCA	6,629
HI	16,819
MAG	188,719
NPA	14,395
Total	**226,562**

CLEARANCE IN 2020

A total of 347,109m² of mined area was cleared in Lebanon in 2020 (209,955m² by demining NGOs and UNIFIL, and 137,154m² by LAF), destroying in the process a total of 16,234 anti-personnel mines (14,227 by demining NGOs and UNIFIL; and 2,007 by the LAF, including 27 during EOD spot tasks), 28 anti-vehicle mines, and 9,041 items of other UXO (see Table 5).[173]

Total clearance in 2020 was a decrease on the 0.48km² of mined area cleared in 2019 (0.36km² by demining NGOs and 0.12km² by LAF).[174]

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.[175]

Table 5: Mine clearance in 2020[176]

Operator	Area cleared (m²)	AP mines destroyed	AV mines destroyed	UXO destroyed
DCA	33,261	2,378	0	15
HI	68,497	68	0	13
MAG	65,333	7,398	3	39
NPA	23,830	3,123	0	8
LAMINDA	12,955	385	0	23
LAF	137,154	2,007*	24	8,943**
UNIFIL	6,079	875	1	0
Totals	**347,109**	**16,234**	**28**	**9,041**

AP = Anti-personnel AV = Anti-vehicle UXO = unexploded ordnance

* Includes 27 anti-personnel mines destroyed by the LAF combat engineers during rapid response call-outs across Lebanon.
** UXO destroyed across all LAF operations, including BAC.

HI reported releasing five mined areas, totalling 23,695m² in which no anti-personnel mines were found. Of the five

tasks, two were cleared and three were subject to technical survey.[177] DCA reported clearing four mined areas, totalling 4,652m^2 in which no anti-personnel mines were found. The areas in question had been tasked to DCA based on evidence of incidents occurring or items being found and subsequently destroyed by LMAC.[178] MAG reported that it cleared a total of 33,549m^2 of mined area in 2020 which was found not to contain anti-personnel mines.[179] NPA reported that none of the tasks cleared in north-east Lebanon (totalling 11,606m^2) proved to contain explosive devices, including anti-personnel mines of an improvised nature.[180] Many of MAG and NPA's clearance tasks in 2020 had been generated as CHAs, based on explosive IEDs that had been previously found and destroyed by the LAF, and then no further IEDs were subsequently found by the operators during clearance. To address this, and increase operational efficiency, the NMAS was adjusted in 2021 to allow instead for technical survey of CHAs. MAG and NPA are discussing with LMAC/RMAC being permitted to conduct technical survey in 2021, prior to clearance.[181]

Due to the nature of the militia minefields in north Lebanon, there is sometimes a lack of clearly defined CHAs. Accordingly, in certain areas, additional non-technical survey and technical survey could help to define areas of actual contamination more accurately. Unfortunately, deployment of MDDs or demining machinery to help facilitate survey and clearance in north Lebanon is limited in scope, due to the climate and terrain of many of the tasks in the region.[182] NPA underscored the importance of the use of evidence-based non-technical survey and technical survey to more accurately define areas of actual mine contamination prior to initiating clearance, in particular in areas suspected to be contaminated by improvised anti-personnel mines in north-east Lebanon. [183]

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.[184]

In 2020, LMAC said that on average NGOs lost 46 working days because of the impact of the COVID-19 pandemic, compared to the 2020 implementation plan.[185] Despite new SOPs on safe behaviour, positive cases resulted in multiple demining personnel being required to self-isolate.[186] HI's operations were suspended between mid-March and mid-May 2020, due to national lockdowns. HI prepared a new SOP containing instructions on precautionary measures to avoid the spread of COVID-19.[187] DCA said COVID-19 impacted negatively on its land release operations and resulted in 33 working days (across mine and CMR operations) being lost in 2020. DCA worked with LMAC to acquire an exemption to lockdown movement, which meant its staff could operate while using its vehicles. Some non-technical survey activities were conducted online/conducted in person with less people in attendance due to social distancing and restrictions on meeting sizes. DCA made up some lost days by weekend working.[188] According to MAG, the 42 working days it lost due to COVID-19 related lockdown periods and curfew were the equivalent of around 45,000m^2 of land release.[189] NPA reported 40 operational days lost due to COVID-19 related lockdowns and said that operational capacity was often further reduced due to individual staff contracting COVID-19 and needing to isolate.[190]

As in the previous year, roadblocks due to civil unrest also prevented teams from getting to their site on some days.[191] DCA, HI, MAG, and NPA reported that the political unrest did not, however, impact their landmine operations in 2020.[192]

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.[193]

Clearance of mined areas was originally expected to be completed by the end of 2020, in accordance with the 2011–20 national strategy, but meeting the target was contingent on deployment of considerable resources: 125 manual clearance teams (45 for minefields excluding the Blue Line and 80 for the Blue Line), 2 mechanical teams, and 9 two-strong MDD teams.[194] 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.[195] However, this looks to be very ambitious, considering the extent of the remaining mined area (18.23km^2) and annual mine clearance rates of considerably less than 1km^2 per year, with a total of only 2.3km^2 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 since 2018, as enshrined in the revised NMAS. Crucially, LMAC's demonstrated commitment to enhance the use of non-technical and technical survey should help to cancel or reduce areas more efficiently.[196]

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).[197]

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.[198]

In 2020, LMAC said an average of 46 working days were lost by operators because of the impact of the COVID-19 pandemic.[199] The COVID-19 pandemic impacted the whole of Lebanon's mine action programme and all operations were

suspended from 12 March 2020 for more than two months. After the relaxation of general mobilisation measures by the government of Lebanon, a TWG meeting was held and the phases for restarting operations and necessary safety measures relating to COVID-19 were developed and adopted. Operations resumed in early May 2020, under the new guidelines and safety measures, and as at July 2020 NGO clearance operators were fully operational.[200] Furthermore, each new positive COVID-19 case resulted in colleagues from their clearance team needing to self-isolate, further impacting operational output.[201]

Table 6: Five-year summary of AP mine clearance

Year	Area cleared (km^2)
2020	0.35
2019	0.48
2018	0.39
2017	0.51
2016	0.55
Total	**2.28**

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

According to LMAC, the strategic implementation plan, which will support the new National Mine Action Strategy 2020–25, will address an exit strategy and long-term risk management.[202]

LMAC provided summary information on its plans regarding an exit strategy with respect to addressing remaining cluster munition remnant contamination, and residual risk after CCM Article 4 fulfilment,[203] though further details have yet to be provided on an exit strategy and long-term risk management strategy for mined areas.

1 Email from Lt.-Col. Fadi Wazen, Operations Section Head, LMAC, 15 March 2021.

2 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

3 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020.

4 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

5 LMAC, "Annual Report 2020", p. 14; and email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

6 Email from Lt.-Col. Fadi Wazen, LMAC, 5 August 2021.

7 Interview with Brig.-Gen. Elie Nassif, Director, and Brig.-Gen. Fakih, Head of Operations, LMAC, Beirut, 18 April 2016.

8 Ibid.

9 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

10 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

11 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.

12 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.

13 LMAC, "Annual Report 2019", p. 14.

14 Ibid., pp. 7 and 25.

15 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

16 LMAC, "Annual Report 2020", p. 36.

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, 15 March 2021.

24 LMAC, "2018 Annual Report Lebanon Mine Action Centre", p. 36; interview with Brig.-Gen. Jihad Bechelany, LMAC Director, Lt.-Col. Fadi Wazen, LMAC, and Ariane Elmas, Mine Action Advisor, UNDP, Beirut, 16 April 2019; and email from Emile Ollivier, NPA, 19 March 2019.

25 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020.

26 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020; and LMAC, "Annual Report 2020", p. 28.

27 Email from Lt.-Col. Fadi Wazen, LMAC, 15 June 2021.

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33 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

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43 Email from Rana Elias, Cooperation Programmes Coordinator, GICHD, 26 August 2020.

44 Email from Lt.-Col. Fadi Wazen, LMAC, 21 August 2019.

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48 LMAC, "Plan for the Implementation and Monitoring of the LMAP Strategy (2020–25)", p. 19.

49 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

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53 Email from Matthew Benson, Country Director, DCA, 24 May 2021.

54 Email from Matthew Benson, DCA, 23 July 2021.

55 Email from Danila Zizi, HI, 15 July 2021.

56 Email from Ret. Brig.-Gen. Badwi El Sakkal, President, LAMINDA, 18 March 2020.

57 Email from Sylvain Lefort, MAG, 24 March 2021.

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60 Email from Valerie Warmington, NPA, 28 May 2020.

61 Email from Lt.-Col (CHN) Yakun Zhang, Chief – J3 Combat Engineer Section, UNIFIL Force HQ, 4 August 2021.

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73 Email from Matthew Benson, DCA, 4 June 2021.

74 Email from Sylvain Lefort, MAG, 24 March 2021.

75 Email from Sylvain Lefort, MAG, 23 July 2021.

76 Email from Hala Amhaz, NPA, 15 March 2021.

77 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.

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96 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.

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104 Email from Hala Amhaz, NPA, 15 March 2021.

105 Email from Lt.-Col. Fadi Wazen, LMAC, 15 June 2020.

106 Email from Valerie Warmington, NPA, 23 July 2021.

107 Email from Valerie Warmington, NPA, 28 May 2020.

108 LMAC, "Annual Report 2020", p. 26.

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110 LMAC, "Annual Report 2020", p. 26.

111 Ibid., p. 36.

112 Email from Lt.-Col. Fadi Wazen, LMAC, 15 June 2021.

113 LMAC, "Annual Report 2020", p. 36.

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119 LMAC, "Annual Report 2020", p. 10.

120 Emails from Sylvain Lefort, MAG, 23 July 2021; and Valerie Warmington, NPA, 23 July 2021.

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129 Email from Valerie Warmington, NPA, 28 May 2020.

130 Email from Hala Amhaz, NPA, 17 March 2021.

131 Email from Valerie Warmington, NPA, 28 May 2020.

132 Email from Valerie Warmington, NPA, 23 July 2021.

133 Ibid.

134 Emails from Valerie Warmington, NPA, 28 May 2020; and Hala Amhaz, NPA, 17 March 2021.

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149 Email from Danila Zizi, HI, 15 July 2021.

150 Email from Sylvain Lefort, MAG, 24 March 2021. LMAC reported MAG as having three non-technical survey teams. Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

151 LMAC, "Annual Report 2020", p. 8; and email from Lt.-Col. Fadi Wazen, LMAC, 15 June 2021.

152 Email from Danila Zizi, HI, 15 July 2021.

153 Emails from Sylvain Lefort, MAG, 24 March and 27 May 2021.

154 Emails from Hala Amhaz, NPA, 15 March 2021; and Valerie Warmington, NPA, 2 June 2021.

155 Email from Hala Amhaz, NPA, 15 March 2021.

156 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.

157 LMAC, "Annual Report 2020", p. 36.

158 Email from Matthew Benson, DCA, 24 May 2021.

159 Email from Sylvain Lefort, MAG, 24 March 2021.

160 Presentation by Lt.-Col. Fadi Wazen, LMAC, at the Regional School for Humanitarian Demining in Lebanon (RHDSL), Beirut, 8 April 2019.

161 Email from Hala Amhaz, NPA, 17 March 2021.

162 Emails from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021; and Matthew Benson, DCA, 24 May 2021.

163 Ibid.

164 Email from Matthew Benson, DCA, 24 May 2021.

165 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

166 Ibid. 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.

167 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020.

168 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

169 Email from Danila Zizi, HI, 15 July 2021.

170 Email from Sylvain Lefort, MAG, 24 March 2021.

171 LMAC, "Annual Report 2020", pp. 11 and 15; and emails from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021. There was a discrepancy between data reported by LMAC and what was reported by HI and MAG. HI reported cancelling 3,999,535m^2 of mined area in north Lebanon. The amount of cancelled area reported by HI included both dangerous areas (DAs) and minefields, while cancelled area reported by LMAC only included minefields (emails from Danila Zizi, HI, 15 and 27 July 2021). MAG reported cancelling 35,831m^2 of anti-personnel mined area in Chouf (Mount Lebanon) in 2020. MAG also reported cancelling a further 400m^2 of anti-vehicle mined area in Ras Baalbek (north-east Lebanon) (email from Sylvain Lefort, MAG, 24 March 2021). The reason for the discrepancies between LMAC and operator data may result from errors when data are transferred by the RMAC to LMAC.

172 LMAC, "Annual Report 2020", pp. 10 and 15; and emails from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021; Hala Amhaz, NPA, 17 March 2021; Matthew Benson, DCA, 24 May 2021; and Danila Zizi, HI, 15 July 2021. There was a discrepancy between data reported by LMAC and what was reported by MAG. MAG reported reducing 53,472m^2 of mined area on the Blue Line and 2,220m^2 in Ras Baalbek (north-east Lebanon) in 2020 (email from Sylvain Lefort, MAG, 24 March 2021). The reason for the discrepancies between LMAC and operator data may be due to errors when data are transferred by the RMAC to LMAC.

173 Emails from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020; and LMAC, "Annual Report 2019", p. 7.

174 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020; and LMAC, "Annual Report 2019", p. 7.

175 Email from Lt.-Col. Fadi Wazen, LMAC, 5 August 2021.

176 LMAC, "Annual Report 2020", pp. 8 and 9; and emails from Lt.-Col. Fadi Wazen, LMAC, 15 March, 13 July, and 5 August 2021; Danila Zizi, HI, 15 July 2021; and Hassan Noureddine, J3 Combat Engineer Section, UNIFIL Force HQ, 16 August 2021. During its clearance in 2020, HI found six victim-activated improvised mines, consisting of a fuse, mortar, and trip-wire. The clearance totals in LMAC's Annual Report 2020 accidentally and erroneously excluded the 68,497m^2 and 68 anti-personnel mines destroyed by HI. Mine Action Review has included these in the clearance totals. In addition, there were some discrepancies between data reported by LMAC and what was reported by DCA, MAG, and NPA. DCA reported that it cleared a total of 150,448m^2 in 2020 on the Blue Line (south Lebanon) and in Baabda District (Mount Lebanon), with the destruction of a total of 2,080 anti-personnel mines. The discrepancy may be because DCA includes confirmation and mechanical asset data, whereas LMAC does not (emails from Matthew Benson, DCA, 24 May and 23 July 2021). MAG reported that it cleared a total of 114,066m^2 in 2020 on the Blue Line and in Rass Baalbeck, with the destruction of a total of 7,363 anti-personnel mines, 3 anti-vehicle mines, and 42 other items of UXO. The reason for the discrepancies between LMAC and operator data may be due to discrepancies when data is transferred by the RMAC to the LMAC (emails from Sylvain Lefort, MAG, 24 March and 23 July 2021). NPA reported that it cleared 23,830m^2 in Nabatiyeh in 2020, with the destruction of 3,123 anti-personnel mines, but that it also cleared a further 11,606m^2 of area contaminated by anti-personnel mines of an improvised nature (victim-activated IEDs), although no devices were discovered. The explanation for some of the discrepancies between LMAC and NGO clearance data is likely related to LMAC not including IED clearance as mine clearance (emails from Hala Amhaz, NPA, 17 March 2021 and Valerie Warmington, NPA, 23 July 2021; and Lt.-Col. Fadi Wazen, LMAC, 5 August 2021).

177 Emails from Danila Zizi, HI, 15 and 27 July 2021.

178 Emails from Matthew Benson, DCA, 24 May and 23 July 2021.

179 Email from Sylvain Lefort, MAG, 24 March 2021.

180 Email from Hala Amhaz, NPA, 17 March 2021.

181 Emails from Sylvain Lefort, MAG, 24 March 2021; and Valerie Warmington, NPA, 23 July 2021.

182 Interview with Chris Chenavier, HI, Toula, 18 April 2016.

183 Email from Hala Amhaz, NPA, 17 March 2021.

184 Interview with Chris Chenavier, HI, Toula, 18 April 2016.

185 Emails from Lt.-Col. Fadi Wazen, LMAC, 15 March and 15 June 2021.

186 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

187 Email from Danila Zizi, HI, 15 July 2021.

188 Email from Matthew Benson, DCA, 24 May 2021.

189 Email from Sylvain Lefort, MAG, 24 March 2021.

190 Emails from Hala Amhaz, NPA, 15 and 17 March 2021.

191 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021

192 Emails from Matthew Benson, DCA, 24 May 2021; Danila Zizi, HI, 15 July 2021; Sylvain Lefort, MAG, 24 March 2021; and Hala Amhaz, NPA, 15 and 17 March 2021.

193 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.

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195 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.

196 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.

197 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.

198 Email from Matthew Benson, DCA, 24 May 2021.

199 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

200 Emails from Lt.-Col. Fadi Wazen, LMAC, 22 July 2021; Sylvain Lefort, MAG, 23 June 2020; and Brig.-Gen. (ret.) Badwi El Sakkal, LAMINDA, 22 June 2020.

201 Email from Lt.-Col. Fadi Wazen, LMAC, 15 March 2021.

202 Email from Lt.-Col. Fadi Wazen, LMAC, 19 March 2020.

203 LMAC, "Annual Report 2020", p. 31.

LIBYA

MINE ACTION REVIEW

CLEARING THE MINES 2021

RECOMMENDATIONS FOR ACTION

- **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.**
- **All parties to the conflict in Libya should ensure that forces loyal to them do not use anti-personnel mines.**
- **As soon as political conditions permit, Libya should enact mine action legislation, establish an interministerial national mine action authority, and adopt a national mine action strategy.**
- **Libya should expedite the capacity building and accreditation of mine clearance operators.**
- **Libya should, at the earliest opportunity possible and as soon the security situation permits, conduct a baseline survey to identify the extent of contamination from anti-personnel mines and begin systematic clearance.**

UNDERSTANDING OF AP MINE CONTAMINATION

Mine contamination in Libya 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 Muammur 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, including Misrata, 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 the two entities engaged in an armed conflict, 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. According to reports by Human Rights Watch, fighters aligned to Khalifa Haftar, including foreign forces, appear also to have laid mines as they withdrew from southern districts of Tripoli in May 2020.[5]

Confirmed instance of landmine use by rebels occurred in Ajdabiya; other locations where pro-government elements laid mines included Brega, Khusha, Misrata, and the Nafusa mountains.[6] The escalation of conflict in Libya in 2014 brought new reports of mine use by armed groups fighting around Tripoli airport.[7] There were also allegations of landmine use by non-state armed groups between 2016 and 2018,[8] with contamination believed to be mainly in Benghazi, Derna (in the east of Libya), and Sirte.[9]

Mines of an improvised nature are suspected to have been laid during 2016 by Islamic State in areas that they controlled, such as in Sirte.[10] In July 2017, the engineering divisions of Operation Dignity[11] continued to clear mines and booby-traps left by Islamic State fighters from Benghazi, but also warned civilians from attempting to return to their homes before clearance work was finished.[12]

According to UNMAS, after the withdrawal of LNA forces in May 2020, explosive ordnance (booby-traps, landmines, and IEDs) was scattered across southern Tripoli. UNMAS reported that 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.[13]

In June 2020, the President of the APMBC 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. The press release followed reports, including by the UN Support Mission in Libya (UNSMIL), of anti-personnel mines of an improvised nature being discovered in the Ain Zara and Salahuddin areas of Tripoli, which have maimed or killed civilians returning home for the Eid holiday.[14] Other reports include evidence that LNA-affiliated forces have laid extensive tripwire-activated anti-personnel mines and booby-traps in homes and other civilian objects, and photos and videos verified by Amnesty International show Russian and Soviet-era anti-personnel landmines, including MON-50s, MON-90s, OZM-72s, and MS3s.[15] HALO Trust reported that it had found ML-7/8 anti-lift devices being laid underneath OZM-72 anti-personnel bounding fragmentation mines.[16]

Between late May and early July 2020, UNSMIL reported 138 casualties, including two clearance personnel, due to the newly laid mines and other explosive devices.[17] According to the UN Office for the Coordination of Humanitarian Affairs (OCHA), most people at risk from explosive hazards and in need of assistance are in Tripoli, representing 39% of all those in need. Those with the most severe needs are in Benghazi, Derna, Misrata, and Sirte.[18]

As an observer to the Eighteenth Meeting of States Parties (18MSP) to the APMBC in November 2020, Libya expressed its willing to accede to the APMBC and announced the formation of a committee that is tasked to assess and evaluate the needed steps in this regard.[19] Back in 2011, the rival leader of LNA, commander Khalifa Haftar, had publicly pledged not to use anti-personal mines,[20] a pledge he did not fulfil in the years that ensued.

There is no accurate estimate of the extent of anti-personnel mine contamination across Libya, as many suspected hazardous areas (SHAs) have not been surveyed. As at April 2021, national contamination data from the LibMAC database, reported a total contamination of 287km² of anti-personnel mines, 61km² of confirmed hazardous areas (CHAs) and 226km² of SHAs, distributed over seven localities.[21] LibMAC data from 2017 indicate that the SHA of 223km² in Sirte is suspected to contain only anti-vehicle mines.[22] 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. LibMAC reported that it plans to conduct additional non-technical surveys to better understand the recent contamination of 2020 in Tripoli and to immediately start its clearance, whereas additional technical surveys are needed to reduce the identified SHAs in the other localities.[23]

A wide range of munitions have been used. Found in 2020 in Tripoli were a tripwire-activated anti-personnel mines; anti-handling or anti-lift devices on anti-personnel and anti-vehicle mines; and a number of IEDs. Anti-personnel mines, mainly the tripwire victim-activated type, have been mostly used as booby traps in urban settings.[24] According to Danish Church Aid (DCA), conventional minefields are rare in the west and central coastal area of Libya, but as of writing, non-technical survey revealed up to four SHAs that are believed to contain anti-personnel mines in Southern Tripoli. The data provided by LibMAC indicate mostly mixed contamination and is not disaggregated by contamination type.

Explosive remnants of war (ERW) contamination seems to be the major preoccupation of the demining agencies due to the presence of devices in populated areas and inside residential homes. Since 2011 and through October 2020, the UN Mine Action Service (UNMAS) reported having cleared more than 1 million items of ERW and approximately 54 tonnes of small arms ammunition.[25]

In 2020, 687,802m² of newly discovered anti-personnel mine contamination was reported in greater Tripoli and added to the LibMAC database.[26] Of this, DCA discovered 178,506m² in 28 CHAs through non-technical surveys,[27] and HALO Trust discovered 132,797m² through 12 non-technical survey tasks.[28]

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 ERW in cities across Libya.[29]

Table 1: Anti-personnel mined area by locality (at end 2020)[30]

Locality	CHAs	Area (m²)	SHAs	Area (m²)	Total SHAs/CHAs	Total area (m²)
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**

PROGRAMME MANAGEMENT

Mine action exists in a fragmented and violent political context. Following years of armed conflict, a new UN-backed "unity" government, the GNA, was formally installed in a naval base in Tripoli in early 2016. It has subsequently faced opposition from the LNA rival government and a host of militia forces. In April 2019, Khalifa Haftar, the LNA military commander, launched an offensive to take control of Tripoli and topple the GNA. Fighting continued throughout 2020 until June when the GNA managed to drive the LNA forces out of Tarhouna, its last stronghold in the west of Libya, putting an end on the months-old offensive to take Tripoli. The warring parties reached a ceasefire agreement to halt hostilities in October 2020, albeit with frequent interruptions. This culminated in the election of an interim government following the UN-sponsored five-day Geneva talks in February 2021 with a roadmap leading to National elections in December 2021.

LibMAC was mandated by the Minister of Defence to coordinate mine action in December 2011.[31] Operating under the UN-backed GNA, LibMAC's headquarters are in Tripoli, in the west of the country, and it also has offices in Benghazi[32] and Misrata.[33]

Other national entities conduct mine and ERW clearance, but these are not accredited by LibMAC.[34]

ITF Enhancing Human Security (ITF) regularly executed salary payments for 22 LibMAC staff in 2020 and covers all costs related with LibMAC's daily functioning. Funded by the United States Department of State, ITF provided US$797,767 of capacity support to the LibMAC in 2020.[35]

According to the UN Humanitarian Response Plan (HRP) of 2020, Libyan national capacity to mitigate the threat of explosive hazards is insufficient to address the growing threat. With the existing managerial and coordination capacity in place, governmental and non-governmental actors have a solid base for growth, yet are lacking sufficient numbers of qualified personnel, equipment, and technical expertise to scale up to meet demand.[36] The UN raised US$7.5 million for the mine action sector in Libya in 2020.[37]

UNMAS deployed to Libya in March 2011. When major hostilities resumed between rival political factions in 2014 and again in April 2019, the UN temporarily relocated the majority of its staff to Tunisia and, as of early 2021 was in the process of returning to Libya. During periods of evacuation, UNMAS has been operating remotely from Tunisia.[38]

UNMAS prioritises the capacity enhancement of Libyan mine action actors, supports the LibMAC in accreditation processes for mine action organizations and facilitates coordination with international stakeholders and implementing partners. Since 2015, UNMAS has trained more than 70 National Safety Authority (NSA) operators and military engineers in advanced explosive ordnance disposal (EOD); trained 30 officers from eastern Libya in non-technical survey; and trained several operators to address explosive ordnance threats in Sirte. UNMAS also increased capacity through the provision of EOD equipment to national actors and assisted LibMAC in developing the Libyan Mine Action Standards (LibMAS) that are now being implemented.[39]

In 2017/18, the United States Office of Weapons Removal and Abatement (WRA) and the United Kingdom financed the training of 70 IED operators in Sirte, conducted by the company JANUS, and with participants from the NSA and the military engineers.[40]

In 2020, HALO Trust delivered non-technical survey training to eight members of LibMAC and three of the Free Fields Foundation (3F) staff in June. In addition, one member of LibMAC staff attended a three-day course of Information Management (IM) in Tunis in January 2020.[41] In 2019, The HALO Trust worked closely with LibMAC to build their capacity to quality assure and accredit mechanical clearance. HALO Trust ran a workshop in the LibMAC Tripoli office, covering all aspects of mechanical clearance. In addition, HALO provided translated quality assurance forms for quality assuring task sites and for accrediting the armouring of mechanical assets; and also conducted armour testing of different materials to provide a baseline of information for LibMAC.[42]

The Danish Refugee Council's (DRC's) Humanitarian Disarmament and Peacebuilding sector (formally known as Danish Demining Group (DDG)), planned to provide capacity development in gender and diversity mainstreaming in mine action to LibMAC in 2021.[43]

LibMAC and UNMAS co-chair a monthly Implementing Partners meeting. The meetings were held in-person in Tunis then moved online since the COVID-19 pandemic.[44]

GENDER AND DIVERSITY

LibMAC does not have a gender and diversity policy for mine action in place. As at April 2021, 13% of the LibMAC employees were women and 50% of managerial/supervisory positions were filled by women. No women were employed in operational positions. LibMAC disaggregates mine action data by sex and age.[45]

The HALO Trust reported that its Libya programme seeks to comply with HALO's general gender and diversity policy. However, due to rigid gender norms that largely impede women's free movement and ability to work in a mixed-gender office setting, particularly reinforced in areas with strong Islamist influence such as Sirte, HALO has reported that the recruitment of women, including for non-operational roles, has proved difficult.[46] In 2020, six of HALO's ninety-four Libyan employees and five of the fifteen senior management team members were women (two of five were internationals, while three of the remaining ten were national staff). No women were employed in operational roles.[47]

HALO's approach to community liaison, including door-to-door risk education prior to clearance, targeted risk education task sites, and specific events to reach out to women in particular, is designed to reach out to women and men equally. This is especially important given that women are largely absent from public life. In particular, the introduction of pre-clearance focus group discussions with

women and men separately helps to ensure that subsequent community liaison/risk education activities are targeted to the needs of all beneficiaries.[48] The change in the primary location of operations from Sirte in 2019 to Tripoli in 2020, where risk education is already being widely carried out by other organisations, decreased the need for HALO Trust to do targeted pre-clearance community liaison events in 2020.[49]

With regards to diversity, in Sirte, HALO Trust recruits equally among the tribes and seeks to consult all ethnic groups during survey and clearance processes. HALO makes task prioritisation recommendations based on humanitarian need, although all task orders are issued under the authority of LibMAC.[50] The HALO Trust disaggregates relevant mine action data by gender and age.[51]

DRC has a gender and diversity policy in place, but, as at April 2021, its implementation plan was still under development. DRC consults women and children during survey and community liaison activities. This is achieved by composing all-female survey teams to reach women in community settings where this cannot be done by mixed-gender teams, which is specifically the case in Sabha. In 2020, 13 of the total 77 employees of DRC Libya programme were women. Of these, 5% of survey and 6% of managerial/supervisory positions were filled by women.[52]

DCA's Libya programme has an active policy of employing females into programme roles to increase their financial independence and teach them transferable skills that they may use beyond their current employment with DCA. Gender mainstreaming and mainstreaming of marginalised groups are written in the programme's core policies. DCA has a gender mainstreaming built-in each all its projects, including its target groups, and ensures that female adults and children constitute at least 50% of beneficiaries. DCA also employs all-female teams to be able to engage with female-headed households.

In terms of diversity, DCA works closely with marginalized persons and communities, for example, by working with ERW victims to promote the rights of persons with disabilities. DCA conducted the very first, and only to date, "signed/sign language" EORE training for hearing-impaired persons. Moreover, DCA employs nurses, female teachers, and university lecturers in community liaison and EORE teams to achieve better outreach to women and children during survey and community liaison activities. In 2020, 25% of DCA employees in Libya were women, but as at April 2021, the rate was increased to 29% by recruiting all-female non-technical survey teams. Seven of the fifteen managerial/supervisory positions were filled by women.[53]

INFORMATION MANAGEMENT

LibMAC receives technical support for the Information Management System for Mine Action (IMSMA) from the Geneva Centre for Humanitarian Demining (GICHD) and UNMAS. In March 2019, Humanity and Inclusion (HI) reported that LibMAC had recently announced details of a new effort to bring the IMSMA database up to date and ensure the data are reliable.[54] With support from the GICHD, LibMAC planned to transition from IMSMA to IMSMA Core in mid-2020.[55] As at April 2021, the transition has yet been completed.[56]

IMSMA is accessible to clearance organisations and data collection forms are reported to be consistent and enable collection of necessary data.[57] Operators have internal quality control systems prior to submitting of data to LibMAC for further quality control. The HALO Trust reported that the LibMAC regularly updates the IMSMA database to a high standard.[58]

Since early 2019, The HALO Trust has been working closely with LibMAC to cover mechanical clearance in the Libyan IMSMA database. The planned transition to IMSMA Core will allow data entry for mechanical clearance.[59]

PLANNING AND TASKING

There is no mine action strategy currently for Libya.[60]

LibMAC does, however, have a national short-term operational plan.[61] LibMAC prioritises survey and clearance operations based on humanitarian, security and development indicators,[62] and is responsible for issuing task orders. DRC reported that, at times, task orders are issued to different NGOs in the same locations simultaneously.[63]

The reported information from the national authorities and the operators on task prioritisation differ widely and each operator seems to have set its own prioritisation system that is coordinated with the LibMAC. According to DRC, the coordination meetings between the operators and LibMAC have been put on hold during 2020 due to the COVID-19 restrictions, which had a detrimental effect on operational planning.[64]

According to DCA, 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 callouts, particularly from returning internally displaced persons (IDPs). Therefore, much of the clearance is reactive EOD spot tasks in order to minimise the immediate threat to human life. Outside of that, DCA prioritises residential areas, educational facilities, medical facilities and water, and electricity supply sites.[65]

HALO Trust'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).[66]

The Tripoli ERW Hazard Mapping and Information Management Project uses open-source data collation and geolocation techniques to map potential ERW contamination along the Tripoli frontlines by collecting information on active fighting incidents, weapons systems and ammunition used, and ERW-related accidents and displacement. The online data collection portal, linking to a live database that is shared with LibMAC and other stakeholders, is used to track historical data starting from 4 April 2019 up to the present. Mapping ERW contamination along the frontlines enables LibMAC to coordinate and direct specialist clearance capacity as well as risk education teams to the most highly contaminated areas.[67]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national mine action legislation in Libya, but LibMAS in Arabic and English, have been elaborated 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.[68] According to international clearance operators, the national mine action standards are aligned to the International Mine Action Standards (IMAS), reproducing it word-for-word in many parts.[69] As at April 2021, the LibMAS have not been updated since their approval in 2017.

While the LibMAS are broad and not overly restrictive, some additional guidance on how implementing organisations should adapt to local circumstances and conditions may be beneficial. For example, this should cover what they should consider as direct versus indirect evidence in the context of clearance in urban areas. This could help to standardise how evidence is considered by the various operators.[70]

OPERATORS AND OPERATIONAL TOOLS

Mine action operations have been conducted by the army engineers, a police unit, and the Ministry of Interior's NSA also known as Civil Defence.[71] Military engineers reportedly lack mine detectors and are working with basic tools and even their bare hands.[72] The NSA is mandated to conduct EOD in civilian areas.[73] These institutions liaise with LibMAC but are not tasked or accredited by them, nor do they provide clearance reports to the Centre.

Table 2: Operational non-technical survey (NTS) and technical survey (TS) capacities deployed in 2020[74]

Operator	NTS teams	Total personnel	TS teams
3F	2	6	0
Libya Peace Organization	2	6	0
HALO Trust[75]	5	12	0
DCA[76]	4	44	0
DRC	2	6	0
Totals	**15**	**74**	**0**

Table 3: Operational clearance capacities deployed in 2020[77]

Operator	Manual clearance teams	Total deminers*	Dog teams (dogs and handlers)	Mechanical assets/machines
DCA	7	77	0	0
HALO Trust	0	0	0	3
Totals	**7**	**77**	**0**	**3**

* Excluding team leaders, medics, and drivers.

The deteriorating security situation resulted in the withdrawal of UNMAS and international mine action operators from Libya in mid 2014. International clearance operators active in Libya include DCA, DRC, and HALO Trust.[78] HI's survey and clearance operations stopped in April 2019 and the project formally ended in June of that year.[79] The National NGO operator, 3F, continued to be operational in 2020. Another national operator, the Libyan Demining Group (LDG), was in the process of becoming established in 2019,[80] but, as at April 2021, had not been accredited by LibMAC.[81] Local organisations Peace Organization from Zintan and World Without War (3W), from Misrata, which had been trained by HI in 2016 and received accreditation for non-technical survey,[82] subsequently had their operations suspended for not complying with standards and, in addition, neither organisation had secured funding.[83] In 2020, LibMAC reported having accredited two additional local operators: The Safe Trust NGO (*Al-Thiqa al-Amena*) and the Communication NGO (*Al-Tawasol*).[84]

DCA is operational in Libya 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. DCA also conducts risk education.[85] Now in its eleventh year of working in Libya, DCA currently has offices Benghazi, Misrata, Sirte, and Tripoli. Its office in Al-Bayda was closed since the end of its programme in Derna in October 2020. In 2020, DCA deployed manual clearance teams in Benghazi, Derna, Sirte, and Tripoli. DCA increased both survey and clearance capacity in 2020 as it expanded to address the ERW contamination in the south of Tripoli and expected to increase its clearance teams from two to four in Tripoli in 2021 under additional funding.[86]

DRC set up in Libya since 2011 and has three offices in Benghazi, Sabha and Tripoli. Its offices in Misrata and Zwara were closed at the end of 2020. DRC was operational in both Benghazi and Sabha in 2020.[87] In Sabha, DRC had two non-technical survey teams and two EOD teams, which it was managing remotely.[88] In addition, DRC had one BAC team, two EOD teams, one NTS team and one EORE team in Benghazi in 2020.[89] Security issues in the south continue to disrupt mine action and prevent continuous operations. In Tripoli, DRC works through its national implementing partner, 3F, and in 2021 planned to establish its own mine action teams.[90] 3F operates under its own accreditation and standing operating procedures (SOPs), and has an operational contingent of 37, composed in two EOD teams and two non-technical survey teams.[91] In 2020, DRC conducted two non-technical surveys in Benghazi and one in Sabha. DRC also conducted one EOD task in Benghazi and another in Al-Shati.[92]

The HALO Trust has been present in Libya since November 2018, and has offices in Misrata, Sirte, and Tripoli. Its first operational footprint in Libya was the deployment of two mechanical clearance teams in Sirte in October 2019. The operation has been suspended since June 2020 due to the escalation of conflict in the area of Sirte.[93] 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. In July 2020, HALO trained eight personnel in non-technical survey and deployed two non-technical survey teams. In November 2020, HALO trained and deployed three additional non-technical survey teams.[94] As at April 2021, HALO Trust was training and preparing to deploy two technical survey/clearance teams and three additional mechanical clearance teams in Tripoli. The mechanical clearance teams will use a 22.5 SDLG excavator, a 17.5 tonne SDLG front loader, and a CAT backhoe loader. HALO intended to deploy 13 manual personnel and 16 mechanical personnel in 2021, subject to accreditation by LibMAC.[95] As of writing, HALO was not yet accredited to conduct clearance or EOD tasks.[96]

The HALO Trust and DCA worked in partnership in Sirte under a joint three-year European Union (EU) Instrument contributing to Stability and Peace (ICSP) contract, which started in February 2019. Under this contract, HALO provides three mechanical clearance assets and two mechanical clearance teams (MCTs) while DCA conducts EOD tasks. In January 2020, the first EU-funded MCT was deployed in Sirte. The first of three mechanical clearance assets, a medium-range front-loader, was procured and upgraded locally in Libya in January 2020.[97] The deterioration of the security situation that ensued led the HALO Trust to suspend its operation in Sirte in June 2020. Consequently, HALO did not provide the second of the mechanical clearance assets. An additional EU-funded 17.5 tonne front end loader that was originally meant for Sirte was redirected to Tripoli in late 2020. HALO Trust intends to resume its operations in Sirte if security permits.[98]

Humanitarian access to Libya for survey and clearance operations, remains challenging for all operators. HALO, for example, experienced delays in the granting of multiple-entry visas and limited movement between locations due to ongoing conflict and changing frontlines. 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.[99]

HALO is mitigating security risks to its staff by maintaining working relationships with key interlocutors in both eastern and eastern Libya, including LibMAC, ministries, and municipal authorities. Community liaison in Benghazi, Misrata, Sirte, and Tripoli is key to ensuring community acceptance. In Sirte specifically, HALO recruits equally among the tribes. International staff are sometimes needed to cut across tribal lines when negotiating access.[100]

The deteriorated security situation in Sirte since January 2020 has made operations difficult for the HALO Trust, however it was able to continue operations under a remote management model until the front line shifted from Tripoli to Sirte in June 2020. From that point onwards, HALO suspended operations in Sirte due to the presence of armed actors unfamiliar with its work. HALO continues to monitor the situation and intends to restart its operations in Sirte as soon as the security situation permits. HALO also faced minor issues of access and acceptance during non-technical survey activities in Tripoli. This is in part due to HALO personnel passing through unfamiliar checkpoints. HALO expects that access will improve over time as awareness increases and teams deploy for survey and clearance creating more visibility and acceptance. HALO has no access problems in Benghazi.[101]

The level of insecurity in Libya have not significantly affected operations of DCA in 2020. DCA lost approximately four weeks of operations time in Sirte following the change in front lines in January 2020.[102] For DRC, the security situation in Libya has posed little to no challenges to the implementation of survey activities, and it continued to enjoy good access in its area of operations.[103] HI conducted EOD spot tasks in 2019 in Tawerga, but was hindered by security issues. It stopped survey and clearance operations in April 2019 and the project formally ended in June 2019, although its victim assistance work in Libya continues.[104]

A number of other Libyan civil society organisations are also reported to carry out mine action operations, but they are not accredited by LibMAC.

DEMINER SAFETY

On 6 July 2020, two humanitarian mine clearance workers of 3F were killed in a trip-wire activated mine during clearance operation in southern Tripoli.[105] It is not known whether the accident was effectively investigated or whether lessons learned were concluded.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2020

Three anti-personnel mines were destroyed in EOD spot tasks by DCA in 2020.[106] No land was released through non-technical survey, technical survey or clearance in 2020.

Land release data was not made available by LibMAC in 2020.

A total of 687,802m^2 of newly discovered anti-personnel mine contamination was reported in Greater Tripoli and added to the LibMAC database.[107] Of which, DCA discovered 178,506m^2 in 28 CHAs through non-technical surveys,[108] and HALO Trust discovered 132,797m^2 through 12 non-technical survey tasks.[109]

SURVEY IN 2020

No land was released through non-technical survey, technical survey, or clearance in Libya in 2020. The non-technical surveys to map the new contamination in Tripoli were concluded in March 2021 and as at April 2021, preparation for survey and clearance was underway.[110]

In 2020, LibMAC personnel opened 81 tasks, mostly for non-technical survey activities performed by international and national operators in south parts of Tripoli after LNA withdrawal, in Tawargha and in Benghazi. LibMAC also conducted 69 Quality Assurance (QA) and Quality Control (QC) missions. LibMAC personnel were engaged in activities related to an unintended explosion in the former Military Academy in Misrata on 6 May 2020, where they performed survey missions and risk education tasks.[111]

CLEARANCE IN 2020

Three anti-personnel mines were destroyed in EOD spot tasks by DCA in Benghazi in 2020.[112] DCA planned to clear two minefields in its area of operations in 2021.

HALO Trust did not have EOD trained teams in 2020. HALO's rubble removal work in Sirte uncovered items of UXO, which were marked and handed over to DCA's EOD teams for disposal. In Tripoli, HALO reports EOD spot tasks to LibMAC who then assigns it to other EOD accredited organizations. [113] As at May 2021, only DCA and 3F had been accredited to conduct EOD tasks in Tripoli.[114]

In June 2020, it was reported in online media sources that demining experts from the Turkish Armed Forces had started to clear landmines and IEDs planted by Khalifa Haftar's forces in south Tripoli, Tarhouna, and other areas. This was based on information from Libya's Foreign Ministry.[115]

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 internally displaced persons 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.[116] Security conditions continued to pose a challenge to mine action in Libya.

In its statement as an observer to the APMBC 18MSP in November 2020, Libya listed the exceptional circumstances in which it is going through in addition to the lack of human, logistical, and technical capacities as the main challenges hindering Libya's progress in operationalising its mine action programme.[117]

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MOROCCO

MINE ACTION REVIEW

CLEARING THE MINES 2021

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 according to international mine action standards (IMAS) for land release methodology.**
- **Morocco should establish a timeline for completing clearance of all mined areas on territory under its jurisdiction or control.**

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 120,000km^2 of area was contaminated,[2] although the threat is undoubtedly huge. 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 APMBC Article 7 transparency report (covering 2020) 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 latest Article 7 report, 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]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Morocco does not have a national mine action authority or a mine action centre. The RMA carries out demining, which it reports is conducted in collaboration with MINURSO.[9]

In 2020, as in the previous year, the RMA received training from the United States (US) Marines on demining and explosive ordnance disposal (EOD) techniques.[10]

GENDER AND DIVERSITY

Morocco is not believed to have a gender policy in place for its demining operations.

INFORMATION MANAGEMENT AND REPORTING

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 clearance of mines and ERW.[11]

OPERATORS AND OPERATIONAL TOOLS

All mine clearance in Morocco is conducted by the RMA. In 2019, Morocco reported that 13 demining modules and 165 demining detachments were deployed and responded to 54 interventions during the year.[12]

Previously, in 2010, Morocco declared it had employed 10,000 deminers, though only 400 detectors were at their disposal at that time.[13] This raised serious questions both about the procedures being used and the accuracy of clearance figures being reported.

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 2020, Morocco reported "clearance" of a total area of 171km^2 with the destruction of 22 anti-personnel mines, 29 anti-vehicle mines, and 542 items of ERW.[14] This is a significant decrease compared to the 301km^2 that Morocco reported to have cleared the preceding year.[15] Morocco also reported that there were 23 mine-related casualties in 2020, with one person killed and the other 22 injured.[16]

In his October 2020 report to the UN Security Council, the UN Secretary-General reported that, since October 2019, the RMA reported the release of over 253km^2 of land west of the Berm, with the destruction of 796 items, including 37 anti-personnel and anti-vehicle mines.[17] In his October 2019 report, the Secretary-General had reported that, from 1 March to 31 July 2019, the RMA claimed to have cleared more than 98km^2 of land west of the Berm, with the destruction of 441 items, consisting of 415 items of unexploded ordnance, 17 anti-personnel mines, and 9 anti-vehicle mines.[18] No further details were provided.

Morocco has reported that since 1975 and through the end of October 2019, a total of 96,727 mines, of which 49,325 were anti-personnel mines, along with 20,543 items of ERW had been destroyed and a total of almost 5,561km^2 was cleared during demining operations.[19]

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.[20]

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 provided annual voluntary Article 7 reports to the APMBC regularly over the past decade and attends APMBC meetings as an observer. It has not, however, indicated when it might complete mine clearance.

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 26 July 2021, at: https://bit.ly/3eYLd64.

4 Voluntary Article 7 Report (covering 2020), 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 Report (covering 2020), 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, "Humanitarian Mine Action increases demining capacity in Morocco", 2 May 2019, at: http://bit.ly/2LltXKS; and AFRICOM, "U.S. Marines Continue Humanitarian Mine Action Program", 12 March 2020, at: https://bit.ly/2TAzmDF.

11 Voluntary Article 7 Report (covering 2018), Form D.

12 Statement of Morocco, Fourth APMBC Review Conference, Oslo, 27 November 2019.

13 Statement of Morocco, Intersessional Meetings, Geneva, 23 June 2010.

14 Voluntary Article 7 Report (covering 2020), Form D.

15 Voluntary Article 7 Report (covering 2019), Form D.

16 Voluntary Article 7 Report (covering 2020), Form D.

17 "Report of the Secretary-General on the situation concerning Western Sahara", UN doc. S/2020/938, 23 September 2020, para. 42.

18 "Report of the Secretary-General on the situation concerning Western Sahara", UN doc. S/2019/787, 2 October 2019, para. 48.

19 Statement of Morocco, Fourth APMBC Review Conference, Oslo, 27 November 2019.

20 "Morocco to Deploy Highly Qualified Team to Remove Sahara Landmines", *Sahara Question*, 25 March 2016, at: http://bit.ly/2Llu9d4.

MYANMAR

MINE ACTION REVIEW

CLEARING THE MINES 2021

KEY DEVELOPMENTS

However short-lived, there were positive developments in mine action in Myanmar during 2019 and the first quarter of 2020, including preliminary steps by the government towards establishing a national mine action authority (NMAA) and approval of Myanmar's first national mine action standard on the marking of hazardous areas. Since March 2020, all momentum has been lost as the COVID-19 pandemic severely slowed progress and operators complied with national and local restrictions.

In February 2021, the Myanmar military staged a *coup d'état*, and announced a one-year state of emergency. This has further significantly impeded progress in mine action. Civilian landmine casualties have increased by 240% in 2020 compared to the previous year. Although non-governmental organisations (NGOs) are permitted to conduct non-technical survey, they are still not authorised to conduct technical survey, explosive ordnance disposal (EOD), or mine clearance. These activities remain under the sole remit of the Myanmar army (Tatmadaw).

RECOMMENDATIONS FOR ACTION

- **Myanmar should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.**
- **Myanmar 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.**
- **The Myanmar army (Tatmadaw) and armed groups should stop all use of anti-personnel mines.**
- **As an entity to lead effective mine action, an NMAA, once established, needs to be civilian led and democratically controlled.**
- **Despite the political stalemate, donors should continue funding humanitarian mine action in Myanmar. Organisations should prioritise the immediate mitigation of explosive ordnance (EO)-related civilian deaths.**
- **Mine action NGOs and their implementing partners should continue efforts to establish the baseline of anti-personnel mine contamination, mark hazardous areas, and conduct risk education.**
- **Myanmar should accelerate non-technical survey, marking of hazardous areas, and permit accredited operators to conduct clearance and EOD.**
- **Mine action NGOs and their implementing partners should continue to develop and approve National Mine Action Standards (NMAS), particularly for non-technical survey, technical survey, and clearance.**
- **A centralised information management database should be established onto which data collected on mined areas should be entered. The information should be managed in keeping with high standards of data protection and taking into account potential security and safety repercussions amid the delicate political context.**
- **Myanmar should ensure that areas planned for internally displaced people (IDPs) returns are safe or that, at a minimum, mined areas have been clearly delineated, perimeter-marked and fenced, and risk education duly conducted.**

UNDERSTANDING OF AP MINE CONTAMINATION

Myanmar is heavily mine-affected as a result of conflicts between the Myanmar army and numerous non-state armed groups (NSAGs) affiliated with ethnic minorities. Violence in Myanmar started after the country's independence in 1948 and is ongoing, with anti-personnel mines continuing to be laid.[1] The Landmine Monitor has documented the use of anti-personnel mines by the Tatmadaw, and by various NSAGs in Myanmar, every year since the publication of its first annual report in 1999.[2] In 2020–21, both the Myanmar military and many NSAGs continued to lay anti-personnel mines and victim-activated improvised explosive devices (IEDs),[3] and in 2020, Myanmar was the only country where new use of anti-personnel mines by the government forces was confirmed.[4] Mined areas, which are especially in areas close to Myanmar's borders with Bangladesh, China, and Thailand, pose a particular threat in the north and east of the country, and most recently, in the western Rakhine state.

There is no accurate estimate of the extent of mine contamination. The government of Myanmar has said that while it is very difficult to have a complete picture of contamination, data indicate that nine of the fourteen states and regions are contaminated with landmines and explosive remnants of war (ERW).[5] Although landmine casualty data are not systematically collected in Myanmar, media reports in 2020 indicated high numbers of civilian casualties, further attesting to the scale of

contamination.[6] The year 2020 saw an increase of 240% of landmine casualties compared to 2019. Of the recorded incidents between January and October, Rakhine state accounted for approximately 50% of the total number of casualties, while Shan and Kachin represented, respectively, 26% and 10% of the total.[7]

The Independent International Fact-Finding Mission on Myanmar, established by the United Nations 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 continue to lay landmines and use IEDs.[8]

In September 2018, the Fact-Finding Mission had reported that mines had been laid by the Tatmadaw soldiers along the border with Bangladesh in the lead-up to and following operations targeting fleeing Rohingya civilians and seeking to prevent those who had already left from returning. In April 2017, it was reported that the Myanmar and Bangladesh governments had agreed to remove mines and IEDs from the border area. By August of that year, however, the Tatmadaw was laying mines along the border, not removing them, and in September, Bangladesh formally complained to Myanmar about the latter's emplacement of mines.[9]

New emplacement of mines has continued despite the signing of the Nationwide Ceasefire Agreement in October 2015 between the Government of Myanmar and eight ethnic armed groups (with a further two signing the agreement in 2018). This Agreement had committed all signatories to end the use of landmines and to cooperate on mine-clearance operations.[10]

In the absence of a national contamination baseline, non-technical survey conducted by international NGOs and their partner organisations in recent years is starting to provide a better idea of the extent of anti-personnel mine contamination in areas in which they operate. The HALO Trust conducted a non-technical survey in the first quarter of 2020 in Kayin and northern Shan states (in the west and south-west). The survey recorded 0.43km^2 of anti-personnel mine contamination across five confirmed hazardous areas (CHAs) and four suspected hazardous areas (SHAs).[11]

Mines Advisory Group (MAG) conducted four non-technical surveys in Kayah and Tanintharyi states, identifying four SHAs covering a total of 9,321m^2.[12] In 2019, MAG conducted baseline and remote baseline survey in Kachin state, targeting 59 villages identified for IDP return or resettlement. The resultant report, published in 2020, revealed that 90% of the villages surveyed had declared evidence of landmines or unexploded ordnance (UXO), with 70% of the villages reporting direct evidence of contamination. The report highlights the need for the Myanmar government to make humanitarian mine action a prerequisite for any IDP return.[13]

Anti-personnel mines laid by the Tatmadaw are mostly produced in State-owned factories.[14] Ethnic armed groups acknowledge use of anti-personnel mines of an improvised nature as well as of a number of anti-vehicle mines, but unconfirmed reports in 2018 suggested groups in the north have also obtained Chinese Type 72 anti-vehicle mines.[15]

In a statement delivered at the Fourth Review Conference of the APMBC in Oslo in November 2019, the Government of Myanmar said that it would "continue to promote the full stop in the use of anti-personnel mines by all parties to the conflict" and stated that it was "working hard to strengthen the knowledge of and the respect towards international humanitarian law among all parties to the conflict."[16]

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The government 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.[17]

In 2019 and early 2020, Myanmar was making welcome progress towards establishing an NMAA, which is needed to strengthen its humanitarian mine action programme. The government told the Fourth 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."[18]

An initial workshop on how Myanmar can establish an NMAA to lead and manage a humanitarian mine action programme was hosted by Myanmar in Nay Pyi Taw in October 2019, attended by the Tatmadaw, humanitarian mine action 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.[19] Discussions focused on which ministries would form part of a future NMAA and the mechanisms for establishing the Authority. The Attorney General's Office reportedly advised that the establishment of an NMAA, including its mandate, terms of reference, and budget would need to follow the national legal process, which could take time, especially in the absence of sufficient political will and pressure to fast-track the process.[20] On 3 January 2020, an interministerial meeting took place, attended by 14 different ministries including the Ministry of Defence, during which agreement was reached in principle to establish an NMAA and for a governmental task force/working committee to be created to begin the process.[21]

A second international workshop in January 2020 discussed how Myanmar can establish an NMAA in Myanmar. It was attended by the GICHD and the Norwegian Presidency to the APMBC, but NGO clearance operators were not invited.[22]

Following the two workshops, the government created a task force to work towards the establishment of the NMAA.[23] However, momentum in 2020 was lost with the onset of the COVID-19 pandemic and the resulting shift in government priorities.[24] The governmental elections in November 2020 further reduced interest in humanitarian mine action. The government had established a new Department of Rehabilitation (DoR) in 2018, which gradually took over the

responsibility to oversee mine action operators and their activities. The DoR, although cooperative and engaged, falls short of addressing mine action challenges at a country level,[25] a capacity needed to tackle national-level issues such as creating an NMAA and mine action legislation.

In November 2020, the Director General of the DoR announced during a mine risk working group (MRWG) meeting that the DoR had finalised the vision and terms-of-reference of the working committee that is to be set up prior to the establishment of an NMAA and submitted it to the President office for consideration. As a focal line ministry of implementing the "National Strategy on Resettlement of IDP Return and Closure of IDP Camps", the DoR is said to be committed to acquiring approvals so that humanitarian demining can begin. Nevertheless, as at April 2021, this had yet to be translated into concrete progress.[26]

In a statement delivered at the Eighteenth Meeting of States Parties to the APMBC, held virtually in November 2020, Myanmar said: "Myanmar has formed the Mine Action Working Group on 22 May 2020 in order to craft the National Mine Action Strategy. It is indeed the first step towards formulating a National Strategy and Plan of Action for mine clearance".[27]

The need to accelerate the establishment of an NMAA is all the more pressing in light of the government's plan to close IDP camps. At the end of 2020, an estimated 370,000 people were internally displaced within Myanmar, and by June 2021, the number had increased by a further 200,000 due to renewed clashes between the Myanmar army and NSAGs in Chin, Kayah, and Kayin states following the coup.[28] Myanmar government launched the "National Strategy on Resettlement of IDPs and Closure of IDP Camps" in November 2019.[29] The plan identifies the need for landmine clearance to enable IDPs to return to their villages of origin, but does not provide any further details of how and when such clearance will take place.

At the Fourth APMBC Review Conference in November 2019, Myanmar acknowledged that mine action "is a precondition for safe return and resettlement of IDPs, and sustainable and durable solutions" and 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".[30] Several senior government officials have similarly expressed support for the need for mine clearance and other mine action activities in areas identified for IDP returns.[31] However, displaced communities remain afraid of returning to their villages due to the presence of landmines within and around their villages.[32] Moreover, the instability since the coup has created an environment that is not conducive to the establishment of the necessary mine action structures or to the conduct of humanitarian demining.

International NGO operators are advocating for camp closures to be conducted in a safe, voluntary, and dignified manner, and for mine action to form an essential part of the planning and activity implementation process of IDP returns. In particular, non-technical survey and hazard marking conducted to international standards are urgently needed in potential resettlement areas, to define and demarcate hazardous areas and to verify safe areas. This is a pre-requisite before IDPs can be allowed to return to areas that may contain mines.[33]

Many parts of Myanmar are still in the throes of armed conflict and part of the timeline for the return of IDPs depends on progress in the peace process with ethnic armed groups.[34] Since the coup, however, fighting with NSAGs has escalated on multiple fronts.[35] According to a briefing by the Office of the United Nations High Commissioner for Refugees (UNHCR) in March 2020, in western Myanmar the return of IDPs is "hindered by ongoing fighting" and "newly laid anti-personnel mines and improvised explosive devices pose additional risks."[36] Kachin is a priority state in the IDP camp closure strategy, but the KIA has not yet signed the ceasefire agreement with the government. However, in negotiation with the government, a mandate has been given to Kachin church leaders to act on behalf of NSAGs with regard to IDP resettlement.[37]

Discussions continued in early 2020 between humanitarian operators and the national authorities regarding possible survey and clearance in relation to the IDP camp closure strategy,[38] but had been suspended as at March 2020, due to the impact of the COVID-19 pandemic.[39] Some mine clearance is said to have been undertaken by the military as part of an initiative to facilitate the return of IDPs, but there are serious doubts as to the standard of this clearance.[40] Similarly, the Independent International Fact Finding Mission expressed concerns "about reports that some demining operations conducted by the Tatmadaw may have failed to meet relevant quality standards and did not include agricultural land surrounding residential areas."[41] The Tatmadaw has historically seen mine clearance as solely its own task.

The Ministry of Social Welfare, Relief and Resettlement (MSWRR) and the United Nations Children's Fund (UNICEF) co-chair the MRWG which was set up in 2012 and comprises 10 ministries, 41 international and national organisations, and 5 state-level coordination agencies (in Kachin, Kayah, Kayin, Shan states, and, since early 2020, Rakhine state).[42] Since March 2020, the MWRG continued to convene virtually at state levels.[43] At national level, virtual MRWG meetings were only held in the third and fourth quarters of 2020.[44]

In Kachin and Shan states, a notable discussion point of the MRWG was around the need for survey and clearance as part of the camp closure, return, and resettlement process.[45] The MRWG has also successfully advocated for a government decision to allow the import of detectors in 2020.[46] The MRWG was said to have active participation from state and union level government representatives, and mine action NGOs.[47] Along with UNICEF, Humanity and Inclusion (HI) co-chairs the Victim Assistance Technical Group (VATG), a subgroup of the MRWG.[48]

There is also an informal Non-Technical Survey Working Group (NTSWG), which was an ad-hoc group established in late 2018 as an offshoot of the MSWG. The working group was initially held in Yangon and comprised only humanitarian actors, but was subsequently moved to Nay Pyi Taw and expanded to include the Department of Rehabilitation, the Tatmadaw, and additional mine action organisations.[49] In 2020, the group comprised five members: Danish Refugee Council (DRC), HALO Trust, HI, MAG, and NPA.[50] The NTSWG continued to convene regularly 2020,[51] and in early 2020, mine action NGOs and their partners were able to successfully advocate for permission to mark and fencing of hazardous areas, and jointly review and approve the national standards on marking.[52] In 2020, the group established a coordination mechanism of non-technical survey activities and harmonised non-technical survey forms and data

collection tools. As at April 2021, the NTSWG had elaborated national non-technical survey standards but had yet to approve them. Technical survey standards were also being developed.[53]

Myanmar was also working closely with the ASEAN and the ARMAC, enhancing technical cooperation in mine action in 2019.[54] In 2020, DanChurchAid (DCA) provided training on explosive ordnance risk education (EORE) to partner NGO and local community-based organisations (CSOs) staff in northern Shan and Kayin states. DCA reported that the COVID-19 pandemic has had a negative impact on maintaining the close cooperation with the national authorities to some extent, as face-to-face meetings or trainings were no longer possible.[55]

The DRC's Humanitarian Disarmament and Peacebuilding Sector, formally known as Danish Demining Group (DDG), helped to develop the capacity of both the national and the regional authorities in 2020 by conducting humanitarian mine action sensitisation workshops and training of trainer (ToT) of EORE to the DoR, Department of Social Welfare, and Department of Disaster Management.[56]

MAG reported positive developments in trust building with the national authorities in 2020. The DoR had agreed to advance the development of an NMAA and welcomed MAG's support on the development of national standards, establishment of a national database, and planning of a regional conference with ASEAN delegates (which was later cancelled following the 2021 coup). MAG believes that it would have been able to conduct technical surveys and possibly clearance had it not been for the effects of the coup.[57]

NPA, along with the GICHD, assisted a delegation from Myanmar during the attendance of the National Directors Meetings (NDM) in Geneva in February 2020.[58] NPA paid and facilitated the attendance of Myanmar representatives, and helped to set up bilateral talks during the conference.[59]

GENDER AND DIVERSITY

DCA has a gender and diversity policy and implementation plan. In 2020, 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.[60]

DRC reported having 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, 58% of DRC's managerial/supervisory positions were held by women.[61]

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, including women and children, during non-technical survey and community liaison, and its survey and community liaison teams are gender-balanced as far as possible. HALO disaggregates relevant mine action data by gender and age.[62] There is equal access to employment for qualified women and men in HALO survey and community liaison teams in Myanmar. Of HALO Trust's 26 operational staff in Myanmar, 10 are women; and of the 16 managerial/supervisory roles, 5 are women. Until September 2020, HALO worked with two civil society partners in north Shan and Kachin states, which increased its outreach to both ethnic Shan and Kachin communities.[63]

MAG has a gender and diversity policy and its implementation plan in Myanmar is focused on gender-balanced community liaison teams, equal participation by women in all MAG activities, and gender- and age-disaggregated data.[64] A total of 43% of personnel in MAG's Community Liaison Field Teams are female (50% of community liaison officers; 67% of community liaison team leaders; and 25% of community liaison supervisors); among senior and mid management staff 11% are women, as are 44% of total staff.[65] Women are always consulted during baseline survey (BLS) and non-technical survey by MAG, 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.[66] All MAG's community liaison teams are gender balanced and consist of one male and one female community liaison officer.[67]

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 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.[68] There is equal access to employment for qualified women and men in NPA survey teams in Myanmar, with women making up 50% of the NPA and partner organisation survey staff, and 20% of leadership roles.[69]

INFORMATION MANAGEMENT AND REPORTING

As at May 2021, there was no centralised mine action information management database in Myanmar.[70] This is so even though data collection and information management was one of the six main priorities of the 2018–19 MRWG strategic work plan.[71] It was hoped that a national database would be set up once an NMAA is established.[72] Issues of conflict sensitivity, however, pose potential challenges for such a database, which would require input from the joint parties to the ceasefire.

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.[73]

DRC uses the Fulcrum information management system.[74] HALO Trust's information management system is also Fulcrum, with data recorded in Microsoft Access.[75] MAG is using Survey123 for data collection and ArcMAP for mapping and GPS services, both provided by ArcGIS. In 2020, MAG upgraded its information management systems by switching to MAG's new global IM system which is on the ESRI platform and is called Operations Management Information Systems (OMIS).[76]

NPA Myanmar and its partner organisations also use Survey123 in the collection of non-technical survey information and all survey data is 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.[77]

PLANNING AND TASKING

Currently there is no national mine action legislation in Myanmar, but prior to the February 2021 coup the government reported plans to elaborate and adopt the required national legislation to establish an NMAA, "as soon as feasible".[78] No progress has been registered since the coup.

DCA's partner organisations, which primarily work in conflict-affected areas, prioritise their tasks in conjunction with local authorities, often those of NSAGs, based on feedback from communities.[79]

In 2019, HALO Trust followed a systematic work plan for its non-technical survey, while also prioritising credible reports received of local contamination.[80] During 2020, due to COVID-19 pandemic, access to communities has become more challenging and HALO has taken a more pragmatic and consultative approach.[81]

The first stage of MAG's task prioritisation is based on desk research using the "Village Situation Analysis" tool, through which data is gathered on all villages within MAG's operational areas, including information on conflict, accidents, victims, and access. This information is used alongside MAG's operational database to target activities.[82]

MAG conducts two types of survey in Myanmar: the BLS and non-technical survey. The BLS is a basic preliminary assessment that offers a rapid snapshot of contamination in a particular area, based on focus group discussions and data from community members. On completion of a local BLS, villages are assigned one of three colour categories: red, which represents a high confidence of contamination (direct evidence of contamination is reported); amber, which represents low confidence of contamination (indirect evidence of contamination is reported); and grey, which indicates there was no evidence of contamination at the time of the survey. This categorisation forms the basis for MAG's prioritisation of non-technical survey.[83]

In 2019, MAG also undertook "remote BLS" within the IDP camps and villages with a large proportion of displaced people, in the states of Kachin and northern Shan.[84] In 2020, MAG developed and piloted over-the-phone BLS in Kayin and Chin states. This allows community liaison staff to quickly scan a village tract and identify which villages might need in-person EORE and BLS when evidence of contamination is shared during the phone interviews. MAG reports this methodology has proven effective, low-cost, and allowed rapid survey of a large area. This is particularly important in Myanmar where a desk assessment is challenging considering the lack of accessible military records and accident data.

Similar to regular BLS, the village leader gathered a group of key informants for each over-the-phone BLS session. Information gathered during the interviews help guide the prioritisation of villages for follow-on activities, emergency EORE, and remote EORE when on site access is restricted. Considering the increase in fighting in MAG's operational areas in 2021, MAG and its partners plan to use this tool to gather information rapidly about areas where fighting or aerial strikes have occurred to capture EO contamination and identify communities in need of emergency EORE.[85]

MAG's non-technical survey is a more detailed survey that more accurately identifies the location of SHAs and CHAs, enabling MAG to create polygons, identify EOD spot tasks, and generate hazardous area reports which can be shared with local communities and key stakeholders. Non-technical survey is prioritised in villages categorised as red through the BLS, followed by those classed as amber.[86]

NPA prioritises areas for survey using joint input from local stakeholders and communities along with NPA's local partner organisations. Non-technical survey teams conduct both risk education and village baseline assessments involving members of the communities. Risk education sessions are interactive and facilitate a two-way conversation between local communities and NPA/partner team members. Based on community responses, a conflict, accident, and contamination overview of the village is determined through community mapping, following which CHAs and SHAs are created.[87]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Historically, Myanmar has not had national standards and therefore operators have followed the International Mine Action Standards (IMAS) and their own SOPs. However, progress was made with Myanmar's first national standard on marking, which was approved by the government in January 2020. A standard for non-technical survey was being elaborated by the NTSWG in 2020, led by the Mine Action Advisor from the New Zealand Embassy,[88] but as April 2021, these standards had yet to be approved by the group. The NTSWG was also in the process of developing national standards for technical surveys as of writing.[89]

In 2018, operators successfully advocated for the Government of Myanmar to include physical marking (with warning signs) and fencing of SHAs and CHAs as part of the non-technical survey process. The central government approved marking of polygons, though local authorities were also involved in the approval process.[90] 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.[91]

The HALO Trust reported that permission had been granted for marking of hazardous areas by authorities in both north Shan and Kayin states, provided that the village chief agrees. In the first quarter of 2020, HALO marked seven CHAs, one in northern Shan and six in Kayin states, with warning signs in the local languages.[92] MAG received permission from the government to conduct fencing/marking operations in early 2020 and has recruited technical field staff to support the activity. MAG, however, 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.[93] In Mon state, NPA's non-technical surveys did not confirm any hazardous areas, therefore, no marking was conducted by NPA in 2020.[94]

As at April 2021, progress had yet to be made in elaboration of national standards for clearance activities and none of the humanitarian mine action organisations was yet permitted to conduct technical survey or clearance in Myanmar.[95]

OPERATORS AND OPERATIONAL TOOLS

Six international demining organisations (DCA, DRC, The HALO Trust, HI, MAG, and NPA) have offices in Yangon and some provincial locations. None of the humanitarian demining organisations in Myanmar is yet permitted to conduct clearance, EOD, or technical survey; as at May 2021, they were only permitted to conduct non-technical survey, risk education, and community liaison.

Tatmadaw engineers have reportedly conducted some military mine clearance but operations are neither systematic nor have they been formally recorded, and there is concern regarding quality and standard to which clearance is conducted.[96]

DCA's mine action work in Myanmar is exclusively done through local partner organisations. In 2020, DCA had around 15 formal partners and supported a number of small CSOs in 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. In 2020, none of DCA's partners conducted any survey activities and DCA could not deploy its technical advisor to support trainings to its partners. 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 and the COVID-19-related travel restrictions.[97]

DRC has not been granted permission to carry out technical survey or clearance activities since it conducted non-technical surveys in Kayah state in 2019. As a result, DRC has closed its programme in Kayah state and has instead prioritised non-technical survey activities in Kachin and Shan states. DRC's plans to commence non-technical survey in the said states did not materialise due to the COVID-19 movement restrictions and were postponed to 2021. DRC's community liaison and mapping activities continued throughout 2020 as part of its EORE activities in partnership with CSOs. In Rakhine state, DRC rolled out EORE activities in 2020 and provided a TOT to CSO staff. DRC's community liaison and non-technical survey staff were decreased in 2020 due to the closure of its programme in Kayah state. The capacity in Kachin and Shan states remained unchanged while it saw in increase in Rakhine with the rolling out of EORE activities.[98]

HALO conducted non-technical survey in north Shan and Kayin states in the first quarter of 2020, but suspended all mine action activities in March 2020 due to the COVID-19 pandemic. In April 2020, HALO reduced the number of teams from seven to five due to a decrease in funding, and in August 2020, on the back of the delivery of COVID-19 hygiene materials, started delivering modified EORE sessions to smaller household groups. HALO's teams are all dual-skilled for non-technical survey and EORE, but the COVID-19 movement restrictions have only enabled the latter since March 2020. As at April 2021, HALO was in the process of establishing a footprint in Kachin state to assist with the safe return of IDPs once the security and political situations allow.[99]

In 2020, MAG's non-technical survey and community liaison capacity consisted of nine teams with a total of 18 staff. This is a decrease from the 12 teams of 26 staff in 2019 as MAG delayed recruitments due to the impact of COVID-19 on operations. MAG worked with six implementing partners in 2020 in Chin Kachin, Kayah, northern Shan, and Tanintharyi states, delivering EORE, BLS, and non-technical surveys. MAG does not expect major changes to its capacity in 2021.[100]

The COVID-19 pandemic has had a severe impact on MAG and its partners' ability to operate throughout 2020. Mine action activities were suspended from March 2020 to August 2020, and as MAG was preparing to redeploy, a second wave of COVID-19 spread in October 2020. NSAGs and

local communities also employed their own measures to control the spread of the virus, which together with official restrictions, have created multi-layered challenges to the operations. Movements between townships and communities were tightly controlled, and domestic flights suspended for the majority of the year. International flights have been suspended since March 2020 and remain suspended at the time of writing. Visas have been assessed on a case-by-case basis, making it difficult for international staff to get permission to enter the country.[101]

In 2020, NPA was focusing on three areas of work: national ownership and capacity development, non-technical survey and risk education with civil society partners, and emergency response by local and national partners.[102] In 2020, NPA conducted non-technical survey with two local civil society partners in six villages in Mon state (in the south-east), during which NPA provided training and technical support to the partner organisations and experienced NPA team leaders accompanied partner teams during non-technical survey operations. [103] NPA's number of staff remained unchanged in 2020, albeit consolidated in four non-technical survey teams who also conduct EORE and conflict preparedness and protection (CPP). The COVID-19 pandemic has affected NPA's operations by limiting access to villages and communities in all of NPA areas of operation. It also restricted travels to and from Myanmar, as well as access to visa, domestic movement of staff, and the ability to meet with key stakeholders. Consequently, unlike in the previous year, no mined areas were newly identified by NPA in 2020.[104]

LAND RELEASE

As in previous year, no land release took place in 2020 in Myanmar as humanitarian mine action operators are not permitted to conduct clearance or technical survey by either the government or ethnic minority authorities. Since 2018, operators have been authorised to conduct non-technical survey to identify mined areas, in addition to conducting risk education and community liaison activities which they were already undertaking. NGO operators are not permitted to conduct EOD of any explosive ordnance discovered during survey operations.

SURVEY IN 2020

HALO Trust conducted non-technical survey in 2020 in northern Shan and Kayin state. The survey recorded 0.43km^2 of anti-personnel mine contamination across five CHAs and four SHAs.[105]

Table 1: Anti-personnel mined area by state identified by HALO Trust (at end of 2020)[106]

State	CHAs	Area (m^2)	SHAs	Area (m^2)	Total SHAs/CHAs	Total area (m^2)
Shan	5	419,009	0	0	5	419,009
Kayin	0	0	4	6,068	4	6,068
Totals	**5**	**419,009**	**4**	**6,068**	**9**	**425,077**

The mined area identified in 2020 is a third of what was identified in 2019 by HALO, which totalled 1.28km^2.

MAG conducted four non-technical surveys in Kayah and Tanintharyi states. The survey identified four SHA's totalling 9,321m^2. This is a sharp decrease from the 42 hazardous areas that MAG identified in the previous year. The decrease is caused by the strict COVID-19 measures that severely reduced field deployment.[107]

Table 2: Anti-personnel mined area by state identified by MAG (at end of 2020)[108]

State	SHAs	Area (m^2)
Kayah	1	209
Tanintharyi	3	9,112
Totals	**4**	**9,321**

CLEARANCE IN 2020

No clearance of anti-personnel mines or other ordnance by international NGOs was permitted by the authorities in 2020 as in previous years.[109] The results of ad hoc clearance by the Myanmar army have not been publicly reported.

PROGRESS TOWARDS COMPLETION

The positive progress in anti-personnel mine survey in Myanmar in 2018 and 2019, which was hoped to lead to clearance, has come to a standstill since March 2020 due to the impact of COVID-19 pandemic and is likely to be reversed after the military coup in February 2021.

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. [110]

DRC reported that it was no longer able to provide online EORE due to internet blackouts. Its field deployments have been largely limited due to safety concerns and the ongoing fighting in Kachin state. In Rakhine state, however, travel between the field sites was still possible as Rakhine remained relatively isolated from the insecurity affecting the rest of the country.[111]

The HALO Trust suspended team deployments in February 2021, but resumed operations again in March with four teams, two in each of Shan and Kayin states. HALO continues to review the local security and COVID-19 situation on daily basis, adjust or postpone its deployments accordingly.[112]

MAG, together with the majority of its partners, halted activities since February 2021. The coup has rendered field communication difficult, negatively impacted staff safety as well as MAG's relations with local and national authorities.

MAG has engaged with the State Administrative Council (SAC) appointed authorities only on a strictly essential basis. MAG is working on adapting activities to the new context and getting back operational, and is currently conducting a field assessment whose findings will be used to ensure operations respond to the needs of communities.[113]

NPA has also put all its operations on hold since March 2021, though as at May 2021, discussions over a potential restart were ongoing.[114]

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2 The Landmine and Cluster Munition Monitor, Myanmar Burma Mine Ban Policy, Last updated 12 November 2019, at: https://bit.ly/2Trv0mN.

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24 Email from Hilde Jørgensen, NPA, 27 May 2021.

25 Email from Liam Harvey, Programme Manager, DRC, 21 April 2021.

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NORTH KOREA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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.**

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 1,000km^2 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]

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 emplaced mines on 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] No other land release is known to have occurred.

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".[4] Diplomacy intended to improve relations between North and South 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.[5] US army engineers trained South Korean army engineers who in turn provided the training to the Korean People's Army.[6]

LAND RELEASE

No clearance or land release is known to have occurred in 2020.

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.[7] Officials said North Korea had notified the government it had cleared 636 mines while South Korea found none.[8] 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.[9] North Korean forces also reportedly cleared a 1.3km-long mine belt in the Arrowhead Hill region.[10] Reviving tensions between North Korea and the United States in 2019 have held back further progress in demining.

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PAKISTAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

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.**

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).

In 2019, Pakistan reiterated past statements that, "Pakistan 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 Balochistan 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 2018–20, mine casualties were from mines of an improvised nature laid by NSAGs, from 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]

LAND RELEASE

There are no reports of formal survey or clearance of mined area in 2020 as in previous years 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 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, 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, 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]

1 Recent Landmine Use by India and Pakistan, Human Rights Watch Backgrounder, May 2002, p. 4, at: http:/bit.ly/3srXtQz.

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 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/3gltcjV.

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/2ZDeOJQ; "Balochistan: One Pakistani solider killed in landmine blast another wounded", *Balochwarna*, 6 April 2020, at: http://bit.ly/3gltcjV.

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 Effected 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.

13 Statement of Pakistan, 17th Meeting of State Parties to the APMBC, 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.

RUSSIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

RECOMMENDATIONS FOR ACTION

- **Russia should 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.**

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 14km^2 of land and posed a major obstacle to development.[2] In contrast, Chechen officials and human rights organisations have previously estimated that 245km^2 of land was mined, including 165km^2 of farmland and 73km^2 of woodland.[3]

In January 2017, a commander in the Russian Armed Forces reportedly told press agency Interfax that more than 100km^2 of land remained to be cleared in Chechnya, and a further 20km^2 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. Between 2012 and 2020, units of the Southern Military District have since surveyed and cleared more than 200km^2 of agricultural and forest land in Chechnya and Ingushetia, destroying over 37,000 explosives, including landmines. Most of the explosive devices destroyed resulted from the two Chechen wars.[6]

As at 2011, according to the United Nations Children's Fund (UNICEF), 3,132 civilians, including 772 children, had been killed (731) or wounded (2,401) by mines and ERW in Chechnya since 1994. Data collection, which was conducted by a local non-governmental organisation (NGO) partner Voice of the Mountains, was suspended in January 2011, due to lack of funding.[7]

ALLEGED USE OF MINES IN CRIMEA IN 2014

Reports of minefields emplaced to demarcate border areas after Russia's annexation of the Crimea, appear to have concerned either "phoney minefields" or areas containing trip-flares. Trip-flares are not covered by the APMBC.[8]

On 8 March 2014, the Israeli newspaper *Harts* reported that "Russian combat engineers were seen placing mines in the land bridge connecting the [Crimean] peninsula to the mainland in order to foil any Ukrainian attempt to retake Crimea."[9] The photographer Evgeny Feldman of the Russian publication *Novaya Gazeta* photographed an apparent minefield laid near a road leading into Crimea and close to the villages of Chongar and Nikolaevka, in Kherson province of Ukraine. The photographs show a line of mounds of earth in a field and "Danger Mines" warning signs.[10] Other photographs, shared with Human Rights Watch by a photo-journalist, showed an area near Chongar marked with "Danger Mines" signs and evidence of stake-mounted, tripwire-initiated flares in the ground, also known as "signal mines".[11]

Members of the local population informed Ukrainian partners of the International Campaign to Ban Landmines (ICBL) that Russian Special Forces operating in Kherson province had laid mines, but it was not possible to confirm the reports, including whether any mines laid were anti-personnel or anti-vehicle.[12] On 7 March 2014, Ukrainian media reported that the Russian military had laid mines around the main gas line into Crimea, but this allegation has not been independently verified.[13]

At a meeting of the Convention on Certain Conventional Weapons (CCW) in April 2014, Ukraine alleged Russian use of TM-62 anti-vehicle mines and unidentified anti-personnel mines in Kherson province just north of Crimea.[14] At the same CCW meeting, Russia denied using anti-personnel mines, asserting "the Self Defence forces of Crimea, before the referendum, placed the minefields with relevant markings, around Chongar". Russia said, "they placed only signal mines and put proper signage around the fields".[15]

PROGRAMME MANAGEMENT

There is no formal civilian mine action programme in Russia and no national mine action authority. Mine clearance is carried out by 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).[16]

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.[17]

EMERCOM reports that it clears about 40,000 items of ERW from the Second World War annually on Russian Federation territory, the bulk of the ERW found are aerial bombs, artillery shells, grenades, and mines.[18]

In 2020, Russia reported that 1,989 military personnel, 57 survey personnel, 522 machine operators, and 42 engineers were involved in clearance operations in the Russian Federation.[19]

LAND RELEASE

Russia reported clearing 261km^2 of mined area on Russian Federation territory in 2020, with 105,678 items of unexploded ordnance (UXO) found and destroyed.[20] The main tasks of Russia's engineering troops in 2020 included clearance in Chechnya and Ingushetia.[21]

As at October 2020, EMERCOM reported clearing 1.47km^2 of land, destroying 33,000 items of UXO in the process. The clearance was conducted in Tver, Leningrad, Kaliningrad, and New Moscow districts, as well as in Crimea in an historic site of the Kerh fortress. The clearance included underwater clearance in the Baltic and Black seas. The destroyed devices are a legacy of the Second World War.[22]

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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, at: www.kavkaz-uzel.ru; "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.

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5 Ibid.

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7 Email from Eliza Murtazaeva, Project Officer, Child Protection, UNICEF Vladikavkaz, 2 May 2011.

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10 "Between Crimea and Ukraine there are already minefields, armoured vehicles and army camps", *Novaya Gazeta*, 8 March 2014, at: http://bit.ly/2H9CehE.

11 Landmine Monitor, Mine Ban Policy Ukraine; and "email from George Henton to HRW", 10 March 2014.

12 ICBL, "Reports of Russian landmine use in Crimea requires immediate response", Geneva, 10 March 2014, at: http://bit.ly/2OXjAzL.

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14 Presentation by Dr Kateryna Bila, Ukrainian Ministry of Foreign Affairs, "Implementation of the Protocol II by Ukraine", CCW Amended Protocol II Meeting of Experts, Geneva, 1 April 2014.

15 Statement of Russia, CCW Amended Protocol II Meeting of Experts, Geneva, 1 April 2014.

16 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.

17 CCW Protocol V Article 10 Report, Form B, 31 March 2015; and meeting with Andrey Grebenshchikov, First Secretary, Department for Nonproliferation and Arms Control, Russian Ministry of Foreign Affairs, in Geneva, 9 April 2015.

18 "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.

19 CCW Protocol II Article 13 Report (covering 2020), Form B.

20 Ibid.

21 CCW Protocol V Article 10 Report (covering 2020), Form F.

22 "Pyrotechnicians of the EMERCOM of Russia found and destroyed over 33 thousand explosive objects in 2020", EMERCOM media news, 19 October 2020, at: https://bit.ly/3xs7y2T.

SOUTH KOREA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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.**

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 128km^2 (see Table 1), 8% more than the area of contamination identified by the National Defence Committee in a 2020 report.[1]

Table 1: Confirmed hazardous areas (CHAs) in South Korea (at October 2020)[2]

		Controlled Protection Zones			
	Total	DMZ	CCZ	Restricted Protection Zones	Rear area
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 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 km^2. CCZ contamination includes 257 defined mined areas and 176 undocumented sites covering a total of 114.79km^2.[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. Funding to support the programme appears to have become available only in the last year. 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]

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.[13]

LAND RELEASE

South Korea reported the clearance of 158 mines 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.[14]

The Army said in February 2021 that it planned to conduct mine clearance in 42 areas covering 630,000m^2 by November 2021. The areas targeted for clearance included 36 rear air-defence sites south of the CCZ.[15]

1 Yoo Hyun-min, "828,000 landmines buried nationwide…59,000 even south of the Civilian Control Line", *Yonhap News Agency*, 9 October 2020.

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.

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13 Choi Han-young, "The first military to meet international standards and train mine removal experts", *Kookbang*, 5 February 2021.

14 Jung Bitna, "Unearthed 143 remains of this year's Arrowhead Bill", *Yonhap News Agency*, 19 November 2020.

15 Maeng Soo-yeol, "Civil control line, public works, rear air defense camp mine removal operation", *Kookbang*, 1 April 2021.

SYRIA

MINE ACTION REVIEW

CLEARING THE MINES 2021

KEY DEVELOPMENTS

Mine action in Syria remains fragmented due to the ongoing instability, the multitude of armed actors, and continuing shifts in control over territory. The United Nations Mine Action Services (UNMAS) has taken on a de facto role as a coordinator of mine action for the whole of 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).

RECOMMENDATIONS FOR ACTION

- **Syria should 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.**
- **Parties to the Syrian conflict should cease all use of anti-personnel mines, including those of an improvised nature.**
- **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 strategy.**
- **Syria should expedite registration and access for international demining organisations to facilitate a credible humanitarian demining programme.**
- **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.**
- **Survey and clearance data from all mine action operators in Syria should be recorded and safeguarded in a digital format and in accordance with the IMAS.**

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 Turkey and Lebanon in 2012 and Turkish authorities claimed five years ago 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]

From mid-2019 through October 2020, 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 had yet unconfirmed allegations of new anti-personnel mine use by the Non-State Armed Groups (NSAGs).[2] In September 2019, the Central Division, a faction of a Turkish-backed coalition named "the Syrian National Army", committed to adhere to a total ban on the use of anti-personnel mines by signing the Geneva Call Deed of Commitment.[3]

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 (EO) contamination was left in areas liberated from Islamic State and its affiliated groups that controlled large swaths of north-east Syria until their defeat in 2018–19.

In Manbij, close to the Turkish border, heavy casualties from mines, including those of an improvised nature, occurred after Kurdish forces pushed out Islamic State in mid-August 2016.[4] Islamic State forces heavily mined the approaches to Manbij and around the Tishreen dam to the east of it, using young boys disguised as shepherds to lay the mines, the United Nations (UN) Commission of Inquiry monitoring the conflict in Syria reported in March 2017.[5] 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 Barghuz (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.

This contamination has taken a heavy toll on returning civilians: Médecins sans Frontières (MSF) reported that the number of victims of mines and other explosive devices it treated in north-east Syria doubled between November 2017 and March 2018. Half of them were children. Its patients reported discovering mines and booby-traps on roads, beside fields, on rooftops, and under staircases, as well as rigged devices placed in common household items from refrigerators and air conditioners to televisions and cooking pots.[6] 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.[7] 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.[8]

The UN estimated in 2020 that EO contamination was affecting one third of populated communities, with areas that experienced intense hostilities, including Aleppo, Daraa, Deir Ezzor, Idlib, Raqqa, and Rural Damascus, being particularly affected. In the same year, the UN recorded an average of 76 explosions per day, equating to an explosion every 20 minutes.[9] The Syria Humanitarian Needs Overview (HNO) report by the UN Office for Humanitarian Affairs (OCHA) highlighted an alarming rise in the use of improvised explosive devices (IEDs), especially those which are vehicle-borne and victim-activated, with 194 attacks verified in 2020. Almost two-thirds of these attacks took place in areas under the control of Turkish-affiliated armed groups in the north-west of Syria.[10]

The HALO Trust conducted an EO community contamination impact assessment in north-west Syria (Aleppo and Idlib governorates) between 2018 and 2020. The assessment confirmed EO contamination in over 400 communities (41% of those assessed),[11] with 73% of affected communities reporting agricultural land was blocked, and 48% impeded from accessing housing.[12] 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).[13] 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 deploying non-technical survey.[14]

The Syria Civil Defence (SCD), better known as "the White Helmets", surveyed 97 communities in north-west Syria during 2020, of which 71 (73%) were identified as contaminated by some form of explosive ordnance.[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 presence of anti-personnel mines, 46% of cluster munition remnants (CMR), and 25% of IEDs.[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 55.82km^2 of mined area across a total of 806 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 May 2021, MAG had released 81% of the area, leaving 10.63km^2 requiring further survey and clearance (see Table 1).[17]

Working from the Syrian capital, Damascus, UNMAS started an EO assessment in Rural Damascus (South) in August 2020.[18] 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. As at May 2021, a little over 7km^2 of SHA had been surveyed, of which over 4.9km^2 (approximately 70%) was confirmed as hazardous. More than 750 items of EO were located and marked.[19]

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).

Table 1: Anti-personnel mined area in north-east Syria surveyed by MAG (as at May 2021)[20]

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	14	1,384,186	13	595,925	27	1,980,111
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	**110**	**7,371,124**	**97**	**3,263,740**	**207**	**10,634,864**

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

There is no national mine action authority 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. The committee meets on an ad-hoc basis.[21]

Given the lack of critical national mine action structures, UNMAS liaises with the National Mine Action Coordination Committee chaired by the Syrian Ministry of Foreign Affairs (MoFA) and accredits clearance operators on a de-facto basis. UNMAS does not provide capacity-building support to the national authorities, but in 2020, as part of its role in coordinating mine action, UNMAS drafted national mine action standards (NMAS) and associated guidelines and submitted them to the Syrian government for review and approval.[22]

Mine action in Syria is coordinated by three response mechanisms: i) the Damascus-based Mine Action Sub-Cluster (MASC) coordinated by UNMAS; ii) the north-west MASC co-chaired by UNMAS and The HALO Trust; and iii) 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. Coordinators of the three structures organise monthly meetings with the respective mine action actors.[23]

In north-east Syria, a mine action centre (MAC) was created in January 2021[24] by the Humanitarian Affairs Office (HAO) of the Syrian Democratic Forces (SDF). The MAC largely supports and facilitates mine action activities but does not maintain an updated database or task operators.[25] Mine action stakeholders hold monthly working group meetings and are supported by iMMAP.[26] DanChurchAid (DCA) reported having a constructive relationship with and support from the MAC. This has seen it receive unhindered access and permission to operate and import demining equipment. As at May 2021, DCA was in the process of drafting a Memorandum of Understanding (MoU) with the north-east MAC.[27] Another operator confirmed a positive relationship with that MAC, but underlined challenges due to the complex and bureaucratic procedures established by the Iraqi side for staff screening and border-crossing permissions. This results in long waiting times and undermines the mine action efficiency in the north-east. Contingent on future funding, MAG is considering providing support to the existing mine action coordination structure in the north-east in partnership with iMMAP in 2021. MAG will also work with the north-east MAC to elaborate a specific plan for capacity building of the centre.[28]

Headed by iMMAP under the umbrella of the protection cluster,[29] the north-east MAWG is attended by some 27 active members. Its activities include survey, risk education, clearance, and victim assistance.[30]

In the north-west, mine action is coordinated by the MASC cross-border response from Gaziantep (Turkey-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 Turkey. HALO also coordinates with local bodies in the north-west of Syria when necessary. HALO provides explosive ordnance risk education (EORE) and training of trainer (ToT) sessions to the local protection committees and volunteer groups organised under the local councils in the north-west.[31]

In 2020, US$53 million were requested by the humanitarian sector to respond to mine action needs across Syria. By the end of 2020, only 17% of these needs had been funded. UNMAS Syria Response Programme was seeking US$30 million for 2021 to support coordination and to scale up mine action interventions, including survey and clearance across Syria, but as at March 2021, the programme was facing an imminent shortfall of US$9 million for the pilot clearance project alone.[32]

In a statement to the Twenty-Fourth 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 support for mine action in Syria, provide equipment to existing national resources, and encourage international NGOs to step in and help Syria clear mines.[33]

GENDER AND DIVERSITY

DCA mainstreams gender and diversity in its programme and recruitment policy. As at April 2021, women made up 38% of DCA's Syria programme staff and 28% of the mine action project staff. Moreover, 42% of the supervisory positions were filled by women. DCA was also planning to deploy an all-female clearance team in Al-Hassakeh governorate. DCA ensures that survey and community liaison teams are inclusive and gender balanced by deploying mixed risk education (RE) and non-technical survey teams and by hiring both female and male community liaison officers. DCA disaggregates mine action data by sex and age in its questionnaires, monthly reports and database.[34]

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. In 2020, HALO designed EORE materials tailored for women, children, and teenagers and included a character with a disability. HALO reports that its field staff represent the communities in which they work in terms of ethnic and social background, and that they are all gender balanced. All of HALO's staff are trained on gender-sensitive content and approaches to EORE messaging. As at December 2020, women comprised 30% of the total number of HALO Trust employees, including its partner organisations in Syria. Women also made up 22% of managerial/supervisory positions and 35% of operational positions.[35]

MAG has a 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 standing operating procedures (SOPs) and those of IMAS and are implemented by gender and language

balanced community liaison teams. All mine action data are disaggregated by sex and age. In 2020, women made up 30% of MAG's total number of employees, 50% of its community liaison officers, and 29% of the organisation's operational positions.[36]

SCD reports having a gender and diversity policy in place. As at May 2021, of the 2,866 SCD volunteers operating in north-west Syria, 262 were women. In addition, of the 256 management positions, 10 were held by women. Women, however, were not represented in clearance and survey teams. SCD reports that, unlike in the south of Syria where it deployed mixed gender survey teams in 2017–18, and despite its best efforts in the north-west, it has been unsuccessful in encouraging female volunteers to join the survey and clearance teams. This is due to the high-risk nature of the work and the impression that it is significantly more hazardous than other roles. Yet, SCD hoped to achieve a 50/50 split when selecting volunteers for two additional survey teams it was planning to train in 2021. Despite not having female volunteers within its clearance and survey teams, SCD ensures that women and girls are consulted during community liaison activities by seconding female volunteers from other areas of the organisation during EORE and survey activities. Mine action data are disaggregated by sex and age.[37]

As of end 2020, women made up almost 40% of UNMAS personnel, with 25% of supervisory/managerial roles held by women as well as 32% of operations and security positions. In adherence to UN gender guidelines for mine action, gender is mainstreamed in planning and implementation. UNMAS disaggregates data by sex, age, and ethnic background. Throughout the project cycle, UNMAS takes into consideration how EO contamination impacts beneficiaries differently according to age, sex, physical abilities, and personal background, and recognises the importance of ensuring that messages target women specifically. The programme continues to look for methods to improve targeting and to encourage gender parity in the composition of field teams. According to UNMAS, the recruitment of women, especially for roles involved in community liaison and direct contact with the population, is critical.[38]

INFORMATION MANAGEMENT AND REPORTING

SCD uses Survey123 for data collection and Information Management System of Mine Action (IMSMA) Core for data keeping and management,[39] while DCA uses Survey123.[40]

HALO uses IMSMA data collection forms and regularly reports to the north-west MASC and the Office of the United Nations High Commissioner for Refugees (UNHCR)-led Gaziantep coordination hub. HALO uses mobile-data collection tools and preserves data in Excel and Microsoft PowerBI databases.[41] MAG uses the online server, SharePoint, to preserve its mine action data.[42]

iMMAP provides technical information management services to the mine action working group 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 MAC. As at May 2021, the MAC did not have the capacity to manage an IMSMA database on its own. The working group in north-east Syria has recently harmonised data collection forms used by all actors to make it compatible with IMSMA.[43]

As at June 2021, UNMAS was in the process of setting up IMSMA Core as the national mine action information management system in Damascus. UNMAS manages the database, collating explosive ordnance 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 IMSMA.[44] It is believed, however, that clearance conducted by the Syrian and Russian forces largely goes unreported.

Despite concerted efforts to establish a centralised database representing the whole of Syria, SCD reported that its clearance and explosive ordnance disposal (EOD) data were not accepted in the 4W reporting mechanism of the north-west MASC.[45] This is reportedly because, as at June 2021, SCD's application to re-join the protection coordination cluster had yet to be granted, and membership of the protection coordination cluster is a pre-condition for active membership in the MASC.[46] It is of course important that all relevant data on EO contamination, survey efforts, and clearance/EOD operations are captured in a central information management database.

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-east, DCA reports that the MAC prioritises urban clearance (houses, schools, and public facilities).[47] The mine action working group, with the support of iMMAP, also participates in determining areas of operations.[48] MAG reported that, due to the lack of the necessary mine action coordination structures in 2020, there was no tasking system in place. MAG's community liaison teams identify hazardous areas through non-technical surveys. They subsequently complete a clearance prioritisation form to assess the impact of EO contamination on communities and to provide data for operational planning, including information on direct and indirect beneficiaries, infrastructure, natural resources, land use and land ownership.[49]

In the north-west, HALO uses data collected from its EO community contamination assessment survey to identify high-priority communities for EOD, focusing on removing contamination that prevents access to basic services or livelihood resources. HALO engages with communities

where it conducts EOD to obtain their informed consent and considers requests from local authorities for interventions.[50] SCD does not have a specific prioritisation system as the vast majority of its tasks are call-outs or immediate disposal of items encountered during survey.[51]

UNMAS reports that it collates EO data from different partners and analyses it to enable needs-based prioritisation and inform the wider humanitarian response with data, maps, and identification of hazardous areas.[52]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There are no formal NMAS in Syria, but in 2020, UNMAS drafted NMAS and associated guidelines which are under consideration by the Syrian government.[53]

Due to the lack of NMAS, most of the operators work to their own SOPs. For example, DCA works in accordance to 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 newly established MAC in the north-east of Syria.[54] In the north-west, HALO's operations are governed by its own SOPs, which are in accordance with IMAS.[55]

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. Russia deployed several hundred military deminers from its Armed Forces Demining Centre from 2017 onwards, conducting clearance with manual teams supported by mine detection dogs and Uran-6 mine detection robots. Russian troops also provided training courses for Syrian army engineers at Hmeimim air base (Lattakia governorate in the north-west) and at training centres established in 2017 in Aleppo and Homs. By the start of January 2018, Russian armed forces reported they had trained 900 Syrian engineers.[56] Russia started to withdraw troops, including deminers, from Syria in 2018 but its Ministry of Defence (MoD) continued to report mine clearance and EOD in Syria in 2020.[57]

Russia appealed to other countries in 2018 to provide support. Armenia responded by sending an 83-man team to Syria in February 2019, planning to focus its work on the northern governorate of Aleppo.[58] Armenia rotated a new team to replace the first after four months.[59] The ACHDE reported having cleared 35,000m^2 and destroyed 29 landmines and items of UXO during the clearance operation in Aleppo city between February and June 2019.[60]

In areas not under government control, international and national demining organisations conducted clearance in north-east Syria controlled by the SDF. In December 2020, a team of British bomb disposal military veterans volunteered to clear two lanes of landmines, as well as bombs and an IED belt left by the Islamic State in Rojava, Al-Hassakeh governorate.[61] Turkey reported in January 2020 that its security forces conducted mine and IED clearance in areas of northern Syria it occupied.[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 Turkey, 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]

The HALO Trust, which has been present in Syria since 2016, is operational in north-west Syria in opposition-controlled areas of Idlib and western Aleppo, as well as the Turkish-administered areas of northern Aleppo. HALO's programme in 2020 covered EORE, victim and survivor assistance, survey, and EOD. Since November 2020, HALO has deployed an EOD team in the Turkish-administered areas of northern Aleppo in partnership with a Turkish implementing partner organisation. HALO delivers activities through direct implementation, as well as in partnership with local NGOs.

In 2020, HALO partnered with Turkish registered Syrian NGOs, Shafak and HiHFAD, for EORE and survivor assistance activities, and with a Turkish NGO, iMFAD, for non-technical survey and EOD. HALO's capacity of 2020 comprised of six survey teams, one EOD team, and seven EORE and victim assistance teams. As at June 2021, HALO was planning to continue EOD activities in northern Aleppo, expand its EOD capacity westwards to the opposition-controlled areas of Idlib and to start non-technical survey and mine clearance in 2021. However, HALO is facing a serious shortfall of funding for it to operate at the needed scale for EOD, non-technical survey, and ultimately mine clearance. According to HALO, the COVID-19 pandemic had minimally disrupted the operations and project outputs overall. Security, however, remains the key challenge for international staff entering north-west Syria, a problem for all international NGOs and not only HALO Trust.[64]

MAG has been operational in the north-east of Syria since 2016, conducting clearance, EORE, and surveys on contamination, accidents and victims. As reported by iMMAP, in 2020, MAG alone accounted for 70% of clearance activities, 60% of mine action beneficiaries, and 95% of contamination mapped and reported in north-east Syria. Following a forced suspension of its activities in October 2019, MAG resumed its activities in the north-east in late 2020. MAG partnered with two national NGOs only for community liaison activities in 2020, and had no plans of partnership for clearance activities.[65]

As at May 2021, MAG was deploying 10 community liaison teams, three mine action teams, and two multi-task teams in its Shaddadi base in Al-Hassakeh. Funds permitting, MAG is planning to set up a training centre and a second line mechanical workshop. MAG reported that it was intending to

re-open its operational base in Raqqa in October 2021 with a planned capacity of ten community liaison teams, two mine action teams and two EOD teams. In addition, MAG is looking into expanding its presence in the north-east, with a view to re-establishing its operations at the same level as that prior to its suspension of activities. Through a combination of partnered and direct implementation, MAG will address mine and cluster munition contamination to enable the safe return of displaced communities, restore access to agricultural land, and enable the rehabilitation of critical infrastructure and property.[66]

According to MAG, the challenges to the clearance of anti-personnel mines in Syria are: the volatile security situation; the lack of trauma medical care within an hour's reach to the operation site, which is a pre-condition for clearance; the impact of the COVID-19 pandemic and the potential increase of cases that could lead to additional lockdowns; the potential disputes in housing, land, and property for clearance activities when ownership documents are unavailable for returnees or other community members; and the lack of a functioning national mine action authority, which impedes coordination and clearance prioritisation.[67]

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.[68] As at July 2021, RMCO was still operational and was being trained on EOD by the United States (US) forces.[69]

The SCD was operational in Aleppo, Hama, and Idlib governorates (in the north and north-west of the country) and continued to conduct single-item disposal of UXO along with survey in north-west Syria. SCD reported that the items it encountered are predominately CMR, but SCD teams also disposed of abandoned anti-personnel mines it encountered. SCD's operational capacity in 2020 was six clearance teams and four survey teams and it was planning to recruit two additional survey teams in the second half of 2020.[70]

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 Agnès Marcaillou reported the government had agreed to the involvement of international demining organisations. They would be registered by the government and coordinated by UNMAS, which stated that discussions were underway on plans for survey, marking, and clearance.[71] As at June 2021, only the ACHDE was accredited in government-controlled areas. UNMAS reported the lack of qualified in-country operators as one of the major challenges to advancing 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.[72]

To facilitate access for clearance operators, following consultations with the Syrian government in December 2020, 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.[73] Subject to in-country registration by the government, UNMAS hopes that government acceptance of the listed pre-qualified operators will lead to expanding access for qualified international clearance operators within Syria. UNMAS reports that it might further increase its capacity if the pilot clearance project starts as planned in 2021 and scale up clearance operations. UNMAS has been encouraging safer programming for humanitarian workers, training security focal points in risk awareness, and integrating risk education into a range of humanitarian programmes.[74]

In late 2019, UNMAS identified 50 locations in Rural Damascus, Daraa and Homs for survey and clearance operation. All areas were classified as level three or above on the HRP 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. The prioritisation criteria covered key issues such as EO contamination, potential land use for housing, land and property issues, access to key infrastructure, returnees/internally displaced persons (IDPs), and support to the UN humanitarian activities.

As at June 2021, an area for a pilot clearance project was identified, initially focusing on agricultural areas in western Ghouta (Rural Damascus), and UNMAS was in the process of preparing a clearance contract. Further humanitarian clearance is subject to Syrian government approvals for international humanitarian mine action operators to register and work in Syria, and the availability of necessary funding.[75] In its statement to the 24th NDM in May 2021, Syria said that it had facilitated the opening of UNMAS offices in Aleppo.[76]

LAND RELEASE

Syria's continuing instability prevented progress towards a coordinated national programme of mine action. Comprehensive information on outcomes of survey and clearance in any areas was unavailable.

The ACHDE reported to UNMAS that it had cleared 319,820m^2 of land between February 2019 and December 2020. When items of EO are found by the Armenian teams, they are marked and reported to the Aleppo Governor's office and the Russian Center for Reconciliation. These authorities then liaise with the Syrian army engineers to remove the marked items or destroy them in situ.[77]

SCD teams disposed of 506 items of explosive ordnance in north-west Syria, including two anti-personnel mines, in 2020.[78]

In government-controlled areas, Syrian deminers were reported to have cleared mines and explosive devices in areas recaptured from opposition armed groups. Among tasks completed in 2020 was clearance of the Damascus-Aleppo highway.[79] According to media reports in July 2020, ACHDE had completed the clearance of 185,209m^2 in and around Aleppo since it

started clearance operations in February 2019.[80] Demolitions of cleared items are conducted by the Syrian army.[81] The Russian Federation reported that, since 2016, its specialists have cleared more than 65km^2 and disposed of 105,000 items of UXO on Syrian territory, including in the city of Aleppo and in Palmyra.[82]

Northwards, Turkey reported its security forces destroyed 891 mines and 1,660 IEDs in areas of northern Syria it occupied in January 2020.[83] In 2020, HALO Trust destroyed 22 items of ERW in Aleppo governorate, though none of the destroyed items was an anti-personnel mine or a victim-activated IED. As at June 2021, HALO Trust EOD team had disposed of 51 items of UXO.[84] In the north-east, MAG cleared 18,736m^2 of anti-personnel contaminated land, destroying in the process six anti-personnel mines.[85]

In its statement as an observer to the 18th Meeting of States Parties (18MSP) of the 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 non-politicised financial and technical assistance to the mine action sector in Syria, without pre-conditions and in coordination with the Syrian government.[86]

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20 Email from MAG, 24 May 2021.

21 This information is provided on the condition of anonymity.

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44 Email from UNMAS, 30 June 2021.

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72 Online interview with UNMAS, 14 May 2021.

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UZBEKISTAN

MINE ACTION REVIEW

CLEARING THE MINES 2021

RECOMMENDATIONS FOR ACTION

- **Uzbekistan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.**
- **Uzbekistan should clear mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.**
- **Uzbekistan should be more transparent in detailing the extent of its mine contamination and clearance operations.**

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]

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 organizations, and as at 2018, civilian casualties were still being reported on the Uzbek-Tajik border.[4]

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.[5] Online media sources reported that by October 2018 demining along the border had started,[6] 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 9.5km^2.[7] Mine clearance along the border, conducted by Uzbekistan, was reportedly completed by January 2020,[8] following which the Uzbek and Tajik authorities progressed from delimiting their border to demarcating it.[9] As at May 2021, demarcation discussions were still ongoing.[10]

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.[11] 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".[12] Uzbekistan has not reported plans to clear mines laid on its 150km border with Afghanistan.

PROGRAMME MANAGEMENT

There is no functioning mine action programme in Uzbekistan.

In March 2021, Russia and Uzbekistan were considering bilateral cooperation in mine action clearance and training of Uzbek military personnel at the Russian Mine Action Centre.[13]

LAND RELEASE

There are no detailed reports of survey or clearance output in 2020, but according to online media sources in January 2020, mine clearance on the Uzbek side of the border with Tajikistan was completed.[14] 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.[15]

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.

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 "Uzbekistan reportedly completes demining work on Tajik border", *The Diplomat*, 10 January 2020.

6 "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.

7 "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.

8 "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.

9 "Uzbekistan reportedly completes demining work on Tajik border", *The Diplomat*, 10 January 2020; and "Uzbekistan, Tajikistan to finalise border demarcation", *Azernews*, 7 January 2020.

10 "Uzbekistan and Tajikistan discuss demarcation of state border", *KUN.UZ News*, 22 May 2021, at: https://bit.ly/3iSbky7.

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12 "Kyrgyzstan, Uzbekistan sign deal to end border disputes", *Euroasianet*, 26 March 2021, at: https://bit.ly/3vD5QKA.

13 "Uzbekistan, Russia looking at joint training of bomb disposal specialists", *Tass* (Russian News Agency), 30 March 2021, at: https://bit.ly/3gDKjfn.

14 "Uzbekistan reportedly completes demining work on Tajik border", *The Diplomat*, 10 January 2020.

15 Ibid.

VIETNAM

MINE ACTION REVIEW

CLEARING THE MINES 2021

KEY DEVELOPMENTS

With the adoption of a new national mine action decree in March 2019, followed by adoption of a more detailed Guiding Circular in December 2019, the Vietnam National Mine Action Centre (VNMAC) has now been officially empowered to start coordinating humanitarian mine action in Vietnam. This provided a legal basis for VNMAC to make significant progress in 2020 in ongoing efforts to review and update the national mine action standards to bring them more in line with the International Mine Action Standards (IMAS), establish a fully functioning national information management database, and build a national quality management (QM) capacity.

However, VNMAC's current focus is on survey and clearance of explosive ordnance contamination (mainly explosive remnants of war (ERW)) elsewhere in the country, and not on releasing mined areas 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 final five-year work plan (2021–25), which corresponds to implementation of the National Mine Action Plan for 2010–25.**
- **Vietnam should publish a detailed assessment of remaining mined areas.**
- **Vietnam should publish annual reports on its progress in the survey and clearance of mined areas.**
- **National Technical Regulations (QCVNs) and National Mine Action Standards (TCVNs) should be updated in line with IMAS, including with regards to addressing anti-personnel mine contamination, as distinct from battle area clearance (BAC).**
- **VNMAC should continue progress to develop a fully functional national information management database and make Information Management System for Mine Action (IMSMA) data available to all clearance operators and relevant stakeholders. Items of explosive ordnance discovered and destroyed, should be clearly and accurately recorded, including distinguishing anti-personnel mines from anti-vehicle mines.**
- **VNMAC should publish comprehensive annual reports on the results of survey and clearance by all operators.**

UNDERSTANDING OF AP MINE CONTAMINATION

Vietnam's mine problem is certainly small compared with contamination from ERW, though the full extent of its mined area is unknown. A survey published in 2018 reported the presence of anti-personnel mines in 26 of 63 cities and provinces but gave no further details.[1]

Most mines were left by conflicts in the 1970s with neighbouring Cambodia and China, and affect areas close to its borders with those countries.[2] 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.[3] It was reported in 2013 by Vietnam's Military Engineering Command that clearance had been completed in areas bordering Cambodia.[4] 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.[5] Some mines have also been found around former US military installations.[6]

Vietnam also has extensive 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,[7] although management and operations continued to depend largely on the Armed Forces.

In a positive development, Vietnam's mine action programme is undergoing 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 was adopted on 27 December 2019 and circulated in early 2020.[8] Under Decree 18, while the Ministry of National Defence (MoD) will continue to elaborate and preside over the national mine action programme as the lead authority, in coordination with other relevant ministries and sectors,[9] VNMAC will, under the direction of the Prime Minister and management of the MoD, "monitor, coordinate and implement mine action tasks".[10] Guiding Circular 195, which details a number of articles and methods regarding implementation of the Decree, also officially appoints VNMAC as the national coordinator of mine action activities in Vietnam.[11]

The adoption of Decree and Guiding Circular has given VNMAC a clear mandate, roles, and responsibilities, as the national coordinating entity for mine action operations and have established the legal basis for revision and updating of the national regulations and standards (QCVNs and TCVNs), which began in 2020.[12] VNMAC now have authority over mine action data, which they are beginning to exercise by requiring provinces to collect and report data to the VNMAC Information Management Unit (IMU) on a quarterly basis.[13] 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.[14]

VNMAC is entirely nationally funded, and implementation of the National Mine Action Programme (Programme 504) is funded by both state and international funding.[15] 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 procedures (SOPs) on QM, survey, and clearance and related issues); iii) facilitation of activities to develop the management and administration capacity, and 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.[16]

VNMAC's involvement in coordination meetings, such as the Landmine Working Group (LWG), increased in 2020. The LWG, which was co-chaired by Norwegian People's Aid (NPA) and the International Centre (IC) in 2020, and by MAG and UNDP in 2021, is a platform for humanitarian mine action stakeholders in Vietnam to meet regularly to share and discuss updates that impact the sector.[17] During 2020, VNMAC used the LWG for collective discussions, including on the updating of the QCVNs and TCVNs. Quarterly LWG meetings continued throughout 2020, but were not possible in Q1 due to the COVID-19 pandemic.[18] In Quang Tri province, the Quang Tri Provincial Mine Action Center (QTMAC) leads the piloting and coordination of mine action operations.

International NGOs (INGOs) reported that cooperation and collaboration with VNMAC continued to strengthen in 2020, including in its close engagement with the LWG and in discussions seeking input from the international community on the legal frameworks (QCVNs, TCVNs, and SOPs). Coordination also strengthened as a result of the Decree and Circular. This was despite constraints posed by COVID-19, which resulted in limitations on meetings and travel, and which saw VNMAC frequently forced to close their office to non-VNMAC personnel. Despite this, VNMAC have shown an increased understanding in their role and how they need to fulfil, 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]

Golden West Humanitarian Foundation (Golden West), Mines Advisory Group (MAG), NPA, PeaceTrees Vietnam (PTVN), and the United Nations Development Programme (UNDP), all provide capacity development support in Vietnam (see Mine Action Review's *Clearing Cluster Munition Remnants 2021* report on Vietnam for more details).

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. 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.[21] In March 2021, the Prime Minister approved resolution 28/NQ-CP to promulgate the National Strategy on Gender Equality 2021–2030.[22]

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/QD-TTg dated 24 December 2010 of the Prime Minister approving the National Strategy on gender equality for the period 2011–20 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/QD-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.[23]

At VNMAC, 22% of employees are female, with women in more than 20% of management/supervisory/executive positions.[24] 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 an increase in female participation.[25]

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 information management, 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. Operators receive a bi-annual report from VNMAC, containing summary data.[26] Linkages between VNMAC and the provinces are still to be fully defined and different models are emerging (for example, QTMAC in Quang Tri province, DBCU in Quang Binh province, and Project Management Unit (PMU)/IMU in Binh Dinh province as part of KV-MAP).[27] VNMAC is in the process of determining how information management will be collected nationally and shared.[28]

As at April 2021, VNMAC reported that it was making efforts to improve the collection of data and information management capacity nationwide. But continued international assistance (funded by the US) is still required in order for VNMAC to further develop its capacity.[29]

The information management project, overseen by the PM-WRA Information Management Advisor to VNMAC, is now in the second year of the implementation phase. The national database structure exists and the inputting of available data is ongoing. The VNMAC database unit is now fully functional and operational, and the focus is on standardisation of the reporting forms to ensure data is reported consistently and is subject to quality control (QC).[30]

VNMAC reported that data collection forms are specified in the Appendices of Circular 195 and the National Standard TCVN 10299-10 (2014), and that since 2020, it had started to develop a set of standardised IMSMA data collection/reporting forms.[31] The goal for 2021 was to complete all requirements from Guiding Circular 195, including standardised reporting for all forms and consolidation of all historical data into one national IMSMA database. However, this relies on the COVID-19 situation permitting the travel between provinces necessary to coordinate the implementation.[32]

NPA is working with VNMAC at the national level to establish IMUs to collect and collate information from across Vietnam and give transparent access to available data. Throughout the period 2019–20, VNMAC's IMU worked to input historical data stored on other databases, including available data from the provinces. However, it is unclear what data the provinces are holding that have not yet been delivered to VNMAC.[33]

For details on information management at the provincial level, please see Mine Action Review *Clearing Cluster Munition Remnants* report for Vietnam.

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 8,000km^2 of explosive ordnance between 2016 and 2025.[34]

A five-year plan (2021–25) has been developed to implement the final period of the current National Mine Action plan, but as at July 2021 had yet to be formally approved. The plan 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. There is no separate plan for anti-personnel mines.[35] As at April 2021, international operators expected that VNMAC would share the new five-year plan with sector stakeholders through the LWG forum for review and comments.[36] Annual work plans will then be developed, based on the five-year plan.[37]

There is no national prioritisation system specifically for mine clearance. 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 National Technical Regulations (QCVNs), which are legally binding and similar in content to SOPs, and National Mine Action Standards (TCVNs), which despite being standards are considered optional by VNMAC.[38]

In a positive development, VNMAC made significant progress in 2020 to review and update the QCVNs to help bring them into line with IMAS.[39] The former QCVNs and existing TCVNs were drafted more with the MoD in mind, used terminology inconsistently, and chapters contradicted themselves.[40] INGOs welcomed the inclusiveness of the revision process,[41] which involved the establishment of four working groups, co-chaired by VNMAC, and extensive consultation with operators and international organisations, including the Geneva Institute for Humanitarian Demining (GICHD).[42] As at May 2021, the revision process for the QCVNs had been completed and was awaiting final approval from the Prime Minister's office. Revision of the TCVNs was also underway in the first half of 2021, in anticipation of the expected official approval and release of the QCVNs, which are required to be adopted first.

As part of the revision process, VNMAC also updated its SOP on QM Systems (QMS), as part of KV-MAP, a process which was still ongoing in 2021. In addition, a single, field-orientated QM SOP has been prepared by the QTMAC, with support from NGOs, for use in Quang Tri province. The latter was undergoing final revision by the mine action sector as of writing and was expected to be adopted and fully implemented by QTMAC by the middle of 2021.[43]

As at April 2021, VNMAC reported that the relevant authorities were in the process of developing legal documents (Circulars) related to the revised QCVNs, TCVNs, and SOPs.[44]

The QCVNs and TCVNs cover anti-personnel mine operations under the heading mines/ERW clearance, but more work is required in both documents with respect to addressing mined areas, as distinct from battle areas.

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.

According to VNMAC, the Thua Thien Hue Provincial Military Command conducted survey of explosive ordnance in 2020, and the Engineering Command of the Army conducted both survey and clearance. At the peak of the KV-MAP project, VNMAC reported that 85 survey and clearance teams (totalling 2,125 soldiers) were deployed. 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.[45]

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.[46]

INGO operators active in Vietnam include: MAG, working in Quang Binh and Quang Tri provinces; NPA, working in Quang Tri, Quang Binh, and Thua Thien Hue provinces; and PTVN in Quang Tri and Quang Binh provinces.[47] In Quang Binh province, MAG, NPA, and PTVN, established a consortium project for joint survey and clearance of cluster munition remnants and other explosive ordnance. Due to approval procedures, NPA began non-technical survey and technical survey operations in Quang Binh in September 2020 and PTVN began EOD spot tasks and clearance in January 2021.[48] Danish Demining Group (DDG) ceased its survey and clearance operations in Vietnam (Quang Nam province) in January 2020, due to lack of funding.[49] 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 2020

According to VNMAC, a total of 120.63km^2 of land was surveyed in 2020 and confirmed to be contaminated with remnants of bombs, mines, and explosive ordnance, mostly unexploded ordnance (UXO). The amount of area confirmed to be contaminated with mines was not disaggregated,[50] but is likely to be a very small proportion of the total area.

MAG, NPA, and PTVN did not survey any mined area in 2020.[51]

CLEARANCE IN 2020

VNMAC reported clearing 61.5km^2 of land contaminated by all explosive ordnance in 2020, with the destruction of 3,443 submunitions, 86,971 other items of ERW, 77 anti-personnel mines, and 2 anti-vehicle mines. This is believed to result almost entirely from clearance by the provincial military teams coordinated by VNMAC as part of the KV-MAP ERW project. It is not known what proportion of the total area cleared was mine-contaminated area, as the amount of area cleared of anti-personnel mines was not disaggregated from area cleared of CMR and other ERW,[52] but it is likely to be very small.

VNMAC said that the amount of area contaminated by munitions (i.e. not only mines) released in 2020 was an increase on the previous year. This was due to the implementation of multiple projects, including for local socio-economic development; based on official development assistance (ODA), such as KV-MAP; and through operations by INGOs in the central provinces.[53]

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 2020 and none of the three organisations encountered mines during their CMR or EOD operations.[54] MAG did, however, destroy four anti-personnel mines during EOD spot call outs in 2020: two in Quang Binh province and two in Quang Tri province.[55]

QTMAC recorded that six anti-personnel mines and two anti-vehicle mines were destroyed in Quang Tri province in 2020: all during EOD responses. All of the mines discovered and destroyed were isolated mines and were not part of a minefield. This was a decrease compared to the nine anti-personnel mines destroyed during EOD responses in 2019.[56]

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 8,000km^2 of explosive ordnance from 2016 to 2025[57] but did not specify how much of this, if any, should be mined area.

VNMAC reported that the COVID-19 pandemic has impacted 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 sanitation, and the work of ensuring personnel, equipment, and logistics for performing tasks.[58]

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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 will expand to conduct training course on residual risk management, site safety, and long-term risk management (LTRM) tools and protocols.[59]

As part of the project on residual risk, GICHD has worked with VNMAC, UNDP, and NPA on several areas, with activities having started in December 2020 and expected to last throughout 2021 and 2022. Activities under the project include:

- Review of the QCVNs, TCVNs, and SOPs with a focus on risk management, site safety, and QM.
- Support in drafting Vietnam's explosive ordnance risk education (EORE) standard and strategy.
- Assessment of VNMAC's current legal, normative, procedural, and structural capacities with respect to dealing with the residual threat, and provision of recommendations for future desired capacity.
- Site safety training for 50 VNMAC staff and related offices.
- A Risk Management Regional Forum to share, develop, and steer good practice in risk management for the sector in the region, which is expected to take place on the ARMAC platform.
- A Regional Workshop on Liability, All Reasonable Effort, and Risk Management which will also include outreach and familiarisation of the existing and upcoming IMAS technical notes on mine action (TNMAs) and will also promote exchange of good practices and share common challenges across countries.
- An online Risk Management Training E-Publication portal. This resource will be available for online guided learning, face-to-face events, and workshops, and self-access to the material. The e-learning publication will cover ISO 31000:2018 on Risk Management, IMAS 07.14 on Risk Management in Mine Action, Risk Management related to ammunition management (IATGs), and associated educational materials/studies.
- A pilot LTRM project to supplement the existing LTRM protocols and tools, with the goal of helping equip VNMAC to address EO residual contamination through the development of a national plan and policy instruments for the implementation of a nationally owned, sustained and sustainable residual risk management of explosive ordnance.[60]

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.[61]

The Foundation 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.[62]

Golden West is also training PTVN EOD teams, funded by PTVN, to help develop their training capability, ensuring long-term success. PTVN instructors regularly work with Golden West and VNMAC, enhancing training skills and building a lasting capability.[63]

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6 Ibid.

7 Prime Ministerial Decree (No. 738 of 2013) on the management and implementation of mine action activities, Hanoi, April 2018.

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10 Draft Decree on the management and implementation of mine action activities, Hanoi, April 2018.

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12 Emails from Kimberley McCosker, Capacity Development Advisor, NPA, 8 April 2021; and Helene Kuperman, MAG, 31 March 2021.

13 Email from Kimberley McCosker, NPA, 13 May 2021.

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15 Email from Tim Horner, VNMAC, on behalf of Mr. Phuc, VNMAC, 6 April 2021.

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21 Email from Tim Horner on behalf of Mr. Phuc, VNMAC, 6 April 2021. (Clauses 1 and 3, Article 26 of the 2013 Constitution).

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25 Ibid.

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33 Emails from Kimberley McCosker, NPA, 8 April 2021; and Helene Kuperman, MAG, 31 March 2021.

34 Prime Minister, "Decision on Approval of the National Mine Action Plan Period 2010–2025", Hanoi, 21 April 2010.

35 Email from Tim Horner on behalf of Mr. Phuc, VNMAC, 6 April 2021.

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42 Ibid.; and email from Tim Horner on behalf of Mr. Phuc, VNMAC, 6 April 2021.

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54 Emails from Helene Kuperman, MAG, 31 March 2021; Kimberley McCosker, NPA, 8 April 2021; and Phạm Hoàng Hà, PTVN, 11 May 2021.

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57 Prime Minister, "Decision on Approval of the National Mine Action Plan Period 2010–2025", Hanoi, 21 April 2010.

58 Email from Tim Horner on behalf of Mr. Phuc, VNMAC, 6 April 2021.

59 Email from GICHD, 16 June 2021.

60 Ibid.

61 Email from Mark Lasley, Golden West Humanitarian Foundation, 16 June 2021.

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OTHER AREAS

KOSOVO

MINE ACTION REVIEW

CLEARING THE MINES 2021

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 instead report on progress in line with its Mine Action Strategy for 2019–2024.**
- **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.**
- **As and where necessary, evidence-based survey should be conducted to confirm the presence of mines before embarking on full clearance of mined areas.**
- **KMAC and international mine action operators should increase their collaboration to seek additional funding and greater financial stability for mine action.**

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] At the end of 2020, 32 confirmed mined areas remained, covering almost 1.25km^2. This is a decrease on the 1.36km^2 of mined area, across 35 confirmed hazardous areas (CHAs), reported at the end of 2019.[2] Remaining contamination includes four CHAs totalling 425,000m^2, which contain a mix of mines and CMR.[3]

One CHA of 15,000m^2 of previously unknown anti-personnel mine contamination was discovered and added to the database in 2020. The new CHA, which contains legacy contamination, was reported to KMAC by the local population.[4] The HALO Trust reported that KMAC discovered two new mined areas in 2020, both in the municipality of Hani Elezit within the Ferizaj region. The newly discovered areas are at Dremnjak and Neçavc, covering an estimated area of 20,000m^2 and 14,700m^2, respectively.[5] It is not clear whether the CHA reported to KMAC is included in those reported by HALO.

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 province and confirmed 130 hazardous areas: 79 mined areas covering an estimated 2.76km^2 and 51 cluster munition strikes covering an estimated 7.63km^2.[6]

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.[7] The baseline of mine contamination at the end of 2019 cannot be reconciled with the baseline, survey, and clearance data reported by KMAC at the end of 2020. The discrepancy could be attributed to differences in reported figures for cancellation by non-technical survey.[8]

The HALO Trust also believes that Kosovo's current baseline reflects a relatively accurate picture of the remaining contamination but suggests 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. To conduct the review, HALO Trust was planning to deploy two non-technical survey teams throughout 2021 and conduct re-survey on 57 planned future tasks.[9]

Both anti-personnel and anti-vehicle mines were used during the conflict, in fixed-pattern minefields as well as more randomly in "nuisance" minefields. Many anti-personnel mines had minimal metal content.[10] Although the total number of mines emplaced during the conflict is not known, the UN Mine Action Coordination Centre (UNMACC) reported, as at 31 May 2000, that a total of 7,232 mines had been cleared in the preceding year (3,448 anti-personnel mines and 3,784 anti-vehicle mines).[11] 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",[12] but further investigation revealed that considerably more contamination remained to be addressed than had been indicated.[13]

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 Protection Force (KFOR) and Kosovo Security Force (KSF) explosive ordnance disposal (EOD) teams regularly dispose of ERW in response to information provided by the public and demining organisations.[14]

NATIONAL OWNERSHIP AND 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.[15] 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.[16]

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.[17] In 2020, 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.[18]

NGO operators in Kosovo report having a constructive and proactive working relationship with KMAC. HALO Trust staff meet with the director of KMAC for monthly coordination meetings,[19] and, in addition, KMAC's QA officers visit HALO Trust on a quarterly basis to discuss operations planning, along with conducting unannounced weekly field visits to HALO tasks.[20]

In 2020, the Kosovo government provided €990,000 in financial support to KMAC, and to the KSF for mine and ERW clearance.[21] Kosovo's mine action strategy for 2019–24 sets out the objective of intensifying resource mobilisation efforts in order to gain greater financial stability.[22] While a specific resource mobilisation strategy does not exist, operators reported that coordinated approaches with KMAC were made to potential donors such as the United States and the European Union.[23] In 2020, HALO Trust was able to secure 12-month funding for anti-personnel mine clearance from the Swiss government with the support of KMAC.[24]

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.[25]

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.[26] 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.[27]

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.[28]

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 poor socio-economic conditions.[29]

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, which was adopted in February. The policy aims both at increasing the recruitment of women, as well as retention of existing female employees.[30] 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 Geneva International Centre for Humanitarian Demining, 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.[31]

In HALO Trust's Kosovo programme, 17% of employees are women, including in 14% of operational roles in survey and clearance teams, although no women were in operational management positions in 2020.[32] HALO also ensures that community liaison teams are gender balanced and include senior personnel fluent in relevant languages, to ensure that community liaison activities are inclusive of ethnic minorities.[33]

HALO Trust is committed to increasing the number of women in the organisation generally and specifically in management roles. While this proved difficult in 2020 as there were no job openings, HALO was extending recruitment opportunities in 2021 thanks to newly secured funding.[34] In September 2020, HALO conducted a training to promote Assistant Team Leaders, the training led to the appointment of two female assistance Team Leaders for the first time in 2020. HALO

Trust planned to conduct a similar training in 2021, which it sees as an opportunity to recruit additional female staff in operational management.[35] Relevant mine action data are disaggregated by gender and age, and data collected post-clearance are also disaggregated to ensure the understanding and analysis of impact of mine action activities takes gender into consideration.[36]

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.[37]

INFORMATION MANAGEMENT AND REPORTING

KMAC uses the Information Management System for Mine Action (IMSMA) New Generation version for its national mine action database. Data are disaggregated between mines, CMR, and other ERW.[38] Operators were positive in their assessments of the quality and accessibility of data in the database and of KMAC's information management system in general. Operators report to KMAC on a weekly basis.[39] The land release data reported to Mine Action Review by clearance operators and the KMAC were largely aligned. This is an improvement compared to previous years' reports, which typically 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.[40] 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.[41]

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.[42]

Updates on clearance progress of high and medium priority areas were not made available, but as at May 2021, HALO Trust was clearing two medium priority tasks.[43]

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.[44]

As per the strategy, KMAC will develop annual operational work plans to implement the strategy's goals.[45] KMAC will also request an external mid-term review of the strategy in 2022 to evaluate progress and make any adaptations according to contextual changes if required.[46]

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.[47] In 2020, KMAC planned that clearance would start on nine mined areas[48] but this was delayed for three months due to the COVID-19 pandemic.[49] The mine action strategy for 2019–24 is also said to align with the objectives of Kosovo's National Development Strategy 2016–2021.[50]

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 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.[51]

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 International Mine Action Standards (IMAS).[52]

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 HSTAMID detectors by The HALO Trust, which have enhanced operational productivity.[53]

OPERATORS AND OPERATIONAL TOOLS

In 2020, 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 area in 2020, solely focusing instead on CMR.[54] The demining season is from the end of March to the end of November, due to weather conditions.[55]

HALO Trust's operational personnel are cross-trained for mine clearance and battle area clearance (BAC) and can move readily between these activities. On average, in 2020 The HALO Trust deployed 24 deminers across three teams to mine clearance tasks. This is half of the capacity HALO deployed in the previous year. HALO explains that the decrease comes in coincide with the ending of contract with donors in 2019 and the resultant reduction in funding.[56] As at May 2021, HALO had decreased the number of demining teams to one. The team will operate until the funding ends in October 2021, after which HALO will only have funds available for BAC. In April 2021, HALO established two non-technical survey teams that will continue operating into 2022.[57]

By the end of December 2020, HALO had completed desk review of all known tasks to date with the support and coordination of KMAC.[58]

KSF operated two manual clearance teams in 2020, totalling 20 deminers, and expected capacity to remain the same in 2021.[59] KFOR supports the KSF and Kosovo Police with EOD response tasks and organising mine and ERW demolitions in Mitrovica and the north of Kosovo.[60]

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2020

A total of 0.18km^2 of mined areas was released in 2020: 0.14km^2 through clearance and the remainder reduced through technical survey.

One CHA of 15,000m^2 of previously unknown anti-personnel mine contamination was discovered and added to the database in 2020.[61] The HALO Trust reported that KMAC discovered two new mined areas in 2020 of a total estimated area of 34,700m^2.[62] It is not clear whether the CHA reported by KMAC is included in these reported by HALO.

SURVEY IN 2020

There was no land cancellation through non-technical survey by any of the operators in 2020.

A total of 44,751m^2 was reduced through technical survey by The HALO Trust in 2020. This is a significant decrease compared to the 92,761m^2 that was reduced by HALO in 2019. The decrease is attributed to the drop in funds combined with the impact of COVID-19 pandemic on teams deployment.[63]

Table 1: Reduction through technical survey in 2020[64]

District	Operator	Area reduced (m^2)
Ferizaj	HALO Trust	31,629
Gjakova	HALO Trust	13,122
Total		**44,751**

CLEARANCE IN 2020

In 2020, a total area of almost 0.14km^2 of anti-personnel mined area was cleared, with seven anti-personnel mines and two items of UXO found and destroyed (see Table 2).[65] This was a significant decrease in the area cleared compared to 2019, when almost 0.27km^2 of anti-personnel mined area was cleared, with 21 anti-personnel mines found and destroyed.[66]

Table 2: Mine clearance in 2020[67]

District	Operator	Area cleared (m²)	Anti-personnel mines destroyed	UXO destroyed
Ferizaj	HALO Trust	68,575	4	0
Gjakova	HALO Trust	23,300	0	0
Gjakova	KSF	35,844	0	1
Hani I Elezit	KSF	11,888	3	1
Total		**139,607**	**7**	**2**

A further five anti-personnel mines were destroyed by the KSF in EOD response tasks in 2020.[68] 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.[69]

Compared to the previous year, in 2020, The HALO Trust saw a decrease of mine clearance productivity by some 41.5% based on its own data, as a result of reducing team numbers due to reduced funding in addition to the impact of COVID-19 on team deployment.[70]

KMAC reported that three tasks were cleared by The HALO Trust in 2020 in which no anti-personnel mines were found: one in Ferizaj and two in Gjakova.[71] HALO Trust reported an additional ongoing task in Gjakova being cleared where no anti-personnel mines had been found as at May 2021.[72]

PROGRESS TOWARDS COMPLETION

Kosovo cannot formally adhere to the APMBC 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.

As stated in Kosovo's Mine Action Strategy 2019–24, which aims to complete mine and cluster munition clearance by the end of 2024, this will only be achievable if sustained funding is secured.[73] 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.[74]

As at April 2021, KMAC reported that it still expects to clear all known mined areas by the end of 2024.[75] However, only 1km² of anti-personnel mined area has been cleared in the last five years (see Table 3). HALO is currently conducting non-technical survey and will have a better idea of the remaining contamination by the end of 2021. HALO would require increased capacity to complete mine clearance by the end of 2024 as the funding commitment, as at April 2021, was insufficient.[76] HALO also highlighted the need for a review of the current data on mined areas, including an evaluation of survey polygons, and application of efficient land release methodologies, in order to ensure coordinated and cost-effective targeting of clearance.[77]

The coordinated mobilisation efforts in 2020 yielded additional funds and translated into increased capacities of HALO Trust in 2020–21. This capacity needs to be further increased and sustained over the strategy period in order to meet the 2024 target date.[78]

The COVID-19 pandemic has certainly impacted Kosovo's mine action programme. From mid-March to mid-May 2020, the entire mine action sector was closed at the direction of KMAC, as the government implemented strict lockdown measures across the country, resulting in lost productivity. Operators were able to partially phase back operations in early May and fully by June 2020.[79]

Despite operators working at full capacity during the second half of 2020, the pandemic continued to weigh on the operation. Some of the challenges reported by HALO Trust included running on a winter schedule, which meant that teams worked an hour less each day; the increased breaks for handwashing (to prevent the spread of COVID-19) led to a reduction of working time; the need to isolate teams for up to two weeks when suspected cases occurred; and the fleet issues due to social distancing requirements.[80]

Assuming the target is met, completion of mine clearance in 2024 would be 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.

Table 3: Five-year summary of AP mine clearance

Year	Area cleared (km²)
2020	0.14
2019	0.27
2018	0.22
2017	0.23
2016	0.15
Total	**1.01**

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

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.[81]

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/331PWfQ, pp. 6 and 15.

2 Email from Ahmet Sallova, Head of Mine Action Centre, KMAC, 16 April 2020.

3 Email from Ahmet Sallova, KMAC, 29 April 2021.

4 Ibid.

5 Email from Megan Dwyer, Programme Manager, HALO Trust, 23 April 2021.

6 HALO Trust, "Action on cluster munitions in Kosovo", Side event, First Convention on Cluster Munitions (CCM) Review Conference, Dubrovnik, 10 September 2015.

7 Email from Ahmet Sallova, KMAC, 16 April 2020.

8 Email from Ahmet Sallova, KMAC, 17 June 2021.

9 Email from Megan Dwyer, HALO Trust, 23 April 2021.

10 ICRC, *Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo*, June 2001, p. 15.

11 Ibid.

12 "UNMIK Mine Action Programme Annual Report – 2001", Mine Action Coordination Cell, Pristina, undated but 2002, p. 1.

13 HALO Trust, "Failing the Kosovars: The Hidden Impact and Threat from ERW", Report, 15 December 2006, p. 1.

14 Email from Ahmet Sallova, KMAC, 1 August 2012.

15 Ibid.

16 Emails from Ahmet Sallova, KMAC, 16 June and 3 July 2017; and Ministry of Defence, "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.

17 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 5–6.

18 Email from Ahmet Sallova, KMAC, 28 April 2021.

19 Emails from Olivia Meader, HALO Trust, 22 May 2020; and Ahmet Sallova, KMAC, 16 April 2020.

20 Email from Olivia Meader, HALO Trust, 22 May 2020.

21 Email from Ahmet Sallova, KMAC, 28 April 2021.

22 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 14.

23 Email from Terje Eldøen, NPA, 25 April 2019.

24 Email from Megan Dwyer, HALO Trust, 23 April 2021.

25 Email from Ahmet Sallova, KMAC, 30 April 2019.

26 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 8.

27 Ibid.

28 Email from Ahmet Sallova, KMAC, 28 April 2021.

29 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 8–9.

30 Ibid., p. 8.

31 Email from Olivia Meader, HALO Trust, 22 May 2020.

32 Email from Megan Dwyer, HALO Trust, 23 April 2021.

33 Emails from Olivia Meader, HALO Trust, 1 May 2019 and 22 May 2020.

34 Email from Megan Dwyer, HALO Trust, 23 April 2021.

35 Ibid.

36 Email from Olivia Meader, HALO Trust, 1 May 2019; and "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 8.

37 Email from Ahmet Sallova, KMAC, 16 April 2020.

38 Email from Ahmet Sallova, KMAC, 30 April 2019.

39 Emails from Olivia Meader, HALO Trust, 1 May 2019; and Terje Eldøen, NPA, 25 April 2019.

40 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 13.

41 Email from Ahmet Sallova, KMAC, 28 April 2021.

42 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 12.

43 Email from Megan Dwyer, HALO Trust, 18 May 2021.

44 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 9–10.

45 Ibid.

46 Ibid., p. 16.

47 Emails from Ahmet Sallova, KMAC, 30 April 2019; and Tom Welling, HALO Trust, 7 May 2018.

48 Email from Ahmet Sallova, KMAC, 16 April 2020.

49 Email from Ahmet Sallova, KMAC, 28 April 2021.

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54 Email from Charles Frisby, Acting Country Director, NPA, 27 April 2021.

55 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.

56 Emails from Megan Dwyer, HALO Trust, 23 April 2021.

57 Ibid.

58 Ibid.

59 Email from Ahmet Sallova, KMAC, 28 April 2021.

60 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 4; and interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.

61 Email from Ahmet Sallova, KMAC, 28 April 2021

62 Email from Megan Dwyer, HALO Trust, 23 April 2021.

63 Ibid.

64 Email from Ahmet Sallova, KMAC, 28 April 2021.

65 Ibid.

66 Emails from Olivia Meader, HALO Trust, 22 May and 23 June 2020; and Ahmet Sallova, KMAC, 16 April and 16 July 2020.

67 Email from Ahmet Sallova, KMAC, 28 April 2021.

68 Ibid.

69 Interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.

70 Email from Megan Dwyer, HALO Trust, 23 April 2021.

71 Emails from Ahmet Sallova, KMAC, 28 April 2021; and Megan Dwyer, HALO Trust, 18 May 2021.

72 Email from Megan Dwyer, HALO Trust, 18 May 2021.

73 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 6.

74 Ibid.

75 Email from Ahmet Sallova, KMAC, 28 April 2021.

76 Email from Megan Dwyer, HALO Trust, 23 April 2021.

77 Email from Olivia Meader, HALO Trust, 22 May 2020.

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80 Email from Megan Dwyer, HALO Trust, 23 April 2021.

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NAGORNO-KARABAKH

MINE ACTION REVIEW

CLEARING THE MINES 2021

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.**

UNDERSTANDING OF AP MINE CONTAMINATION

Estimates of Nagorno-Karabakh's mine contamination have risen sharply as a result of survey conducted by HALO Trust. In 2019, the estimate more than doubled to 7.75km^2, and in 2020 it rose a further 22% to 9.48km^2 after The HALO Trust identified 58 additional mined areas: 39 confirmed hazardous areas (CHAs) and 17 suspected hazardous areas (SHAs) (see Table 1).[1]

Table 1: Anti-personnel mined area by region (at end 2020)[2]

Region	CHAs	Area (m^2)	SHAs	Area (m^2)	Total area (m^2)
Askeran	13	435,410	1	28,309	463,719
Hadrut	19	2,068,787	0	0	2,068,787
Lachin	17	550,631	0	0	550,631
Martakert	109	2,626,743	124	3,450,231	6,076,974
Martuni	2	154,715	0	0	154,715
Shahumyan	4	167,900	0	0	167,900
Totals	**164**	**6,004,186**	**125**	**3,478,540**	**9,482,726**

Most of the additional hazardous areas were located in the north-eastern Martakert area bordering Azerbaijan, with smaller additions in Hadrut and Askeran, all pre-dating the six-week conflict between Armenia and Azerbaijan that broke out in September 2020. Azerbaijan reported that pro-Karabakh forces laid landmines in that conflict as they retreated before its advancing forces but it is unclear whether any contamination was added in the remaining territory under the control of the Nagorno-Karabakh authorities.[3] A large amount of this contamination is in areas now under Azerbaijani control as the areas remaining after the conflict are considerably smaller than the traditional Oblast. The border has yet to be demarcated preventing a precise determination of how much contamination is in Azerbaijan but HALO Trust reported that more than 40 CHAs and SHAs in its database are in, or contiguous to, areas under Azerbaijan's control.[4]

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 combat. 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.[5] The mines were of Soviet design and manufacture, and due to the nature of the conflict certain areas were mined several times.[6] 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.[7] Unconfirmed reports suggest more mines were laid after the so-called "four-day war" in April 2016.

NATIONAL OWNERSHIP AND 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.[8]

The HALO Trust established the Nagorno-Karabakh Mine Action Centre (NKMAC) in 2000 but the project did not attract local support and stalled.[9] 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.[10] A mine action coordination committee responsible for liaising between the local authorities and The HALO Trust ended in 2018.[11] HALO trust held discussions with authorities on establishing a mine action centre in 2019 and 2020 but these did not reach a conclusion.[12]

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.[13] HALO's staff of 137 in 2020 included 19 women, with four holding supervisory positions and eleven working in field operations.[14] As 13% of HALO's staff they represented a smaller proportion than in previous years because of an increase in staff numbers. HALO's most senior national staff member is a woman and women have been employed in both survey and clearance. HALO appointed the first woman for non-technical survey in 2019, and by 2021 all HALO survey teams included at least one woman.[15]

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.[16]

INFORMATION MANAGEMENT AND REPORTING

Nagorno-Karabakh does not have a mine action information management system; The HALO Trust operates its own database.[17]

No central mechanism exists for systematic sharing of data on mine clearance, underscoring the value of a mine action authority. The emergency services share information on explosive ordnance disposal (EOD) call-outs and advance notice of demolitions.[18] The Nagorno-Karabakh Army Liaison Officer shares information with The HALO Trust on items found, incidents, CHAs, and clearance on a regular basis. HALO is not authorised to share this data with others.[19]

PLANNING AND TASKING

There is no national mine action strategy currently in place in Nagorno-Karabakh.[20]

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Nagorno-Karabakh has no local mine action standards. The HALO Trust follows its internal standard operating procedures but it updated its standing operating procedures (SOPs) for battle area clearance (BAC) in 2020 to address the threat from urban contamination.[21]

OPERATORS

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 fell from 159 at the start of the year to 137 by September after financing support from the United States Agency for International Development (USAID) ended in April 2020. In the process, HALO reduced the number of manual clearance teams from twelve to seven, and the number of deminers from 74 to 54. In February 2021, HALO recruited new staff, increasing the total number to 155, and in the process increasing the number of survey teams from five to seven and the number of clearance teams from eight to ten. It also converted two non-technical survey teams to conduct only EOD and operated two mechanical teams with eight staff. HALO reported an urgent need for more staff but further expansion was not expected without additional donor support.[22]

The Nagorno-Karabakh Emergency Service, formerly known as the Rescue Service, conducts EOD spot tasks and has reportedly conducted some BAC. HALO works very closely with the Rescue Service and has provided many of its staff with EOD and clearance training.[23] One Nagorno-Karabakh army unit conducts limited demining.[24] Russian peacekeepers have conducted 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.[25]

A new local mine clearance organisation, HAK, was established in 2020, initially with one clearance team. In 2020, it mainly focused on getting established and learning about contamination and was not heavily active operationally. HALO Trust said it provided HAK with information and equipment, including detectors and personal protective equipment (PPE).[26]

OPERATIONAL TOOLS

The HALO Trust started working with Minehound detectors in 2020 following trials the previous year that showed the detector had increased clearance rates by around 10%. This figure was expected to rise further with experience.[27]

DEMINER SAFETY

The HALO Trust did not experience any demining or EOD accidents resulting in casualties in 2020. However, all men under 58 were conscripted into the army during the 2020 war and three serving and four former HALO Trust staff were killed in the fighting.[28]

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2020

The HALO Trust released 54,616m^2 through clearance in 2020, a year in which continuing survey was a priority and operations were halted by the outbreak of war in September.[29]

The COVID-19 pandemic mainly affected risk education but also led to a decrease in the number of personnel available for survey because of their age and risk category and led to a suspension of surveyors' interviews with community members. As one of only two international organisations working in Nagorno-Karabakh, The HALO Trust also supported the authorities' health response by providing ambulances as well as supplying health kits to six villages in Martakert and food and other supplies to hundreds of families in the Lachin region.[30]

SURVEY IN 2020

The HALO Trust continued in 2020 with the nationwide survey started in the previous year which did not result in cancellation of any suspected areas but confirmed another 58 hazardous areas affecting 1,146,026m^2. Of this, most—828,934m^2—was in Martakert. HALO halted the nationwide survey after the 2020 war, giving priority instead to surveying cluster munition contamination and clearing ERW.[31]

CLEARANCE IN 2020

The 54,616m^2 cleared by the HALO Trust in 2020 (see Table 2) was little more than a quarter of the clearance conducted in 2019 and resulted in destruction of 7 anti-personnel mines compared with 114 in 2019. HALO Trust destroyed six more anti-personnel mines and seventeen anti-vehicle mines in EOD spot operations.[32]

Table 2: Clearance of anti-personnel mines in 2020[33]

Province/Region/District	Operator	Area cleared (m^2)	AP mines destroyed	AV mines destroyed
Hadrut	HALO Trust	24,768	1	1
Lachin	HALO Trust	9,694	3	0
Martakert	HALO Trust	20,154	3	0
Total		**54,616**	**7**	**1**

1 Email from Miles Hawthorn, Programme Manager, HALO Trust, 18 April 2021.
2 Ibid.
3 See, e.g., R. Rehimov, "Karabakh: Azerbaijani civilian killed by landmine blast", *Anadolu Agency*, 14 December 2020.
4 Email from Miles Hawthorn, HALO Trust, 12 August 2021.
5 United States Agency for International Development (USAID), "De-mining Needs Assessment in Nagorno-Karabakh", September 2013, p. 2.
6 HALO Trust, "Our role in Nagorno-Karabakh: History", accessed 20 July 2019 at: http://bit.ly/2Zyu1KZ.
7 L. Musayelian, "Karabakh Enhances Defense Capabilities", Asbarez, Stepanakert, 26 July 2013, at: https://bit.ly/30lO3ew.
8 Email from Miles Hawthorn, HALO Trust, 20 May 2021.
9 Emails from Andrew Moore, HALO Trust, 28 June 2013; and Asqanaz Hambardzumyan, Field Officer, HALO Trust, 26 April 2019.
10 Emails from Rob Syfret, HALO Trust, 13 May and 4 September 2020; and Miles Hawthorn, HALO Trust, 18 April 2021.
11 Emails from Andrew Moore, HALO Trust, 26 May 2016; and Asqanaz Hambardzumyan, HALO Trust, 26 April 2019.
12 Email from Rob Syfret, HALO Trust, 13 May 2020.
13 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.
14 Email from Miles Hawthorn, HALO Trust, 18 April 2021.
15 Emails from Rob Syfret, HALO Trust, 7 May 2020; and Miles Hawthorn, HALO Trust, 29 July 2021.
16 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.
17 Email from Rob Syfret, HALO Trust, 7 May 2020.
18 Email from Rob Syfret, HALO Trust, 13 May 2020.
19 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.
20 Ibid.
21 Emails from Rob Syfret, HALO Trust, 7 May 2020; and Miles Hawthorn, HALO Trust, 18 April 2021.
22 Emails from Rob Syfret, HALO Trust, 7 May 2020; and Miles Hawthorn, HALO Trust, 18 April and 20 May 2021.
23 Email from Asqanaz Hambardzumyan, HALO Trust, 26 April 2019.
24 Ibid.
25 Email from Miles Hawthorn, HALO Trust, 18 April 2021.
26 Email from Miles Hawthorn, HALO Trust, 18 April 2021.
27 Emails from Miles Hawthorn, HALO Trust, 18 April 2021; and Rob Syfret, HALO Trust, 13 May 2020.
28 Email from Miles Hawthorn, HALO Trust, 18 April 2021.
29 Ibid.
30 Ibid.
31 Ibid.
32 Ibid.
33 Email from Miles Hawthorn, HALO Trust, 18 April 2021.

WESTERN SAHARA

MINE ACTION REVIEW

CLEARING THE MINES 2021

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.**
- **A resource mobilisation plan should be developed with the aim of attracting international donor support.**
- **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.**

UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of mine contamination across Western Sahara is not known, although the areas along the Berm[1] 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 2020, 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 2020, 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 216km^2 (see Table 1).[5] The main difference in the type of contamination from the data reported in 2019 is that all contamination is now reported as mixed anti-personnel and anti-vehicle mines, at the end of 2019, it was reported that 27 confirmed hazardous areas (CHAs) containing anti-vehicle mines totalled 61.9km^2.[6] According to UNMAS, the anti-vehicle mine contamination has been recategorised as mixed anti-vehicle mine and anti-personnel mine and is included in the contamination estimate.[7]

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 216km^2 remaining at the end of 2020, as set out in Table 2.[8] From 2019, the number of CHAs has increased by ten and the amount of area has increased by 2.94km^2 while the number of suspected hazardous areas (SHAs) has decreased by nine and the area has decreased by 0.04km^2. Overall, the total number of hazardous areas has increased from 24 to 25 and the total area has increased by 2.91km^2.[9] UNMAS reported that no previously unrecorded anti-personnel mine contamination was added to Western Sahara's information management database in 2020.[10] According to UNMAS, this increase was due to change in survey method as teams began to use a vehicle-assisted box survey method, which allowed them to cover larger areas and record new hazards.[11]

Table 1: Mined area east of the Berm (at end 2020)[12]

Type of contamination	CHAs	Area (km^2)	SHAs	Area (km^2)	Total CHAs and SHAs	Total area (km^2)
AP mines	0	0	0	0	0	0
AV mines	0	0	0	0	0	0
AP/AV mines	15	90.05	10	125.96	25	216.01
Totals	**15**	**90.05**	**10**	**125.96**	**25**	**216.01**

AP = Anti-personnel AV = Anti-vehicle SHA = Suspected hazardous area

Table 2: Mined area containing anti-personnel mines by province east of the Berm (at end 2020)[13]

Province	CHAs	Area (km²)	SHAs	Area (km²)	Total CHAs and SHAs	Total area (km²)
North Region	5	0.26	3	4.10	8	4.36
South Region	10	89.79	7	121.86	17	211.65
Totals	**15**	**90.05**	**10**	**125.96**	**25**	**216.01**

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 are located within the 5km-wide buffer strip and are inaccessible for clearance.[14] Clearance of the buffer strip of mines and ERW is not foreseen in UN Mission for the Referendum in Western Sahara (MINURSO) Military Agreements No. 2 (with the Polisario Front) and No. 3 (with the Moroccan army), which, according to the UN, considerably limits the ability of MINURSO military observers to patrol and verify developments.[15] No survey or clearance of the buffer strip was conducted during 2020.[16]

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.[17]

Western Sahara also has a significant problem from CMR and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants 2021* report on Western Sahara for further information).[18]

NATIONAL OWNERSHIP AND 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 30 October 2020, MINURSO's mandate was extended for an additional 12 months until 30 October 2021 under UN Security Council Resolution 2548. 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 the SMACO, which is responsible for coordinating mine action activities in Western Sahara east of the Berm, excluding the buffer strip.[19]

In 2020, UNMAS Western Sahara provided SMACO with €50,000 funding to cover some of its operating expenses. SMACO also receives ongoing capacity development support from UNMAS.[20]

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.[21] UNMAS has a gender strategy as part of its overall country strategy.[22] 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.[23] 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.[24]

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 2020, 43% of staff in UNMAS Western Sahara were women with 14% in supervisory roles although there are only seven staff in total (both national and international). In SafeLane Global (UNMAS's contractor), 17% of operational roles were held by women. 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 camps. All national deminers, both male and female, are Sahrawi.[25]

INFORMATION MANAGEMENT AND REPORTING

According to UNMAS, the Information Management System for Mine Action (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 COVID-19 lockdown. As at March 2021, this process was still ongoing.[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 newly published global UN Mine Action Strategy 2019–2023. In order to achieve a Western Sahara that is 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 March 2021, none of these objectives had been achieved and UNMAS reported delays in progress due to the suspension of operations as a result of COVID-19. The yearly work plan was suspended in 2020 due to COVID-19, although there had also been no mine action work plan in 2019.[30]

UNMAS Western Sahara mine action activities continue to be in support of 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 ensuring 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 in March 2021 that the standards are reviewed annually and that no updates were made in 2020.[34]

An external quality management system was in place from 2018 and implemented by UNMAS and SMACO to the east of the Berm.[35]

OPERATORS AND OPERATIONAL TOOLS

Table 3: Operational clearance capacities deployed in 2020[36]

Operator	Manual teams	Total deminers*	Dog teams	Comments
SafeLane Global (for UNMAS Western Sahara)	2	24	0	No change from 2019
Totals	**2**	**24**	**0**	

* Excluding team leaders, medics, and drivers.

SafeLane Global (formerly Dynasafe MineTech Limited, DML) was the implementing operator for UNMAS Western Sahara, conducting survey and clearance in 2020. There was no change in operational capacity in 2020 from the previous year and no change was planned for 2021.[37]

Danish Demining Group (DDG) did have funding in 2020 for non-technical survey in Western Sahara east of the Berm, however, due to the restrictions introduced as part of the COVID-19 outbreak and then the renewal of conflict from November 2020, DDG was not able to deploy any teams after they received training in March. As at April 2021, with the border with Algeria still predominantly closed, DDG (now known as Danish Refugee Council's Humanitarian Disarmament and Peacebuilding sector) have had to reorientate activities and they no longer have funding to conduct survey in Western Sahara.[38]

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2020

There was no survey or clearance conducted of mined area in 2020.[39] This is a decrease from the 0.20km^2 of mined area which was cleared by SafeLane Global for UNMAS Western Sahara in the north and south regions during 2019.[40] According to UNMAS, the absence of survey and clearance during 2020 was due to the partial suspension of clearance operations in accordance with COVID-19 protocol, with only the explosive ordnance disposal (EOD) response team on standby for emergency EOD and route verification tasks.[41]

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 Sahrawi State for the goals of the Treaty".[42]

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.[43] In 2020, UNMAS Western Sahara reported that it needed to maintain its level of funding of $3.265 million per year and to secure an additional $2 million per year to clear all known mine and ERW contamination in the territory of Western Sahara, east of the Berm, and outside the buffer strip, restricted areas, and the Berm itself by 2023.[44]

However, there has been a massive decrease in clearance output from 2018 to 2020 in Western Sahara with no mined areas cleared during 2020 due to operations being partially suspended because of the outbreak of COVID-19 and the resurgence of conflict.[45] The 2023 completion date was always ambitious but now looks impossible and should be revised along with the timed objectives in SMACO's Strategic Plan 2019–2023. Additional resources and capacity, along with support to SMACO, also need to be secured urgently.

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; Virginie Auger, UNMAS, 29 March 2017.

5 Email from Leon Louw, UNMAS, 30 March 2021.

6 Email from Edwin Faigmane, UNMAS, 18 June 2020.

7 Email from Leon Louw, UNMAS, 11 May 2021.

8 Ibid.

9 Email from Edwin Faigmane, UNMAS, 28 July 2020.

10 Email from Leon Louw, UNMAS, 30 March 2021.

11 Email from Leon Louw, UNMAS, 11 May 2021.

12 Email from Leon Louw, UNMAS, 30 March 2021.

13 Ibid.

14 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.

15 "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.

16 Email from Leon Louw, UNMAS, 30 March 2021.

17 Emails from Graeme Abernethy, UNMAS, 14 September 2018; and Edwin Faigmane, UNMAS, 18 June 2020; and UNMAS, "2017 Portfolio of Mine Action Projects: MINURSO".

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

19 Response to questionnaire by Sarah Holland, UNMAS, 24 February 2014, and email, 25 February 2014; and email from Edwin Faigmane, UNMAS, 6 August 2020.

20 Email from Leon Louw, UNMAS, 30 March 2021.

21 Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.

22 Email from Leon Louw, UNMAS, 30 March 2021.

23 Email from Edwin Faigmane, UNMAS, 18 June 2020.

24 Emails from El Hadji Mamadou Kebe, NPA, 4 May 2019 and 14 March 2018.

25 Email from Leon Louw, UNMAS, 30 March 2021.

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, 30 March 2021.

29 SMACO "Strategic Plan 2019–2023", at: http://bit.ly/38jaGm^2; and email from Robert Thompson, UNMAS, 31 July 2019.

30 Email from Leon Louw, UNMAS, 30 March 2021.

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, 30 March 2021.

35 Emails from Robert Thompson, UNMAS, 29 April 2019; and Edwin Faigmane, UNMAS, 28 July 2020.

36 Email from Leon Louw, UNMAS, 30 March 2021.

37 Ibid.

38 Email from Catherine Smith, Regional Coordinator, DDG, 18 April 2021.

39 Email from Leon Louw, UNMAS, 30 March 2021.

40 Email from Edwin Faigmane, UNMAS, 29 July 2020.

41 Email from Leon Louw, UNMAS, 30 March 2021.

42 "SADR initiative welcomed by Maputo Conference on Mine Ban", *Sahara Press Service*, 2 July 2014, at: http://bit.ly/2GE1JqW.

43 SMACO "Strategic Plan 2019–2023", at: http://bit.ly/38jaGm^2.

44 Email from Edwin Faigmane, UNMAS, 6 August 2020.

45 Email from Leon Louw, UNMAS, 30 March 2021.

ANNEX

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

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AIM	Abandoned Improvised Mines (Afghanistan)
AP	Anti-personnel
APMBC	1997 Anti-Personnel Mine Ban Convention
AV	Anti-vehicle
AXO	Abandoned explosive ordnance
BAC	Battle area clearance
BiH	Bosnia and Herzegovina
CCM	2008 Convention on Cluster Munitions
CHA	Confirmed hazardous area
CMR	Cluster munition remnants
DCA	DanChurch Aid
DDG	Danish Demining Group
EO	Explosive ordnance
EOD	Explosive ordnance disposal
EORE	Explosive ordnance risk education
ERW	Explosive remnants of war
EU	European Union
FSD	Swiss Foundation for Mine Action
GICHD	Geneva International Centre for Humanitarian Demining
GIS	Geographic information system
HI	Humanity and Inclusion
ICRC	International Committee of the Red Cross
IED	Improvised explosive device
IMAS	International Mine Action Standards
IMSMA	Information Management System for Mine Action
IP	Implementing partner
ITF	International Trust Fund (ITF) Enhancing Human Security
LIS	Landmine Impact Survey
MAG	Mines Advisory Group
MDD	Mine detection dog
MoU	Memorandum of Understanding
MRE	Mine risk education
NATO	North Atlantic Treaty Organization
NGO	Non-governmental organisation
NMAS	National Mines Action Standards
NPA	Norwegian People's Aid
NSAG	Non-state armed group
OAP	Oslo Action Plan
OAS	Organization of American States
OSCE	Organization for Security and Co-operation in Europe
PPE	Personal protective equipment
QA	Quality assurance
QC	Quality control
QM	Quality management
SHA	Suspected hazardous area
SOP	Standing (or standard) operating procedure
TWG	Technical working group
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNMAS	United Nations Mine Action Service
UXO	Unexploded ordnance
VA	Victim assistance
VTF	Voluntary Trust Fund (United Nations)

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