

MINE  
ACTION  
REVIEW

# CLEARING THE MINES 2018

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

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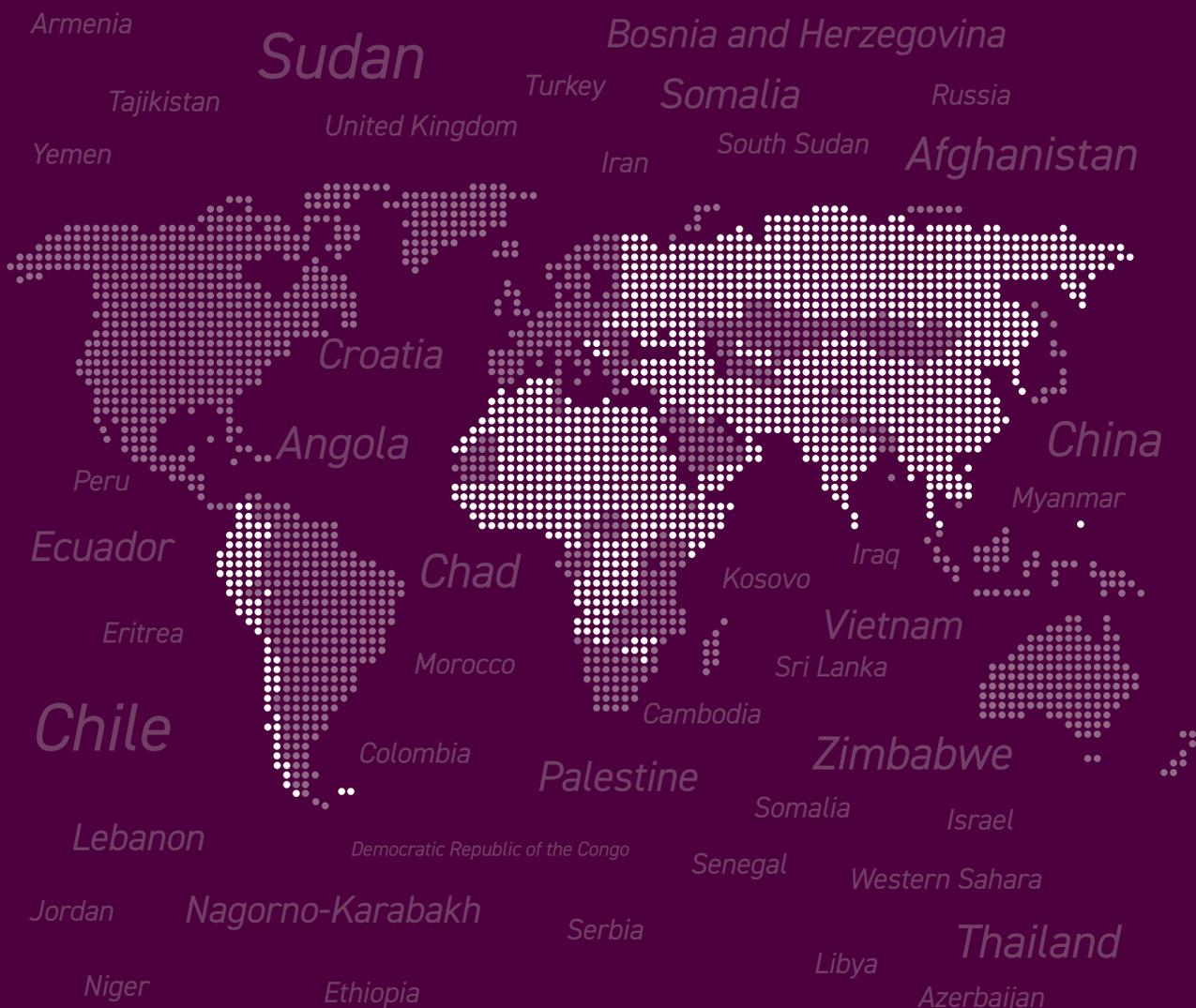
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# A REPORT BY MINE ACTION REVIEW FOR THE SEVENTEENTH MEETING OF STATES PARTIES TO THE ANTI-PERSONNEL MINE BAN CONVENTION



## Acknowledgments

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## Other Information

The publication is available for download at [www.mineactionreview.org](http://www.mineactionreview.org)

Mine Action Review conducted the mine action research in 2018, including on anti-personnel landmine survey and clearance, and shared all its country reports with the International Campaign to Ban Landmines (ICBL) and Cluster Munition Coalition (CMC)'s Landmine Monitor.

Please send any comments to [feedback@mineactionreview.org](mailto:feedback@mineactionreview.org)

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# FOREWORD

BY THE HALO TRUST, MINES ADVISORY GROUP,  
AND NORWEGIAN PEOPLE'S AID

It's time to get real. With the Fourth Review Conference of the Anti-Personnel Mine Ban Convention (APMBC) marking 20 years since the treaty's entry into force, we need progress in land release to greatly accelerate. Everyone – including ourselves – needs to play their part in achieving this.

Globally, 58 states and three other areas are still affected by anti-personnel mines. While this is a significant and much welcome reduction from the 88 states and four other areas recorded in 1999, and despite the massive contamination added by Islamic State in particular, given available resources and expertise the total in 2018 should be far, far lower. By the Fifth Review Conference in 2024, we need the number of affected states parties to be down to no more than a handful and we need to continue to address humanitarian emergencies and completion concurrently. Failure will be counted in terms of lost lives and lost livelihoods.

For sure, mistakes in survey in the early days cost us all dearly, exaggerating hugely the extent of the problem and asserting the presence of contamination where it did not, in fact, exist. And, despite the best of intentions, poor survey and inadequate information management continues to plague our profession, sometimes leading to clearance resources being wasted on uncontaminated areas. Today, however, old surveys can no longer be an excuse for slow progress. The re-surveys conducted in several countries over the last few years, as well as those underway or planned, clearly evidence that high-quality survey can be achieved without excessive expenditure. An accurate baseline is, or should be, the starting point for all successful national mine action programmes.

Once the contaminated areas have been accurately identified, a variety of tools and procedures are available to conduct clearance efficiently. It's not only about square metres though, it's about how we work and the progress achieved. Ensuring the quality of demining operations through strong National Mine Action Standards and standard operating procedures; conducting thorough risk assessments before deployment to ensure we use the most effective tool for the task; application of well-drafted national strategies and workplans that guide the prioritisation of clearance tasks; and effective communication, collaboration, and coordination are also paramount.

Strong national ownership and good governance is central. States can create an enabling environment for successful mine action, by allowing cancellation and reduction of suspected area based on sound risk management principles without the need for clearance. They can ensure that detectors and other humanitarian demining equipment is not subject to import tax, consonant with the APMBC and good international practice. They can commit their best experts to ensure the coordination of operations. And, as completion nears, they can plan properly for the national capacity that will be needed to address any contamination that is found after international assistance has ended or previously unknown contamination discovered after completion of land release.

Successful national ownership requires political engagement by both the affected nation and supporting states. It also often requires support, be it financial, technical or strategic, learning lessons from others. This is essential if we are to create a sector that is progressive and innovative and able to respond to new challenges posed by current conflict. Different actors, whether they are states, civil society, NGOs or parts of the UN, can add value in different ways in supporting affected states to achieve their obligations. Again, it is our collective responsibility to identify and acknowledge each other's strengths and find ways for our efforts to complement each other.

The challenges posed by mines of an improvised nature impact a relatively small number of countries. It is, however, clear that victim-activated improvised explosive devices that also meet the definition of an anti-personnel mine must be recorded, documented and reported under the APMBC. Failure to do so by states parties not only puts them in non-compliance with the treaty, but also creates costly confusion and risks denying survivors their rights. We all have a responsibility to prevent this.

While the response to new humanitarian emergencies and increased casualties commands a high percentage of funding for mine action, we also need donors to continue their excellent support to the treaty; to support the full spectrum of affected countries, including those still suffering from sometimes decades-long anti-personnel mine contamination. Country-specific approaches, such as the Individualised Approach (supported by the APMBC's Committee on the Enhancement of Cooperation

and Assistance), provide an excellent platform for individual affected states to present their strategy for Article 5 implementation and challenges faced, to the donor community. These approaches help motivate and create an environment of collaboration to support states create clear plans and outline the assistance they require to reach completion. We ask that states don't forsake affected countries at the last hurdles. Support what are now successful programmes in Angola, Cambodia, Sri Lanka, Thailand, Zimbabwe, and others, whatever the mistakes of the past.

Let us not fall short with 2025 just around the corner. Instead, let's plan to succeed by ridding our planet of a man-made scourge, matching achievements in eliminating smallpox and polio. It's time to get real.



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# OVERVIEW

## SUMMARY

Despite progress in many affected countries, global anti-personnel mine clearance in 2017 was a significant drop on the previous year, down to almost 134km<sup>2</sup> from 146km<sup>2</sup> (corrected down from almost 172km<sup>2</sup>) in 2016. The number of emplaced mines destroyed also fell, down from more than 232,500 anti-personnel mines and over 21,000 anti-vehicle mines in 2016, to more than 181,600 anti-personnel mines and over 7,500 anti-vehicle mines in 2017. A significant proportion of the decrease in clearance output can be accounted for by the fact that the 2016 global clearance figure in last year's report included 22.1km<sup>2</sup> of mine clearance output for Afghanistan that concerned clearance of only anti-vehicle mines, not anti-personnel mines. A further 3.3km<sup>2</sup> reported as 2016 clearance in Turkey, on the Syria border as part of construction of a border defence, was subsequently revealed to be overwhelmingly cancellation by non-technical survey.

However, there was still a significant decrease in clearance output in 2017 compared to the 146km<sup>2</sup> recorded for the previous year (the corrected figure for 2016 clearance). Most of the decrease is explained by Algeria's completion of clearance in late 2016 (with an estimated 12km<sup>2</sup> of clearance in 2016) and, therefore, no cleared area was recorded for Algeria in 2017. Furthermore, in Croatia some mined area that was cleared in 2017 was not formally reported as 2017 clearance output due to an administrative change in Croatia's recording and reporting process. This obscures the fact that overall, annual clearance levels remained broadly constant in most countries in 2017. Nonetheless, on paper, the total area cleared of anti-personnel mine in 2017 represents the lowest recorded total for a decade.

Moreover, anti-personnel mines of an improvised nature (sometimes also referred to as improvised mines, locally produced mines, or artisanal mines), especially those made and laid by Islamic State in Iraq and Syria, took a heavy toll on civilians while adding significantly to global contamination. It has not been possible to quantify the amount of clearance in Syria (and the extent of clearance of mined area containing anti-personnel mines in Iraq is an estimate by Mine Action Review).

Behind the global clearance numbers lie several national positions of even greater concern. **Eritrea** has given no evidence that it has been clearing anti-personnel mines over recent years. Indeed, there is no indication of any progress in demining since the end of 2013. Eritrea is thus failing to comply with its obligation under Article 5 to complete clearance as soon as possible. It failed to submit an updated Article 5 workplan as required by states parties when they granted a second extension in 2014 and last submitted an Article 7 transparency report in 2014, in and of itself a violation of the Convention.

**States parties to the Anti-Personnel Mine Ban Convention (APMBC) should initiate an Article 8 procedure to facilitate and clarify compliance, including, if necessary, a fact-finding mission to Eritrea.** Added to this bleak landscape, Ethiopia and Senegal are also seemingly in violation of their international legal obligations to clear mines as soon as possible: Ethiopia because it has failed to engage in mine clearance since 2013 and Senegal because it is believed that, despite denials, anti-personnel mines remain around military bases two decades after it adhered to the APMBC. Other affected states parties that did not clear any mined area in 2017 include Chad, Niger, and Serbia. Serbia did, however, release a small amount of land through technical survey in 2017, which represents a positive development in its land release methodology given an earlier preference for clearing suspected hazardous areas (SHAs).

In a much welcome development, as this report was going to print in early November 2018, **Ukraine** finally submitted an extension to its Article 5 deadline, seeking a five-and-a-half-year period (although the request says five years) until 1 December 2021. Prior to submission of its Article 5 extension request, Ukraine had continued to refuse to seek a deadline extension as a result of new use of anti-personnel mines since conflict erupted in 2014, putting it in serious violation of the APMBC. Assuming its extension request is granted by states parties at the Seventeenth Meeting of States Parties, Ukraine will return to compliance with Article 5. Ukraine should, however, adopt straightforward national mine action legislation, the absence of which is negatively impacting the effectiveness and efficiency of mine action, delaying the establishment of a national mine action centre, and hindering coordination, strategic planning, and the introduction of a handover process for land release.

As at 1 September 2018, a total of 58 states and 3 territories were believed to be still contaminated with anti-personnel mines, a reduction of one state, Mauritania, on the previous year following its completion of clearance in late 2017. Mauritania was expected to make a formal declaration of full completion of its APMBC Article 5 treaty obligations at the Seventeenth Meeting of States Parties in November 2018. Palau might also soon be in a position to make a similar declaration, once survey and assessment are completed. Otherwise, if mined areas suspected to contain anti-personnel mines remain on its territory, it should seek an extension to its treaty deadline for clearance as its Article 5 deadline expired on 1 May 2018.

Six states did submit requests for extensions to their Article 5 clearance deadlines in 2018: Bosnia and Herzegovina, Croatia, Cyprus, Serbia, Sudan, and the United Kingdom. Among other affected states parties, only the Democratic Republic of Congo (DR Congo),

Peru, Sri Lanka, and Zimbabwe were expected to comply with their respective Article 5 deadlines for survey and clearance without the need to seek an extension.

Cameroon and Nigeria, whose Article 5 deadlines expired several years ago, are each affected by mines of an improvised nature emplaced by Boko Haram fighters in the past two years. Neither state has submitted its respective annual transparency report declaring this new mine contamination as Article 7 of the APMBC requires, much less requested a new Article 5 deadline. Following several years of non-compliance, Jordan reported to Mine Action Review that it has now completed its sampling and verification project in the Jordan Valley and that its military had conducted “checks” on its northern borders. As soon as conditions permit, the national authorities plan to confirm if any quality control of earlier clearance is needed on the northern borders. Only at this stage will it become clear if Jordan has fulfilled its obligations under Article 5.

Set against this concerning backdrop, the aspiration of states parties to complete clearance “to the fullest extent possible” by 2025, as laid down by the declaration of the APMBC’s Third Review Conference in 2014, is not being realised. This is so, even in states parties that are not blighted by ongoing armed conflict. Overall, improvements in mine action programmes remain patchy, with inefficient land release methodologies still plaguing too many programmes and too many operators. Dozens of mined areas were fully cleared in 2017, consuming precious resources but without any landmines being found. Better targeting of clearance, enabled by high-quality evidence-based survey and backed by more funding, are desperately needed if a landmine-free 2025 is to be still possible.

## GLOBAL CONTAMINATION

As at 1 September 2018, a total of 58 states and 3 territories were believed to still have mined areas containing anti-personnel mines on territory under their jurisdiction or control. Of these, a total of 36 states parties to the APMBC were confirmed or strongly suspected to contain anti-personnel mines (see Table 1). One state party, Mauritania, completed clearance of anti-personnel mines from its territory in 2017, following release of the remaining one square kilometre of mined area. Mauritania was expected to make a formal declaration of completion of its Article 5 treaty obligations at the Seventeenth Meeting of States Parties in November 2018. In addition, Palau may not, after all, be mine-affected. Despite Mauritania’s completion of clearance the number of affected states parties increased because Palestine and Sri Lanka, both formerly states not party, acceded to the treaty and became states parties on 1 June 2018 (with a corresponding treaty clearance deadline of 1 June 2028).

A total of 22 states not party to the APMBC are affected by anti-personnel mines, a reduction of two resulting from Palestine and Sri Lanka’s welcome accession to the treaty. As was the case in 2016, three other areas were also contaminated with anti-personnel mines.

In some states already known to be heavily mined, notably Iraq, Syria, and Yemen, ongoing armed conflicts added new contamination again in 2017, as they had the previous year. The armed forces in Myanmar (a state not party) and in Ukraine (a state party) are both believed to have emplaced new anti-personnel mines for a second year in a row. In Myanmar’s case, this is a violation of international human rights law and international humanitarian law. In Ukraine’s case this is a serious violation of its APMBC obligations “never under any circumstances” to use anti-personnel mines.

**Table 1: Global Anti-Personnel Mine Contamination (at September 2018)**

States parties		States not party	
Afghanistan	Nigeria	Armenia	Lebanon
Angola	Oman	Azerbaijan	Libya
Argentina*	Palau**	China	Morocco
Bosnia and Herzegovina	Palestine	Cuba	Myanmar
Cambodia	Peru	Egypt	North Korea
Cameroon	Senegal	Georgia	Pakistan
Chad	Serbia	India	Russia
Chile	Somalia	Iran	South Korea
Colombia	South Sudan	Israel	Syria
Croatia	Sri Lanka	Kyrgyzstan	Uzbekistan
Cyprus	Sudan	Lao PDR	Vietnam
DR Congo	Tajikistan	<b>22 states not party</b>	
Ecuador	Thailand	<b>Other areas</b>	
Eritrea	Turkey	Kosovo	
Ethiopia	Ukraine	Nagorno-Karabakh	
Iraq	United Kingdom	Western Sahara	
Jordan	Yemen	<b>3 other areas</b>	
Niger	Zimbabwe		
<b>36 states parties</b>			

\* Argentina is mine-affected by virtue of its assertion of sovereignty over the Falkland Islands/Malvinas. The United Kingdom also claims sovereignty over the Islands and exercises control over them.

\*\* Palau may be able to declare fulfilment of its Article 5 obligations once necessary assessment and survey has been completed.

Three other states parties may be added to the Mine Action Review list of those affected by anti-personnel mines: Mali, the Philippines, and Tunisia. Mali certainly continues to suffer the consequences of anti-vehicle mine contamination,<sup>1</sup> and many of the mines, although laid primarily on roads, may in fact and in law be anti-personnel mines.<sup>2</sup> In the Philippines, there have been reports of possible contamination by improvised devices that might meet the APMBC definition of an anti-personnel mine, as a result of armed conflict between the Philippines Army and non-state armed groups.<sup>3</sup> Tunisia reports that there may be minefields containing a mixture of anti-personnel and anti-vehicle mines left over from the Second World War in the south of the country (El Hamma, Mareth, and Matmata regions), in the centre (in Faiedh and Kasserine), in the north (Cap-Bon) as well as in the north-west of the country.<sup>4</sup> It does not, however, know of specific mined areas.

## Extent of Contamination

Despite the disappointing level of progress overall, in many affected states anti-personnel mine contamination is modest, and completion of clearance would be achievable within months or a few years with the necessary approach and commitment. Table 2 summarises what is known or reasonably believed about the extent of mine contamination in affected states and other areas. It is therefore an assessment by Mine Action Review of the extent of anti-personnel 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. States parties to the APMBC are identified in bold.

**Table 2: Extent of Anti-Personnel Mine Contamination in Affected States and Other Areas (at September 2018)\***

Massive (>100km <sup>2</sup> )	Heavy (>20km <sup>2</sup> )	Medium (2–20km <sup>2</sup> )	Light (<2km <sup>2</sup> ) or extent of contamination unclear
<b>Afghanistan</b>	<b>Angola</b>	<b>Argentina**</b>	<b>Cameroon</b>
<b>Bosnia and Herzegovina</b>	Azerbaijan	Armenia	<b>Cyprus</b>
<b>Cambodia</b>	<b>Chad</b>	<b>Colombia</b>	<b>DR Congo</b>
<b>Iraq</b>	<b>Croatia</b>	<b>Chile</b>	<b>Ecuador</b>
	<b>Ethiopia</b>	China	India
	Iran	Cuba	Kyrgyzstan
	Israel	Egypt	<b>Niger</b>
	Morocco	<b>Eritrea</b>	<b>Nigeria</b>
	Myanmar	Georgia	<b>Oman</b>
	North Korea	<b>Jordan</b>	<b>Palau</b>
	Russia	Kosovo	<b>Palestine</b>
	<b>South Sudan</b>	Lao PDR	<b>Peru</b>
	Syria	Lebanon	<b>Senegal</b>
	<b>Thailand</b>	Libya	<b>Serbia</b>
	<b>Turkey</b>	Nagorno-Karabakh	Uzbekistan
	Western Sahara	Pakistan	
	<b>Yemen</b>	<b>Somalia</b>	
	<b>Zimbabwe</b>	South Korea	
		<b>Sri Lanka</b>	
		<b>Sudan</b>	
		<b>Tajikistan</b>	
		<b>Ukraine</b>	
		<b>United Kingdom**</b>	
		Vietnam	
<b>4 states</b>	<b>17 states and 1 other area</b>	<b>22 states and 2 other areas</b>	<b>15 states</b>

\* States parties to the APMBC are in bold.

\*\* Argentina is mine-affected by virtue of its assertion of sovereignty over the Falkland Islands/Malvinas. The United Kingdom also claims sovereignty over the Islands and exercises control over them.

### Mines of an improvised nature

A very significant and growing problem persists from the use of anti-personnel mines of an improvised nature (also known as improvised mines, locally produced mines, or artisanal mines), especially in Iraq and Syria, resulting from the actions of Islamic State forces, and

in Afghanistan, from the Taliban and associated forces. Further contamination is also being added in the Lake Chad Basin by Boko Haram and Islamic State in West Africa forces. Recorded by some solely under the catch-all term of improvised explosive devices (IEDs), despite their status under international law,<sup>5</sup> these mines pose a major

threat to civilians as well as to soldiers. Where the mines are designed to be exploded by the presence, proximity, or contact of a person and will have the effect of injuring or killing, they fall within the APMBC definition and are prohibited by the treaty.<sup>6</sup> This is believed to be the case with the majority of mines of an improvised nature. It does not matter under the APMBC how these weapons were produced or employed, nor by whom they were laid; if they fall within the definition of an anti-personnel mine and are used within the territory of a state party, all of the Convention's provisions apply, including the obligations to clear and report under Articles 5 and 7, respectively, just as they do to more conventionally manufactured anti-personnel mines.

In states parties that are affected by mines of an improvised nature, all relevant stakeholders should support the national authorities to correctly record and report this contamination under the APMBC, along with efforts to survey and clear the contamination from these devices. This includes United Nations (UN) agencies such as the UN Mine Action Service (UNMAS), national and international clearance operators, and expert organisations.

Failure to address anti-personnel mines of an improvised nature under the APMBC merely because of how these devices are produced, rather than addressing them because of the indiscriminate effect they have, not only

violates the provisions of the APMBC, but also risks weakening the global norm against anti-personnel mines.

While the scale of use of mines of an improvised nature has increased significantly in recent years as a result of use by non-state armed groups such as Islamic State, Boko Haram, and the Taliban, the issue of mines of an improvised nature is not new. For example, APMBC state party, Colombia, among others, has been addressing mines of an improvised nature under its Convention obligations for many years, correctly recording and reporting these victim-activated improvised devices as anti-personnel mines.

Survey and clearance of mines of an improvised nature in urban areas is also not a new occurrence. However, the scale of urban contamination in countries such as Iraq should prompt the mine action community to better clarify and standardise how such contamination, survey and clearance is recorded and reported. This is currently being discussed within the International Mine Action Standards (IMAS) Review Board.

### Completed clearance

A total of 30 states and 1 other area are no longer suspected to be contaminated with mines since the APMBC was adopted in 1997. All but Nepal (a state not party) and Taiwan (other area) are states parties to the APMBC.

**Table 3: Completion of Anti-Personnel Mine Survey and Clearance Since 1997\***

State	State	State
<b>Albania</b>	<b>Greece</b>	<b>Nicaragua</b>
<b>Algeria</b>	<b>Guatemala</b>	<b>Rwanda</b>
<b>Bhutan</b>	<b>Guinea-Bissau</b>	<b>Suriname</b>
<b>Bulgaria</b>	<b>Honduras</b>	<b>Swaziland</b>
<b>Burundi</b>	<b>Hungary</b>	Taiwan
<b>Rep. of Congo</b>	<b>FYR Macedonia</b>	<b>Tunisia</b>
<b>Costa Rica</b>	<b>Malawi</b>	<b>Uganda</b>
<b>Denmark</b>	<b>Mauritania</b>	<b>Venezuela</b>
<b>France</b>	<b>Montenegro</b>	<b>Zambia</b>
<b>The Gambia</b>	<b>Mozambique**</b>	
<b>Germany</b>	Nepal	
<b>Total</b>		<b>30 states and 1 other area</b>

\* States parties to the APMBC are in bold.

\*\* Mozambique has four small suspected mined areas that are underwater. These areas, which were declared by Mozambique to the other APMBC states parties, must be released as soon as it is possible to do so.

## RECORDED CLEARANCE IN 2017

For 2017, Mine Action Review has estimated total clearance of almost 134km<sup>2</sup> of mined area containing anti-personnel mines, compared to 146km<sup>2</sup> (corrected down from almost 172km<sup>2</sup>) recorded for 2016. The correction to the 2016 clearance total reflects the fact that the 2016 Afghanistan clearance data inadvertently included 22.1km<sup>2</sup> of clearance that was anti-vehicle, not anti-personnel, mine clearance; and 3.3km<sup>2</sup> of clearance output recorded for Turkey in 2016, was subsequently revealed to be almost entirely cancellation through non-technical survey. Much of the 12km<sup>2</sup> decrease in

actual clearance output between 2017 and 2016 (based on the corrected 2016 total), is explained by Algeria's completion of anti-personnel mine clearance in late 2016 (with an estimated 12km<sup>2</sup> of clearance in 2016) and therefore, no subsequent cleared area was recorded for Algeria in 2017.

Destruction of emplaced landmines also reduced dramatically, down from more than 232,500 anti-personnel mines and over 21,000 anti-vehicle mines in 2016 to more than 181,600 anti-personnel mines and

over 7,500 anti-vehicle mines in 2017. The decrease in the number of emplaced anti-personnel mines destroyed in 2017 is also primarily explained by Algeria, which destroyed some 62,589 anti-personnel mines in 2016 and subsequently completed anti-personnel mine clearance in late 2016. Only 137 "isolated" anti-personnel mines were reported by Algeria as having been destroyed in 2017.<sup>7</sup>

Table 4 summarises the outputs of major mine clearance operations in 2017, with a comparison in square kilometres to the previous year. As was the case in 2016, more than 95% of all recorded clearance in 2017 was by states parties to the APMBC. That said, six states parties did not conduct any mine clearance in 2017: Cameroon, Chad, Eritrea, Ethiopia, Niger, and Serbia. Lebanon, which recorded clearance of only 0.5km<sup>2</sup> nonetheless destroyed 9,205 anti-personnel mines in the process, illustrating the density of contamination.

**Table 4: Major Recorded Anti-Personnel Mine Clearance in 2017\***

State or other area*	Area cleared (km <sup>2</sup> )	AP mines destroyed	Comparison to 2016 clearance (+/- km <sup>2</sup> )	Comment
<b>Afghanistan</b>	28.2	14,629	+ 1.0 (compared to corrected AP mine clearance in 2016)	2017 clearance output of 28.2km <sup>2</sup> is of anti-personnel clearance only, and excludes anti-vehicle mine clearance. 2016 clearance output of 49.2km <sup>2</sup> , recorded in last year's Mine Action Review report, inadvertently included anti-vehicle mine clearance. This has been corrected for in the comparison to 2016.
<b>Croatia</b>	30.4	1,393	- 8.3	Decrease in 2017 clearance output, compared to 2016, is reportedly due to a change in administrative reporting processes for recording and reporting clearance output, rather than a drop in actual clearance output.
<b>Cambodia</b>	27.7	5,780	+ 1.0	
<b>Iraq</b>	23.3	25,743	+ 6.9	Based on an estimated total area cleared. Of the 25,743 mines reported destroyed, 13,212 devices destroyed in Federal Iraq were only recorded as "IEDs", and the number of these devices which were anti-personnel mines of an improvised nature, was not specified.
Azerbaijan	4.0	42	+ 3.2	Clearance of a further 3.7km <sup>2</sup> in which no mines were found has been omitted consonant with good practice.
<b>Sri Lanka</b>	3.2	31,012	+ 0.9	
<b>South Sudan</b>	1.7	734	- 0.9	
<b>Zimbabwe</b>	1.7	30,533	+ 0	
<b>Jordan</b>	1.4	75	+ 0	
<b>Angola</b>	1.2	3,546	+ 0	
<b>United Kingdom</b>	1.1	2,557	+ 0.7	
<b>Yemen</b>	1.0	1,729	- 2	Estimated figure for the area cleared, as data on mine clearance reported by YEMAC was not disaggregated from ERW clearance.
<b>Chile</b>	0.9	5,728	- 2.6	
<b>Somalia</b>	0.9	143	- 0.2	
<b>Turkey</b>	0.8	26,381	+ 0.7	Includes 2016 and 2017 clearance output. 2016 clearance output reported to Mine Action Review for the Syrian border was incorrect and included cancelled area. This has been corrected in the comparison to 2016 clearance.
<b>Bosnia and Herzegovina</b>	0.7	1,749	- 0.6	
<b>Sudan</b>	0.7	144	- 0.3	
Israel	0.7	737	- 0.2	
<b>Tajikistan</b>	0.6	6,647	+ 0.1	
Lebanon	0.5	9,523	- 0.1	
Other programmes combined	2.9	12,785		
<b>Totals</b>	<b>133.6</b>	<b>181,610</b>		

\* APMBC states parties are in bold and clearance figures are rounded to the nearest decimal point.

In Croatia, reported clearance output decreased by 20 per cent in 2017 compared to the previous year (though the Croatian Mine Action Centre (CROMAC) maintains that a further 8.6km<sup>2</sup> was actually cleared but could not be officially reported because the “necessary administrative processes” had not yet been completed). Chile’s clearance figure dropped by almost three quarters. However, whereas in 2016 Chile did not report the number of mines destroyed during clearance, in 2017, it reported destruction of 5,728 emplaced anti-personnel mines and 1,406 anti-vehicle mines.

As previously mentioned, last year, Mine Action Review had reported Turkey as having conducted significant mine clearance for the first time since becoming a state party to the APMBBC in 2004. This turned out to be a false dawn. The output that it reported to Mine Action Review as clearance of more than 3km<sup>2</sup>, along its border with Syria to enable the construction of a wall, was in fact overwhelmingly release by cancellation.

Among the most affected states parties, only Iraq managed to improve its clearance output in 2017, and once again the figure is one that has been estimated by Mine Action Review because some of the data from the national authorities is not believed credible. Furthermore, UNMAS has not disaggregated data on devices destroyed in Iraq by its contractors. UNMAS appears to be recording and reporting all mines of an improvised nature only as “improvised explosive devices (IEDs)”. Instead, it should fully respect the definition of an anti-personnel mine laid down in the APMBBC, a disarmament treaty with more than 160 states parties, including Iraq, and ensure that mines of an improvised nature that meet the APMBBC legal definition of an anti-personnel mine are recorded and reported as such. The UN Secretary-General is the depositary of the APMBBC.

Despite the ongoing armed conflicts on its territory, Yemen again managed an estimated 1km<sup>2</sup> of clearance for the year, destroying in the process 1,729 anti-personnel mines. Further significant clearance may also have occurred in China, Iran, Russia, and Syria but the results have either not been recorded or have not made publicly available.

## TREATY DEADLINES FOR CLEARANCE

In accordance with Article 5, each state has a deadline of ten years to complete survey and clearance of mined areas upon becoming party to the APMBBC. It may request one or more periods of extension of up to ten years at a time if it is unable to complete clearance in time. Table 5 summarises progress towards these deadlines. Efficient

release of mined areas depends primarily on high-quality evidence-based survey. In addition, each affected state that has not yet done so should conduct a national baseline survey and develop an appropriately ambitious strategic plan to release all identified areas of mine contamination.

**Table 5: Progress by Affected States Parties in Implementing Article 5 of the APMBBC**

State party	Article 5 deadline	Status of progress	Implementation priorities
Bosnia and Herzegovina	1 March 2019	Interim extension requested to March 2021	Complete and approve swiftly its national mine action strategy for 2018–25, and reform governance and management of mine action.
Croatia	1 March 2019	Extension requested to March 2026	Enhance use of non-technical and technical survey to improve land release efficiency.
Serbia	1 March 2019	Extension requested to March 2023	Apply non-technical and technical survey to improve land release efficiency.
United Kingdom	1 March 2019	Extension requested to March 2024	Present detailed plans for completing demining of the Falkland Islands/Malvinas as soon as possible.
Sudan	1 April 2019	Extension requested to April 2023	Clarify plans for demining in Western Kordofan state and Abyei.
Cyprus	1 July 2019	Extension requested to July 2022	Cyprus and Turkey to facilitate clearance of all mined areas inside and outside the buffer zone.
Argentina	1 January 2020	Not on track	Renew earlier offer to the United Kingdom to support demining of the Malvinas/Falkland Islands.
Cambodia	1 January 2020	Not on track	Accelerate clearance of dense anti-personnel mined areas and only clear land with firm evidence of contamination. Conclude early agreements with Thailand to, at the least, pilot cooperation in border demining.
Chad	1 January 2020	Not on track	Complete national non-technical survey as soon as possible and restart clearance.
Eritrea	1 February 2020	Not on track	Report on progress in demining as required by the APMBBC and respect duty to clear mined areas as soon as possible.

State party	Article 5 deadline	Status of progress	Implementation priorities
Chile	1 March 2020	Unclear whether on track	Accelerate clearance in order to meet deadline.
Yemen	1 March 2020	Not on track	Give access to international demining operators to increase technical expertise and capacity and accelerate clearance.
Tajikistan	1 April 2020	Not on track	Complete survey of all mined areas and draft strategic plan aiming for full clearance as soon as possible.
Ethiopia	1 June 2020	Not on track	Submit an updated workplan and respect duty to clear mined areas as soon as possible.
Niger	31 December 2020	Unclear whether on track	Submit a detailed workplan and accelerate demining to complete clearance within no more than two years.
DR Congo	1 January 2021	On track	Submit a detailed workplan and complete clearance as soon as possible, but no later than 1 January 2021.
Mauritania	1 January 2021	Completed clearance	Formally declare completion of Article 5 obligations at the APMBC Seventeenth Meeting of States Parties in November 2018.
Colombia	1 March 2021	Not on track	Conduct national baseline survey of contamination, strengthen management and coordination of mine action.
Senegal	1 March 2021	Not on track	Complete non-technical survey and clear all mined areas with firm evidence of contamination as soon as possible.
South Sudan	9 July 2021	Not on track	Develop resource mobilisation strategy and seek long-term support for a national mine action programme.
Turkey	1 March 2022	Not on track	Finalise the national strategic mine action plan for 2019–21 as soon as possible and move forward without further delay to large-scale clearance of border and non-border areas.
Somalia	1 October 2022	Not on track	Conduct a national survey to elaborate a baseline of mine contamination.
Ecuador	31 December 2022	Unclear whether on track	Accelerate demining to complete clearance within no more than two years.
Afghanistan	1 March 2023	Not on track	Incorporate in reporting data on contamination and clearance of all anti-personnel mines of an improvised nature to comply with the APMBC. Present revised milestones for clearance that reflects reduced funding and clarify the implications for meeting its Article 5 deadline.
Thailand	31 October 2023	Unclear whether on track	Accelerate non-technical survey and clearance to achieve its extension request land release milestones and conclude early agreements with Cambodia to, at the least, pilot cooperation in border demining.
Peru	31 December 2024	On track	Consider using mine detection dogs or other technical survey methods to speed up land release in the Condor mountain range.
Oman	1 February 2025	Unclear whether on track	Present plans for survey and clearance as soon as possible.
Angola	31 December 2025	Not on track	Complete the nationwide re-survey of contamination by re-surveying the three outstanding provinces (Cabinda, Lunda Norte, and Lunda Sul), no later than the end of 2018.
Zimbabwe	31 December 2025	On track	Continue to accelerate clearance with a view to completion as soon as possible but no later than the end of 2025.
Iraq	1 February 2028	Not on track	Incorporate in reporting data on contamination and clearance of all anti-personnel mines of an improvised nature to comply with the APMBC.
Palestine	1 June 2028	Unclear whether on track	Establish a reliable baseline of contamination as soon as possible and develop a strategic mine action plan.
Sri Lanka	1 June 2028	On track	Complete clearance as soon as possible, with the aim to fulfil Article 5 obligations by 2021.

States parties without a future deadline	Article 5 deadline	Status of progress	Implementation priorities
Cameroon	1 March 2013	Needs extension	Request extended Article 5 deadline and conduct non-technical survey in Extrême-Nord (Far North) region.
Jordan	1 May 2012	Needs extension	As soon as conditions permit, confirm if any quality control of earlier clearance is needed on Jordan's northern borders.
Nigeria	1 March 2012	Needs extension	Request extended Article 5 deadline and conduct non-technical survey in Borno, Yobe, and Adamawa states.
Ukraine	1 June 2016	Extension requested to December 2021	Ensure no use of anti-personnel mines by its forces and adopt national mine action legislation without further delay.
Palau	1 May 2018	Unclear whether in compliance	Complete survey all suspected mined areas, especially in Bloody Nose Ridge in Peleliu state, as soon as possible.

Several states parties appear to be in breach of their international legal obligation to clear mines "as soon as possible", notably Eritrea, Ethiopia, and Senegal. Eritrea evicted international demining organisations a decade ago and has failed to fill the gap left by their departure from the national mine action programme. States parties should consider initiating an Article 8 procedure to address Eritrea's failure to respect its treaty obligations. Ethiopia has not conducted meaningful mine clearance for the last five years. Senegal has failed to clear known mined areas without justification, and the apparent decision not to clear mines around military bases raises serious doubt as to Senegal's compliance with the prohibition on use under the APMBBC.

While states not party to the APMBBC do not have specific clearance deadlines, their obligations under international human rights law to protect life mean that they are required to survey, mark, and clear anti-personnel mines as soon as possible.<sup>8</sup> With respect to Kosovo, the Kosovo Mine Action Centre (KMAC) still aims to complete clearance of anti-personnel mines by 2021, but cautions that reductions in funding may thwart that ambition. In a welcomed development, mine clearance operations in the joint security area of the Demilitarised Zone (DMZ) on the Korean peninsula commenced in October 2018, following the signing of a military agreement by North and South Korea. Mine Action Review encourages all states not party and other territories to pledge to complete clearance as soon as possible but no later than 2025, as committed to in the APMBBC's Maputo +15 declaration.

## MINE ACTION PROGRAMME PERFORMANCE

The quality of programmes for the survey and clearance of landmines varies widely among states and territories. To help affected states and their partners focus their capacity building and technical assistance efforts on areas of weakness, a performance scoring system is used by Mine Action Review. Ten areas with a particularly strong influence on the effectiveness and efficiency of a landmine survey and clearance programme are assessed, as explained in Table 6.

A score of between 0 and 10 is accorded for each of the ten criteria and an average performance score calculated. Average scores of 8.0 or above are considered "very good", 7.0–7.9 is ranked "good", 5.0–6.9 is ranked "average", 4.0–4.9 is ranked "poor", while 0–3.9 ranks as "very poor". The factors that determine each score are summarised in the table below.

**Table 6: Programme Performance – Criteria and Factors**

Criterion	Key factors affecting scoring
<b>Understanding of the problem</b>	Has a national baseline of mine contamination been established?
	Has the extent of the mine threat been identified with a reasonable degree of accuracy? Does the estimate include confirmed hazardous areas (CHAs) as well as suspected hazardous areas (SHAs)?
<b>Target date for completion</b>	Is a state seeking effectively to clear all contamination from its territory?
	Has a date been set by the mine action centre (MAC) or national mine action authority (NMAA) for completion of clearance?
	Is the target date realistic based on existing capacity?
	Is there a strategic plan in place to meet the target date? Is it sufficiently ambitious?
<b>Targeted clearance</b>	Is clearance focused on confirmed contamination?
	Are significant areas of land being cleared that prove to have no contamination?
<b>Efficient clearance</b>	Are dogs integrated into demining operations (where appropriate)?
	Are machines integrated into demining operations (where appropriate)?
<b>National funding of programme</b>	Is national funding covering the cost of the MAC?
	Is national funding covering any survey or clearance costs?
	Is national funding being used efficiently? Is national funding being used in accordance with good governance principles?
<b>Timely clearance</b>	Are contaminated areas prioritised for clearance according to explicit criteria?
	Are areas of high impact dealt with swiftly?
	Are there delays to clearing an area for political reasons?
<b>Land release system</b>	Is there a coherent land release system in place for the programme?
	Is this system understood and used by all the operators?
	Is there an effectively functioning non-technical survey capacity?
	Is there an effectively functioning technical survey capacity?
<b>National standards</b>	Do national mine action standards exist?
	Are they consistent with the International Mine Action Standards (IMAS) and do they reflect international best practice?
	Are they adapted to the local threat and context?
	How well are they applied?
<b>Reporting on progress</b>	Does the state submit regular Article 7 transparency reports on progress in fulfilling its Article 5 clearance obligations?
	Does it report regularly and meaningfully to donors and civil society?
	Do these reports detail progress disaggregated by the different methods of land release?
	Are they accurate?
<b>Improving performance</b>	Has the national programme, or have key parts of it, improved or deteriorated over the previous year?

Table 7 summarises programme performances for states and other areas in 2017, identifying whether the trend in performance is positive or negative compared to the previous year. Of the programmes that were given ratings in both years, 22 improved, 5 remained the same, while 16 deteriorated. States parties to the APMBC are in bold.

No state in this year’s report attained a “Very Good” rating, though four programmes were rated “Good”: Mauritania, Sri Lanka, the United Kingdom, and

Zimbabwe, a drop of one on last year. The United Kingdom registered the largest increase in mine action programmes as a result of accelerated clearance and a commitment to finally honour its Article 5 obligations, albeit only by 2024. The biggest drop in the scoring was for Eritrea’s national programme, a reflection of its failure to comply with its treaty obligations. Also suffering a major drop were Chad, Croatia, and Senegal. All of these states are party to the APMBC.

Table 7: States and Other Areas by Landmine Programme Performance Score in 2017

State/other area	Performance score	Performance rating	Change in performance score	Performance trend
<b>Mauritania</b>	7.4	Good	+ 0.4	▲
<b>Sri Lanka</b>	7.2	Good	NC	◀▶
<b>United Kingdom</b>	7.2	Good	+ 0.8	▲
<b>Zimbabwe</b>	7.2	Good	+ 0.2	▲
<b>Chile</b>	6.9	Average	- 0.3	▼
<b>Afghanistan</b>	6.7	Average	NC	◀▶
<b>Thailand</b>	6.7	Average	+ 0.4	▲
<b>Cambodia</b>	6.6	Average	+ 0.3	▲
<b>Croatia</b>	6.5	Average	- 0.4	▼
<b>Angola</b>	6.3	Average	+ 0.3	▲
<b>Israel</b>	6.3	Average	+ 0.1	▲
<b>Jordan</b>	6.2	Average	+ 0.1	▲
<b>Lebanon</b>	6.1	Average	+ 0.4	▲
<b>Kosovo</b>	6.0	Average	+ 0.3	▲
<b>Azerbaijan</b>	5.8	Average	+ 0.2	▲
<b>Cyprus</b>	5.8	Average	NC	◀▶
<b>South Sudan</b>	5.8	Average	- 0.2	▼
<b>Bosnia and Herzegovina</b>	5.7	Average	- 0.2	▼
<b>DR Congo</b>	5.7	Average	+ 0.1	▲
<b>Niger</b>	5.6	Average	- 0.2	▼
<b>Palestine</b>	5.6	Average	+ 0.2	▲
<b>Serbia</b>	5.6	Average	+ 0.2	▲
<b>Sudan</b>	5.6	Average	+ 0.4	▲
<b>Turkey</b>	5.6	Average	+ 0.3	▲
<b>Colombia</b>	5.5	Average	- 0.3	▼
<b>Nagorno-Karabakh</b>	5.5	Average	- 0.1	▼
<b>Tajikistan</b>	5.5	Average	+ 0.3	▲
<b>Armenia</b>	5.2	Average	- 0.3	▼
<b>Iraq</b>	5.0	Average	+ 0.2	▲
<b>Western Sahara</b>	5.0	Average	- 0.2	▼
<b>Chad</b>	4.8	Poor	- 0.4	▼
<b>Somalia</b>	4.8	Poor	+ 0.3	▲
<b>Ecuador</b>	4.7	Poor	- 0.2	▼
<b>Russia</b>	4.7	Poor	NC	◀▶
<b>Georgia</b>	4.5	Poor	- 0.2	▼
<b>Peru</b>	4.5	Poor	- 0.1	▼
<b>Yemen</b>	4.5	Poor	+ 0.5	▲
<b>Ukraine</b>	4.4	Poor	NC	◀▶
<b>Vietnam</b>	4.3	Poor	+ 0.2	▲
<b>Senegal</b>	3.0	Very Poor	- 0.4	▼
<b>Eritrea</b>	2.5	Very Poor	- 0.5	▼
<b>Ethiopia</b>	2.2	Very Poor	- 0.2	▼
<b>Myanmar</b>	1.5	Very Poor	+ 0.1	▲

NC = No change

Of the states with the worst programme performance ratings in 2017, a disappointing number are states parties to the APMB. Ethiopia, a state party, has gone from being one of the best mine action programmes a decade ago to being one of the worst. The problems are all of its own making. The same is true for Eritrea, which has failed to even report on progress in demining, while Senegal has very little progress on which to report. Yemen's ongoing conflict has clearly affected its

demining programme, but at least it maintained signs of improvement in 2017 amid the continuing conflicts across its territory. Myanmar, a state not party, was by some distance the lowest ranked programme, with the government's continued refusal to allow mine clearance preventing a peace dividend from being realised and new mine-laying amounting to a serious violation of international human rights law.

## REPORTING ON SURVEY AND CLEARANCE

It continues to be unacceptable how poorly states report on their efforts to tackle landmine contamination. Too many are either unable or unwilling to provide simple and accurate reports on the extent of contamination and progress in survey and clearance.

For states parties to the APMBC, detailed reporting is a legal obligation. Under Article 7, each affected state party is required to report annually on:

- To the extent possible, the location of all mined areas that contain, or are suspected to contain, anti-personnel mines under its jurisdiction or control, to include as much detail as possible regarding the type and quantity of each type of anti-personnel mine in each mined area and when they were emplaced
- The status of programmes for the destruction of anti-personnel mines in accordance with Article 5, and
- The types and quantities of all anti-personnel mines destroyed after becoming a state party to the APMBC, including a breakdown of the quantity of each type of anti-personnel mine destroyed.<sup>7</sup>

Failure to comply with this reporting obligation is a violation of the APMBC. As at September 2018, the following states parties had not submitted Article 7 reports for 2017, and in some cases previous calendar years too: Cameroon, Eritrea, Ethiopia, Nigeria, and Yemen. States parties Mali and the Philippines, which may also be revealed to have anti-personnel mine contamination had also yet to submit their respective Article 7 reports as at September 2018. Initial Article 7 reports by Palestine and Sri Lanka were due on or before 28 November 2018. As noted above, Iraq is not reporting on anti-personnel mines of an improvised nature produced by Islamic State as landmine contamination in its Article 7 transparency reports, as it is legally required to do.

Mine Action Review has a set of reporting templates that it provides to affected states to ensure reporting in accordance with good practice, including the IMAS. They cover contamination, survey, and clearance, as set out in Annex 2. In particular, the tables for survey and clearance set out the data the national mine action centre should require operators to report on a monthly basis, and which all states should be able to present.

The most common problems Mine Action Review has encountered in reports by states and operators are:

- An inability or refusal to distinguish mine clearance from battle area clearance
- Lack of understanding of what a suspected hazardous area (SHA) is, particularly when compared to a confirmed hazardous area (CHA), and a corresponding failure to distinguish between the two forms of mined area in reporting
- An inability to report accurately on land released by technical survey distinct from full clearance (this problem concerns a number of leading mine action operators as well as less experienced demining bodies)
- Reporting on anti-personnel mines, particularly those of an improvised nature, only as IEDs and not as anti-personnel mines
- Reporting as “land release” an initial survey of a large, previously unsurveyed area (even a district) that may contain contamination but which in fact does not, and
- Failure to disaggregate reported data by the amount of land cancelled by non-technical survey, reduced by technical survey, and released by clearance.

These skew reporting and give a false impression of efficiency, and in some instances are not in compliance with state party reporting obligations under the APMBC. In many cases, they are also evidence of poor land release practices in the field.

1 See, e.g., M. Moore, “Mali”, The Month in Mines, November 2017, Landmines in Africa blog, at: <https://landminesinafrica.wordpress.com/tag/mali/>: “Four civilians were killed in northern Mali when the minibus they were riding in struck a landmine near Lellehoye in the Gao region.”

2 There is no threshold of pressure in the definition of an anti-vehicle mine under international law, although in the 1990s the International Committee of the Red Cross helpfully suggested that those blast landmines that ordinarily detonated under 150 kilograms of downward pressure should be considered anti-personnel mines.

3 ICBL Landmine Monitor 2017; and “7 soldiers injured in landmine blast in southern Philippines”, *Xinhua*, 19 September 2018, at: [http://www.xinhuanet.com/english/2018-09/19/c\\_137479352.htm](http://www.xinhuanet.com/english/2018-09/19/c_137479352.htm).

4 Tunisia Article 7 Report (for 2017), Form C2.

5 According to Article 2(2) of the APMBC, a mine is “a munition designed to be placed under, on or near the ground or other surface area and to be exploded by the presence, proximity or contact of a person or a vehicle.” As is clear from the *travaux préparatoires* of the Convention, it does not matter whether the mine is factory-produced or artisanal, or whether it is adapted from another munition.

6 According to Article 2(1) of the APMBC, “Anti-personnel mine” means a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons.

Mines designed to be detonated by the presence, proximity or contact of a vehicle as opposed to a person, that are equipped with anti-handling devices, are not considered anti-personnel mines as a result of being so equipped.” According to Article 2(3) of the APMBC, “Anti-handling device” means a device intended to protect a mine and which is part of, linked to, attached to or placed under the mine and which activates when an attempt is made to tamper with or otherwise intentionally disturb the mine.

7 Article 7 Report (for 2017), p. 26

8 For instance, in the case of *Albekov v. Russia*, which concerned the failure to clear landmines, the European Court of Human Rights held that “having regard to the State’s failure to endeavour to locate and deactivate the mines, to mark and seal off the mined area so as to prevent anybody from freely entering it, and to provide the villagers with comprehensive warnings concerning the mines laid in the vicinity of their village, the Court finds that the State has failed to comply with its positive obligation under Article 2 of the Convention to protect [life].” European Court of Human Rights, *Albekov and Others v. Russia*, Judgment (Final), 6 April 2009, para. 90. See also *Pasa and Erkan Erol v. Turkey*, Judgment, 12 December 2006. At the time, Russia was not (and is still not) a party to the APMBC.

9 Art. 7(1)(h) and (i), CCM.

# STATES PARTIES

The background consists of several overlapping, angular shapes in various shades of purple and dark purple. The shapes are layered, creating a sense of depth and movement. The top-left corner is a dark purple triangle. A large, light purple trapezoidal shape is positioned in the upper-middle section. Below it, a dark purple shape forms a wide, shallow V-shape. Further down, another light purple shape is partially visible, and a dark purple shape forms a wide, shallow inverted V-shape. The bottom of the image is dominated by a large, dark purple shape that tapers towards the center.

# AFGHANISTAN

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

<b>PROGRAMME PERFORMANCE</b>	2017	2016
<b>Problem understood</b>	8	8
<b>Target date for completion of mine clearance</b>	7	7
<b>Targeted clearance</b>	7	7
<b>Efficient clearance</b>	7	7
<b>National funding of programme</b>	4	4
<b>Timely clearance</b>	6	7
<b>Land-release system in place</b>	8	8
<b>National mine action standards</b>	7	6
<b>Reporting on progress</b>	7	7
<b>Improving performance</b>	6	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.7</b>	<b>6.7</b>

## PERFORMANCE COMMENTARY

Afghanistan's mine action programme completed a transition to national ownership in 2017 but is struggling to maintain productivity in the face of financial constraints and deteriorating security which has increased contamination while hampering survey and clearance.

## RECOMMENDATIONS FOR ACTION

- The Mine Action Programme of Afghanistan (MAPA) should update its Article 5 extension request to reflect lower levels of funding and clearance and the additional challenge posed by mines of an improvised nature.
- Afghanistan should act quickly to pass the long-debated national mine action law.
- The government should provide funds from the national budget for mine action.

## CONTAMINATION

Afghanistan is one of the countries most affected by mines and explosive remnants of war (ERW) resulting from the decade-long war of resistance that followed the Soviet invasion of 1979, the 1992–96 internal armed conflict, 1996–2001 fighting between the Taliban and the Northern Alliance, and the United States (US)-led coalition intervention in late 2001, which added considerable quantities of unexploded ordnance (UXO). Continuing conflict between the government, the Taliban and other armed groups is still adding contamination, particularly by mines of an improvised nature, which have overtaken legacy mined areas as the biggest humanitarian threat.<sup>1</sup>

By the end of 2017, Afghanistan had 2,073 mined areas containing anti-personnel mines affecting 205km<sup>2</sup>, according to data provided to Mine Action Review by the Department of Mine Action Coordination (DMAC). This represented a second successive year of net decline in the extent of anti-personnel contamination. But surveys continue to find new areas of legacy mine contamination. DMAC added 92km<sup>2</sup> of mine and ERW contamination to the database in 2017 and reported 20km<sup>2</sup> affected by abandoned mines of an improvised nature, though it has yet to reach a reliable estimate of much larger areas assessed as contaminated by such mines.<sup>2</sup>

**Table 1: Remaining contamination at the end of 2013, 2014, 2015, 2016, and 2017<sup>3</sup>**

Type of contamination	Hazardous areas					Area (km <sup>2</sup> )				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Anti-personnel mines	2,981	2,825	2,765	2,387	2,073	240	230	251	225	205
Anti-vehicle mines	1,140	1,156	1,243	1,145	1,122	236	256	275	277	297
Improvised mines*	28	19	23	N/R	57	5	4	5	N/R	20
ERW**	179	254	279	310	310	35	38	63	89	119
<b>Totals</b>	<b>4,328</b>	<b>4,254</b>	<b>4,310</b>	<b>3,842</b>	<b>3,562</b>	<b>516</b>	<b>528</b>	<b>594</b>	<b>592</b>	<b>641</b>

\* Abandoned devices only

\*\* 2017 data includes 18 areas with cluster munition remnants over 6.86km<sup>2</sup>

In contrast, Afghanistan's latest Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report said its Article 5 obligations at the end of 2017 comprised 2,130 hazardous areas covering almost 225km<sup>2</sup> (see Table 2), 7.45km<sup>2</sup> less than at the start of the year.<sup>4</sup>

**Table 2: Anti-personnel mine contamination by region (at end-2017)<sup>5</sup>**

Region	Mined areas	Area (km <sup>2</sup> )
North-east	703	62.94
Central	595	39.82
South	176	44.70
West	67	34.00
South-east	199	18.77
North	286	15.93
East	104	8.50
<b>Totals</b>	<b>2,130</b>	<b>224.66</b>

DMAC reported that 143 of Afghanistan's 400 districts had been cleared of mines by the end of 2017. The MAPA had declared six districts of Badakhshan to be mine free in April 2017. The HALO Trust reported in February 2018 that the western province of Herat was free of mines after years of operations involving clearance of more than 600 mined areas. Land release had opened up 40km<sup>2</sup> of farmland.<sup>6</sup>

### Mines of an improvised nature

Afghanistan's Article 5 clearance obligations have been significantly increased by landmines of an improvised nature, which have also contributed to a sharp upturn in casualties in recent years. Afghanistan now identifies them as the greatest challenge for the mine action sector.<sup>7</sup>

In 2017, the United Nations recorded 1,019 civilian casualties (438 civilians killed and 581 injured) as a result of pressure-plate mines of an improvised nature, compared with 11 people reported killed and 41 injured by foreign-made anti-personnel mines.<sup>8</sup> Although the number of civilian casualties from conflict rose sharply

in the first half of 2018, mines of an improvised nature caused 314 casualties (including 114 deaths and 200 injuries), 43% less than in the same period of 2017.<sup>9</sup>

At the request of the National Security Council, DMAC's implementing partners conducted a rapid assessment of 22 provinces at the end of 2016. Implementing partners reported five provinces as inaccessible.<sup>10</sup> In the remaining 17, they identified 270 areas affected by post-2001 ERW, covering an estimated 421km<sup>2</sup>, in which anti-personnel mines accounted for 5.3km<sup>2</sup> and improvised devices, including pressure-plate mines of an improvised nature, affected 228km<sup>2</sup>. This included almost 55km<sup>2</sup> classified as high risk, mostly in Kandahar, Helmand, and Urozgan provinces, as well as 3.5km<sup>2</sup> of medium risk and 170km<sup>2</sup> as low risk. Anti-vehicle mines affected 90,000m<sup>2</sup> and ERW were nearly 188km<sup>2</sup>.<sup>11</sup>

The MAPA entered the assessment results into the Information Management System for Mine Action (IMSMA) database in late 2017.<sup>12</sup> At the end of March 2018, DMAC estimated that pressure-plate mines of an improvised nature affected an area of 248km<sup>2</sup>.<sup>13</sup>

## Other explosive contamination

Afghanistan has massive ERW contamination, which has continued to rise as a result of continuing conflict. DMAC reported total ERW contamination at around 1,674km<sup>2</sup> as at the end of 2017, reporting "legacy contamination" of 588km<sup>2</sup> dating back to before 2001 and 1,086km<sup>2</sup> that occurred after 2001.<sup>14</sup>

DMAC estimates of anti-vehicle mine contamination have risen steadily as a result of survey in the last five years, reaching nearly 300km<sup>2</sup> by the end of 2017 (see Table 1). The estimate of ERW contamination has similarly more than tripled since 2013 to 119km<sup>2</sup> in 2017, not including NATO firing ranges.

By the end of 2017, Afghanistan said it had closed 64 firing ranges and released 555km<sup>2</sup> of firing range land, destroying in the process 26 anti-personnel mines, 50 anti-vehicle mines, and 93,228 items of UXO.<sup>15</sup> DMAC reported 42 ranges covering 605km<sup>2</sup> remained to be cleared.<sup>16</sup>

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## PROGRAMME MANAGEMENT

Afghanistan's mine action programme, originally established in 1989, is led by DMAC, which comes under the Afghan National Disaster Management Authority. It received operational support in planning, prioritising, and information management from the UN Mine Action Service (UNMAS) through the UN Mine Action Centre of Afghanistan or UNMACA, which changed its name to "UNMAS in support of DMAC" (UNMAS/DMAC) in November 2016.<sup>17</sup>

DMAC staff had increased to 159 working in 15 departments by the end of 2017 after personnel transitioned from UN to DMAC contracts.<sup>18</sup> Department heads were due to continue as UNMAS advisers to DMAC until also coming under DMAC management by the end of June 2018, though the transition process was completed a month early.<sup>19</sup> A total of 240 personnel were still employed in UNMAS/DMAC in 2017 but the number was due to fall to 209 in 2018.<sup>20</sup>

### Strategic Planning

Afghanistan's Article 5 deadline extension request submitted in 2012 set out plans for clearance of all known areas contaminated by mines and ERW by March 2023. It consolidated the 4,442 mine and ERW hazards then remaining into 308 projects to facilitate monitoring of progress and resource mobilisation, an approach that continues to shape mine action planning.<sup>21</sup> However, the extension request targets were soon overtaken by a sharp drop in donor funding, which fell by more than half between 2011 and 2014, and by the addition of extensive contamination by mines of an improvised nature, expanding the extent of Afghanistan's Article 5 obligations.

A five-year plan for 2016–20, adopted in January 2016, did not amend extension request clearance targets but set four strategic goals:<sup>22</sup>

- Facilitate development
- Engage with other sectors
- Reduce the impact of mines and ERW, and mitigate the impact of mine incidents; and
- Mainstream gender and diversity to ensure participation in, and shared benefits of, mine action.

The plan set out 33 objectives and 111 associated actions. These included incorporating mine action into Afghanistan's National Priority Programmes and Sustainable Development Goals; integrating mine action into the activities of line ministries, improving fundraising; completing survey; and keeping implementation of Afghanistan's Article 5 extension on track. The plan acknowledged that continued use of mines of an improvised nature on the present scale could prevent Afghanistan from meeting its Article 5 clearance deadline.<sup>23</sup>

DMAC's concept paper on mines of an improvised nature reported that none was cleared in 2017 but proposed clearance of the entire ERW-affected area of 421km<sup>2</sup> identified in 17 provinces at a projected cost of US\$146 million. DMAC continued to discuss approaches to tackling mines of an improvised nature with operators and was due to roll out a strategy for clearance in 2018.<sup>24</sup>

DMAC also produced a concept paper in 2017 proposing clearance of all remaining anti-vehicle mine contamination, consisting at the time of the report (mid-2017) of 1,096 hazardous areas covering 292km<sup>2</sup> across 26 provinces. Contamination consists mainly of minimum-metal mines laid randomly over large areas and sometimes at a depth that can be difficult for conventional detectors to locate. The paper recommended clearance by front-end loaders with mechanical follow-up at an estimated cost of almost US\$128 million.<sup>25</sup>

In 2018, Afghanistan expected to release almost 64km<sup>2</sup> of contamination from anti-personnel mines, anti-vehicle mines, and ERW (57.5km<sup>2</sup> through clearance and 6.4km<sup>2</sup> through area reduction). Two-thirds of the area to be cleared was in central areas and the north-east of the country.<sup>26</sup>

## Legislation and Standards

DMAC has prepared draft mine action legislation to be included as an annex to a 2005 law banning the use, acquisition, and stockpiling of weapons, ammunition, and explosive items. After years of review by the Ministry of Justice, the draft has reportedly been referred to the cabinet's legislative committee for approval.<sup>27</sup>

An "Abandoned Improvised Mine (AIM) technical working group", set up in November 2017, has been assigned the task of drafting standard terminology and policy for tackling mines of an improvised nature. A policy paper on AIMS issued by DMAC in May 2018 after consultations with implementing partners set out 11 principles to be followed by implementing partners.<sup>28</sup> These included the following:

- All survey and clearance should be conducted in accordance with MAPA principles of neutrality and MAPA members shall not participate in or facilitate counter-IED activities, including providing information on AIMS to security forces
- Afghan national mine action standards are the default standards for AIM activities but operators should also draft specific SOPs for AIM-related operations
- Each organisation and team needs DMAC accreditation for each type of activity
- AIM activities should receive a high level of internal and external QA
- AIM clearance should only be conducted with the full consent of the community and all relevant actors, and should not be conducted in areas of ongoing conflict
- AIM activities should be recorded on IMSMA, including information on access, level of conflict, and details of each device or suspect device
- All survey should be conducted by teams trained and accredited for AIM non-technical survey
- If new AIM contamination is suspected in areas that were previously cleared or identified as clear, resurvey should be coordinated by DMAC with full consent of all relevant actors and include an assessment of the level of conflict.

## Quality Management

DMAC teams conduct external quality assurance (QA) of implementing partners and checks on their internal QA processes. DMAC had 26 QA/quality control (QC) staff working in seven regions, which conducted 2,399 monitoring visits in 2017. The staff reported 57 major and 59 minor non-conformities.<sup>29</sup> Swiss Foundation for Mine Action (FSD) operations in Afghanistan's remote northern province of Badakhshan are accessed mainly through Tajikistan, and QA is conducted by the Tajikistan National Mine Action Centre (TNMAC) on behalf of DMAC to avoid travel and visa delays.<sup>30</sup>

DMAC also conducted external QA/QC of firing range clearance with 21 QM inspectors who carried out 2,708 visits in 2017 during which they reported three major non-conformities.<sup>31</sup>

Norwegian People's Aid (NPA) was accredited by DMAC in November 2017 to conduct a Third Party Monitoring project funded by the US Department of State to monitor performance of all implementing partners receiving US funding.<sup>32</sup>

## Information Management

DMAC manages a national database using IMSMA. The database contains data on victim assistance and risk education. Regional mine action offices with read-only IMSMA access to the database verify survey and clearance results but data entry is conducted only by experienced staff at the national level.<sup>33</sup>

In 2017, DMAC classified ERW contamination not just by type but also by source and date. DMAC was debating approaches to recording data on landmines of an improvised nature and IEDs. Results of DMAC's preliminary assessment of contamination which have not been subject to survey are recorded as "initial hazardous areas" but are not entered into the national database.<sup>34</sup>

## Operators

The MAPA employed a total of 7,156 people at the end of 2017 but the sector has been facing severe financial constraints, and in 2018 DMAC expected the number would fall to 5,376.<sup>35</sup>

Mine clearance is conducted by six national and three international NGOs.<sup>36</sup> Long-established national NGOs are: Afghan Technical Consultants (ATC), the Demining Agency for Afghanistan (DAFA), the Mine Clearance Planning Agency (MCPA), the Mine Detection and Dog Centre (MDC), and the Organization for Mine Clearance and Afghan Rehabilitation (OMAR). AREA, a national NGO accredited in 2014, became operational at the end of 2016. International NGOs active in survey and clearance in 2017 were Danish Demining Group (DDG), The HALO Trust and FSD. As noted above, NPA started work in 2017 providing QA/QC of projects funded by the US Office of Weapons Removal and Abatement (WRA).

## LAND RELEASE

The MAPA cleared a total of 40km<sup>2</sup> of overall mined area in 2017, 17% less than in 2016. A significant percentage of 2017 clearance concerned land contaminated only by anti-vehicle mines. The amount of cleared land affected only by anti-personnel mines or mixed AP/AV mines amounted to 28.2km<sup>2</sup>.<sup>37</sup> This represents a slight increase in anti-personnel mine or mixed AP/AV mine clearance, compared to the equivalent 27.1km<sup>2</sup> in 2016.<sup>38</sup>

### Survey in 2017

DMAC reported adding mine and ERW contamination totalling almost 93km<sup>2</sup> to the database in 2017, of which 62km<sup>2</sup> was mined area (46 SHAs affecting 47km<sup>2</sup> and 97 CHAs covering almost 15km<sup>2</sup>) [see Table 3]. It also reported that operators cancelled 39 suspected mined areas covering 2.4km<sup>2</sup> in 2017.

**Table 3: New suspected or confirmed mined areas identified in 2017<sup>39</sup>**

	SHAs identified	Estimated area (m <sup>2</sup> )	CHAs identified	Estimated area (m <sup>2</sup> )	Total area (m <sup>2</sup> )
Mined area	46	47,049,041	97	14,746,667	61,795,708
Battle area	14	20,923,157	9	10,009,617	30,932,774

DMAC had planned survey of 24 districts in Year 1396 (2017–18) under the “Mine and ERW Impact Free Community Survey” (MEIFCS) started in 2012 but it was held back by lack of funding. The only recorded MEIFCS activity was undertaken by FSD, which surveyed 13 communities in Badakhshan.<sup>40</sup> MCPA deployed nine teams to conduct non-technical survey on ERW contamination resulting from fighting in 24 districts across 12 provinces.<sup>41</sup>

### Clearance in 2017

MAPA reported release of 40km<sup>2</sup> of overall mined area through clearance and area reduction in 2017 (see Table 4). It included a total of 29.1km<sup>2</sup> affected by anti-personnel mines or a mixture of anti-personnel and anti-vehicle mines, of which 28.2km<sup>2</sup> was released through clearance and 0.94km<sup>2</sup> through area reduction (see Table 5).<sup>42</sup> No clearance of mines of an improvised nature was reported in 2017 despite growing attention to the issue.<sup>43</sup>

Afghan implementing partners were mainly responsible for an upturn in clearance in 2016 and accounted for most of the downturn in 2017, mainly as a result of financial constraints. In 2017 six national implementing partners collectively cleared 17.4km<sup>2</sup>, little more than half the area they cleared in 2016, with DAFA and MDC in particular experiencing loss of contracts. Only AREA, which started demining in 2016, significantly expanded operations in 2017 (clearing 1.3km<sup>2</sup>).<sup>44</sup>

The HALO Trust increased its area clearance by more than a quarter in 2017 and accounted for more than half the total mined area cleared by the MAPA. The increase was made possible by increased funding, which saw HALO Trust add around 870 staff over the year, bringing the total to 3,420 (of whom 2,975 were engaged in operations). It expected additional United Kingdom funding to support a further increase in capacity in 2018. The HALO Trust expanded its area of operations to include the southern province of Kandahar in addition to its work in the centre, north, north-east, south-east, and the west. In 2018, The HALO Trust completed training its first team in survey, clearance and disposal of mines of an improvised nature.<sup>45</sup>

DDG, with three clearance teams and one survey team and 35 field staff, implemented one DANIDA contract in 2017, clearing almost one-third less land than in 2016 but destroying more mines. It won an additional contract in 2017 from WRA but started work in 2018.<sup>46</sup> FSD increased capacity from three demining teams to four in 2017 and increased the amount of land released through clearance by more than 60% to 0.5km<sup>2</sup>, as well as destroying more than 6,500 anti-personnel mines. Productivity looked set to drop in 2018 as a result of loss of funding from a foundation which had supported clearance in one district, though discussions were underway for that support to resume in 2019.<sup>47</sup>

Table 4: Mine clearance in 2017<sup>48</sup>

Operator	Areas cleared	Area cleared (m <sup>2</sup> )	Area reduced (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
AREA	21	1,295,095	0	195	5	80
ATC	82	4,050,832	252,471	924	18	4,197
DAFA	10	3,330,914	0	0	49	523
DDG	7	227,636	70,581	81	3	139
FSD	6	533,688	0	6,526	0	114
HALO	336	21,919,980	0	6,052	139	1,007
MCPA	41	2,836,400	114,895	180	17	51
MDC	16	2,207,307	0	2	21	44
OMAR	58	3,643,027	523,784	643	10	1,069
<b>Totals</b>	<b>577</b>	<b>40,044,879</b>	<b>961,731</b>	<b>14,603</b>	<b>262</b>	<b>7,224</b>

AP = Anti-personnel AV = Anti-vehicle

Table 5: Clearance of mined area containing anti-personnel mines in 2017<sup>49</sup>

Operator	Area cleared (m <sup>2</sup> )	Area reduced (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
AREA	1,295,095	0	195	5	80
ATC	3,302,107	240,108	924	0	4,114
DAFA	11,320	0	0	0	0
DDG	227,588	70,581	81	0	139
FSD	533,688	0	6,524	0	114
HALO	17,674,607	0	5,975	11	964
MCPA	1,765,792	101,508	148	1	47
MDC	4,817	0	2	0	0
OMAR	3,362,203	523,653	643	0	1,064
<b>Totals</b>	<b>28,177,217</b>	<b>935,850</b>	<b>14,492</b>	<b>17</b>	<b>6,522</b>

## Deminer Safety

DMAC reported two deminers were killed and one injured in the course of demining in 2017 but 14 security incidents reported in 2017 inflicted greater losses. This included one AREA deminer who was murdered

by anti-government elements in Nangahar province in September. A total of 97 staff were abducted but later returned. Operators also reported equipment losses, including detectors, VHF radios, and mobile phones.<sup>50</sup>

## ARTICLE 5 COMPLIANCE

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

The extension request Afghanistan submitted in 2012 is not on track to fulfil its targets. A sharp downturn in donor funding since 2012 resulted in loss of MAPA capacity and a drop in combined anti-vehicle and anti-personnel mine clearance rates (see Table 6), although anti-personnel mine clearance rates have increased over the last three successive years (see Table 7). To catch up, DMAC called for funding of \$110 million in 1396 but received just short of \$40 million. The MAPA required \$76 million in 1397 (2018–19) to support release of 144km<sup>2</sup> of mine and ERW contamination but expected to receive funding at the same level as the previous year or slightly more.<sup>51</sup>

Afghanistan also has to reassess its Article 5 obligations to take account of extensive contamination by mines of an improvised nature. The extent of this new contamination has yet to be determined by survey but preliminary estimates in 17 of 22 affected provinces identified 152 hazards covering approximately 228km<sup>2</sup>. Moreover, mitigating the threat is obstructed by insecurity which renders some areas inaccessible to deminers, and even where there is access clearance teams will be limited to tackling only the hazardous areas where they have the consent of all relevant parties.

**Table 6: Combined anti-personnel and anti-vehicle mine clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )
2017	40.04
2016	49.25
2015	35.38
2014	62.87
2013	60.11
<b>Total</b>	<b>247.65</b>

**Table 7: Anti-personnel mine clearance in 2013–17<sup>52</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	28.12
2016	27.12
2015	13.44
2014	22.28
2013	N/R

- 1 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.
- 2 Emails from DMAC, 11 April and 18 August 2018.
- 3 Ibid.
- 4 Article 7 Report (for 2017), Form F. The form also states that 2,088 anti-personnel mine hazards covering 223km<sup>2</sup> remained at the end of 2017.
- 5 Article 7 Report (for 2017), Form F.
- 6 Email from DMAC, 11 April 2018; UNMAS/DMAC, "Six districts of Badakhshan Province declared free of known mines and explosive remnants of war", Press release, 4 April 2017; Jared Ferrie, "Herat declared mine free after 10-year clearance drive", Reuters, 15 February 2018.
- 7 Article 7 Report (for 2017), Background, p. 5. The report states that, between 2001 and 2013, average monthly casualties fell from 175 to 36, but that in 2017 the average monthly casualty toll had risen to 171.
- 8 UNAMA, "Protection of Civilians in Armed Conflict, Annual Report 2017", February 2018, pp. 31–32; and Article 7 Report (for 2017), Form J.
- 9 UNAMA, "Mid-year Update on the Protection of Civilians in Armed Conflict, 1 January to 30 June 2018", 15 July 2018, p. 5.
- 10 The five inaccessible provinces were Baghdis, Ghor, Laghman, Sar e Pul, and Zabul.
- 11 DMAC, "Concept Note: Demining Operations in Mines/ERWs/Pressure Plate IEDs Contaminated Areas", Undated but 2017, p. 2 and Annex A.
- 12 Email from DMAC, 12 September 2018.
- 13 DMAC, "MAPA Fast Facts, Quarterly Update, 4th Quarter 1396 (January–March 2018)".
- 14 Article 7 Report (for 2017), Background. The report identifies a total of 1,764km<sup>2</sup> of ERW contamination but provides estimates of pre-2001 and post-2001 contamination which amount to 1,674km<sup>2</sup>. DMAC's "Fast Facts" reported ERW contamination of 1,800km<sup>2</sup> at the end of March 2018, recording the area affected by anti-personnel mines as 208km<sup>2</sup> and by anti-vehicle mines as nearly 504km<sup>2</sup>.
- 15 Article 7 report, Form C.
- 16 Data provided by DMAC, 11 April 2018.
- 17 Email from Mohammad Wakil Jamshidi, Chief of Staff, UNMAS/DMAC, 16 May 2017.
- 18 Email from DMAC, 11 April 2018.
- 19 Email from DMAC, 18 August 2018.
- 20 Email from DMAC, 11 April 2018.
- 21 Article 5 deadline Extension Request, 29 March 2012, pp. 167–75.
- 22 National Mine Action Strategic Plan, 1395–1399 [2016–2020], State Ministry for Disaster Management and Humanitarian Affairs, undated but 2016, pp. 2–7.
- 23 National Mine Action Strategic Plan, 1395–1399 [2016–20], State Ministry for Disaster Management and Humanitarian Affairs, undated but 2016, p. 22.
- 24 UNMAS/DMAC, "Concept Paper: Demining Operations in Mines/ERWs/Pressure Plate IEDs Contaminated Areas", Undated but 2017, p. III.
- 25 DMAC, "Concept Note for Clearance of Anti-Vehicle Remaining Mined Areas in Afghanistan", undated but 2017, pp. 3–8.
- 26 Article 7 Report (for 2017), Form F.
- 27 Email from DMAC, 18 April 2018; Article 7 Report (for 2017), Form A.
- 28 Email from DMAC, 18 April 2018; DMAC, "Policy on Abandoned Improvised Mines Demining in Afghanistan", May 2018, pp. 2–4; interview with Patrick Fruchet, Head of Office, UNMAS Kabul, in Geneva, 8 June 2018.
- 29 Email from DMAC, 11 April 2018.
- 30 Email from Mathew Wilson, Head of Operations, FSD, 23 July 2018.
- 31 Email from DMAC, 12 September 2018.
- 32 Email from Vanja Sirica, Country Director, NPA, 25 April 2018.
- 33 Telephone interview with Anne-Li Naucleur, Information Management Adviser, Geneva International Centre for Humanitarian Demining, 24 August 2018; and email, 30 September 2018.
- 34 See Article 7 Report (for 2017), Background; interview with Mohammed Shafiq Yosufi, DMAC, 8 June 2018; email from DMAC, 11 April 2018.
- 35 Email from DMAC, 11 April 2018.
- 36 Ibid.
- 37 Emails from DMAC, 11 April and 16 July 2018. Afghanistan's Article 7 report for 2017 (Form F) recorded clearance of 27,848,953m<sup>2</sup> in 2017, reduction of 948,213m<sup>2</sup>, and cancellation of 1,729,047m<sup>2</sup>.
- 38 Article 7 Report (for 2016), Form F.
- 39 Emails from DMAC, 11 April and 16 July 2018.
- 40 Email from DMAC, 11 April 2018.
- 41 The 12 provinces were Baghlan, Faryab, Ghazni, Kabul, Kandahar, Khost, Kunar, Logar, Maidan Wardak, Nangarhar, Paktika, and Paktya.
- 42 Email from DMAC, 11 April 2018.
- 43 Ibid.
- 44 Ibid.
- 45 Email from Calvin Ruysen, Regional Director for Central Asia, HALO Trust, 16 May 2018.
- 46 Email from Maria Berwald, Programme and Operations Coordinator Afghanistan and Colombia, DDC, 25 April 2018.
- 47 Email from Mathew Wilson, FSD, 23 July 2018.
- 48 Email from Abdul Qudos Ziaee, UNMAS/DMAC, 18 July 2018. Data records clearance of anti-personnel and mixed mined areas.
- 49 Email from DMAC, 18 July 2018. Afghanistan's Article 7 report for 2017 (Form F) recorded clearance of 27,848,953m<sup>2</sup> in 2017, reduction of 948,213m<sup>2</sup>, and cancellation of 1,729,047m<sup>2</sup>, with the destruction of 14,624 AP mines and 286 AV mines.
- 50 Email from DMAC, 11 April 2018; "UNMAS Afghanistan and DMAC strongly condemn brutal murder of an Afghan deminer in Nangahar", UNMAS/DMAC statement, 12 September 2017.
- 51 Interview with Mohammad Shafiq Yosufi, DMAC, in Geneva, 8 June 2018; email from DMAC, 1 April 2018; UN Mine Action Gateway, "Survey and Clearance of Landmines and Explosive Remnants of War (ERW) in 1397 (April 2018 – March 2019)", accessed at [www.mineaction.org/resources/project/7471](http://www.mineaction.org/resources/project/7471).
- 52 Email from DMAC, 18 July 2018; and Afghanistan's Article 7 reports for 2013, 2014, 2015, and 2016 (Form F).

# ANGOLA

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

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	9	8
Target date for completion of mine clearance	6	6
Targeted clearance	8	7
Efficient clearance	8	7
National funding of programme	4	4
Timely clearance	5	5
Land-release system in place	7	7
National mine action standards	4	5
Reporting on progress	5	4
Improving performance	7	7
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.3</b>	<b>6.0</b>

## PERFORMANCE COMMENTARY

In 2017, Angola requested and was granted a further eight-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline until the end of 2025. While significant efforts were again made by operators and the national mine action centre, CNIDAH (Comissão Nacional Intersectorial de Desminagem e Assistência Humanitária), to improve the quality of the national mine action database in preparation for the submission of the request, significant inconsistencies in Angola's reporting on the size of remaining contamination persisted. The request as finally submitted contains annual land release targets on a province-by-province basis for the duration of the extension period, but discrepancies in reporting continue to obstruct clarity on the extent of the remaining challenge and the annual milestones needed to reach completion.

Angola has been facing a severe decline in funding for mine action in recent years. This trend continued in 2017–18, reaching its lowest level ever. A crisis point was reached in April 2018 when the United States (US), one of Angola's biggest and long-term mine action donors, decided not to continue funding for future mine action operations. This greatly affected non-governmental organisation (NGO) mine action operators, The HALO Trust, Mines Advisory Group (MAG), and Norwegian People's Aid (NPA), with critical uncertainty over whether resources could be secured to continue operations.

In September 2018, the United Kingdom (UK) Department for International Development (DFID), pledged to fund mine action in Angola over a two-year period from July 2018 as part of £46 million of support for mine action programmes globally. This has injected critically needed funding to sustain mine action operations in Angola. However, the continuing decline and gap in funding experienced by all operators negatively affected operations in 2017–18, and significantly more resources are required if Angola's new deadline of 2025 is to be met.

Despite the funding shortfalls, in 2017 Angola made further strides towards the completion of a nationwide re-survey, which operators were optimistic could be achieved by the end of 2018. More than 90% of suspected hazardous areas (SHAs) recorded as a result of inflated estimates from a 2004–07 Landmine Impact Survey (LIS) were cancelled during the re-survey process. Overall, a huge swathe of land has been removed from the national database: close to 274km<sup>2</sup> of land was released through re-survey in just two years. Encouragingly, NPA reported that clearance of all known and registered tasks in Malanje province had been successfully completed as at end-May 2018, putting Malanje province on track to become Angola's first province to be declared free of the threat of mines and explosive remnants of war (ERW), following an official declaration by CNIDAH.<sup>1</sup>

## RECOMMENDATIONS FOR ACTION

- Angola should complete its nationwide re-survey of contamination by finishing the re-survey of the three remaining provinces: Lunda Norte and Lunda Sul by the end of 2018, and Cabinda by the end of 2019.
- Angola should provide an updated workplan to accompany its Article 5 extension request with greater clarity and detail on the number of mined areas to be addressed, annual targets towards completion, and corresponding projections of the resources needed.
- Angola should continue to work closely with operators to improve the national mine action database and to reconcile data held by CNIDAH with that of other national mine action entities. Particular efforts should be made to ensure demining data is disaggregated from verification data. Dedicated and sustained assistance for information management capacity to these ends should be provided to CNIDAH.
- Data should be recorded and reported consistently according to International Mine Action Standards (IMAS) terminology. Angola should update states parties regularly on progress, including through submitting annual APMBC Article 7 transparency reports in a timely manner.
- Angola should revisit its National Mine Action Standards (NMAS) to update them on the basis of IMAS and the country context, in particular on areas of management and quality control identified by CNIDAH.
- National demining assets and capacity should be put to full use to clear confirmed mined areas on the basis of humanitarian or socio-economic needs and priorities.
- Angola should clarify and empower the management structure of the national mine action programme, including the roles and responsibilities and funding of the two mine action entities. IMAS recommends that a single national authority be created to provide effective and efficient management of the national programme.

- Angola should increase its national funding to mine action so as to accelerate the pace of clearance and demonstrate national commitment to respect its Article 5 clearance obligations. It should continue to develop its resource mobilisation strategy and provide additional clarity on the increased costs for implementation contained in its revised extension request.
- Angola should ensure that no taxes are imposed on equipment imported by international operators to carry out mine action operations.
- Angola should increase its international advocacy to attract re-entry of donors so as to reverse the decline in international funding for mine action. A national resource mobilisation plan should be developed and implemented.
- Angola should ensure that an adequate quality control (QC) capacity exists for timely handover and reporting on released land as soon as possible after clearance is completed.
- As soon as possible, Angola should develop a plan at the national and provincial level for tackling any contamination that is found once clearance of mined areas has been completed. The plan should clearly establish the national entity and capacity with responsibility for survey and clearance.

## CONTAMINATION

According to its latest Article 7 transparency report, as at April 2018, Angola had a total of 1,220 mined areas remained covering 147.6km<sup>2</sup>: 999 confirmed hazardous areas (CHAs) over 89.3km<sup>2</sup> and 221 suspected hazardous areas (SHAs) covering 58.3km<sup>2</sup>.<sup>2</sup> The report noted, however, that a process was ongoing of updating the database with additional information from national demining entities, the Executive Commission for Demining (Comissão Executiva de Desminagem, CED) and the National Demining Institute (Instituto Nacional de Desminagem, INAD), not yet contained in its national Information Management System for Mine Action (IMSMA) database.<sup>3</sup>

Operators estimated, though, that as at April 2018, a total of 1,219 tasks remained to be addressed, with a total estimated size of 92km<sup>2</sup>. This calculation was made on the basis of the expected outcome of final re-survey efforts across the whole country.<sup>4</sup> If accurate, it would be a very considerable decrease from the national estimate of almost 129km<sup>2</sup> of CHA and 356km<sup>2</sup> of SHA from mid-2014.<sup>5</sup>

As per the figures provided by CNIDAH in its latest Article 7 transparency report, at April 2018 all 18 provinces still contained mined areas. Encouragingly, international operators completed re-survey of Moxico and Malanje provinces in mid-2017, along with Bengo and Luanda provinces in August/September 2017, leaving only three provinces where re-survey had yet to be completed: Lunda Norte and Lunda Sul, where re-survey efforts were ongoing and due to be completed in 2018; and Cabinda, the only province where re-survey had yet to commence at September 2018.<sup>6</sup>

**Table 1: Anti-personnel mine contamination by province (at April 2018)<sup>7</sup>**

Province	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Bengo	55	4,278,431	0	0
Benguela	71	4,305,107	0	0
Bié	119	6,007,303	0	0
Cabinda	2	49,500	34	7,643,567
Huambo	5	517,497	0	0
Huíla	17	3,219,680	0	0
Kuando Kubango	248	22,666,069	0	0
Kunene	33	2,575,367	0	0
Kwanza Norte	41	7,038,501	0	0
Kwanza Sul	127	8,585,995	1	35,000
Luanda	9	1,121,211	0	0
Lunda Norte	N/R	N/R	47	7,756,788
Lunda Sul	9	523,980	96	39,776,600
Malanje	10	1,569,312	0	0
Moxico	186	11,254,849	40	1,196,085
Namibe	3	253,750	0	0
Uíge	47	6,513,964	3	1,860,000
Zaire	17	8,823,000	0	0
<b>Totals</b>	<b>999</b>	<b>89,303,516</b>	<b>221</b>	<b>58,268,040</b>

MAG completed non-technical re-survey of Moxico province in May 2017, although it noted that CNIDAH only completed updating the IMSMA database with the results in the first quarter of 2018. As at September 2018, non-technical survey by MAG in Lunda Norte and Lunda Sul, which began in June–July 2017, was ongoing, and expected to be completed by the end of 2018.<sup>8</sup> In March 2017, NPA completed re-survey of Malanje province and estimated that it could complete clearance of all known contamination in the province within the first six months of 2018.<sup>9</sup> It subsequently reported that all known and registered tasks in Malanje province had been successfully cleared as at end-May 2018.<sup>10</sup> The HALO Trust reported that, as at August/September 2017, it had completed re-survey of two provinces (Bengo and Luanda), bringing to 10 the number of Angola’s (18) provinces that it had re-surveyed. The results of the re-survey of these provinces were also not included in the figures presented in Angola’s Article 5 deadline extension request, however. The HALO Trust was planning to start re-survey of Cabinda province in April 2019, after the rainy season has ended, which it expected could be completed by September 2019.<sup>11</sup>

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, Kuando Kubango, and Moxico. Landmines affect some of the poorest and most marginalised communities in the country, including those experiencing chronic food insecurity.<sup>12</sup> In 2017, remaining contamination was predominately located in rural, underdeveloped areas.<sup>13</sup> Mines continue to have a significant socio-economic impact for these communities and impede the return of the displaced and block access to land and water.<sup>14</sup>

Much of the land released by mine action is used for agriculture, which is of critical importance for acutely poor communities reliant on subsistence farming. But the lack of safe land also continues to have implications for larger-scale agricultural production as Angola seeks to diversify its sources of national income. CNIDAH confirmed in 2017 that the government was developing a new strategy of economic diversification, including expansion of agriculture, livestock, tourism, and mining, and the presence of mines was a serious impediment to many of these.<sup>15</sup>

Historically, humanitarian demining efforts in Angola have focused on urban and peri-urban areas due to security concerns in the countryside during the years of conflict, and in response to the needs of growing town-based populations afterwards. The HALO Trust reported in 2018 that many of the cities and towns in Angola had witnessed significant urban expansion, following reconstruction enabled by mine clearance. At the same time, rural populations have been largely left without support to deal with mine contamination, which for hundreds of communities means living beside minefields, with the daily threat of mines, despite the end of the conflict over 15 years ago.<sup>16</sup>

In 2018, MAG continued to emphasise Angola’s critical need to diversify its economy following the crash in global oil prices in mid-2014. Contamination from mines continued to hamper social and economic development, and new victims continued to be reported, often children, it said. Food security and improved livelihoods remained dependent on access to cleared land for housing, farming, access to water sources, and small market production. As in 2017, a reverse migration continued in its areas of operations, with the return of populations from coastal urban areas to subsistence farming in the provinces, along with the spontaneous return of internally displaced persons and refugee populations.<sup>17</sup>

NPA reported that five incidents were recorded in 2017 in the provinces of Malanje and Zaire, where it was operational. It stated that, in many cases, communities were aware of and avoided minefields in their proximity while waiting for demining, but in others, due to the

pressing need for land, villagers entered mined areas for sustenance activities such as farming, hunting, pasturing, or firewood collection, leading to tragedies.<sup>18</sup>

Angola also has a significant problem of ERW, especially unexploded ordnance (UXO).<sup>19</sup>

## PROGRAMME MANAGEMENT

Angola's national mine action programme is managed by two mine action structures. CNIDAH serves as the national mine action centre. It reports to the Council of Ministers or, in effect, to the Presidency of the Republic. It also accredits NGOs and commercial demining companies. Under the vice-governor of each province, CNIDAH's 18 provincial operations offices set annual objectives.

The other coordination body, the CED, reports to the newly created Ministry of Social Action, Family, and Women's Promotion (Ministério da Acção Social, Família e Promoção da Mulher, MASFAMU, formerly the Ministry of Social Assistance and Reintegration, or MINARS). It supports mine clearance in areas where development projects are a priority and is the coordination body for activities conducted by the national public operators (the Armed Forces, the Military Office of the President, INAD, and the Police Border Guard).<sup>20</sup> INAD, which was established in 2002 in order to separate coordination and operational roles, is responsible, under the auspices of the MASFAMU, for demining operations and training.

Tension between the two national authorities over who has the ultimate power to represent national demining efforts has persisted, to the apparent detriment of mine action.<sup>21</sup> Operators working under CED auspices remain reluctant to report to CNIDAH. Part of the problem is that CNIDAH is still only a temporary governmental body. Transforming it into an agency would strengthen CNIDAH's position, but this has been consistently delayed by lack of presidential approval.<sup>22</sup>

Lack of cooperation between the two national entities is visible in poor coordination between demining for infrastructure development and humanitarian demining across Angola. Demining for infrastructure development typically targets roads, bridges, airports, electric towers, hydroelectric power plants, and land for major state agriculture projects and new industry investments (such as cement factories), as well as for construction of new housing. In many cases, it is more accurate to describe this work as verification or confidence-building, as it is not undertaken on the basis of any known or suspected mine risk. Most demining by NGOs supported by international donors is determined in consultation with provincial authorities. The basis for decision-making is the national IMSMA database, although, until 2017, this largely reflected the results of the outdated and inaccurate LIS.

Angola's mine action programme has had more than a decade of capacity-building assistance, including from the United Nations Development Programme (UNDP), international mine action NGOs, and the Geneva International Centre for Humanitarian Demining (GICHD). Notably, UNDP sought to build CNIDAH's capacity in

2002–11, but admitted that its support was not very successful, especially in database management.<sup>23</sup> Astonishingly, no formal, independent evaluation of the programme as a whole has been conducted.

## Strategic Planning

As noted above, in 2017, Angola submitted a request to extend its Article 5 deadline for a further eight years, until the end of 2025. Operators commended CNIDAH's inclusive and participatory approach to the elaboration of the request.<sup>24</sup> The initial version of the request did not contain a detailed workplan or annual clearance targets, but suggested that clearance could gradually phase out, with clearance of less-contaminated provinces completed first.<sup>25</sup>

Angola's revised extension request, submitted in November 2017, set out annual targets for clearance on a province-by-province basis (*see Article 5 section*). As at June 2018, no new detailed strategic plan had been published since the expiration of Angola's 2013–17 Mine Action Strategic Plan, despite the significant effort made to accurately define all remaining mined areas for inclusion in the initial Article 5 extension request. According to The HALO Trust, a key challenge hindering the development of such a strategy or detailed workplan was the difficulty faced by CNIDAH and operators to project and actualise the completion of annual clearance targets on the basis of the severely limited funding available in 2017, along with a lack of engagement from donors on prioritisation.<sup>26</sup>

In granting its Article 5 extension request in December 2017, states parties to the APMBC stipulated that Angola should submit an updated workplan to detail activities and land release output projections for the duration of the request period. At the Sixteenth Meeting of States Parties in December 2017, Angola pledged to submit an updated workplan by the Seventeenth Meeting of States Parties in November 2018.<sup>27</sup> Previously, following a request by the Twelfth Meeting of States Parties, Angola elaborated a workplan for 2014–17 based on the preliminary results of its national survey, which projected that 327 confirmed mined areas covering about 35.5km<sup>2</sup> would be cleared by the end of 2017.<sup>28</sup>

## Legislation and Standards

There is no national mine action legislation in Angola, based on available information.

Operators reported no developments in Angola's NMAS in 2017. The HALO Trust recommended in June 2018 that a wider selection of the IMAS should be considered for publication as NMAS in Angola.<sup>29</sup> NPA reported that it had submitted its own revised Standing Operating

Procedures (SOPs), updated on the basis of IMAS and adjusted to the national context for approval by CNIDAH, which it hoped could also be taken into consideration in developing additional definitions in Angola's NMAS.<sup>30</sup> According to Angola's revised November 2017 extension request, a process has been initiated to update its national standards on management and quality control.<sup>31</sup>

## Quality Management

CNIDAH is responsible for undertaking external quality assurance (QA) and QC of mine action activities, including QC of all completed tasks prior to handover of land to beneficiaries.<sup>32</sup>

In 2017, The HALO Trust indicated that QA at provincial level remained generally weak, due to lack of funding and support. The frequency of worksite visits varied between provinces and there was a significant backlog of tasks awaiting formal handover in HALO Trust's areas of operations, it said. While these were being addressed by joint HALO/CNIDAH post-clearance visits on a province-by-province basis, as an interim measure, informal handovers took place between HALO Trust and local beneficiaries in order to facilitate more timely use of returned land. The HALO Trust further reported that CNIDAH was openly requesting donor assistance for improvement of its quality management capacity.<sup>33</sup>

NPA reported that CNIDAH conducted QC on several of its tasks during the year, while MAG stated that the CNIDAH team visited its operations regularly.<sup>34</sup> NPA reported that while CNIDAH's provincial offices were facing considerable restrictions due to lack of funding, in coordination and with support from NPA, including for transport, tasks carried out in 2017 were eventually quality assured by CNIDAH. NPA said it would have been ideal if a minimum of two external QC visits could have been conducted during operations, with an additional visit for final approval of tasks before handover. Operators would benefit if CNIDAH, at a provincial level, was fully trained and equipped to conduct necessary external QA/QC, as well as from a better-established connection between CNIDAH's central and provincial offices, which would vastly improve the process of certification and handover of cleared tasks, it said.<sup>35</sup>

CNIDAH reported in its revised Article 5 extension request that while improvements in its own and the CED's QC teams had been made, more remained to be done requiring "special measures in relation to this challenge".<sup>36</sup>

## Information Management

Angola's mine action programme has been plagued with difficulties in information management for more than a decade, impeding efforts to achieve a comprehensive, accurate understanding of contamination. As a consequence, Angola has made widely different and conflicting claims of the extent of its mine problem. Two issues are at the crux of Angola's inability to construct a reliable mine action database: on the one hand, CNIDAH's database does not match NGOs' own records, while on the other, CED operators fail to report to CNIDAH in the IMSMA format.<sup>37</sup> Operators have persistently raised concerns about inaccurate data, inconsistency and unreliability of information, internal issues within CNIDAH, and lengthy delays in updating data.<sup>38</sup>

In early 2016, IMSMA New Generation (NG) was installed with the help of the GICHD. Subsequently, all operators reported investing significant time and resources working with and supporting CNIDAH to update the database and reconcile inconsistencies between the database and operator records. Operators reported, however, that, initially, the introduction of IMSMA NG exacerbated delays in updating the database as parties struggled to learn the new system. They questioned the wisdom of the timing of the switch, which occurred during the middle of the accelerated country-wide re-survey and preparations for the Article 5 deadline extension request.<sup>39</sup> However, positive trends and changes were reported with the launch of the new version, and assistance from GICHD to resolve discrepancies resulted in significant areas of SHA and CHA being cancelled from the database purely through clean-up.<sup>40</sup>

Unfortunately, despite the significant efforts invested in improving the accuracy database and progress in reconciling data, these advances were not reflected in the Article 5 extension requests submitted by CNIDAH in 2017. The initial May request contains inconsistencies between key figures in the narrative text and in the supporting annexes, as well as calculation errors. Lengthy tables of data presented in Word format, rather than Excel, make it extremely difficult to identify and correct discrepancies in data.<sup>41</sup> It is possible that data was distorted during the process of developing the extension request, likely at the point of extraction from IMSMA. The revised November request is an improvement, though it still contains inconsistencies between figures reported in the request and in annexed tables, and does not explain the increase in the estimated size of remaining contamination.

CNIDAH reported in 2017 that efforts were underway to harmonise its database with CED data, but stated that further work on use and management of data was needed with respect to INAD, which is the guardian of the IMSMA database for the CED, the Demining Brigades of the Security Unit of the President of the Republic, the Angolan Armed Forces, and the Angola Border Guard Police.<sup>42</sup> CNIDAH reiterated that these efforts were still ongoing with respect to the CED and INAD in April 2018.<sup>43</sup>

In 2018, MAG reported that the significant discrepancies in the extension request and between the NGO operators' reporting and the CNIDAH database had been noted and were in process of being cleared from the IMSMA database. In its view, there was a great need for proactive and longer term technical assistance to CNIDAH for database management than the short consultancy-based approaches used so far.<sup>44</sup> Despite the far greater attention placed on the quality of the information in the national database during the preparation of the extension request, MAG reported that new figures for the re-survey work it conducted in 2017 in Moxico were not reflected in the request, despite the re-survey having been completed by May 2017.<sup>45</sup>

NPA confirmed that international NGOs worked jointly with CNIDAH on adjusting figures and reducing discrepancies in the CHIDAH database based on progress in the field in 2017, resulting in an increase in its ability to deliver more credible information. However, despite these efforts, it was widely recognised that

improvements are still required, and according to NPA, uniformisation of reporting formats used by all operators would be a significant step forward in improving data quality.<sup>46</sup> In addition, NPA noted the potentially significant issue of integration of data from the CED.<sup>47</sup>

The HALO Trust reported that in recent years, due to Angola's ongoing financial crisis, CNIDAH continued to have difficulties to pay for reliable internet connections that would facilitate basic data transfers. Instead, operators were having to visit CNIDAH in Luanda and transfer data directly via memory sticks.<sup>48</sup>

## Operators

Three international NGOs conducted humanitarian demining in Angola in 2017: The HALO Trust, MAG, and NPA. Operators included local NGOs The Association of Mine Professionals (APACOMINAS), Demining and Humanitarian Assistance Organisation (ODAH), Union for the Rights to Education, Health and Safety for the Unemployed (UDESSD), and Associação Terra Mãe (ATM).

In 2007–17, collectively the resources of the three largest operators, HALO Trust, MAG, and NPA declined by nearly 90%.<sup>49</sup> In 2017, annual funding was only 19% of the then projected amount needed (\$275 million) to complete mine clearance by the end of 2025.<sup>50</sup> In 2016, the loss of funding from the European Union (EU) Development Fund for demining impacted all international operators with demining effectively coming to a halt in five provinces (Bié, Benguela, Cunene, Kwanza Sul, and Kwanza Norte).<sup>51</sup> A steady decline in funding continued in 2017, culminating in the critical loss of US funding for mine action operations in April 2018. Prior to that, US support had accounted for 80% of all funding for mine action in Angola following the withdrawal of the EU in 2016.<sup>52</sup>

In 2017, The HALO Trust employed, on average, 292 staff, a reduction of 23 on the previous year. On average in 2017, 16 manual demining teams were operational along with 1 mechanical demining team operating a DIGGER tiller, as well as two combined survey, explosive ordnance disposal (EOD), risk education, and minefield marking teams.<sup>53</sup>

On 8 March 2017, The HALO Trust introduced a "100 Women in Demining in Angola" project, with the aim of empowering 100 women through recruitment, training, and employment across a range of mine action roles, including operations, administration, logistics, and fleet support. The focus of the project was Benguela province, where more than 75 minefields continued to impact local

communities and demining operations had stopped in 2014 due to a lack of funding. As at June 2018, HALO reported that achievements had included 36 women trained as deminers, 20 had been trained as paramedic-deminers, 3 were trained as drivers. Demining had included clearance of two minefields totalling 60,000m<sup>2</sup>, with more than 200 mines and items of UXO destroyed. Donors for the project included the Swiss foundation Welt Ohne Minen (World Without Mines), the US JDK Revocable Trust (a legacy from an individual's will), and the Italian oil and energy company ENI.<sup>54</sup>

The HALO Trust reported a significant reduction in demining capacity in Cuito Cuanavale in Kuando Kubango province in the first half of 2017 due to reduced funding, forcing it to suspend all demining operations and the deployment of six local demining teams. Some overall capacity was recovered later in the year as a result of its "100 Women in Demining" project in Benguela province. HALO Trust noted that it considered Cuito Cuanavale to be the most heavily mined town in Africa, despite the removal of more than 35,000 mines in 2005–17.<sup>55</sup>

At the start of 2017, MAG employed a total of 83 national staff and 4 international staff, which increased to 98 national staff and 5 international staff at the end of 2017, as a result of increased funding. It reported training its first female deminers in April 2018. In 2017, it began deploying a Mini-MineWolf 240 and a TEREX Ground Preparation machine.<sup>56</sup>

In 2017, NPA reported that its operational capacity faced two major staff reductions during the year: the number of deminers dropped from 74 in January–February to 44 in December. Mechanical assets could only be financially supported and deployed in the first half of 2017, and operations resumed to manual demining only in July–December 2017.<sup>57</sup> NPA also continued its partnership with international demining NGO APOPO during the year, which employed eight mine detection rat handlers and two mechanical operators, and four deminers from October 2016 to operate a brush-cutter machine.<sup>58</sup>

Collectively, the four CED operators – the Armed Forces, the Military Office of the President, INAD, and the Police Border Guard – are working in all 18 provinces. They are tasked by the government to clear or verify areas prioritised by national infrastructure development plans.<sup>59</sup> A number of commercial companies<sup>60</sup> operate in Angola and are accredited by and report to CNIDAH, but are mostly employed by state or private companies to verify areas to be used for investment, whether or not they are known to contain SHAs.<sup>61</sup>

## LAND RELEASE

Prior to Angola's submission of its Article 5 deadline extension requests in 2017, the various problems with the national database, including the different reporting formats between CNIDAH and CED, made it difficult to describe in detail and with any degree of accuracy the extent of land released in Angola over the years. Additionally, data from the CED and commercial companies have not been made available.

Operators reported an increase in total land release of close to 3.2km<sup>2</sup> in 2017, from 138.4km<sup>2</sup> released by survey and clearance in 2016 to close to 141.6km<sup>2</sup> in 2017. Of this, there was a 2km<sup>2</sup> increase in the amount of land cancelled by non-technical survey compared with 2016, up from 136km<sup>2</sup> in 2016 to 138km<sup>2</sup> in 2017, along with nearly double the amount of land reduced by technical survey, from 1.2km<sup>2</sup> in 2016 to 2.4km<sup>2</sup> in 2017. This was due to accelerated efforts to complete re-survey in preparation

for the submission of the extension request. The amount of land released through clearance remained steady, dropping only marginally from just under 1.2km<sup>2</sup> in 2016 to just over 1.18km<sup>2</sup> in 2017, despite funding and capacity for clearance continuing to decrease.<sup>62</sup>

Angola's progress in land cancelled and reduced through survey has resulted in a hugely significant amount of land release, with close to 274km<sup>2</sup> of land released in just two years, a highly notable achievement for the national mine action programme.

## Survey in 2017

International operators reported cancelling more than 138km<sup>2</sup> of SHA through non-technical survey in 2017, and reducing a further 2.4km<sup>2</sup> through technical survey, while confirming as contaminated 143 mined areas with a total size of over 15km<sup>2</sup> (see Table 2).<sup>63</sup> This compares to 2016 when nearly 136km<sup>2</sup> of SHA was cancelled through non-technical survey, 1.2km<sup>2</sup> reduced through technical survey, and 155 areas with a total size of nearly 7.8km<sup>2</sup> confirmed as mined.<sup>64</sup>

**Table 2: Mined area survey in 2017<sup>65</sup>**

Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )	Areas confirmed	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
HALO (Bengo)	96	61,879,866	55	3,440,820	0
HALO (Benguela)	6	566,723	2	97,300	0
HALO (Bié)	2	20,000	0	0	0
HALO (Huambo)	1	20,600	1	1,971	489,652
HALO (Huila)	0	0	0	0	2,901
HALO (Kuangdo Kubango)	2	63,250	3	88,500	208,576
HALO (Luanda)	45	15,459,511	9	1,121,211	0
MAG (Moxico)	59	10,131,044	17	769,344	116,669
MAG (Lunda Sul)	99	39,318,011	42	7,260,216	0
MAG (Lunda Norte)	9	6,641,500	0	0	0
NPA (Malanje)	6	803,555	10	1,772,867	1,393,062
NPA (Uige)	6	3,457,953	4	599,046	215,646
<b>Totals</b>	<b>331</b>	<b>138,362,013</b>	<b>143</b>	<b>15,151,275</b>	<b>2,426,506</b>

TS = Technical survey

As reported above, in March 2017, NPA completed re-survey of Malanje province.<sup>66</sup> Its survey output increased dramatically in 2017 to close to 5.9km<sup>2</sup> released through non-technical and technical survey, and just under 2.4km<sup>2</sup> confirmed, compared with just over 0.6km<sup>2</sup> released through survey and 0.4km<sup>2</sup> confirmed in 2016. It reported that this was due to refresher trainings for operational staff on land release methodologies and a task which consisted of an old electric power transport line of approximately 18km in length, allowed for a high portion of the land reduced through technical survey, in comparison with survey outputs in 2016.<sup>67</sup> NPA reported that a further 3.25km<sup>2</sup> was cancelled as a result of database clean-up in Uige province in 2017.<sup>68</sup>

As noted, MAG reported that it completed non-technical re-survey of Moxico province in May 2017, and that CNIDAH was in process of updating the IMSMA database as a result. As at September 2018, non-technical survey in Lunda Norte and Lunda Sul, which began in June–July 2017, was ongoing, and was expected to be completed by the end of 2018.<sup>69</sup> Its re-survey of Moxico province identified a total of 244 tasks with a total size of more than 13.5km<sup>2</sup> remaining. This marked the end of a three-year process to re-survey the province in which a total of 221 tasks were cancelled and 108km<sup>2</sup> cancelled or reduced.<sup>70</sup>

The HALO Trust completed re-survey of Bengo and Luanda provinces in August and September 2017, however, as reported above, the results of the re-survey were not included in the figures presented in Angola's extension request. It intended to start re-survey of the last remaining province, Cabinda, in April 2019 once the rainy season ended, and estimated that it could complete re-survey by September 2019.<sup>71</sup>

According to CNIDAH, between 2012 and April 2014, 192km<sup>2</sup> was either cancelled by non-technical survey, or released by technical survey, or removed from the national database by eliminating data discrepancies between CNIDAH and the operators.<sup>72</sup>

## Clearance in 2017

As set out in Table 3, international NGO operators reported clearing a total of over 1.18km<sup>2</sup> of mined area in 2017, destroying in the process 3,480 anti-personnel mines, 114 anti-vehicle mines, and 2,201 ERW.<sup>73</sup> This is compared to 2016, when NGO operators reported clearing a total of just under 1.2km<sup>2</sup> of mined area.<sup>74</sup> There was a decrease of only 14,242m<sup>2</sup> of clearance in 2017, however, the amount of mines found and destroyed nearly trebled, from 1,255 in 2016 to 3,480 in 2017, suggesting an improvement in targeted and efficient clearance and land release operations.<sup>75</sup>

Table 3: Mine clearance in 2017<sup>76</sup>

Operator	Province	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
HALO	Benguela	4	28,780	44	0	110
HALO	Huambo	18	364,237	27	9	441
HALO	Huila	1	10,828	20	0	1
HALO	Kuando Kubango	7	326,062	1,957	16	62
MAG	Moxico	2	291,477	188	88	1,524
NPA	Malanje	13	163,262	1,224	1	53
NPA	Uige	2	0	20	0	10
<b>Totals</b>		<b>47</b>	<b>1,184,646</b>	<b>3,480</b>	<b>114</b>	<b>2,201</b>

AP = Anti-personnel AV = Anti-vehicle

Additionally, NPA reported destroying 12 anti-personnel mines, 4 anti-vehicle mines, and 67 items of UXO in spot tasks in 2017.<sup>77</sup> MAG deployed an EOD team to clear spot tasks, destroying 45 anti-personnel mines, 1 anti-vehicle mine, and 545 items of UXO.<sup>78</sup> The HALO Trust reported destroying 9 anti-personnel mines, 5 anti-vehicle mines, and 196 items of UXO in EOD spot tasks.<sup>79</sup>

MAG reported that its significant increase in clearance output in 2017 of nearly 0.29km<sup>2</sup> up from 0.16km<sup>2</sup> in 2016 was due to the use of a MineWolf 240 as a ground preparation asset, followed by manual clearance.<sup>80</sup>

The HALO Trust reported that its decrease in clearance output in 2017, from just over 0.8km<sup>2</sup> in 2016 to just under 0.7km<sup>2</sup> in 2017, was a direct result of experienced demining capacity having to be suspended due to lack of funding where operations were ongoing, while a new capacity had to be recruited and trained in new areas, where new funding was able to be secured.<sup>81</sup>

In 2016, HALO Trust launched a "Mine Impact Free Huambo" initiative, with the goal of completing clearance of Huambo province by end-2018. With support from a set of partners including the United States, Switzerland,

and Japan, along with the Canton of Bern and DIGGER Foundation, HALO Trust aimed to deploy 10 demining teams and a DIGGER D-250 tiller to complete clearance of Huambo within three years.<sup>82</sup> As at July 2018, HALO Trust reported that five minefields remained to be cleared, and if access to one minefield around an ammunition storage area at a military base was granted, it believed that clearance of Huambo province would be completed before the end of 2018.<sup>83</sup>

Following completion of re-survey in 2017, NPA reported completing clearance of all known and registered tasks in Malanje province as at end-May 2018, marking a highly significant milestone of the first province to be declared free of the threat of mines in Angola, following official declaration by CNIDAH.<sup>84</sup>

### Deminer Safety

The HALO Trust reported that on 13 February 2018 one of its deminers was severely injured after he unintentionally initiated a Soviet-made fragmentation mine which had fallen off its wooden stake and both tripwire and mine had become buried below the surface. It reported in June 2018 that he was making a steady recovery.<sup>85</sup>

## ARTICLE 5 COMPLIANCE

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.

According to its revised November 2017 extension request, Angola intends to meet the following annual milestones: 176 mined areas addressed in 2018; 189 mined areas addressed in 2019; 190 mined areas addressed in 2020; 188 mined areas addressed in 2021; and 688 mined areas addressed in 2022–25.<sup>86</sup> At the same time, annexed tables accompanying the revised request contain a more detailed breakdown of annual targets for remaining contamination to be addressed; however these figures are inconsistent with the annual targets in the request itself, and with the conflicting total estimates of contamination reportedly remaining to be addressed.

At the Sixteenth Meeting of States Parties, Angola was requested to provide an updated and detailed workplan providing greater clarity on the amount of remaining contaminated area and milestones for completion. The Article 5 Committee noted that this workplan should contain an updated list of all areas known or suspected to contain anti-personnel mines, annual projections of which areas would be dealt with by which organisations during the remaining period covered by the request and a detailed updated budget.<sup>87</sup> Angola pledged to submit this updated workplan by the Seventeenth Meeting of States Parties in November 2018.<sup>88</sup>

In 2018, The HALO Trust, MAG, and NPA, reported that Angola's new Article 5 deadline of 2025 would not be met if current funding levels are not significantly increased.<sup>89</sup> All three operators were badly affected by the US's decision to pull its funding for mine action in Angola, which ended in April 2018.<sup>90</sup> NPA stated that with only three international operators on the ground,

each constantly confronted with funding cuts and corresponding decreases in operational capacity, it was doubtful if it could complete clearance by this date.<sup>91</sup> MAG estimated a seven-fold increase in funding per year for the next eight years would be necessary.<sup>92</sup>

According to The HALO Trust, with the lack of a strategic plan in place for 2018 or going forward, only individual donor workplans as brokered by operators existed, which were endorsed by CNIDAH, albeit with little autonomy. It likewise confirmed the most significant challenges for operators remained the retention of funding to deploy assets and retain key staff before vital capacity, which has taken decades to establish, is lost due to further funding cuts.<sup>93</sup>

CNIDAH and operators have estimated that the cost of completing clearance by 2025 will be US\$275 million.<sup>94</sup> The revised November 2017 extension request, however, indicates that the total cost for activities planned during the period of the extension is US\$348 million.<sup>95</sup> According to the revised 2017 extension request, two roundtables will be held in 2017–18 with potential donors from the banking, industrial, steel and other sectors, with the aim of mobilising public, private, national, and foreign resources.<sup>96</sup> MAG confirmed that a roundtable to this effect was held in June 2017, followed by a larger conference in November 2017.<sup>97</sup> According to the revised extension request, a strategy for a thematic approach to funding will also be developed. The request states that mobilisation of national funding will require persuasion of “competent bodies of the Angolan State, through existing legal planning mechanisms for this purpose”, adding that CNIDAH is primarily responsible for the implementation of the strategy, which it said is already in progress.<sup>98</sup>

The Government of Angola has provided significant funding for demining, but almost exclusively in support of major infrastructure projects, and it has faced severe budget cuts following the global crash in oil prices. Clearance of rural areas has typically not been funded by the government, and assistance from international demining organisations has been vital to clear poor and rural areas.<sup>99</sup> Despite not funding mine action by international operators directly in 2017, the government did continue to make available in-kind support, such as free use of land for office compounds, and institutional incentives such as tax exemptions on the import of goods.<sup>100</sup> However, according to MAG, a new tax code introduced in 2018 restricted tax-exempt items to uniforms, blankets, and tents only, while its primary import costs were from cars and spare parts and no longer tax-exempt.<sup>101</sup>

Encouragingly, The HALO Trust, MAG, and NPA, which bid as a consortium for UK DFID funding in a tender process announced in March 2018, were successfully awarded funding from DFID for mine action operations in Angola, which was set to become available in July 2018. However, while an immensely welcomed development which prevented the looming threat of a complete shut-down of mine action in Angola, operators remained concerned that the gains in new DFID funding received in 2018 would be offset by the loss of US funding and further cuts in capacity in the interim period, resulting in no overall increase in resources for humanitarian demining in-country.<sup>102</sup>

Also notably, The HALO Trust expected to complete clearance of Huambo province during the second half of 2018, achieving another significant milestone with the second province declared free of the threat of mines in Angola.<sup>103</sup> In 2018, it also hoped to further expand its ‘100 Women in Demining’ project, with funding support from a major oil company, energy giant Italian company ENI, of \$150,000, which it reported was one of the largest donations from an oil company towards humanitarian demining in Angola. Positively, HALO Trust indicated that with the growing success of the project, further funding was expected to be made available in 2018–19, which would greatly increase HALO’s ability to tackle the remaining mine contamination problem in Benguela province.<sup>104</sup>

News that clearance of two provinces, Malanje and Huambo, are on track to being reported completed by 2018 is highly encouraging. Completion of these provinces will be major steps forward for Angola’s mine action programme and a demonstration that meaningful progress is achievable to reach Angola’s completion target of 2025. It remains paramount, however, that increased and sustained international support is made available to realise the goal of a mine-free Angola.

**Table 4: Anti-personnel mine clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )
2017	1.2
2016	1.2
2015	4.1
2014	2.2
2013	3.8
<b>Total</b>	<b>12.5</b>

- 1 Email from Nicola Jay Naidu, Country Director, NPA, 11 September 2018.
- 2 APMBC Article 7 Report (for June 2017–April 2018), p. 8.
- 3 *Ibid.*, p. 7.
- 4 Email from Jeanette Dijkstra, Country Director, MAG, 24 April 2018.
- 5 Figures as at June 2014. Article 7 Report (for 2013), Form C.
- 6 Article 7 Report (for June 2017–April 2018), p. 8; and email from Gerhard Zank, Programme Manager, HALO Trust, 11 September 2018.
- 7 Article 7 Report (for June 2017–April 2018), p. 8. MAG reported that in its areas of operations in Mexico province a total of 203 CHAs with a size of 12,135,373m<sup>2</sup> and 41 SHAs with a size of 1,236,812m<sup>2</sup> remained to be addressed as at April 2018. According to HALO Trust, a total of 65 CHAs remained to be addressed in Benguela province and 105 CHAs in Bié province at April 2018. Emails from Jeanette Dijkstra, MAG, 19 September 2018; and Gerhard Zank, HALO Trust, 19 September 2018.
- 8 Emails from Jeanette Dijkstra, MAG, 24 April and 7 September 2018.
- 9 Email from Joaquim da Costa, Acting Country Director, NPA, 25 September 2017.
- 10 Email from Nicola Jay Naidu, NPA, 11 September 2018.
- 11 Emails from Gerhard Zank, HALO Trust, 15 June and 11 September 2018.
- 12 Email from Vanja Sikirica, Country Director, Norwegian People's Aid (NPA), 11 May 2016; and questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
- 13 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 14 *Ibid.*; and emails from Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018.
- 15 Second Article 5 Extension Request, received 11 May 2017, p. 19.
- 16 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 17 Email from Jeanette Dijkstra, MAG, 24 April 2018.
- 18 Email from Joaquim da Costa, NPA, 10 May 2018.
- 19 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email, 17 May 2016.
- 20 Email from Joaquim da Costa, NPA, 10 May 2018.
- 21 Interviews with Pedro Toco, UNDP database assistant to CNIDAH, Luanda, 20 April 2010; Eng. Leonardo Seferino Sapalo, Head, INAD, and CED Member, Luanda, 17 June 2011; Susete Ferreira, UNDP, Luanda, 14 June 2011; Joaquim Merca, CNIDAH, in Geneva, 10 April 2014; and Narciso Paulo S. Tiacafe, Operations Officer, CNIDAH, Luanda, 16 April 2010; and CNIDAH, "Plano Estrategico de Sector de Accao contra Minas 2013–2017", Luanda, undated, p. 30.
- 22 Interview with Joaquim Merca, CNIDAH, in Geneva, 10 April 2014.
- 23 Interview with Susete Ferreira, UNDP, in Luanda, 14 June 2011.
- 24 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.
- 25 Second Article 5 Extension Request, received 11 May 2017, p. 19.
- 26 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 27 Statement by Amb. Maria de Jesus Dos Reis Ferreira, 16th Meeting of States Parties, Vienna, 21 December 2017.
- 28 "Angola: Eliminação completa das minas e remanescentes da guerra ainda é longo – diz CNIDAH" ["CNIDAH says complete elimination of mines and remnants of war will take a long time"], ANGOP, 13 March 2015.
- 29 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 30 Email from Joaquim da Costa, NPA, 10 May 2018.
- 31 Second revised Article 5 Extension Request, 14 November 2017, p. 14.
- 32 *Ibid.*; and emails from Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018.
- 33 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 34 Emails from Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018.
- 35 Email from Joaquim da Costa, NPA, 10 May 2018.
- 36 Second revised Article 5 Extension Request, 14 November 2017, p. 14.
- 37 Email from Vanja Sikirica, NPA, 11 May 2016; and interview with Joaquim Merca, CNIDAH, in Geneva, 10 April 2014.
- 38 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017 and 11 May 2016; Bill Marsden, MAG, 2 May 2017 and 17 October 2016; and Gerhard Zank, HALO Trust, 17 May 2016.
- 39 Email from Bill Marsden, MAG, 2 May 2017; and questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017. In addition, The HALO Trust reported it had provided CNIDAH with a simple means to produce Geographic Information System (GIS)-based minefield maps for all remaining SHAs and CHAs, on a country-wide or province-by-province basis, in PDF formats, a functionality that the new version of IMSMA does not offer. It reported that results from its re-surveys of Cunene and Namibe were electronically transferred and updated in the IMSMA NG database in February 2017 in collaboration with CNIDAH and the GICHD, along with web-based maps with satellite imagery provided through a HALO Trust partnership with GIS mapping company ESRI.
- 40 Email from Vanja Sikirica, NPA, 11 May 2017.
- 41 *Ibid.*
- 42 Second Article 5 Extension Request, received 11 May 2017, p. 12.
- 43 Article 7 report (for June 2017 – April 2018), p. 7.
- 44 Email from Jeanette Dijkstra, MAG, 24 April 2018.
- 45 *Ibid.*
- 46 Email from Joaquim da Costa, NPA, 10 May 2018.
- 47 *Ibid.*
- 48 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 49 Chris Loughran and Camille Wallen, "State of Play: The Landmine Free 2025 Commitment", MAG and HALO Trust, December 2017.
- 50 Stratton and Loughran, "Issue Brief: Time to Change Course, Angola and The Ottawa Treaty", MAG, April 2017.
- 51 *Ibid.*; and emails from Gerhard Zank, 17 May and 17 October 2016. The EU has been a major donor in Angola. In 2013, its office in Angola announced it would provide another €20 million (\$25 million) for mine action in 2013–17. After delays that slowed demining operations, €18.9 million (\$25 million) was finally provided through the 10th European Development Fund. However, support for demining from the Fund ended in 2016.
- 52 Emails from Gerhard Zank, HALO Trust, 15 June 2018; Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018; and Loughran and Wallen, "State of Play: The Landmine Free 2025 Commitment", MAG and HALO Trust, December 2017.
- 53 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 54 *Ibid.*
- 55 *Ibid.*
- 56 Email from Jeanette Dijkstra, MAG, 24 April 2018.
- 57 Email from Joaquim da Costa, NPA, 10 May 2018.
- 58 Email from Vanja Sikirica, NPA, 11 May 2017.
- 59 CNIDAH, "Angola: workplan 2014–17 for the Ottawa Convention Article 5 extension period", June 2014, p. 6.
- 60 Including: Yola Comercial, Fragilpe, Kubuila, Prodmimas, Mavaarum, OJK, VDS, PAFRA, Anglowest, Sedita, Teleservice, and Grupo Everest. CNIDAH, "Angola: workplan 2014–17 for the Ottawa Convention Article 5 extension period", June 2014. According to CNIDAH, a total of 25 commercial companies conducted demining activities from 2012–2016. Second Article 5 Extension Request, received 11 May 2017, p. 17.
- 61 Email from Joaquim Merca, CNIDAH, 12 May 2014.
- 62 Emails from Gerhard Zank, HALO Trust, 15 June 2018; Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018; and questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017; and Bill Marsden, MAG, 2 May 2017.
- 63 Emails from Gerhard Zank, HALO Trust, 15 June 2018; Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018.
- 64 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017; and Bill Marsden, MAG, 2 May 2017.
- 65 Emails from Gerhard Zank, HALO Trust, 15 June 2018; Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018. NPA reported that five of the ten areas it confirmed as CHAs in Malanje province in 2017 referred to new areas which were not previously recorded as SHAs in the CNIDAH database.
- 66 Emails from Joaquim da Costa, NPA, 25 September 2017; and Nicola Jay Naidu, NPA, 11 September 2018.
- 67 Email from Joaquim da Costa, NPA, 10 May 2018. According to NPA, the task consisted of an 18km-long electric power line with poles every 300 metres or so and up to 20 mines surrounding each pole. Full clearance around the poles, combined with exploratory technical survey lines between the poles, accounted for the large increase in reduction through technical survey in 2017.

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- 68 Emails from Vanja Sikirica, NPA, 11 May and 29 September 2017; and Nicola Jay Naidu, NPA, 11 September 2018.
- 69 Emails from Jeanette Dijkstra, MAG, 24 April and 7 September 2018.
- 70 Email from Jeanette Dijkstra, MAG, 29 September 2017.
- 71 Email from Gerhard Zank, HALO Trust, 11 September 2018.
- 72 Presentation "Plano Cartagena v. Art. 5".
- 73 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017; Bill Marsden, MAG, 2 May 2017; and Joaquim da Costa, NPA, 28 September 2017. Figures reported by NPA include outputs by APOPO's mine detection rats.
- 74 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017; Bill Marsden, MAG, 2 May 2017; and Joaquim da Costa, NPA, 28 September 2017. Figures reported by NPA include outputs by APOPO's mine detection rats.
- 75 Emails from Gerhard Zank, HALO Trust, 15 June 2018; Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018; and questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017; and Bill Marsden, MAG, 2 May 2017.
- 76 Emails from Gerhard Zank, HALO Trust, 15 June 2018; Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018. The clearance of 20 anti-personnel mines was the result of a technical survey intervention by APOPO's mine detection rats.
- 77 Email from Joaquim da Costa, NPA, 10 May 2018. NPA reported additionally carrying out battle area clearance in 2017, making its total land release figure for the year 2,092,288m<sup>2</sup>.
- 78 Email from Jeanette Dijkstra, MAG, 29 September 2017.
- 79 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 80 Email from Jeanette Dijkstra, MAG, 24 April 2018.
- 81 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 82 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
- 83 Email from Gerhard Zank, HALO Trust, 16 September 2018.
- 84 Emails from Joaquim da Costa, NPA, 10 May 2018; and Nicola Jay Naidu, NPA, 11 September 2018.
- 85 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 86 Article 5 deadline Extension Request Analysis, 1 December 2017, p. 4.
- 87 Article 5 deadline Extension Request Analysis, 1 December 2017, p. 6.
- 88 Statement by Amb. Maria de Jesus Dos Reis Ferreira, 16th Meeting of States Parties, Vienna, 21 December 2017.
- 89 Emails from Gerhard Zank, HALO Trust, 15 June 2018; Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018.
- 90 Ibid.
- 91 Email from Joaquim da Costa, NPA, 10 May 2018.
- 92 Chris Loughran and Camille Wallen, "State of Play: The Landmine Free 2025 Commitment", MAG and HALO Trust, December 2017.
- 93 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 94 Second Article 5 deadline Extension Request, received 11 May 2017, p. 25.
- 95 Revised Second Article 5 deadline Extension Request, 14 November 2017, p. 25.
- 96 Ibid., p. 21.
- 97 Email from Jeanette Dijkstra, MAG, 10 September 2018.
- 98 Revised Second Article 5 deadline Extension Request, 14 November 2017, p. 21.
- 99 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
- 100 Emails from Gerhard Zank, HALO Trust, 15 June 2018; and Jeanette Dijkstra, MAG, 24 April 2018. In 2017, MAG reported that in-kind support from the Government of Angola continued in the form of rent-free operations base, field camp and training area, and that deminers had received plots of land for farming or housing in the past. HALO reported that its compounds and camps/office facilities were operated on rent-free land provided by relevant provincial governments in Huambo, Kuito, Menongue, and Cuito Cuanavale.
- 101 Email from Jeanette Dijkstra, MAG, 10 September 2018.
- 102 Email from Gerhard Zank, HALO Trust, 15 June 2018.
- 103 Ibid., and 16 September 2018.
- 104 Ibid.

# ARGENTINA (ISLAS MALVINAS)

**ARTICLE 5 DEADLINE: 1 JANUARY 2020**  
(NOT ON TRACK TO MEET DEADLINE)

## RECOMMENDATION FOR ACTION

- Argentina should renew an earlier offer it made to the United Kingdom (UK) to support demining of the Malvinas/Falkland Islands.

## CONTAMINATION

Argentina reports that it is mine-affected by virtue of its claim to sovereignty over the Malvinas/Falkland Islands.<sup>1</sup> 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.”<sup>2</sup> It reiterated this declaration at the Sixteenth Meeting of States Parties and the June 2018 APMBC Intersessional Meetings.<sup>3</sup> The islands were mined, mostly by Argentinian forces, during its armed conflict with the UK in 1982. Argentina has reported that no other territory under its jurisdiction or control is mine-affected.<sup>4</sup>

## PROGRAMME MANAGEMENT

Argentina has a Humanitarian Demining Office under the Office of the Joint Chiefs of Staff of the Armed Forces and a Humanitarian Demining Training Centre (Centro de Entrenamiento de Desminado Humanitario).

## LAND RELEASE

Argentina has argued 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 UK. It did, however, make an offer more than a decade ago to support demining of the islands. In December 2017, Argentina reiterated its claim of sovereignty over the islands and declared that if the UK entered into negotiations over sovereignty an agreement on demining could be reached between the two states.<sup>5</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, and in accordance with the 10-year extension granted in 2009 by the Second Review Conference, 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 January 2020.

At the Second Review Conference Argentina said it was unable to meet its Article 5 obligations because it did not have access to the Malvinas due to the “illegal occupation” by the UK. Argentina said for this reason it had no other choice than to request an extension to its clearance deadline.<sup>6</sup>

In March 2018, the United Kingdom formally submitted a request to extend its Article 5 deadline by an additional five years until 1 March 2024. This deadline is to complete the demining of the Malvinas/Falkland Islands.<sup>7</sup> In light of this, Argentina will also need to submit an extension request in 2019, before the expiry of its Article 5 deadline.

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1 Article 7 Report, Form A, 8 April 2010.

2 Article 7 Report, Form A, 31 August 2000.

3 Statements of Argentina, APMBC 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017; and Committee on Article 5 Implementation, Geneva, 7 June 2018.

4 Statement of Argentina, APMBC 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017.

5 Ibid.

6 Statement of Argentina, Second APMBC Review Conference, Cartagena, 30 November 2009.

7 United Kingdom, Article 5 deadline Extension Request, 29 March 2018.

# BOSNIA AND HERZEGOVINA

**ARTICLE 5 DEADLINE: 1 MARCH 2019**  
(INTERIM TWO-YEAR EXTENSION REQUESTED TO 1 MARCH 2021)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	6	6
Target date for completion of mine clearance	4	5
Targeted clearance	7	7
Efficient clearance	6	6
National funding of programme	7	7
Timely clearance	3	3
Land-release system in place	7	7
National mine action standards	7	7
Reporting on progress	4	5
Improving performance	6	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.7</b>	<b>5.9</b>

## PERFORMANCE COMMENTARY

Clearance output dropped by almost half in 2017 compared to the previous year, and there was also a notable decrease in the amount of land reduced by non-technical survey. The amount of land cancelled by non-technical survey in 2017 cannot be compared to that of 2016, as 2016 data included the results of the full three-and-a-half-year European Union (EU) pilot project, rather than the annual cancellation output for 2016. Information management in Bosnia and Herzegovina (BiH) continued to be a problem, including use of terminology not consistent with the International Mine Action Standards (IMAS) and reporting inconsistent survey and clearance data between different reporting forums for the same period.

Despite the decrease in land release output, the Bosnia and Herzegovina Mine Action Centre (BHMAC) continued to implement the adoption and roll-out of more land release methodology, primarily through using the results

of non-technical survey to more effectively target and task technical survey (both “systematic technical survey” and “technical survey with targeted investigation”), and thereby ensure that full clearance is only undertaken where the presence of mines is confirmed. As part of this process, the three revised national standards on non-technical survey, technical survey (including targeted investigation and systematic technical survey), and land release were adopted in January 2017.

In 2017, BHMAC developed a new National Mine Action Strategy for 2018–25, with support from the Geneva International Centre for Humanitarian Demining (GICHD) and BHMAC also completed amendments to BiH’s demining law. However, as at August 2018, neither the new strategy nor the amended demining law had been formally approved by parliament, calling into question BiH’s political commitment to mine action.

## RECOMMENDATIONS FOR ACTION

- BiH should formally adopt the amended demining law which was drafted in 2017, without further delay.
- The Council of Ministers should approve the National Mine Action Strategy for 2018–2025, without further delay.
- 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.<sup>1</sup> In particular, BiH should continue reforming and strengthening the governance and management of the mine action programme.
- BHMAC should report more accurately and consistently on the extent of anti-personnel mine contamination, including using the classification of suspected hazardous area (SHA) and confirmed hazardous area (CHA) in a manner consistent with the IMAS.
- BHMAC should continue to fully operationalise evidence-based methods of land release throughout its mine action programme, including technical survey with targeted investigation, to more accurately identify and delineate areas of confirmed contamination, and cancel or reduce areas where evidence of mines is lacking.
- The BiH Armed Forces, the Federal Administration of Civil Protection, and the Civil Protection Administration of Republika Srpska should be provided with the necessary demining equipment, in a timely manner, to facilitate the full and efficient deployment of their respective demining capacities.

## 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.<sup>2</sup> It 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). Most mined areas are in the zone of separation between BiH's two main political entities – the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS). Twenty years after the end of the conflicts, BiH is still the most heavily mined country in Europe.

In its latest APMBC Article 7 transparency report, BiH claimed a total of 1,061km<sup>2</sup> of mined area, but it did not disaggregate SHA and CHA.<sup>3</sup> This represents an improbably high 2.1% of the total area of BiH.<sup>4</sup>

The 1,061km<sup>2</sup> of mined area reported to Mine Action Review in Table 1 includes 1,039km<sup>2</sup> of area “suspected to contain mines” and a further 22km<sup>2</sup> of area “known to contain mines”.<sup>5</sup> Somewhat confusingly, of the 1,039km<sup>2</sup> of “suspected mined area”, 306km<sup>2</sup> has reportedly been defined as “confirmed hazardous area” through non-technical survey and will be subject to technical survey and/or mine clearance. According to BHMAL, “it is not technically possible to show it within the same table as it is, and in accordance with BHMAL’s database”.<sup>6</sup>

The 1,061km<sup>2</sup> of overall mined area as at the end of 2017 represents a decrease of 30km<sup>2</sup> compared to the 1,091km<sup>2</sup> of mined area as at the end of 2016.

**Table 1: Anti-personnel mine contamination by canton (at end 2017)<sup>7</sup>**

Canton	Suspected mined areas	Area (km <sup>2</sup> )	“Known” mined areas	Area (km <sup>2</sup> )
Unsko-Sanki	640	100.81	132	3.00
Posavski	174	18.10	6	0.37
Tuzlanski	704	78.39	57	1.39
Zanicko-Dobojski	665	118.35	52	1.79
Bosansko-Podrinjski	222	47.00	19	1.14
Srednje-Bosanski	761	122.53	100	3.23
Hercegovacko-Neret	1,225	149.61	68	3.00
Zapadno-Hercegovacki	10	0.74	3	0.23
Sarajevo	285	73.33	29	1.02
Canton 10	475	85.63	36	1.07
<b>Subtotal BiH Federation</b>	<b>5,161</b>	<b>794.49</b>	<b>502</b>	<b>16.24</b>
Republika Srpska	2,834	229.46	303	5.79
Brčko district	146	15.22	2	0.05
<b>Totals</b>	<b>8,141</b>	<b>1,039.17</b>	<b>807</b>	<b>22.08</b>

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.<sup>8</sup> Similarly, a 2015 UNDP evaluation reported that BHMAL 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.”<sup>9</sup>

During 2017, plans were formulated between BHMAL, clearance operators, and the EU, regarding a country assessment to establish a more accurate baseline of mine-contamination and improve the efficiency of demining operations<sup>10</sup> (see the *Land Release* section of this report for further information).

According to BiH, mined and ERW contaminated areas are located in 129 municipalities/cities, with 1,389 affected communities/populated areas in total, of which 1,338 communities are affected by mines, 31 communities by mixed mine and CMR contamination, and 29 communities by CMR contamination. Mines and ERW directly impact the safety of approximately 545,600 people or 15% of the population of BiH (based on the last census in 2013).<sup>11</sup> Of the total SHA, 63% is forested, 26% agricultural land, and 11% infrastructure, housing, and other land use.<sup>12</sup>

Minefields in BiH generally contain relatively small numbers of mines, which are typically either “in groups or randomly laid”. Many minefield records (approximately 40%), were reportedly 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.<sup>13</sup> Furthermore, physical changes to mined areas (such as in vegetation), and a lack of witnesses to the laying of the mines, pose additional challenges.<sup>14</sup>

In 2017, three anti-personnel mine incidents were recorded, resulting in one injury and three fatalities, all of whom were adult males collecting firewood or hunting at the time of the incidents.<sup>15</sup> According to BHMAC, most mine incidents now occur in forested areas,<sup>16</sup> and those with a fatal outcome are mostly from

PROM-1 bounding fragmentation mines.<sup>17</sup> An analysis of mine accidents in BiH shows that individuals that are more economically vulnerable are more exposed to mine/ERW contamination, as they often knowingly enter into contaminated areas for livelihood activities.<sup>18</sup>

## 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.<sup>19</sup> The Demining Commission is composed of representatives from three ministries (Civil Affairs, Security, and Defence) elected from the three constituent “peoples” of BiH and representing BiH’s three majority ethnic groups (Bosniaks, Croats, and Serbs).<sup>20</sup> Three new Demining Commission members were given a two-year mandate on 23 July 2015,<sup>21</sup> which expired in July 2017. A new Demining Commission was expected to be appointed imminently, but there was a delay during which the existing representatives served as an “acting” Demining Commission in the interim.<sup>22</sup> Subsequently, the existing Demining Commission representatives were re-elected for a further two-year term, from October 2017 to October 2019.<sup>23</sup> Whereas the Minister for Civil Affairs remains ultimately responsible for mine action, the Demining Commission represents 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.<sup>24</sup>

One problem posed by the structure of the Demining Commission is that each of the three represented ministries has separate portfolios in their respective ministries; and their work on the Demining Commission is only part-time in addition to their other responsibilities.<sup>25</sup> Furthermore, according to the 2016 audit office report, “The Commission has not developed a methodology on how to monitor the work of the BHMAC”.<sup>26</sup>

BHMAC, established by a 2002 Decree of the Council of Ministers, is responsible for regulating mine action and implementing BiH’s demining plan, including accreditation of all mine action organisations.<sup>27</sup> 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).<sup>28</sup>

A November 2016 national audit office report on the efficiency of the demining system in BiH concluded that: “The institutions of BiH have not undertaken all activities required to ensure efficiency of the demining system. A conclusion can be drawn that BiH is not committed to dealing seriously with the demining problem, which jeopardises the implementation of the BiH strategic goals and the fulfilment of international commitments assumed. The demining process has neither been analysed nor improved systematically in the past 15 years”.<sup>29</sup> This mirrors some of the strong criticism of BHMAC’s governance and management prior to 2015, (see “Clearing the Mines 2015” report on BiH). However, reforms are now being implemented, under

the leadership of a new acting director of BHMAC, who was appointed on 22 September 2015 by the Council of Ministers.<sup>30</sup> The Demining Commission has reportedly drafted an Action Plan to address the recommendations of the 2016 audit office report, though as at August 2018 the status of the Action Plan was unclear.<sup>31</sup> As at September 2018, it is said by BHMAC that the Action Plan had been mostly realised and the Plan itself was in the process of being formally adopted.<sup>32</sup>

After a 10-year hiatus, Board of Donor meetings resumed in September 2015,<sup>33</sup> and a second meeting took place in March 2016.<sup>34</sup> As the Board of Donors is one of the few platforms where international actors meet formally under law, international donors in BiH welcomed the resumption of the meetings, which provide a forum for improved coordination and communication with the national authorities.<sup>35</sup> As at August 2018, the last Board of Donor meeting had taken place in Sarajevo in November 2017.<sup>36</sup> BiH’s new National Mine Action Strategy 2018–2025, which has yet to be formally approved, specified that at least two board of donors meetings should be organised every year.<sup>37</sup>

In May 2016, moves were made to reinstate expert working groups (EWGs), which used to meet until 2009, helping to address issues such as quality control (QC).<sup>38</sup> According to BHMAC, the EWGs, which were re-established in October 2016, will meet as often as needed.<sup>39</sup> One EWG meeting was held in 2016.<sup>40</sup> The BiH Armed Forces and clearance operators think regular EWG meetings would be of benefit to the mine action sector in BiH.<sup>41</sup> As at June 2017, UNDP reported that it was planning to organise EWGs in coordination with BHMAC,<sup>42</sup> but as at August 2018 no further EWG meetings had taken place.<sup>43</sup>

## Strategic Planning

In 2017, BiH developed a new National Mine Action Strategy for 2018–2025, with support from the GICHD, which addresses all contamination, including mines and CMR.<sup>44</sup> However, as at June 2018, it had not yet been formally approved.<sup>45</sup>

The BiH previous Mine Action Strategy for 2009–19, adopted by the Council of Ministers in 2008,<sup>46</sup> set the target of the country becoming free of mines by 2019. BHMAC conducted the first of three planned revisions of the strategy in 2012–13<sup>47</sup> (the other two were due in 2015 and 2017, respectively).<sup>48</sup> The 2012 revision asserted lack of funding as one of the major reasons for BiH’s slow progress to completion of its clearance goals.<sup>49</sup>

In April 2015, while revision of the second strategy was ongoing, BHMAC stated that it could provisionally report that, after six years, only half of the strategy's scope had been implemented, primarily due to lack of funding for humanitarian demining.<sup>50</sup> The funding shortfall resulted in part from a failure to secure additional funds from government sources. The second revision of the BiH Mine Action Strategy 2009–19 was completed in 2015,<sup>51</sup> in consultation with the Demining Commission and UNDP.<sup>52</sup> Among the strategic and operational goals in the revised strategy, was to eliminate one third of the total suspected mined area in BiH through non-technical and technical survey, by the end of 2019.<sup>53</sup> The operational plan in the 2015 revision also envisaged that over the next two or three years all organisations would transition to conform to the new land release methodology.<sup>54</sup> The revision was endorsed by the Demining Commission in BiH in March 2016, but was not adopted by the Council of Ministers.<sup>55</sup>

The third revision of the strategy was due to be concluded by the end of 2017. In 2016, BHMAC, in consultation with the GICHD, started the revision process. However, rather than revising the existing Mine Action Strategy 2009–19 (revision II, with proposed amendments), BiH, with support from the GICHD, produced an entirely new national mine action strategy for the period through to projected completion of mine and CMR clearance (2018–2025).<sup>56</sup> As part of this process, a first workshop was held in November 2016, followed by four National Mine Action Strategy Working Group Sessions, organised with the participation of relevant government ministries, clearance operators, and other stakeholders in Sarajevo in February 2017.<sup>57</sup>

The new National Mine Action Strategy for 2018–2025 contains a general plan and timeframe for the completion of mine clearance, as well as for CMR.<sup>58</sup> It includes a section on management of residual contamination and national capacities, after clearance of all contaminated areas is completed.<sup>59</sup> In June 2017, BiH reported that it was in the process of defining the final steps of the new strategy,<sup>60</sup> and on 13 September 2017, a meeting was held between BHMAC, the Demining Commission, the GICHD, and UNDP, during which the draft strategy was presented and comments provided. The draft strategy was then shared with the BiH Armed Forces, the entity Civil Protections, UNDP, and the EU for further comment.<sup>61</sup> According to the new 2018–2025 strategy, "A resource mobilisation plan will be developed, clearly stating annual national and international funding targets", and in addition, "Strategy goal action plans with corresponding budgets will be developed, facilitating the implementation of the strategy." It is also stipulated that the strategy will be continuously monitored and reviewed to ensure its continued relevance, to enable the programme's strengths and weaknesses to be identified, and to allow BHMAC and partners to address problems, improve performance, build on success and adapt to changing circumstances.<sup>62</sup>

In October 2017, a month following a validation meeting in Sarajevo, the GICHD submitted the first draft of the new strategy to BHMAC and the Demining Commission. The finalisation process took many months, with the finalised strategy being eventually submitted to the Council of Ministers for adoption in July 2018.<sup>63</sup> As at August 2018, the new strategy had yet to be formally adopted.<sup>64</sup>

BiH's annual operational mine action plan for 2018, in accordance with the Article 16 of the Demining Law, was adopted by the Demining Commission at the fourth session in February 2018 and forwarded for adoption by the Council of Ministers in BiH.<sup>65</sup> As at August 2018, the demining law had not yet been adopted.<sup>66</sup>

Mine action prioritisation and planning in BiH is based on socio-economic impact. However, a UNDP evaluation recommended that the system be reviewed to reflect changing circumstances as well to take account of the specific impact of particularly dangerous mines such as the PROM-1.<sup>67</sup> BHMAC conducted a general assessment in 2016 to help designate high-, medium-, and low-impact SHAs.<sup>68</sup>

In May 2017, BHMAC asked Norwegian People's Aid (NPA) to develop a planning tool for land release. The tool is based on indicators of productivity, resources, and successful land release. It supports implementation of the national mine action strategy and monitoring of BiH's mid-term land release action plans. On 22 August 2017, the tool was presented during a meeting of the BiH Land Release Board, together with representatives from the UNDP and EU delegations in BiH. The National Land Release Board is comprised of BHMAC, the BiH Armed Forces, the civil protection entities of the Federation of BiH and of the Republika Srpska, and NPA serves as an advisor to the board.<sup>69</sup> As part of a project entitled, "country assessment of mine-suspected areas in Bosnia and Herzegovina 2018-2019" (herein "country assessment" project), funded by the EU, a workshop was planned to be held with all relevant stakeholders to be consulted on the process of analysing and defining indicators. The resulting indicators will be used for the strategic planning tool for land release.<sup>70</sup>

A proposed priorities list is created by BHMAC in cooperation with representatives from local authorities. The following, however, fall outside of the standard priority setting procedures: areas of mass graves, where demining is conducted upon request of the Commission for Missing Persons or a judicial body; the sites of plane crashes, fires, floods and other accidents, where demining is requested by authorised state bodies; military zones, demined by the BiH Armed Forces; and targeted demining projects for "insured funds under specific agreements not contained by the priorities list for a certain year".<sup>71</sup>

## Legislation and Standards

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. A new draft demining law, first submitted to parliament in 2010, never received approval from the Council of Ministers.<sup>72</sup> In 2015, the latest draft Bill failed to attract the support of the Council of Ministers, which concluded that instead of adopting a new law, the existing law on demining should be amended.<sup>73</sup>

BiH demining authorities are following the recommendation to amend the existing law, but if amendments exceed 40% of an original Act a new law is needed.<sup>74</sup> In August 2016, the 68th session of the Council of Ministers of BiH issued a “Decision of the establishment of working group for the design of changes on the Demining law in BH”.<sup>75</sup> The working group, which consisted of representatives from the Ministry of Civil Affairs, the Demining Commission, BHMAC, the Armed Forces, and the entity Civil Protections, created a first draft of the amended demining law.<sup>76</sup> As at June 2017, a public consultation had been completed, and the draft law sent, via the Ministry of Civil Affairs, to the Council of Ministers for adoption.<sup>77</sup> However, as at June 2018 the amended law was still awaiting parliamentary adoption.<sup>78</sup>

A BHMAC official acknowledged that the lack of a new legal framework has contributed to BiH’s repeated failure to meet its funding targets under its own mine action strategy.<sup>79</sup> UNDP has highlighted the need for the existing draft to be amended to ensure a strategic management body exists for mine action; that BiH national standards on land release are referenced; and that no technical issues impede land release.<sup>80</sup> As the GICHD has observed: “In order to be able to fulfil its international obligations in a timely fashion, relevant authorities of BiH need to be able to make decisions more quickly and to foster an environment in which operations are not hindered.”<sup>81</sup>

BHMAC developed three new draft chapters of its mine action standards in 2013: on land release, non-technical survey, and technical survey. The standards were adopted by the Demining Commission in 2014.<sup>82</sup>

Subsequent lessons learned from conducting non-technical survey, technical survey (including targeted investigation), and mine clearance resulted in BHMAC amending the three standards in 2015, in accordance with IMAS.<sup>83</sup> The revised chapters were adopted by the Demining Commission on 27 January 2016.<sup>84</sup> The Demining Commission adopted temporary guidelines for QA/QC for land release tasks in July 2017.<sup>85</sup>

In 2016, in collaboration with the GICHD and UNDP, BHMAC held a workshop on “standards and SOP revisions”.<sup>86</sup> At the end of 2016, in order to further optimise efficiency and effectiveness, and ensure that the standards and SOPs allow for the optimal release of land through survey, including by technical survey, BHMAC created four expert working groups, to work on amendments and additional to all the chapters of the national mine action standards and SOPs.<sup>87</sup> The working groups expected to complete their work by the end of September 2017, after which recommendations were to be sent to the demining commission for adoption.<sup>88</sup> Two SOP chapters were adopted by the Demining Commission in April 2018: one on non-technical survey and the other on the opening and monitoring of tasks.<sup>89</sup> In addition, a specific SOP was approved by the Demining Commission for the new 18-month “country assessment” project.<sup>90</sup>

## Quality Management

BHMAC’S two main offices in Banja Luka and Sarajevo coordinate the activities of regional offices in planning, survey, and QC/quality assurance (QA). QA inspectors are based in the regional offices.<sup>91</sup>

The 2015 UNDP evaluation found that BHMAC’s QA of demining activities functions well, but recommended that BHMAC develop effective quality management mechanisms for the whole organisation to make processes more efficient and transparent.<sup>92</sup> However, the 2016 national audit office report found that the quality control of demining carried out by BHMAC is not efficient and that a systematic improvement of the QC process has never been done. In addition, the report states that: “Despite several levels of control in the demining system, accidents and irregularities occur in the areas the BiH Mine Action Centre declared safe”.<sup>93</sup> In the report, “accidents” refer to blasts during demining activities and in areas that have been cleared and released; and “incidents” refer to mines and items of unexploded ordnance (UXO) detected in cleared areas after the completion of works and after the QC certificates had been issued by BHMAC. According to the audit office report, 23 irregularities and 32 accidents occurred between 2005 and 2016. Of the 32 accidents, 29 occurred during demining while the remainder involved civilians after demining had been completed.<sup>94</sup> The Director of BHMAC, however, confirmed in May 2017 that no irregularities or accidents on cleared/released land have occurred in the last two years.<sup>95</sup>

In 2017, QC inspectors from BHMAC conducted 3,076 technical inspections at 225 tasks (of which 2,925 technical inspections at 201 tasks related to technical survey and clearance of mined area), and two decisions were issued which required repetition of technical survey operations and two which required repetition of clearance.<sup>96</sup>

## Information Management

BHMAC does not report accurately or consistently on land release data (disaggregated by product (cancelled, reduced and cleared), activity (non-technical survey, technical survey, and clearance), and classification (SHA and CHA), in a manner consistent with IMAS.

The first goal of BiH’s new National Mine Action Strategy 2018–2025 (yet to be formally approved as of writing) is that, “Sound IM standards, tools and processes ensure that relevant information is collected, stored, analysed, shared and used for efficient and effective planning, prioritisation, tasking and implementation of mine action activities”.<sup>97</sup>

BHMAC, with support of the UNDP and financing from the EU will create a new web-based database to replace the existing system and increase accessibility and transparency of mine action data. The project, entitled “Mine Action Governance and Management Project”, will “aim to influence policy and build the capacity to instil greater organisational openness and adaptability to new methodologies. This will contribute towards re-establishing donor confidence through the formulation of a credible, realistic, and achievable completion plan, which will provide the strategic framework and work plan necessary to clear all known mined areas in the country and comply with the country’s demining obligations under the Anti-Personnel Mine Ban Convention.”<sup>98</sup>

## Operators

As at the beginning of 2018, 26 organisations were accredited for mine action in BiH: four government organisations (Armed Forces of BiH, Federal Administration of Civil Protection, Civil Protection Administration of Republic of Srpska, and Brčko District Civil Protection), the Red Cross Society of BiH; seven commercial organizations (all national); and 14 non-government organizations (NGOs) (11 national and 3 international). 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 37 accredited machines (for vegetation removal, ground disturbance, and removal of debris), 1,257 metal detectors, and 63 accredited explosive detection dogs. 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, 12 inspectors and 28 senior clerks for QC/technical supervision/inspection.<sup>99</sup>

During 2017, technical survey and/or clearance of anti-personnel mines was conducted by the BiH Armed Forces, the Federal Administration of Civil Protection, the Civil Protection Administration of Republic of Srpska, and 14 other clearance organisations, comprising ten NGOs (DEMIRA, Dok-ing deminiranje N.H.O., EDD training centre, Eko Dem, NPA, Mines Advisory Group (MAG), Pro Vita, Stop Mines, Udruga “Pazi Mine Vitez”, and Association UEM) and four commercial organisations (Detektor, N&N Ivsa, Point, and UEM).<sup>100</sup> BHMAC did not expect any major changes to demining capacity in 2018.<sup>101</sup>

The governmental operators – Civil Protection teams and the BiH Armed Forces’ Demining Battalion – constitute about 60% of the available operational capacity in BiH, though their total output in terms of land released by clearance and technical survey is proportionately much less.<sup>102</sup> The general view is that the BiH Armed Forces and Civil Protection are both good partners, and have effective capacities, but have suffered from logistical challenges and equipment deficits, which prevent them from working at full capacity.<sup>103</sup>

The BiH Armed Forces’ survey and clearance operations are fully engaged from March to November, and with reduced activity, predominantly in southern BiH, from December to February.<sup>104</sup> They also deploy machinery and explosive detection dogs during their survey

and clearance operations.<sup>105</sup> The BiH Armed Forces do, however, require ongoing support from external partners, such as NPA (with international funding from governments of Germany, the Netherlands, Norway, and Switzerland, in addition to the Digger Foundation), 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.<sup>106</sup>

Since 2010, NPA has increasingly focused on building the capacity of the Army’s Demining Battalion.<sup>107</sup> This involves transfer of knowledge through operational planning of clearance and technical survey operations; direct operational support; and provision of mine detection dogs (MDDs) and equipment, among other things.<sup>108</sup> The Demining Battalion also receives support from Austria, France, Italy, and the United States, as well as EUFOR, which alone provides 90% of support.<sup>109</sup>

Furthermore, both the BiH Armed Forces and Civil Protection suffer recruitment challenges, but of a differing nature. Deminers in the BiH Armed Forces 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.<sup>110</sup> The Federal Administration of Civil Protection, on the other hand, is unable to employ new deminers, as this is a Federal Government decision. Therefore, the capacity of the Federal Administration of Civil Protection has been reduced as pensioned deminers or those absent due to sickness have not been replaced.<sup>111</sup>

The 2015 UN assessment recommended that BHMAC involve the BiH Armed Forces and Civil Protection teams more in conducting non-technical survey, technical survey, and clearance tasks, as part of the land release process.<sup>112</sup> 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.<sup>113</sup>

NPA is, according to the 2015 UNDP evaluation, well respected in BiH and is treated almost like a national asset, even though it is international and independently donor funded.<sup>114</sup> Both machines and dogs are integrated into NPA demining operations in BiH. Machines are used for mechanical ground preparation, but much of the remaining mined area is in hilly or mountainous terrain, which restricts the use of machinery. NPA uses MDD and special detection dogs (SDDs) for clearance and technical survey tasks, including targeted technical survey.<sup>115</sup> NPA planned to expand the use of SDDs equipped with MDD harnesses, called the SMART system.<sup>116</sup> NPA also supports BHMAC with non-technical survey, and has one non-technical survey team seconded to BHMAC.<sup>117</sup> NPA mine clearance operations in the Srebrenica region, funded by the Netherlands, in support of the activities of the International Commission on Missing Persons, were completed in November 2017.<sup>118</sup> As mentioned above, since 2010, NPA has increasingly focused on building the capacity of the Demining Battalion.<sup>119</sup> NPA expected to receive increased funding in 2018.<sup>120</sup>

MAG received operational accreditation in April 2017, and began technical survey and clearance operations in mid-May 2017, with funding from Austria and the United States.<sup>121</sup> In 2017, MAG had two manual demining teams and two MDDs, and planned to increase capacity by two additional manual teams in 2018.<sup>122</sup>

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.<sup>123</sup> 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.<sup>124</sup>

## LAND RELEASE

In 2017, BiH released almost 0.69km<sup>2</sup> by clearance and 6.68km<sup>2</sup> by technical survey.<sup>125</sup> A further 20.75km<sup>2</sup> was cancelled.<sup>126</sup>

This is only a little more than half the clearance output of the previous year, when almost 1.34km<sup>2</sup> was cleared.<sup>127</sup> It is also a reduction on the 10.39km<sup>2</sup> reduced by technical survey in 2016. The amount cancelled in 2017 is not comparable to 2016, as the 46.94km<sup>2</sup> reported as cancelled by non-technical survey in 2016 included the results of the full three-and-a-half-year EU pilot project, rather than the annual cancellation output for 2016.<sup>128</sup>

### Survey in 2017

In 2017, more than 6.68km<sup>2</sup> was reduced through technical survey, conducted by various government organisations, NGOs, and commercial organisations (see Tables 2 and 3 below).<sup>129</sup> In addition, a further 20.75km<sup>2</sup> was cancelled by non-technical survey.<sup>130</sup>

**Table 2: Technical survey of mined area by Canton in 2017<sup>131</sup>**

Canton	Area reduced (m <sup>2</sup> )
Unsko-Sanki	510,807
Posavski	484,509
Tuzlanski	421,808
Zanicko-Dobojski	279,419
Bosansko-Podrinjski	250,837
Srednje-Bosanski	715,644
Hercegovacko-Neret	59,560
Zapadno-Hercegovacki	0
Sarajevo	674,365
Canton 10	339,319
<b>Total Federation BiH</b>	<b>3,736,268</b>
<b>Total Republika Srpska</b>	<b>2,237,770</b>
<b>Total District Brčko</b>	<b>708,505</b>
<b>Sum total</b>	<b>6,682,543</b>

**Table 3: Technical survey of mined area by operator in 2017<sup>132</sup>**

	Operator	Area reduced (m <sup>2</sup> )
Government	Federal Administration of Civil Protection	587,468
	BiH Armed Forces	2,380,007
	Civil Protection Administration of Republic of Srpska	196,626
NGOs	DEMIRA	82,796
	Dok-ing deminiranje N.H.O.	180,993
	EDD training centre	55,025
	Eko Dem	49,275
	NPA	834,318
	MAG	0
	Pro Vita	465,116
	Stop Mines	197,267
	Udruga "Pazi Mine Vitez"	200,996
	Association UEM	352,618
Commercial demining organisations	Detektor	39,906
	N&N Ivsa	485,477
	Point	318,279
	UEM	256,376
	<b>Total</b>	<b>6,682,543</b>

## Clearance in 2017

A total of almost 0.69km<sup>2</sup> was cleared in 2017, during which 1,749 anti-personnel mines, 20 anti-vehicle mines, and 797 items of ERW were destroyed (see Table 4).<sup>133</sup>

Mine clearance operations were conducted by the BiH Armed Forces, the Civil Protection of FBiH, the Civil Protection of RS, ten non-governmental organisations, and four commercial demining companies (see Table 5).

**Table 4: Mine clearance by canton in 2017<sup>134</sup>**

Canton	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	ERW destroyed
Unsko-Sanki	21,237	250	0	31
Posavski	157,803	93	0	109
Tuzlanski	73,291	121	8	31
Zanicko-Dobojski	24,252	54	0	39
Bosansko-Podrinjski	7,107	133	0	29
Srednje-Bosanski	15,033	339	3	39
Hercegovacko-Neret	102,419	119	0	4
Sarajevo	26,415	430	4	212
Canton 10	1,529	24	0	7
<b>Total Federation BiH</b>	<b>429,086</b>	<b>1,563</b>	<b>15</b>	<b>501</b>
<b>Total Republic Srpska</b>	<b>253,194</b>	<b>169</b>	<b>5</b>	<b>130</b>
<b>Total Brčko District</b>	<b>4,469</b>	<b>17</b>	<b>0</b>	<b>166</b>
<b>Sum Totals</b>	<b>686,749</b>	<b>1,749</b>	<b>20</b>	<b>797</b>

AP = Anti-personnel AV = Anti-vehicle

**Table 5: Mine clearance by operator in 2017<sup>135</sup>**

	Operator	No. of tasks	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	ERW destroyed
Government	Federal Administration of Civil Protection	8	103,303	100	8	86
	BiH Armed Forces	5	44,437	295	0	77
	Civil Protection Administration of RS	7	102,909	63	0	20
NGOs	DEMIRA	7	67,491	30	0	7
	Dok-ing deminiranje N.H.O.	1	81,539	89	0	156
	EDD training centre	0	396	117	0	4
	Eko Dem	0	400	9	0	4
	NPA	4	45,518	319	5	31
	MAG	0	0	5	0	0
	Pro Vita	2	20,331	408	1	37
	Stop Mines	0	719	132	0	73
	Udruga "Pazi Mine Vitez"	1	18,649	34	2	14
	Association UEM	7	85,327	15	0	1
Commercial demining organisations	Detektor	2	30,735	4	0	6
	N&N Ivsa	3	81,221	99	0	202
	Point	0	1,600	19	0	35
	UEM	1	2,174	11	4	44
	<b>Totals</b>		<b>48</b>	<b>686,749</b>	<b>1,749</b>	<b>20</b>

Clearance operations in BiH include mechanical preparation of land, manual clearance, and the use of MDDs and SDDs depending on the geographical conditions.<sup>136</sup>

## Land Release Projects and Methodology in 2012–19

Results of mine action in BiH show that the applied land release model was efficient in the period 2005–09, and prior to 2009, BHM MAC cancelled significant amounts of land annually through non-technical survey.<sup>137</sup> There remains significant potential for further reduction in the size of the SHA. However, this will require strong implementation oversight by BHM MAC and dedicated efforts and improved survey techniques to obtain additional information on mine contamination.<sup>138</sup> It will also require supplementing and combining non-technical survey with the use of technical interventions to confirm or deny the presence of mine contamination in SHAs.<sup>139</sup> BiH's plan is to achieve this through enhanced technical survey methodology, including, where possible, the use of technical survey with "targeted investigation" (also referred to as targeted technical survey), alongside the more traditional systematic technical survey approach, to more accurately determine the location of the confirmed mine contamination.<sup>140</sup>

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 BHM MAC.<sup>141</sup> The resulting "IPA 2011 Land Release" was implemented from 2013 to 2016, with EU funding.<sup>142</sup> The project enabled efficient tasking of systematic technical survey and technical survey with targeted investigation, helping ensure clearance assets were only directed into confirmed hazardous areas.<sup>143</sup> 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. Assuming the six tasks are representative of much of BiH's remaining SHAs, BHM MAC predicts that only a minor proportion of the remaining SHAs contain actual contamination and deployment of clearance assets will therefore only be required for relatively small areas.<sup>144</sup> This has been factored into BiH's National Mine Action Strategy for 2018–2025, and it is hoped that the new land release concept will greatly speed up release of suspected mined area.<sup>145</sup>

The application of technical survey with targeted investigation was also piloted by NPA in 2015, and has subsequently been expanded and implemented by other operators and state bodies, including the BiH Armed Forces and civil protection entities. The process consists of first applying elements of non-technical survey, including desk studies and collection of evidence of contamination. Field-based targeted investigations are then conducted, and the outputs analysed to assess any CHA identified. As part of this process, BHM MAC and NPA identified new sources of information for inclusion, including from former soldiers and commanders, and members of the local population who provided valuable data on mine contamination. Several methodologies can then be applied as part of the technical survey to locate the target contamination, including the use of manual

clearance lane(s) towards a specific target, the use of detection dogs to search for a specific target, or the use of drones to help identify a specific target. Selection of techniques for each target is guided by several factors, including analysis of the characteristics of indirect evidence examined and environmental conditions (including the type of terrain and density of vegetation).<sup>146</sup>

There is broad agreement that technical survey with targeted investigation could significantly improve the efficiency of land release in BiH.<sup>147</sup> It is hoped that targeted investigation could more accurately define CHA, and reduce the area treated through clearance to between 1% and 3% of the original SHA.<sup>148</sup> As part of ongoing efforts to refine and improve survey methodology in BiH, NPA reported that during 2017 it has introduced "scalable multi-phase systematic investigation", which had resulted in significantly less use of manual resources during the operations.<sup>149</sup>

During 2017, plans were formulated for an EU-funded "country assessment" project, conducted jointly by BHM MAC, NPA, BiH Armed Forces' Demining Battalion, to establish a more accurate baseline of mine-contamination and help and improve the efficiency of follow-on survey and clearance operations.<sup>150</sup> The proposed non-technical survey includes desk studies, analysis of war maps, and other materials, and would focus on finding evidence of mines, including analysing evidence of cases in which mines have been removed by locals in the intervening years since the end of the conflict. It also includes components of impact assessment, as the initial survey results date back many years and there is the need to re-determine the current impact of mine contamination.<sup>151</sup>

The "country assessment" project was approved by the EU and the contract signed on 15 August 2018, with an implementation period of 18 months.<sup>152</sup> Under the project, non-technical survey will be conducted by BHM MAC (nine non-technical survey teams), the BiH Armed Forces (two non-technical survey teams), and NPA (three non-technical survey teams), with EU€1.1 million (approx. US\$1.25 million) of EU funding. The nationwide assessment of the size and impact of mine and ERW contamination in BiH aims to determine a more accurate baseline of mine contamination and provide a new foundation for meaningful planning. Results of the assessment will enable BiH to plan for the realisation of the new National Mine Action Strategy for 2018–2025 and preparation of its final Article 5 extension through to completion.<sup>153</sup>

As part of its Article 5 implementation BiH will adopt an integrated approach to mine action, through defining "mine suspect areas" (MSA). As part of the "country assessment" project, 1,030km<sup>2</sup> of remaining mined area is expected to be subdivided into 500 +/-10% MSAs requiring further survey and clearance, and 30km<sup>2</sup> is expected to be cancelled.<sup>154</sup> The MSA polygons will be made up of SHAs and CHAs which encompass one or more impacted communities and which due to economic, cultural, geographical or other reasons form a logical geographical area on which comprehensive survey and clearance will be undertaken.<sup>155</sup> It is envisaged that the creation of MSAs will enable mine action operations to better respond to the needs of the community through

strengthening community liaison and ensuring that the needs of the communities are prioritised and addressed. It is also intended to simplify the tasking procedure by assigning specific organizations a larger geographical area in which to carry out operations.<sup>156</sup> Local administrations and BHMAC will together agree on the size and priority of MSAs in accordance with humanitarian, developmental, and safety needs of

municipality and local communities.<sup>157</sup> The MSAs will be categorised into three categories: high, medium, and low risk, based on available general assessment data. MSAs with a higher probability of containing PROM mines, large confirmed minefields, and high-/medium-impact MSAs based on general assessment, will be categorised as high- and medium-risk MSAs within one municipality. All other MSAs will be categorised as low risk.<sup>158</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the ten-year extension request granted by states parties in 2008), BiH 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 2019. BiH will not meet the deadline and has requested a two-year interim extension to 1 March 2021, in order to carry out survey activities to more accurately define the precise perimeter of mined areas. Following the more accurate definition of the remaining challenge, BiH believes it will be in a better position to calculate the time required to complete its Article 5 obligations. It has pledged to submit a final extension request, based on a more precise understanding of the challenge, by 31 March 2020.<sup>159</sup> Efforts to gain greater clarity of the extent of actual mine contamination are welcomed but long overdue, considering that BiH still does not have an accurate picture of baseline contamination more than 19 years after becoming a state party to the APMBC.

Previously, in May 2016, BHMAC claimed that analysis of the Mine Action Strategy 2009–19, showed that BiH was 3.5 years behind in fulfilling its Article 5 obligations, due to lack of funding.<sup>160</sup> In 2017, BHMAC reported that analysis showed that the fulfilment of BiH's 2019 Article 5 deadline was four years behind schedule "due to funding" issues.<sup>161</sup>

According to its 2018 interim Article 5 extension request, the next two years, will see a transition of working methodologies throughout BiH, with land release being intensively conducted through the application of new standards and SOPs to improve efficiency and cost-effectiveness.<sup>162</sup> Results gained so far through application of more efficient evidence-based land release methodology to more accurately determine the location and extent of actual contamination, and cancel areas not contaminated, indicate the potential for large areas of uncontaminated SHA to be released through survey.<sup>163</sup> BiH has expressed its commitment to complete its Article 5 obligations by 2025, as detailed in BiH's National Mine Action Strategy 2018–2025 (yet to be approved as at August 2018).<sup>164</sup>

The "country assessment" project currently being undertaken in 2018 and 2019, is expected to result in the cancellation of 30km<sup>2</sup> through high-quality non-technical survey and should enable more accurate tasking of technical survey and clearance going forward. However, this represents less than 3% of BiH's total suspected mined area and it remains to be seen what the actual results of the assessment will be and how it will impact BHMAC's Article 5 completion planning. The ratio of technical investigation to non-technical investigation

methods will naturally reduce over time, as land wrongly suspected of being mined is cancelled/released through survey. The potential for technical survey with targeted investigation will also diminish with time, as additional information acquired through survey, including from informants, is obtained and applied.

Over the last five years, BiH has released less than 7.41km<sup>2</sup> thorough clearance (see Table 6). In 2017, as in all years since it was granted the ten-year extension to its initial Article 5 deadline, BiH fell far short of its land release targets.<sup>165</sup> The painfully slow pace of 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.<sup>166</sup>

Table 6: Mine clearance in 2013–17<sup>167</sup>

Year	Area cleared (km <sup>2</sup> )
2017	0.69
2016	1.34
2015	1.64
2014	1.85
2013	1.89
<b>Total</b>	<b>7.41</b>

BHMAC expected land release operations for 2019 and 2020 to continue in line with annual work plans, and predicted that a total of 237km<sup>2</sup> would be released: 179km<sup>2</sup> cancelled through non-technical survey by BHMAC; an additional 30km<sup>2</sup> cancelled through non-technical survey by BHMAC, BiH Armed Forces, and NPA as part of the "country assessment" project; 26km<sup>2</sup> reduced through technical survey by accredited organisations; and 2km<sup>2</sup> cleared. In addition, through non-technical survey BHMAC expected to prepare a total of approximately 120 MSAs, covering approximately 263km<sup>2</sup>.<sup>168</sup>

The new National Mine Action Strategy for 2018–2025 presents an opportunity for BiH to communicate and outline the mine action programme's goals and objectives, both to national and international stakeholders. To implement the new strategy will, however, require strong oversight and commitment from BHMAC, and the Demining Commission and their superiors in the government. The ongoing delay in formal adoption of the new strategy arguably calls into question this commitment.

BHMAC is funded by the common institutions of BiH and other institutions at state level.<sup>169</sup> BiH national state funding also supports survey and clearance of CMR. 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.<sup>170</sup> According to BHMAC, small-scale investments in equipment and training could significantly increase the capabilities of both the Federal Administration of Civil Protection and the Armed Forces.<sup>171</sup>

In 2017, more than BAM32 million (approx. US\$18.7 million) was allocated to mine action operations in BiH.<sup>172</sup> Of this, 54% came from national sources while almost 46% from international donors.<sup>173</sup> Analysis shows that BiH has committed a larger proportion of its national budget to mine action than many other mine-affected countries.<sup>174</sup> Nevertheless, analysis by both NPA and UNDP shows that in the first five years of the 2009–19 strategy, while international donors maintained their planned funding

commitments, anticipated BiH government funding level were not met, especially with regard to planned “additional government” sources and consequently, by 2013, progress was way off target.<sup>175</sup> In the period 2006–17, only 50% of planned funds were available. The local and donor sources ensured the funds as planned, but unfortunately BiH did not provide additional funding due to its economic situation.<sup>176</sup> The Ministry of Civil Affairs, the Demining Commission, and BHMAC have highlighted the limited funds for demining and have requested funds from the national budget.<sup>177</sup>

BiH has calculated that the required cost to fulfil its planned two-year interim extension request is almost 80 million BAM, of which 50% will be national funding and 50% donor funding.<sup>178</sup>

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- 134 Email from Ljiljana Ilić, BHMIC, 17 May 2018; APBMC Article 7 Report (for 2017), Form F; and BHMIC, "Bosnia and Herzegovina Mine Action Annual Report 2017", January 2018, p. 14.
- 135 Email from Ljiljana Ilić, BHMIC, 17 May 2018; APBMC Article 7 Report (for 2017), Form F; and BHMIC, "Bosnia and Herzegovina Mine Action Annual Report 2017", January 2018, p. 15. There was a discrepancy between clearance data provided by BHMIC for MAG and NPA, and that provided by the operators for 2017 operations. BHMIC did not record any output from MAG clearance in 2017, other than destruction of five anti-personnel mines. MAG itself reported clearing 109,180m<sup>2</sup> and destroying 134 anti-personnel mines and 19 items of ERW in 2017. Email from Kathy Keary, MAG, 5 April 2018. NPA reported that it had cleared 23 mined areas, totalling 38,346m<sup>2</sup>, with the destruction of 118 anti-personnel mines, 5 anti-vehicle mines, and 34 items of ERW. Email from Goran Sehić, NPA, 30 March 2018.
- 136 Emails from Goran Zdrle, BHMIC, 17 May 2017; and Ljiljana Ilić, BHMIC, 17 May 2018.
- 137 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.
- 138 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
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- 140 Ibid.; 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"; and "Workshop conclusions: Evaluation of the results of projects technical survey with targeted investigation implemented in Bosnia and Herzegovina in 2016", BHMIC and NPA, 2017.
- 141 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, pp. 19 and 20.
- 142 Statement of BiH, Intersessional Meetings, Geneva, 8 June 2017; BHMIC, "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.
- 143 2018 Article 5 deadline Extension Request, pp. 5 and 11.
- 144 BiH, National Mine Action Strategy 2018–2025", awaiting approval as at August 2018, pp. 6 and 11.
- 145 Interview with Saša Obradovic, BHMIC, Sarajevo, 10 May 2017.
- 146 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
- 147 Interviews with Saša Obradovic and Tarik Serak, BHMIC, Sarajevo, 10 May 2017; Darvin Lisica, NPA, Sarajevo, 8 May 2017; Fotini Antonopoulou, EU, Sarajevo, 8 May 2017; Haris Lokvancic, Swiss Embassy, Sarajevo, 9 May 2017; Muamer Husilović and Ahmet Dulović, Federal Civil Protection of BiH, Sarajevo, 10 May 2017; and Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.
- 148 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 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".
- 149 Email from Goran Sehić, NPA, 30 March 2018.
- 150 Interviews with Darvin Lisica, NPA, Sarajevo, 8 May 2017; Fotini Antonopoulou, EU, Sarajevo, 8 May 2017; and Saša Obradovic and Tarik Serak, BHMIC, Sarajevo, 10 May 2017; and emails from Darvin Lisica, NPA, 31 August 2017; and Suad Baljak, Mine Action Officer, UNDP, 15 September 2017.
- 151 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
- 152 Email from Jonas Zachrisson, Country Director, NPA, 25 September 2018.
- 153 Email from Ljiljana Ilić, BHMIC, 17 May 2018; BHMIC, "Bosnia and Herzegovina Mine Action Annual Report 2017", January 2018, p. 21; and 2018 Article 5 deadline Extension Request, pp. 7, 21, and 22.
- 154 Email from Ljiljana Ilić, BHMIC, 17 May 2018; BHMIC, "Bosnia and Herzegovina Mine Action Annual Report 2017", January 2018, p. 21; and 2018 Article 5 deadline Extension Request, pp. 7 and 23.
- 155 2018 Article 5 deadline Extension Request, p. 6; and "BiH Statement on Interim Request for Extension to the Deadline for Fulfilling Obligations as per Article 5", 7 June 2018, Geneva.
- 156 2018 Article 5 deadline Extension Request, p. 22.
- 157 Ibid., p. 26.
- 158 Ibid., p. 27.
- 159 2018 Article 5 deadline Extension Request, pp. 6 and 20; and "BiH Statement on Interim Request for Extension to the Deadline for Fulfilling Obligations as per Article 5", 7 June 2018, Geneva.
- 160 Email from Tarik Serak, BHMIC, 26 May 2016.
- 161 Email from Goran Zdrle, BHMIC, 17 May 2017.
- 162 2018 Article 5 deadline Extension Request, p. 21.
- 163 Statements of BiH, Intersessional Meetings, Geneva, 8 June 2017; Sixteenth Meeting of States Parties, Vienna, 20 December 2017; and 2018 Article 5 deadline Extension Request.
- 164 Statement of BiH, Sixteenth Meeting of States Parties, Vienna, 20 December 2017; and BiH, National Mine Action Strategy 2018–2025", awaiting approval as at August 2018, p. 24.
- 165 2018 Article 5 deadline Extension Request, p. 31.
- 166 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 14.
- 167 See Mine Action Review and Landmine Monitor reports on clearance in BiH covering 2013–17.

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- 168 2018 Article 5 deadline Extension Request estimate, pp. 24 and 28; and "BIH Statement on Interim Request for Extension to the Deadline for Fulfilling Obligations as per Article 5", 7 June 2018, Geneva.
- 169 Email from Goran Zdrale, BHMAC, 17 May 2017.
- 170 Ibid.; and email from Fotini Antonopoulou, EU, 23 July 2018.
- 171 Statement of BiH, First CCM Review Conference, Dubrovnik, 9 September 2015; and interview with Tarik, BHMAC, Sarajevo, 10 May 2017.
- 172 Email from Ljiljana Ilić, BHMAC, 17 May 2018; BHMAC, "Bosnia and Herzegovina Mine Action Annual Report 2017", January 2018, p. 26.
- 173 BHMAC, "Bosnia and Herzegovina Mine Action Annual Report 2017", January 2018, p. 26.
- 174 NPA, "Humanitarian Disarmament Programme in Bosnia and Herzegovina", PowerPoint Presentation, 17 April 2014; and UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 21.
- 175 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, pp. 17 and 21; and NPA, "Humanitarian Disarmament Programme in Bosnia and Herzegovina", PowerPoint presentation, 17 April 2014.
- 176 Statement of BiH, Intersessional Meetings, Geneva, 8 June 2017.
- 177 Interview with Lt.-Col. Dzevad Zenunovic, Ministry of Defense, Chair of the Demining Commission, Sarajevo, 10 May 2017.
- 178 2018 Article 5 deadline Extension Request, p. 29; and "BIH Statement on Interim Request for Extension to the Deadline for Fulfilling Obligations as per Article 5", 7 June 2018, Geneva.

# CAMBODIA

**ARTICLE 5 DEADLINE: 1 JANUARY 2020**  
(NOT ON TRACK TO MEET DEADLINE)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	8	8
Target date for completion of mine clearance	6	6
Targeted clearance	7	6
Efficient clearance	6	6
National funding of programme	6	6
Timely clearance	6	5
Land-release system in place	8	8
National mine action standards	8	8
Reporting on progress	4	4
Improving performance	7	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.6</b>	<b>6.3</b>

## PERFORMANCE COMMENTARY

Cambodia's mine action sector moved along with little direction or progress in planning for much of 2017. That changed at the end of the year when a management shake-up at the Cambodian Mine Action and Victim Assistance Authority (CMAA) galvanised the preparation of the National Mine Action Strategy, officially launched in May 2018, and injected new momentum into discussions on more survey, better task selection, and more efficient use of assets, accelerating land release towards the goal of completing clearance by 2025 and presenting a compelling case for continued donor funding. Tracking the sector's progress, however, continued to be obscured by discrepancies in results recorded by the CMAA and operators.

## RECOMMENDATIONS FOR ACTION

- Cambodia should push ahead with a land reclamation survey to release suspected mined areas under cultivation.
- Cambodia should accelerate clearance of land with dense mine contamination.
- Cambodia should conclude early agreements with Thailand to, at the least, pilot cooperation in border demining.
- The CMAA should synchronise reporting with operators and eliminate discrepancies, which make it difficult to track progress.

## CONTAMINATION

Cambodia has extensive contamination by mines and explosive remnants of war (ERW) left by 30 years of conflict that ended in the 1990s. Its anti-personnel mine problem is concentrated in, but not limited to, 21 north-western districts along the border with Thailand, which account for the great 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 contamination in the world.<sup>1</sup>

After more than 25 years of mine clearance, new finds of mined areas continue to push up estimates of contamination. A baseline survey (BLS) of Cambodia's 139 most mine-affected districts, completed in 2013, estimated total mine and ERW contamination at 1,915km<sup>2</sup>. Areas affected to some degree by mines covered a total of more than 1,111km<sup>2</sup>, of which 1,043km<sup>2</sup> were affected by anti-personnel mines. This included

some 73km<sup>2</sup> of dense contamination but most areas, covering 892km<sup>2</sup>, contained "scattered or nuisance" anti-personnel and anti-vehicle mines.<sup>2</sup>

At the end of 2017, the CMAA estimated that dense anti-personnel mine contamination in the 136 districts covered by the BLS affected 101km<sup>2</sup>, while mixed anti-personnel/anti-vehicle mined areas amounted to almost 250km<sup>2</sup> (see Table 1). Total contamination of 941km<sup>2</sup> was 5% higher than a year earlier.<sup>3</sup> That estimate is consistent with Cambodia's latest Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report, which put total known or suspected anti-personnel mine contamination at 895km<sup>2</sup>.<sup>4</sup> The CMAA acknowledges much of the BLS data is imprecise, and believes further survey could reduce suspected mined area by one-third or more, but also expects it to capture new polygons that could add up to around 100km<sup>2</sup> to contamination estimates.<sup>5</sup>

**Table 1: Mined area (in 136 districts) (m<sup>2</sup>)<sup>6</sup>**

Contamination classification	End 2017	End 2016
<b>A1 Dense AP mines</b>	<b>101,025,615</b>	<b>100,778,056</b>
A2 Mixed AP and AV mines	33,290,704	36,361,353
A2.1 Mixed dense AP/AV mines	6,794,017	7,090,672
A2.2 Mixed scattered AP/AV mines	209,471,512	168,694,189
<b>A2 Total</b>	<b>249,556,233</b>	<b>212,146,214</b>
<b>A3 AV mines</b>	<b>47,031,294</b>	<b>47,082,941</b>
<b>A4 Scattered or nuisance mines</b>	<b>543,730,050</b>	<b>537,184,712</b>
<b>Totals</b>	<b>941,343,192</b>	<b>897,191,923</b>

AP = Anti-personnel AV = Anti-vehicle

Mines and ERW caused 58 casualties, including 10 deaths, in 2017 (see Table 2), a drop of nearly one-third from the previous year. 2017 is believed to be the first year Cambodia recorded no deaths caused by anti-vehicle mines, attesting to the effects of the attention paid to anti-vehicle mine clearance in the last few years.<sup>7</sup> Cambodia had 31 mine/ERW casualties in the first half of 2018, one fewer than in the same period of 2017, seven of which were fatalities.<sup>8</sup>

**Table 2: Casualties by device in 2016–17<sup>9</sup>**

Device	2017		2016	
	Killed	Injured	Killed	Injured
AP mine	4	15	3	23
AV mine	0	3	4	12
ERW	6	30	18	23
<b>Totals</b>	<b>10</b>	<b>48</b>	<b>25</b>	<b>58</b>

## PROGRAMME MANAGEMENT

The CMAA, set up in September 2000, regulates and coordinates mine action, responsibilities previously assigned to the Cambodian Mine Action Centre (CMAC).<sup>10</sup> The CMAA’s responsibilities include regulation and accreditation of all operators, preparing strategic plans, managing data, setting standards, conducting quality control, and coordinating risk education and victim assistance.<sup>11</sup>

Cambodia’s Prime Minister Hun Sen is the CMAA’s president. In 2016, he appointed Serei Kosal as First Vice President, and Ly Thuch, who also serves as a Senior Minister, as CMAA Secretary General, replacing Prum Sophakmonkol, who moved to the Ministry of Foreign Affairs. At the end of 2017, Ly Thuch became First Vice President of the CMAA, representing the CMAA within government and in relations with foreign governments and donors. Prum Sophakmonkol returned as Secretary General, largely responsible for operational policy and implementation.

The CMAA pursues a national mine action policy that is said to be “people centred”, balancing top-down policy-making with community-up requirements.<sup>12</sup> The CMAA identifies priority communes for clearance on the basis of casualty data while provincial-level Mine Action Planning Units (MAPUs) are responsible for preparing annual clearance task lists. This is done by working in consultation with local authorities to identify community priorities as well as with mine action operators, taking account of donor funding and objectives. Task lists

are reviewed and approved by Provincial Mine Action Committees (PMACs) and the CMAA. Reviews of the system in 2015 identified weaknesses, notably in reconciling local-level priorities with wider strategic goals,<sup>13</sup> and CMAA management acknowledged a need to review the criteria for prioritising clearance in discussions on a new mine action strategy.<sup>14</sup>

The United Nations Development Programme (UNDP) has supported the CMAA through a “Clearing for Results” (CFR) programme since 2006, awarding contracts funded by international donors through a process of competitive bidding. The first two phases from 2006 to the end of 2015 resulted in release of 167km<sup>2</sup> at a cost of \$37 million.<sup>15</sup>

The Clearing for Results (CFR) programme issued two clearance contracts worth \$2.18 million in 2017, both going to CMAC and resulting in reported clearance of 13.38km<sup>2</sup>. It also awarded CMAC a further three contracts worth about \$200,000 for baseline survey and non-technical survey of reclaimed areas, which resulted in release of a further 11.63km<sup>2</sup>. The National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC), which was active in CFR in previous years, did not participate in 2017, citing pressures of UN peacekeeping deployments. In 2018, the CFR programme issued four contracts worth a total of \$1.43 million: three going to CMAC and one to The HALO Trust. CMAC was also awarded land reclamation non-technical survey and baseline survey contracts worth about US\$180,000.<sup>16</sup>

**Table 3: CFR results for 2017<sup>17</sup>**

Operator	Province	Area released (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	Other UXO destroyed
CMAC	Battambang	7,093,940	1,010	5	756
CMAC	Banteay Meanchey	6,287,069	1,159	5	2,331
	<b>Totals</b>	<b>13,380,009</b>	<b>2,169</b>	<b>10</b>	<b>3,087</b>

## Strategic Planning

Cambodia had intended to release a National Mine Action Strategy (NMAS) for 2017–25 in 2016, but preparations stalled as a result of the CMAA's management reshuffle and a lack of direction which persisted in much of 2017. The management team put in place at the end of the year and with effect from the start of 2018 has, though, injected new momentum into the mine action sector with technical working group meetings on strategy and operations seeking to improve efficiency and accelerate land release.

Cambodia's new NMAS 2018–2025 was approved by the Prime Minister in December 2017 and officially launched at a national mine action conference in May 2018. The NMAS estimated that at the rate of progress achieved since 2014 Cambodia would need a little over 10 years to complete clearance of all known mined areas. It observed that to complete clearance of mined areas in eight years would require release of 110km<sup>2</sup> a year.<sup>18</sup>

The NMAS emphasises the need for more efficient use of demining assets. An early draft acknowledged that “a significant number” of mined areas cleared in 2016 either did not contain any mines or only contained mine types that experience showed had degraded and no longer functioned.<sup>19</sup> The observation echoed a finding by the Geneva International Centre for Humanitarian Demining (GICHD) in a 2016 report, citing official data that almost half the land released by full clearance or reduced by technical survey in 2015 contained no mines (26%) or very few (one to three) explosive hazards (23%).<sup>20</sup>

The strategy said planning and prioritisation should take device types into consideration, that clearance tasks should be prioritised on the basis of evidence from survey, and that donor funding should be directed to priority areas where communities are impacted by high-risk mine types that are likely to function.<sup>21</sup>

Cambodia's new strategy omitted many of the more critical assessments of progress included in the 2017 draft strategy but emphasised that “it is essential clearance assets are only deployed in areas where there is clear evidence of mines”, reacting to a weakness in clearance operations in previous years. It said that, in future, clearance tasks should be prioritised on the basis of “effective” non-technical survey.<sup>22</sup> The strategy also seeks to ensure effective targeting of clearance assets by stipulating at least 75% of mine action funding should be allocated to communes selected by the CMAA as priority for clearance.<sup>23</sup>

Other issues under consideration by the CMAA and operators include achieving a better balance in the class of contamination being cleared. Operators acknowledge that although some areas classified as A4 (with scattered or nuisance mines) have proved to be heavily mined, more attention should be paid to clearing A1 areas (with dense anti-personnel mine contamination which accounted for just 3% of land cleared in 2017).<sup>24</sup>

The CMAA also prepared a three-year work plan for 2018–20 in which it set out more detailed land release objectives. The CMAA asked provincial MAPUs to identify priority villages for clearance over the next three years, using that as a starting point for identifying priority minefields. The three-year period also calls for completion of the baseline survey in 36 districts, a land reclamation study, and re-survey to identify mined areas that are in reclaimed land. Other goals include enhancing quality management by developing a performance monitoring system and developing a capacity for dealing with residual hazards after 2025.<sup>25</sup>

## Legislation and Standards

Cambodia adopted a law prohibiting anti-personnel mines in May 1999 before ratifying the APMB in July 1999 but does not have national mine action legislation.

Mine action is conducted according to Cambodian Mine Action Standards (CMAS) that are consistent with the International Mine Action Standards (IMAS). The National Mine Action Strategy calls for review, updating and developing standards on quality management and developing a CMAS on environment in line with IMAS.<sup>26</sup>

## Quality Management

The CMAA is responsible for quality management and in 2017 deployed eight quality assurance (QA)/quality control (QC) teams.<sup>27</sup> In 2017, with UNDP support, it prepared a Performance Monitoring System (PMS) that will track land use and socio-economic changes after release of mine/ERW contaminated land as well as monitor the implementation of NMAS as a management tool for the sector. The CMAA approved the performance matrix in December and planned to test the system in 2018, with a view to rolling it out in 2019.<sup>28</sup>

## Information Management

The CMAA manages a database that upgraded to operating Information Management System for Mine Action (IMSMA) New Generation in 2014 and receives regular operational progress reports from operators.

The GICHD reported in 2016 that the Database Unit staff “possess the skills and knowledge to realize solutions to the increasing analysis and reporting requirement of the CMAA management” and demonstrated a strong commitment to improving the quality of data.<sup>29</sup> However, reporting continues to be dogged by delays, and results released by the CMAA and by operators continued to show significant discrepancies in 2017, highlighting persistent challenges with information management that made it difficult to measure Cambodia's progress towards mine action targets.

## Operators

Mine clearance is undertaken mainly by the national operator, CMAC, and two international mine action non-governmental organisations (NGOs), The HALO Trust and Mines Advisory Group (MAG). A second national NGO, Cambodian Self-help Demining (CSHD), has been active since 2011. The CMAA identified three commercial companies as accredited to operate in 2017, including BACTEC, D&Y, and MUCC.<sup>30</sup>

The CMAA reported 10 NPMEC units accredited with the CMAA in 2017 but NPMEC withdrew from demining due to its international peacekeeping commitments.<sup>31</sup>

## LAND RELEASE

Cambodia appeared to have released marginally less mined land in 2017 than the previous year, although differences between CMAA and operator data suggest the official result may have understated the reality. The CMAA reported release of a total of 95km<sup>2</sup> of contaminated land in 2017, of which 65.5km<sup>2</sup> was mined area. That was well behind the target of releasing 110km<sup>2</sup> of mined area a year set by the NMAS with a view to completing clearance of known contamination by 2025.<sup>32</sup>

**Table 4: Land release in 2015–17 (km<sup>2</sup>)<sup>33</sup>**

Year	Area cancelled by NTS	Area reduced by TS	Area cleared	Totals
2017	26.11	14.25	27.68	<b>68.04</b>
2016	28.93	14.48	25.33	<b>68.74</b>
2015	70.38	30.11	46.47	<b>146.96</b>

NTS = Non-technical survey TS = Technical survey

## Survey in 2017

Operators released a little over 40km<sup>2</sup> through survey in 2017, according to CMAA data (see Tables 5 and 6), about 7% less than the previous year but, again, operators' reported results suggest the total may have been higher. The HALO Trust said it cancelled or reduced nearly 18km<sup>2</sup> and MAG 2.6km<sup>2</sup>.<sup>34</sup>

Operators had expected the share of full clearance in overall land release would rise as non-technical survey caught up with the amount of reclaimed land identified in the BLS but CMAA and operators agree the minefields

recorded in the database need to be resurveyed and reclassified under clear criteria to take account of continuing land reclamation. The CMAA was preparing to undertake this task through a land reclamation re-survey under its three-year implementation strategy. More than 80% of the area cancelled in 2017 was land with scattered mines, reinforcing once more the case for re-survey. Operators believe that re-survey will find that substantial areas which were identified by the BLS as contaminated are already under cultivation.<sup>35</sup>

**Table 5: Release of mined area in 2017<sup>36</sup>**

Operator	BLS polygons released	Area cancelled by NTS (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )	Area cleared (m <sup>2</sup> )	Total release (m <sup>2</sup> )
CMAC	628	10,115,391	11,691,812	17,137,164	38,944,367
CSHD	13	0	163,906	255,794	419,700
MAG	48	1,505,520	1,693,806	402,151	3,601,477
NPMEC	3	0	198,532	237,240	435,772
HALO	352	14,491,974	504,288	9,647,271	24,643,533
<b>Totals</b>	<b>1,044</b>	<b>26,112,885</b>	<b>14,252,344</b>	<b>27,679,620</b>	<b>68,044,849</b>

## Clearance in 2017

Manual clearance released almost 27.7km<sup>2</sup> in 2017 according to the CMAA (see Table 6), slightly more (4%) than the previous year. The CMAA database records clearance of completed tasks on BLS polygons and it attributes discrepancies with results reported by operators to the fact they include clearance on tasks that are still active and to late delivery of results. CMAA clearance data may understate actual clearance as HALO Trust and MAG results showed they cleared a total of 12.7km<sup>2</sup> in 2017 (see Table 8), more than 50% above the area clearance attributed to them by the CMAA, and significantly more mines.<sup>37</sup>

After years of clearance targeting mainly areas of scattered contamination and often with few mines, the NMAS has identified a need to accelerate clearance of more densely contaminated A1 and A2.1 mined areas. That did not happen in 2017, when CMAA data shows that clearance of these areas amounted to nearly 1km<sup>2</sup> or less than 4% of land cleared manually (see Table 6), far behind the pace needed to achieve NMAS targets.

**Table 6: Land release in 2017 by land classification and methodology (m<sup>2</sup>)<sup>38</sup>**

Classification	Cancelled by NTS (C1)	Reduced by TS (C2)	Area cleared (C3)	Total release (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	ERW destroyed
A1 (Dense AP mines)	1,560,577	367,014	788,429	2,716,020	1,331	21	70
A2 (Mixed AP and AV mines)	1,509,594	284,789	1,679,803	3,474,186	594	10	226
A2-1 (Mixed dense AP/AV mines)	5,428	99,566	197,159	302,153	13	0	12
A2-2 (Mixed scattered AP/AV mines)	4,635,044	5,134,384	8,907,283	18,676,711	927	52	3,661
A3 (AV mines)	508,943	153,733	5,352,783	6,015,459	15	120	139
A4 (Scattered or nuisance mines)	16,546,983	5,222,774	10,281,346	32,051,103	2,638	40	6,716
B2 (Land with no verifiable mine threat)	1,346,316	2,990,084	472,817	4,809,217	262	11	558
<b>Totals</b>	<b>26,112,885</b>	<b>14,252,344</b>	<b>27,679,620</b>	<b>68,044,849</b>	<b>5,780</b>	<b>254</b>	<b>11,382</b>

CMAA data showed that CMAC, the biggest operator, cleared one-third more than in 2016, though the 17.9km<sup>2</sup> attributed to CMAC is only marginally more than the amount CMAC itself reported in 2016. The discrepancies illustrate persistent problems reconciling CMAA data with CMAC as well as with other operators. CMAC did not respond to requests for information.

The HALO Trust, employing more than 1,000 staff, continued to concentrate mine clearance operations in five western and northern border provinces and in 2017 deployed teams for the first time to the south-western province of Koh Kong. HALO Trust won a contract for clearance in Pailin under Clearing for Results but reported that clearance of around 1km<sup>2</sup> had resulted in destroying just three mines, underscoring the need for more stringent prioritisation and more targeted clearance.<sup>39</sup>

**Table 7: Mine clearance in 2017<sup>40</sup>**

Operator	Areas cleared	Clearance (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
CMAC	250	17,137,164	1,938	51	2,994
CSHD	10	255,794	235	0	169
MAG	10	402,151	631	13	14
NPMEC	1	237,240	373	0	277
HALO	172	9,647,271	2,136	176	6,927
<b>Totals</b>	<b>443</b>	<b>27,679,620</b>	<b>5,313</b>	<b>240</b>	<b>10,381</b>

MAG recorded a sharp rise in output in 2017, reporting release of 1.9km<sup>2</sup> by clearance compared with 0.3km<sup>2</sup> in 2016. This is more than four times the output reported by the CMAA. It attributed the result to restructuring mine action teams into small units, achieving greater operational flexibility and also to the use of Scorpion

advanced detectors with funding from the United States Humanitarian Demining Research and Development Program. A small rise in funding enabled MAG to add one BAC team in 2018, bringing total staff numbers up to 246. In 2018, it expected to deploy more teams on heavily contaminated border clearance tasks.<sup>41</sup>

**Table 8: 2017 clearance reported by HALO Trust and MAG<sup>42</sup>**

Operator	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
HALO	10,771,931	3,581	171	583
MAG	1,913,766	708	0	229
<b>Totals</b>	<b>12,685,697</b>	<b>4,289</b>	<b>171</b>	<b>812</b>

## Deminer Safety

The HALO Trust reported three accidents (one deminer killed and four others injured) in 2017. Another deminer was killed in early 2018. HALO Trust identified breaches of Standing Operating Procedures as the cause of the accidents.<sup>43</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB (and in accordance with the 10-year extension granted by states parties in 2009), Cambodia 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 January 2020. It will not meet this deadline.

Cambodia's draft mine action strategy for 2017–25 sets a target of completing clearance of known mine contaminated areas by 2025, but makes clear this is dependent on attracting donor support of around \$400 million, averaging more than \$40 million a year, much more than was received in recent years. Cambodia says it expects to fund mine action increasingly from domestic sources in coming years to compensate for the withdrawal of donors, but there was little sign of it yet supporting humanitarian clearance under the management of CMAA.

Donors provided US\$30.4 million in 2017, approximately the same as the previous year, but funding from 2020 looked uncertain.<sup>44</sup> Close to half of 2017 funding was provided by Japan for CMAC. Although the United States maintained funding for the sector at about \$2 million, survey and clearance of US legacy contamination in north-eastern provinces along the border with Vietnam has attracted increasing attention. China joined the list of donors in 2018, announcing it would provide a \$2.5 million grant to CMAC.<sup>45</sup>

**Table 9: Mine clearance in 2013–17<sup>46</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	27.68
2016	25.33
2015	46.47
2014 <sup>47</sup>	54.38
2013	45.59
<b>Total</b>	<b>199.45</b>

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- 1 HALO Trust, "Mine clearance in Cambodia – 2009", January 2009, p. 8.
- 2 Revised BLS data presented in statement of Cambodia to the Standing Committee on Mine Clearance, Geneva, 10 April 2014.
- 3 Data received by email from the CMAA, 22 May 2018.
- 4 Article 7 Report (for 2017), p. 9.
- 5 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2018.
- 6 Data received by email from CMAA, 22 May 2018.
- 7 Compiled from Cambodia Mine Victim Information System (CMVIS) casualty data for 2013–17.
- 8 "Cambodia sees decline in landmine/UXO casualties in 1<sup>st</sup> half of 2018", *Xinhua*, 22 August 2018, at: [www.xinhuanet.com/english/2018-08/22/c\\_137410455.htm](http://www.xinhuanet.com/english/2018-08/22/c_137410455.htm).
- 9 Compiled from CMVIS casualty data for the period 2016–17.
- 10 CMAA is the leading national demining operator, but does not exercise the wider responsibilities associated with the term "centre". Set up in 1992, CMAA was assigned the role of coordinator in the mid-1990s. It surrendered this function in a restructuring of mine action in 2000 that separated the roles of regulator and implementing agency and led to the creation of the CMAA.
- 11 Geneva International Centre for Humanitarian Demining (GICHD), "A Study of the Development of National Mine Action Legislation", November 2004, pp. 64–66.
- 12 Interview with Prum Sophakmonkol, Secretary General, CMAA, Phnom Penh, 24 April 2018.
- 13 *Ibid.*; and "Review of MAPU-led prioritization decisions in CFRIL target provinces, western Cambodia", Draft report, 24 January 2016, pp. 4 and 47.
- 14 Interview with Ly Thuch, then Secretary General, CMAA, Phnom Penh, 2 May 2017.
- 15 "Clearing for Results Phase II, Annual Report 2014", UNDP, undated but 2015, pp. 18–19. Results included contracts awarded in 2015 for release of 54.1km<sup>2</sup> at a cost of \$4.9 million.
- 16 Interview with Edwin Faigmane, Chief Technical Adviser, UNDP, Phnom Penh, 24 April 2018; and email 18 September 2018.
- 17 Email from Edwin Faigmane, UNDP, Phnom Penh, 18 September 2018.
- 18 CMAA, "National Mine Action Strategy 2017–2025", undated but 2018, p. 9.
- 19 CMAA, "National Mine Action Strategy 2017–2025", Draft, 2017, pp. 18–19.
- 20 GICHD, "Finishing the Job", an independent review of Cambodia's mine action sector", Geneva, 30 April 2016, pp. 41–42.
- 21 CMAA, "National Mine Action Strategy 2017–2025", Draft, 2017, p. 35.
- 22 CMAA, "National Mine Action Strategy 2017–2025", May 2018, pp. 8–9.
- 23 *Ibid.*, p. 19.
- 24 Interview with Greg Crowther, MAG, Phnom Penh, 24 April 2018; data on results as at 21 July 2018. Email from Prum Sophakmonkol, CMAA, 3 September 2018.
- 25 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2018; CMAA, "Three Year Implementation Plan (2018–2020)", undated but 2018.
- 26 CMAA, "National Mine Action Strategy 2017–2025", December 2017, pp. 14, 15.
- 27 Email from CMAA, 2 May 2017.
- 28 Interview with Edwin Faigmane, UNDP, Phnom Penh, 24 April 2018.
- 29 GICHD, "Finishing the Job", an independent review of Cambodia's mine action sector", p. 58.
- 30 Email from CMAA, 2 May 2017.
- 31 *Ibid.*
- 32 Email from Prum Sophakmonkol, CMAA, 3 September 2018; CMAA, National Mine Action Strategy 2018–2025, p. 9.
- 33 Data for 2015 was compiled by Mine Action Review from results reported by CMAA and operators. Data for 2016 was received by email from CMAA, 2 May 2017. Data for 2017 was received by email from Ros Sophal, Deputy Database Manager, CMAA, 11 September 2018.
- 34 Email from the CMAA, 22 May 2018; Matthew Hovell, HALO Trust, 16 June 2018; and Greg Crowther, MAG, 11 May 2018.
- 35 Interviews with Greg Crowther, MAG, and Matthew Hovell, HALO Trust, Phnom Penh, 26 April 2018.
- 36 Email from Ros Sophal, CMAA, 11 September 2018.
- 37 Emails from Mathew Hovell, HALO Trust, 16 June 2018; and Greg Crowther, MAG, 11 May 2018.
- 38 Email from Ros Sophal, CMAA, 11 September 2018.
- 39 Interview with Matthew Hovell, HALO Trust, Phnom Penh, 26 April 2018; and email, 16 June 2018.
- 40 Email from Ros Sophal, CMAA, 11 September 2018.
- 41 Email from Greg Crowther, MAG, 11 May 2018.
- 42 Emails from Matthew Hovell, HALO Trust, 16 June 2018; and Greg Crowther, MAG, 11 May 2018.
- 43 Email from HALO Trust, 26 March 2018; and interview with Matthew Hovell, HALO Trust, Phnom Penh, 24 April 2018.
- 44 Email from CMAA, 11 May 2018.
- 45 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2018; Pech Sotheary, "China grants millions for mine clearance", *Khmer Times*, 28 May 2018.
- 46 Compiled by Mine Action Review from data provided by the CMAA and operators.
- 47 CMAA data reported 50.2km<sup>2</sup> released by full clearance in 2014.



# CAMEROON

**ARTICLE 5 DEADLINE: 1 MARCH 2013**  
(NEEDS TO REQUEST NEW ARTICLE 5 DEADLINE)

## RECOMMENDATIONS FOR ACTION

- Cameroon should urgently clear any landmines on its territory, including those of an improvised nature, and take immediate steps to minimise harm to civilians from all explosive devices, including through the provision of risk education.
- Cameroon should inform states parties to the Anti-Personnel Mine Ban Convention (APMBC) of the discovery of any anti-personnel mine contamination and 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.
- As soon as security conditions permit, non-technical survey should commence in the Extrême-Nord (Far North) region, which has been reportedly most affected by conflict.
- As necessary, Cameroon should seek, encourage, and facilitate assistance and expertise from humanitarian demining organisations.

## CONTAMINATION

In 2017, there continued to be a number of reports of casualties and incidents from landmines, including mines of an improvised nature, reportedly laid by the non-state armed group, Boko Haram. These are found primarily in the north of Cameroon along its border with Nigeria. These have followed Cameroon's increased involvement in joint military offensives against Boko Haram as part of a Multi-National Joint Task Force launched in 2015.<sup>1</sup> Most of the reports appear to describe use of mines of an improvised nature produced by Boko Haram.

In September 2017, two Cameroonian soldiers were killed when they stepped on a mine during foot patrol near the Nigerian border.<sup>2</sup> In June 2017, two Cameroonian soldiers were killed and five others were injured when their truck hit a mine on the Homaka road, near the Nigerian border.<sup>3</sup> In May 2017, six civilians were reportedly injured outside the village of Homaka when one stepped on a landmine while looking for straw to use for roofing.<sup>4</sup> In February 2017, four soldiers were killed and several others injured in the Mayo-Tsanaga department, Far North region, after their vehicle detonated a mine.<sup>5</sup>

While the extent of contamination from anti-personnel mines of an improvised nature is not known, the United Nations Mine Action Service (UNMAS) undertook a monitoring mission in January to April 2017 and reported that in 2016, there were 15 incidents involving “roadside IEDs”. These caused 54 casualties, killing 30 and injuring 24 others. At least three quarters of the victims were military personnel. There were six “roadside IED” incidents in the first three months of 2017, killing one person and injuring eight others.<sup>6</sup> UNMAS did not specify to Mine Action Review the type of IED, therefore it is not known whether or not these explosive devices meet the definition of an anti-personnel mine, as defined under the APMBC.

A report by a Cameroonian analyst in 2016 claimed that mines had been used extensively around roads, houses, and vehicles, and that “damage caused by these homemade mines is becoming ever more frequent”.<sup>7</sup> Cameroonian military officials reported in 2015 that “huge” numbers of landmines had been planted by Boko Haram along Cameroon’s Nigerian border, posing a threat to civilians, livestock, and soldiers, and reported recurrent use of mines of an improvised nature along the road between Kerawa and Kolofata, targeting army vehicles.<sup>8</sup>

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## PROGRAMME MANAGEMENT

Cameroon does not have a functioning mine action programme. It has not submitted an Article 7 transparency report concerning the newly laid contamination, as is required of each state party to the APMBC. Its last Article 7 report was submitted in 2009.

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## LAND RELEASE

It is not known to what extent mine clearance or explosive ordnance disposal (EOD) has been undertaken in affected areas. UNMAS reported in April 2017 that Cameroon’s Military Engineer Corps has official responsibility for clearing munitions and that an EOD capacity within the *gendarmerie* was being created to address the mine threat. A capacity for battle area clearance and EOD spot tasks was also needed, it said.<sup>9</sup>

From March to April 2018, 25 Cameroonian soldiers were trained by the French and US Army in Level 4 EOD disposal.<sup>10</sup> In June 2017, the United States (US) was reported to have donated significant quantities of demining equipment to Cameroon, including metal detectors.<sup>11</sup> In March 2016, it was reported that US

military advisors and officers were training Cameroonian soldiers on detection and destruction techniques for mines and other explosive devices.<sup>12</sup> Previously, in 2015, Cameroon was reported to have received demining/EOD training and equipment from the United States and Russia, and armoured mine-detection vehicles were provided by the US Army Africa Command.<sup>13</sup>

In April 2017, UNMAS confirmed that the military and *gendarmerie* had benefitted from substantial and ongoing specialised capacity support from international actors, including France and the United States, but noted a shortage of equipment, and called for further awareness-raising on explosive devices and EOD training.<sup>14</sup>

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## ARTICLE 5 COMPLIANCE

Cameroon is a state party to the APMBC. Its Article 5 deadline to destroy all anti-personnel mines in mined areas under its jurisdiction or control expired on 1 March 2013.

Under the APMBC’s agreed framework, Cameroon should immediately inform all states parties of any newly discovered anti-personnel mines following the expiry of its Article 5 deadline and ensure their destruction as soon as possible. If necessary, it should also submit a request for a new Article 5 deadline, which should be as short as possible and not more than ten years. Cameroon must continue to fulfil its reporting obligations under the convention, including on the location of any suspected or confirmed mined areas under its jurisdiction or control and on the status of programmes for the destruction of all anti-personnel mines within them.

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- 1 M. P. Moore, "This Month in Mines, February 2015", Landmines in Africa blog, 12 March 2015, at: <https://landminesinafrica.wordpress.com/2015/03/12/the-month-in-mines-february-2015/>; and "Multinational Joint Task Force (MNJTF)", *GlobalSecurity.org*, 2017, at: <http://www.globalsecurity.org/military/world/int/mnjtf.htm>.
  - 2 "Landmine explosion kills 2 Cameroonian soldiers", *Andolu Agency*, 28 September 2017, at: <https://www.aa.com.tr/en/africa/landmine-explosion-kills-2-cameroon-soldiers/921956>.
  - 3 "Landmine explosion kills 2 soldiers in north Cameroon", *Andolu Agency*, 24 April 2017, at: <http://aa.com.tr/en/africa/landmine-explosion-kills-2-soldiers-in-north-cameroon/804001>.
  - 4 "Six villagers injured in Boko haram landmine explosion", *Journal du Cameroun*, 17 May 2017, at: <https://www.journalducameroun.com/en/six-villagers-injured-boko-haram-landmine-explosion/>.
  - 5 P. Kum, "Landmine kills 4 Cameroonian soldiers", *Andolu Agency*, 17 February 2017, at: <http://aa.com.tr/en/africa/landmine-kills-4-cameroonians-soldiers/752448>.
  - 6 UNMAS, "Mission Report: UNMAS explosive hazard mitigation response in Cameroon, 9 January – 13 April 2017", 30 April 2017, p. 11; and email from Camille Aubourg, UNMAS, 17 September 2018.
  - 7 "Boko Haram Landmines Inflict Heavy Toll on Cameroon", *Latin American Herald Tribune*, 25 June 2016, at: <http://laht.com/article.asp?ArticleId=2415012&CategoryId=12395>.
  - 8 M. E. Kindzeka, "Land Mines Hamper Cameroon, Chad in Fight Against Boko Haram", *Voice of America News*, 3 March 2015, at: <http://www.voanews.com/a/cameroon-chad-team-up-to-fight-boko-haram/2665815.html>; and M. E. Kindzeka, "Boko Haram Surrounds Havens with Land Mines", *Voice of America News*, 24 May 2015, at: <http://www.voanews.com/a/boko-haram-surrounds-havens-with-land-mines/2787598.html>.
  - 9 UNMAS, "Mission Report: UNMAS explosive hazard mitigation response in Cameroon, 9 January – 13 April 2017", 30 April 2017, pp. 12 and 14.
  - 10 "Génie Militaire - Des démineurs formés", *Cameroon Tribune (Yaoundé)*, 23 April 2018, at: <https://fr.allafrica.com/stories/201804230960.html>.
  - 11 "US donates mine-clearing devices to Cameroon", *Journal du Cameroun*, 24 April 2017; at: <https://www.journalducameroun.com/en/us-donates-mine-clearing-devices-to-cameroon/>.
  - 12 M. E. Kindzeka, "Cameroon Vigilantes Hunt for Boko Haram Landmines", *Voice of America News*, 4 March 2016, at: <http://www.voanews.com/a/cameroon-vigilantes-hunt-for-boko-haram-landmines/3219444.html>.
  - 13 M. E. Kindzeka, "Land Mines Hamper Cameroon, Chad in Fight Against Boko Haram", *Voice of America News*, 3 March 2015, at: <http://www.voanews.com/a/cameroon-chad-team-up-to-fight-boko-haram/2665815.html>; and "US Helps Cameroon in Fight Against Boko Haram", *Voice of America News*, 17 October 2015, at: <http://www.voanews.com/a/us-provides-cameroon-military-equipment-troops-to-fight-boko-haram/3011730.html>.
  - 14 UNMAS, "Mission Report: UNMAS explosive hazard mitigation response in Cameroon, 9 January – 13 April 2017", 30 April 2017, p. 1.

# CHAD

**ARTICLE 5 DEADLINE: 1 JANUARY 2020**  
(NOT ON TRACK TO MEET DEADLINE)

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	6	7
Target date for completion of mine clearance	3	3
Targeted clearance	6	6
Efficient clearance	4	4
National funding of programme	3	3
Timely clearance	2	3
Land-release system in place	5	6
National mine action standards	7	7
Reporting on progress	5	5
Improving performance	7	8
<b>PERFORMANCE SCORE: POOR</b>	<b>4.8</b>	<b>5.2</b>

## PERFORMANCE COMMENTARY

In 2017, no survey or clearance operations were undertaken in Chad. In a positive development new European Union (EU) funding for mine action in Chad was secured in September but as at May 2018 survey and clearance had still to be initiated. Chad is not on track to meet its extended Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline and is planning to submit a

fourth extension request in 2019. In 2018, Mines Advisory Group (MAG) was set to begin operations in Tibesti and Lac regions while Humanity and Inclusion (HI) would operate in Borkou and western Ennedi. The Swiss Foundation for Mine Action (FSD) will provide support to the National High Commission for Demining (HCND) to increase its technical and managerial capacity.

## RECOMMENDATIONS FOR ACTION

- Chad should complete its nationwide survey to enable it to provide a comprehensive estimate of its mine contamination.
- Chad should revise its existing national mine action strategy with updated information, clarify the amount of contamination remaining, and submit a new workplan with clear annual targets for the remaining period up to January 2020 under its extended Article 5 deadline.
- Chad needs urgently to elaborate a resource mobilisation strategy to secure and diversify funding and attract international technical and operational support.
- Chad should take the necessary measures to strengthen the effectiveness of its national mine action centre. It should ensure that demining personnel and resources are fully mobilised and deployed on areas which are confirmed to contain anti-personnel mines.

## CONTAMINATION

As at December 2017, Chad reported it had identified seven confirmed hazardous areas (CHAs) and 421 suspected hazardous areas (SHAs), covering a combined total of 122km<sup>2</sup>.<sup>1</sup> These figures should be approached with caution, however, as we can see from Table 1 the size and extent of mined areas varies widely from Salamat with one CHA and seven SHAs said to total only 592m<sup>2</sup> all the way up to 185 SHAs in Tibesti totalling 75km<sup>2</sup>. In December 2015, Chad reported it had identified a total of 123 mined areas, albeit from a partial national survey.<sup>2</sup> It expected more contaminated areas to be identified in four regions: Borkou, Ennedi, Moyen Chari, and Tibesti. In May 2014, Chad had 113 areas confirmed to contain mines with a total size of 103.5km<sup>2</sup>.

Chad also has a significant problem with explosive remnants of war (ERW); in 2014, it identified 221 ERW-contaminated areas covering 2.5km<sup>2</sup>.<sup>3</sup>

Chad's contamination is the result of the 1973 Libyan invasion and 30 years of internal conflict. Chad's mine action plan for 2014–19 indicated that, based on a national technical survey conducted in 2010–12 and information available as at May 2014, it faced a total of 787 hazardous areas covering 1,236km<sup>2</sup>. This comprised 123 mined areas across seven regions (covering 104km<sup>2</sup>) and 664 ERW-contaminated areas across nine regions (covering 1,132km<sup>2</sup>). Chad reported that it had already addressed ten mined areas and 443 ERW-contaminated areas.<sup>4</sup>

As at the end of 2017, three of Chad's twenty-three regions contained confirmed mined areas while a further seven had SHAs, as set out in Table 1. Borkou, Ennedi, and Tibesti are located in northern Chad at the border with Libya; Sila is located at the border with Sudan; and Moyen-Chari is in southern Chad at the border with the Central African Republic.

**Table 1: Mine contamination by region (at end-2017)<sup>5</sup>**

Region	CHA	SHA	Area (m <sup>2</sup> )
Borkou	0	112	26,961,249
Chari-Baguirmi	0	3	8,699
Ennedi	0	42	16,524,754
Moyen-Chari	0	19	3,273,243
Ouaddai	1	19	0
Salamat	1	7	592
Sila	5	12	6,004
Tibesti	0	185	75,184,525
Wadi Fira	0	18	662
Lac	0	4	798
<b>Totals</b>	<b>7</b>	<b>421</b>	<b>121,960,526</b>

CHA = Confirmed hazardous area

Mines and ERW are said to obstruct safe access to housing, roads, pastures, water points, and mining areas, especially in northern Chad. Contamination is an ongoing threat to local populations and its negative impact on the socio-economic development of Borkou, Ennedi, and Tibesti, which are among its poorest regions, is particularly severe.<sup>6</sup> Mined roads obstruct key transport routes, and diversions opened through

potentially contaminated areas present risks to local populations seeking to access basic state services, such as medical coverage and higher education and training facilities, provided mainly in regional capitals.<sup>7</sup> In regions to the south, east, and west, the impact of mines is thought to be relatively low, with the primary threat coming from ERW: both unexploded ordnance (UXO) and abandoned explosive ordnance.<sup>8</sup> Chad has reported that 136 people were injured or killed by mines or UXO in Borkou and Tibesti regions in 2017.<sup>9</sup>

In April 2018, 22 soldiers were killed and a further 75 wounded during a series of operations in the Lake Chad region against Boko Haram forces who used landmines and other forms of attack.<sup>10</sup> This followed Chad's increased participation in joint military offensives against Boko Haram as part of a Multi-National Joint Task Force launched in 2015.<sup>11</sup> In 2017, numerous incidents involving both civilian and military casualties from landmines, including mines of an improvised nature emplaced by Boko Haram, were reported as part of the insurgency, which spread from north-east Nigeria to involve neighbouring areas of Cameroon, Chad, and Niger. Most reports appeared to describe use of mines of an improvised nature produced by Boko Haram, which functioned as either anti-personnel mines or anti-vehicle mines.<sup>12</sup> In 2017, Chad sent risk education teams to inform the affected population in the Lake Chad region about the dangers of improvised devices and other ERW.<sup>13</sup>

## PROGRAMME MANAGEMENT

The national mine action programme is managed by what is effectively a national mine action centre, the National High Commission for Demining (Haut Commissariat National de Déminage, HCND).<sup>14</sup> The National Demining Centre (Centre National de Déminage, CND), which earlier conducted clearance operations, appears to have been dissolved. In July 2017, a new governmental decree restructured the HCND, reducing the number of personnel by more than half from 744 to 329.<sup>15</sup>

In December 2016, funding for a two-year EU-funded mine action project (Projet d'appui au secteur du déminage au Tchad, PADEMIN) came to an end.<sup>16</sup> Under this project, MAG conducted survey and clearance of mines and ERW, focusing on Borkou, Ennedi, and Tibesti. HI provided capacity-building support to the CND, in particular for information and quality management, and carried out non-technical survey in three southern regions of the country thought to be contaminated by mines and ERW.<sup>17</sup>

In September 2017, the EU agreed to support a new four-year mine action project (PRODECO) in Chad.<sup>18</sup> As part of this project, HI is focusing on survey and clearance in the Borkou and Ennedi regions while MAG is working in the Tibesti and Lake Chad regions.<sup>19</sup> The targets for the PRODECO project for survey and clearance are to conduct non-technical survey in 30 zones in the Lake Chad and Tibesti region, to release 2.7km<sup>2</sup> of mined land in Borkou, Tibesti and Ennedi, to release 200,000m<sup>2</sup> of mined land along roads in Tibesti, and, in the Lake Chad and Tibesti regions, to release 50,000m<sup>2</sup> of land contaminated with other ERW or conduct 100 spot tasks.<sup>20</sup> A third international operator, FSD, is to provide technical support, training, and capacity building to the HCND, including support for the use of the Information Management System for Mine Action (IMSMA).<sup>21</sup>

Since 2008, Chad's mine action programme has suffered from a lack of international funding, weak government oversight, and mismanagement issues within the CND.<sup>22</sup> CND demining operations have also been plagued by poor equipment and lack of funding. On 10 May 2017, a media source reported that 755 deminers employed by the CND began a strike over 10 months of wages which had not been paid by the Ministry of Economy and Development Planning. According to the report, the deminers had carried out several missions in the north, east, and west of the country to open roads linking Chad to neighbouring Libya and Niger and to secure settlement areas, during which a number were killed and others suffered traumatic amputations in mine blasts.<sup>23</sup>

## Strategic Planning

Following the request of the APMB's Thirteenth Meeting of States Parties, the CND elaborated a national mine action plan for 2014–19, with technical support from the United Nations Development Programme (UNDP). The plan gave details on the number, location, and size of remaining mined areas, and provided the following timeline:

- In June 2015 – June 2019, operations would be conducted in Borkou
- In January 2015 – April 2019, operations would be conducted in Ennedi
- In May–December 2015, operations would be conducted in Moyen Chari
- In September 2015 – February 2016, operations would be conducted in Sila
- In November 2014 – November 2019, operations would be conducted in Tibesti.<sup>24</sup>

As at June 2018, the national mine action plan was in the process of being updated.<sup>25</sup>

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## LAND RELEASE

No survey or clearance operations were conducted in Chad during 2017. Nearly 0.58km<sup>2</sup> was released by clearance and technical survey the previous year.<sup>30</sup>

In 2016, MAG and HI conducted survey in the Tibesti and Borkou regions, confirming over 16.24km<sup>2</sup> as contaminated with mines.<sup>31</sup> In December 2016, HI carried out an evaluation of the needs for survey and clearance in Borkou and the west of Ennedi region to prepare for the start of the new four-year EU-funded demining project. It reported identifying more than 40km<sup>2</sup> of area as mined, 2.7km<sup>2</sup> as contaminated with ERW, and a total of 147 open suspected or confirmed hazardous areas.<sup>32</sup>

## Legislation and Standards

HI began a review of Chad's national mine action standards for land release and quality management at the start of 2016. In September 2017, HI reported that 11 national mine action standards had been updated and issued, following HCND approval.<sup>26</sup>

## Quality Management

In 2017, Level 1 EOD [explosive ordnance disposal] quality assurance training was carried out with HCND as part of the PRODECO project.<sup>27</sup>

## Information Management

The HCND uses the IMSMA database. As part of the PRODECO project, the database was being updated in 2018 by the HCND's information management team, under the supervision of an FSD expert.<sup>28</sup>

## Operators

MAG has been the main clearance operator in recent years. In 2016, MAG concluded operations under the EU PADEMIN project. MAG was planning to deploy demining teams under the new EU PRODECO project in June 2018 but, as of three months later, had not yet been able to start clearance due to issues with security in Tibesti. They have started their operations in the Lake Chad region and, as at September 2018, had conducted non-technical survey in seven areas.<sup>29</sup>

HI also conducts demining in Chad and in 2018 was believed to be focusing on survey and clearance in the Borkou and Ennedi regions, though no details had been provided.

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## Progress in 2018

The priorities for 2018 were the Borkou, Ennedi, and Tibesti regions in which six manual demining teams, one non-technical survey team and two mechanical demining teams were to be deployed, as well as a non-technical survey/community liaison team in the Lake Chad region.<sup>33</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the six-year extension granted by states parties in 2013), Chad 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 January 2020. Chad will not meet this deadline and will require a further extension.

As at June 2018, Chad was in the process of preparing its fourth extension request.<sup>34</sup> Its latest extension request, granted in 2013, noted as circumstances impeding compliance with its Article 5 obligations: lack of financial support; the size of the country and poor road network; information management problems; mismanagement at CND; and lack of transparency in resources management, as well as security issues. As at 2018, however, the full extent of the challenge remains unknown, as further survey still needs to be conducted.

In 2013, Chad was requested by states parties to report on the result of a mid-term evaluation of its national mine action strategy by the end of 2015, and to revise the strategy on the basis of updated information, if required. As at mid-2018, it had yet to do so.<sup>35</sup>

Chad's mine action plan for 2014–19 foresaw expenditure of US\$61 million (\$40 million for operations and technical assistance, \$4.5 million for equipment, and \$16.6 million for the HCND's running costs). Chad planned to contribute almost one-third of total funding (\$16.6 million). In 2017, the Chadian government paid the salaries of HCND staff and provided classrooms

and practice areas<sup>36</sup> but MAG and HI reported that the government had not provided any funding for operational mine action in recent years.<sup>37</sup> According to its national plan, Chad's budget for mine action activities in 2017 was just over \$10.3 million, in actuality Chad's budget for 2017 was 1.116 billion francs (almost US\$2 million)<sup>38</sup>

In September 2017, Chad secured new EU funding for mine action operations as part of the PRODECO project. Under the new project, MAG is set to begin operations in Tibesti and Lac regions and HI will carry out survey and mine clearance in Borkou and the west of Ennedi region. MAG expected to increase its non-technical survey and risk education capacity, and deploy a community liaison team for seven months.<sup>39</sup> FSD is providing technical support to the HCND to train new demining teams and increase the technical and managerial capacity of senior HCND staff.<sup>40</sup>

**Table 2: Mine clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )
2017	0.0
2016	0.5
2015	0.3
2014	N/R
2013	N/R
<b>Total</b>	<b>0.8</b>

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- 1 Email from Soultani Moussa, Manager/Administrator, HCND, 19 June 2018.
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- 19 Ibid.
- 20 Email from Soultani Moussa, HCND, 14 September 2018.
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- 22 Presentation of Chad at African Union/ICRC Weapons Contamination Workshop, Addis Ababa, 3–5 March 2013; and Third Article 5 deadline Extension Request, 2 May 2013, p. 12.
- 23 "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://mobile.apanews.net/index.php/fr/news/tchad-greve-des-demineurs-restes-10-mois-sans-salaire>; and email from Julien Kempeneers, HI, 26 September 2017.
- 24 HCND, "Mine Action Plan 2014–2019", May 2014. Previously, in 2013, the Government of Chad had approved a strategic mine action plan for 2013–17 that aimed, among other things, to develop and maintain an effective data collection and management system, strengthen national mine action capacities, and clear contaminated areas. Mine Action Strategic Plan 2013–2017, annexed to Third Article 5 deadline Extension Request, 2 May 2013.
- 25 Email from Soultani Moussa, 19 June 2018.
- 26 Email from Julien Kempeneers, HI, 5 September 2017.
- 27 Email from Soultani Moussa, HCND, 19 June 2018.
- 28 Ibid.
- 29 Email from Romain Coupez, MAG, 13 September 2018.
- 30 Responses to questionnaire by Romain Coupez, MAG, 3 May 2017; and email, 21 September 2017; response to questionnaire by Benjamin Westercamp and Seydou N'Gaye, HI, 22 March 2017; and email from Julien Kempeneers, HI, 5 September 2017.
- 31 Response to questionnaire by Romain Coupez, MAG, 3 May 2017; and email from Julien Kempeneers, HI, 5 September 2017.
- 32 Emails from Julien Kempeneers, HI, 5 and 26 September 2017.
- 33 Email from Soultani Moussa, HCND, 19 June 2018.
- 34 Ibid.
- 35 "Preliminary observations of the Committee on Article 5 Implementation (Switzerland, Chile, Colombia and the Netherlands)", Intersessional Meetings, Geneva, 7–8 June 2018.
- 36 Email from Soultani Moussa, HCND, 19 June 2018.
- 37 Responses to questionnaire by Romain Coupez, MAG, 3 May 2017; and Benjamin Westercamp and Seydou N'Gaye, HI, 22 March 2017.
- 38 HCND, Mine Action Plan 2014–2019, May 2014 and email from Soultani Moussa, HCND, 14 September 2018.
- 39 Responses to questionnaire by Romain Coupez, MAG, 3 May 2017; and Benjamin Westercamp and Seydou N'Gaye, HI, 22 March 2017.
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# CHILE

**ARTICLE 5 DEADLINE: 1 MARCH 2020**  
(UNCLEAR WHETHER ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE	2017	2016
Problem understood	7	7
Target date for completion of mine clearance	7	7
Targeted clearance	7	7
Efficient clearance	7	7
National funding of programme	7	7
Timely clearance	5	7
Land-release system in place	7	7
National mine action standards	8	8
Reporting on progress	8	7
Improving performance	6	8
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.9</b>	<b>7.2</b>

## PERFORMANCE COMMENTARY

Chile cleared 0.86km<sup>2</sup> in 2017, well below its forecasted clearance of 3.24km<sup>2</sup>. Chile also confirmed an additional 0.3km<sup>2</sup> as contaminated with mines in the Antofagasta region and as such has provided an updated workplan for 2018 to 2020, its Anti-Personnel Mine Ban Convention (APMBC) Article 5 clearance deadline. Chile has, however, reconfirmed that it will meet its Article 5 deadline and that it is currently on track to do so, provided that it can meet the clearance targets set out in its updated workplan. Chile will, though, need to significantly increase its clearance output in order to meet these targets.

## RECOMMENDATION FOR ACTION

- Chile should accelerate clearance to ensure it meets its planning targets, taking into account the challenging climatic conditions which significantly hindered clearance in 2017.

## CONTAMINATION

At the end of 2017, Chile had just over 5.1km<sup>2</sup> of mined area left to clear, down from 5.65km<sup>2</sup> at the end of the previous year. Confirmed and suspected mine contamination, which is spread across five regions (see Table 1), is believed to total 1,905 anti-personnel mines.<sup>1</sup> The majority of the confirmed contamination is in the Arica and Parinacota region.

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 contain both anti-vehicle and anti-personnel mines, are generally difficult to access and mostly in unpopulated regions. Of the 28 mined areas identified in Table 1 only nine mined areas contain only anti-personnel mines.<sup>2</sup> The vast majority of the mines were laid in the northern region, with some minefields located as high as 5,000m above sea level.<sup>3</sup>

Table 1: Mined area by province (at end-2017)<sup>4</sup>

Region	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Arica and Parinacota	7	1,222,753	1	145,297
Antofagasta	5	228,854	2	3,129,888
Magallanes and Antártica Chilena	9	313,251	0	0
Tarapacá	3	49,199	0	0
Valparaíso	0	0	1	14,000
<b>Totals</b>	<b>24</b>	<b>1,814,057</b>	<b>4</b>	<b>3,289,185</b>

CHA = Confirmed hazardous area SHA = Suspected hazardous area

Clearance is prioritised according to proximity to populated areas, impact on land that has been designated a national park or is a historical site of touristic interest, and impact on land that obstructs development.<sup>5</sup>

The humanitarian impact of residual contamination is reported to be minimal,<sup>6</sup> and no new mine victims have been reported since two men were injured and another killed in 2016.<sup>7</sup> Clearance of mined areas north of the city of Arica has enabled the development of agricultural projects. The Tambo Quemado sector of Arica and Parinacota region, the Chungará Border Complex, an international crossing on the border with Bolivia, was built after two mined areas were cleared.<sup>8</sup>

### Programme Management

The national mine action programme is managed by the National Demining Commission (Comisión Nacional de Desminado, CNAD), which is chaired by the Minister of Defence. Its main functions are to advise the President, mobilise resources, coordinate demining with state agencies, and develop plans for implementing the APMBC. At the end of 2015, it was announced that the Chilean authorities were investigating allegations of fraud at CNAD amounting to half a million dollars.<sup>9</sup>

### Strategic Planning

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.<sup>10</sup> The main objective of the plan is to eliminate all existing anti-personnel mines on national territory by the March 2020 deadline.<sup>11</sup> In its Article 7 report for 2017, Chile submitted an updated annual clearance plan for 2018–20 taking into account contamination newly found in San Pedro de Atacama during 2017.<sup>12</sup>

Table 2: Updated clearance plan

Year	Planned clearance (m <sup>2</sup> )
2018	1,388,304
2019	3,664,338
2020	50,600
<b>Total</b>	<b>5,103,242</b>

Annually, CNAD issues a National Directive on the Execution of Demining Activities from the Government of Chile, which contains a set of provisions and tasks that supports the planning of demining activities.<sup>13</sup>

## Legislation and Standards

In May 2002, Supreme Decree No.79 created CNAD as an advisory body to the President of the Republic and interministerial coordinator to support the fulfilment of the APMBC.<sup>14</sup>

The International Mine Action Standards (IMAS) have been incorporated into the processes for the development of demining operations.<sup>15</sup> In addition, Chile developed a joint demining manual for its armed forces in 2014, which includes procedures for destruction of unexploded ordnance (UXO).<sup>16</sup>

## Quality Management

Chile conducts both Quality Assurance (QA) and Quality Control (QC) as part of its quality management system. QA is used to continually evaluate demining operations in accordance with acceptance criteria established by CNAD. QC inspection verifies the quality of the clearance process to ensure all mines have been removed and to the required depth before certification is granted.<sup>17</sup>

## Information Management

Since 2003, Chile has been using the Information Management System for Mine Action (IMSMA). During 2017, Chile upgraded to Version 6 of IMSMA 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 around clearance.<sup>18</sup>

## Operators

Demining is conducted by the Army Corps of Engineers and the Navy Peace and Demining Division. Since 2008, mechanical assets have been used to support manual demining in Chile. During 2017, six machines were used in clearance operations (including two Minewolf MW370 and two Bozena 5+) in Arica and Parincota, Antofagasta, and Magallanes y Antártica Chilena. In 2017, a total of 207 deminers were deployed across seven teams.<sup>19</sup>

## LAND RELEASE

Chile cleared 0.86km<sup>2</sup> of mined area in 2017 (see Table 3), a huge reduction in output from 3.5km<sup>2</sup> in 2016. This decrease is due to the change of location of the mined areas from an area of desert coast, which allowed for more efficient clearance, to the highlands of the Arica and Parincota region, which are difficult to access and are located at high altitude (more than 4,000m above sea level) and subject to extreme weather conditions.<sup>20</sup> Chile also confirmed 2.3km<sup>2</sup> as contaminated with mines through technical survey.

## Survey in 2017

In October 2017, a technical survey was carried out in Seilao, Antofagasta, identifying suspected contamination of 2,279,112m<sup>2</sup>, an increase from the previous estimate of 1,971,780m<sup>2</sup>.<sup>21</sup>

## Clearance in 2017

Clearance in 2017 was conducted over 17 areas in four of the five contaminated regions (Antofagasta, Arica and Parincota, Magallanes y Antártica Chilena, and Tarapacá).

Table 3: Mine clearance in 2017<sup>22</sup>

Region	Areas subject to clearance	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed
Antofagasta	7	243,876	2,055	414
Arica and Parincota	3	409,457	2,905	992
Magallanes and Antártica Chilena	4	194,229	542	0
Tarapaca	3	7,618	226	0
<b>Totals</b>	<b>17</b>	<b>855,180</b>	<b>5,728</b>	<b>1,406</b>

AP = Anti-personnel AV = Anti-vehicle

## Deminer Safety

In March 2017, a deminer detonated an anti-personnel mine while carrying out technical survey of the Cerro Purichari minefield, resulting in serious injury to one of his legs.<sup>23</sup>

In August 2017, a deminer detonated an anti-personnel mine while carrying out clearance in the “Pampa Blanca” sector of the General Lagos district, in the Arica and Parinacota Region, resulting in serious injuries to one of his legs.<sup>24</sup>

## Progress in 2018

Chile expected to reach 91.75% of total clearance in 2018. In the Antofagasta region, Chile will conduct further survey of the newly identified Seilao hazardous area in San Pedro de Atacama to more accurately determine the contaminated area. Chile will begin demining operations in Isla Deceit and/or Freycinet in the region of Magallanes and Chilean Antarctica.<sup>25</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB (and in accordance with the eight-year extension granted by states parties in 2011), Chile 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 2020. It is unclear whether Chile will achieve the clearance output in its updated clearance plan.

Chile’s original Article 5 deadline was 1 March 2012 but in 2011 Chile submitted a request for, and was granted, an Article 5 deadline extension to 1 March 2020. Chile cited the extreme climate and challenging topographical conditions as barriers to it being able to complete clearance as planned.

Chile may still be able to meet its extended deadline. At the Sixteenth Meeting of States Parties, Chile stated that as at December 2017 it had achieved “85.57%” of

total clearance and was planning to achieve “91.75%” by the end of 2018 (see Table 4).<sup>26</sup> However, this calculation is based on the number of mined areas rather than the size of the mined areas, and the total number of mined areas (194) is different from the figure given in its 2011 Article 5 deadline extension request (199) and its latest Article 7 Report (147/151).<sup>27</sup> Despite only clearing 0.86km<sup>2</sup> of its forecast 3.24km<sup>2</sup> in 2017 Chile has submitted an updated clearance plan for 2018–2020 that includes all the remaining contamination.<sup>28</sup> In previous years, Chile submitted clearance plans that contained estimates that were more than the amount of area that had been indicated by Chile as remaining to be addressed.<sup>29</sup> Chile reiterated its commitment to fulfil its Article 5 obligations by 2020 in its statement to the Sixteenth Meeting of States Parties and in its statement at the 2018 Intersessional Meetings.<sup>30</sup>

**Table 4: Overall progress in release of mined areas (at 7 December 2017)<sup>31</sup>**

Region	Number of mined areas		% of progress
	Total	Cleared	
Arica and Parinacota	89	81	91.01
Tarapacá	8	5	62.50
Antofagasta	66	59	89.39
Metropolitan	1	1	100
Valparaíso	2	1	50
Magellan	28	19	67.86
<b>Totals</b>	<b>194</b>	<b>166</b>	<b>85.57</b>

Chile is moving into the final phase of operations but, by its own admission, will face considerable challenges to implementation from the climate and topology. The mined areas in the Altiplano and the Austral Islands are difficult to access and are subject to heavy rains and snow which restricts the length of the demining season.<sup>32</sup>

Demining operations are fully funded by the Government of Chile. In 2017, \$4,325,761 was allocated to the demining programme, which fell to \$4,249,207 in 2018. The amount allocated corresponds to the planned budget.<sup>33</sup>

**Table 5: Clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )	Extension request forecast (km <sup>2</sup> )
2017	0.86	3.24
2016	3.52	1.68
2015	1.89	0.93
2014	2.14	4.22
2013	0.71	1.41
<b>Totals</b>	<b>9.12</b>	<b>11.48</b>

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- 1 Email from Col. Andres Caceres Cuadra, Executive Secretary, National Demining Commission (Comisión Nacional de Desminado, CNAD), 12 July 2018.
- 2 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 3 Article 7 Report (for 2009), Form I.
- 4 Article 7 Report (for 2017), Form C; and email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018. There is a small disparity in Form F of the Article 7 report where, in Table 2.5, all outstanding mined areas are reported as confirmed hazardous areas.
- 5 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 6 Article 7 Report (for 2015), Form C.
- 7 Agence France-Presse, "Dominicano gravemente herido al pisar mina en frontera Chile-Perú", *24horas.cl*, 21 May 2016, at: <http://www.24horas.cl/nacional/dominicano-gravemente-herido-al-pisar-mina-en-frontera-chile-peru-2022784>.
- "Land mine explodes on Chile border, injuring two Peruvians", *Peru Reports*, 7 September 2016, at: <https://perureports.com/2016/09/07/land-mine-explodes-chile-border-injuring-two-peruvians/>.
- 8 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 9 "Chile investiga un fraude de medio millón de dólares en el seno de la Comisión de Desminado" ("Chile investigates half a million dollar fraud at the Demining Commission"), *Infodefensa.com*, 28 December 2015.
- 10 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.
- 11 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 12 Article 7 Report (for 2017), Form F2.4.
- 13 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 14 Article 7 Report (for 2017), Form A3.
- 15 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 16 Manual No. MDO-90402. Article 7 Report (for 2015), Form F2.1.
- 17 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 18 Ibid.
- 19 Ibid.
- 20 Ibid.
- 21 Article 7 Report (for 2017), Form F.
- 22 Ibid; and email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 23 Article 7 Report (for 2017), Form F.
- 24 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 25 Ibid.
- 26 Statement of Chile, 16<sup>th</sup> Meeting of States Parties, Vienna, 18–21 December 2017.
- 27 Ibid., and Article 7 Report (for 2017) Form F, and Article 5 deadline Extension Request, March 2011, p. 9.
- 28 Article 7 Report (for 2017) Form F.
- 29 Conclusions on the implementation of Article 5, 16<sup>th</sup> Meeting of States Parties, 18–21 December 2017
- 30 Statements of Chile, 16<sup>th</sup> Meeting of States Parties, Vienna, 18–21 December 2017; and Intersessional Meetings, Geneva, 5–8 June 2018.
- 31 Statement of Chile, 16<sup>th</sup> Meeting of States Parties, Vienna, 18–21 December 2017.
- 32 Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
- 33 Ibid.

# COLOMBIA

**ARTICLE 5 DEADLINE: 1 MARCH 2021**  
(NOT ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE	2017	2016
Problem understood	3	5
Target date for completion of mine clearance	4	5
Targeted clearance	6	6
Efficient clearance	5	5
National funding of programme	7	7
Timely clearance	4	5
Land-release system in place	6	5
National mine action standards	8	7
Reporting on progress	5	6
Improving performance	7	7
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.5</b>	<b>5.8</b>

## PERFORMANCE COMMENTARY

Colombia's clearance output increased in 2017 as did demining capacity within the country, with Norwegian People's Aid (NPA), Humanity and Inclusion (HI) and the Campaña Colombiana Contra Minas (CCCM) all commencing humanitarian demining during the year. However, Colombia's mine action programme is still beset by bureaucratic obstacles, such as poor coordination and tasking, which are impeding efficient mine survey and clearance, and putting in jeopardy the peace dividend for mine action. Colombia introduced a number of new national mine action standards in 2017,

including for clearance, mechanical demining, mine detection dogs (MDDs) and technical survey, which should improve operational efficiency if implemented effectively. A number of operators experienced difficulties with the processes around monitoring and accreditation, which impeded their work. There are inconsistencies in the survey and clearance data that was being reported by the Dirección para la Acción Integral contra Minas Antipersonal - Descontamina Colombia and the operators in 2017, a reflection of ongoing problems in data management.

## RECOMMENDATIONS FOR ACTION

- Colombia should conduct a baseline survey to elaborate a meaningful understanding of contamination and to accelerate significantly clearance of remaining mined areas in accordance with its obligations under Article 5 of the Anti-Personnel Mine Ban Convention (APMBC).
- Colombia should ensure that data is recorded on the Information Management System for Mine Action (IMSMA) database according to International Mine Action Standards (IMAS) terminology rather than the "events" which are currently reported. The newly introduced "Glossary of Terms" should help with this. The authorities should also review the entries currently recorded as "events" in the database so that, as far as possible, they match actual anti-personnel mine contamination.
- Colombia should undertake a comprehensive review of mine action data to ensure that the systematic collection of data from operators as well as the information on new "events" is used to prioritise demining tasks and allocation of resources efficiently.
- Colombia needs to streamline procedures for quality management and apply them consistently to all operators to prevent unnecessary delays to demining operations.
- Colombia should support operators to fully use both non-technical and technical survey to more accurately identify and delineate areas of confirmed contamination, and cancel or reduce areas where evidence of mines is lacking.
- Colombia should report more accurately and consistently on land released through survey and clearance.
- Colombia should conduct a mid-term impact evaluation to assess whether the outcomes set in its strategic plan for 2016–21 are being met or whether the outcomes need revision.

## CONTAMINATION

Colombia's mine problem is the result of decades of conflict with non-state armed groups (NSAGs). The precise extent of contamination remains highly uncertain, but as at October 2018 at least 28 of Colombia's 32 departments were suspected to have a mine threat.<sup>1</sup> As at August 2018, Colombia still lacked an accurate understanding of total contamination, which according to its strategic plan for 2016–21 was 51km<sup>2</sup>.<sup>2</sup> This estimate is unreliable. It is based on a calculation that takes 15% of the number of IMSMA events from 1990 to 2009 and adds them to 24% of the number IMSMA events from 2010 to 2015, with a further 20% added for both periods. These percentages were calculated based on information from historic humanitarian demining operations. The figure it generates is then multiplied by

an estimated average confirmed hazardous area (CHA) of 5,000m<sup>2</sup>, which generated the baseline contamination figure for the country.<sup>3</sup> In its Article 7 report for 2017, Colombia reduced this estimate of contamination to 46km<sup>2</sup> based on the demining work that has been conducted.<sup>4</sup>

Colombia continues to report on "events" included in its database. From 1990 to 2001, the information about accidents and incidents due to anti-personnel mines, unexploded ordnance (UXO), and improvised explosive devices (IEDs) came from both governmental sources, specifically the Department of Administrative Security, and non-governmental sources, including unconfirmed media reports. Since 2002, a more systematic

registration of the effects of landmines, UXO and IEDs began. It was mandated by Article 13 of Law 759/02 that the Ministry of Defence must submit monthly reports of all the events related to anti-personnel mines that were known by their troops. Similarly, local authorities are duty-bound by Law 759/02 to report on any mine accidents or incidents. In addition, information was provided by relevant government departments and health services at a local level and at a national level by the Ministry of the Environment and Sustainable Development and the Ministry of Health among others.<sup>5</sup> As at December 2017, 25,767 of these “events” had been registered in IMSMA across 530 municipalities.<sup>6</sup> When an operator is assigned a task they are given a map of the area and information about the “events” that have been recorded in that area which they must then investigate.<sup>7</sup> However, according to information provided during interviews with some of the operators these IMSMA events are notoriously unreliable, with operators reporting that often they do not correspond to the presence of either landmines or UXO.<sup>8</sup> In Vista Hermosa in the Meta department, for example, of the 15 IMSMA events contained in the task allocation, 12 were cancelled by NPA but after conducting non-technical survey in the area, they also found contamination in areas where no IMSMA events had been reported.<sup>9</sup> Sometimes the events are duplications (when a mine is reported and then cleared by the army, these “events” are duplicated rather than cancelling each other out), or incorrect coordinates are given, or the report of a mine or UXO is actually a hand grenade that has been confiscated by the army. According to Descontamina Colombia, the national mine action centre, IMSMA-recorded events of the military confiscating weapons were ended in 2017.<sup>10</sup>

Descontamina Colombia reported that, by the end of 2017, it had recorded 644 CHAs covering 2,045,425m<sup>2</sup> and a further 691 suspected hazardous areas (SHAs) covering 2,920,525m<sup>2</sup> across 79 municipalities.<sup>11</sup> Of these, 546 were in Antioquia, the department with the largest number of landmine victims.<sup>12</sup> In its Article 7 transparency report for 2017 Colombia reported that 606 suspected mined areas had been recorded between 1990 and 2017, a reduction from 647 at the end of the previous year, and 671 at the end of 2015.<sup>13</sup>

As at July 2018, Descontamina Colombia reported that anti-personnel mines had claimed 11,615 victims between 1990 and 31 July 2018.<sup>14</sup> Of these, the department of Antioquia had the highest number (2,542), followed by Meta (1,136). Vista Hermosa municipality in the department of Meta is the municipality with the largest number of victims, at 368.<sup>15</sup> Colombia reported 56 mine victims in 2017, of which 40 were civilians, a reduction from the 89 victims reported in 2016. As at June 2018, 73 victims had been reported, of which 47 were civilians, suggesting the number of victims is rising significantly.<sup>16</sup>

In January 2017, the United Nations Mine Action Service (UNMAS) had reported that incidents involving mines and UXO have been reported in 673 of Colombia's 1,122 municipalities since 1990.<sup>17</sup> Based on the Descontamina Colombia analysis of incident trends, of those 673, 199 municipalities are considered to be highly impacted (type I), 291 moderately impacted (type II), and 183 suffer from low impact (type III).<sup>18</sup>

All of the landmines remaining in Colombia are said to have been laid by NSAGs and are essentially victim or command-operated, artisanal explosive devices. According to The HALO Trust, mined areas in Colombia are low-density, nuisance minefields that average 4,000m<sup>2</sup> in size.<sup>19</sup> Although contamination levels are relatively low, each mined area can significantly impact rural communities across the country. As there was little, if any, mapping of mined areas by NSAGs and the intended victims were the military or para-military, local communities were often informed that certain areas were mined, though no specifics were given. This has led to a widespread attitude that mines are everywhere and local people are afraid to use vast areas of land for the fear of mines, despite there being little real evidence of their presence.<sup>20</sup>

Mines of an improvised nature were planted in isolated rural areas by NSAG factions to protect strategic positions; often coca cultivations whose crops were used 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.<sup>21</sup> The impact of mine contamination is social, economic, and humanitarian, as the presence of mines divides and isolates rural communities, prevents agricultural land that is suspected of contamination being used, and reduces access to services such as schools and rural development projects.<sup>22</sup>

As at September 2017, Colombia had more than 7 million internally displaced persons (IDPs), which amounts to almost 15% of the country's total population who have been displaced by the more than 50-year-long conflict.<sup>23</sup> There is a clear link between mine contamination and displacement, as displaced people cannot return to areas where there is a risk of landmines. The presence of mines acts as an obstacle to land restitution as well as to the return of IDPs because Colombian law states that victims of the conflict cannot knowingly be endangered. Demining and survey are therefore essential to allow the safe return of Colombia's vast displaced population, as well as to enable rural communities to recover from years of persecution and ensure the safety of local residents in the long term.<sup>24</sup>

On 7 March 2015, negotiators for the Government of Colombia and the FARC announced that agreement had been reached by the two parties on demining.<sup>25</sup> According to a joint statement, the government and the FARC would select a number of pilot zones with the highest level of threat from anti-personnel mines, improvised explosive devices (IEDs), UXO, or other explosive remnants of war (ERW). Following signature in August 2015 of an agreement with the European Union for support to the Pilot Project on Humanitarian Demining, NPA was overseeing non-technical survey of SHAs and technical survey and clearance of CHAs.<sup>26</sup> This led to the clearance of two areas: the villages of El Orejón (municipality of Briceño, Department of Antioquia) and Santa Helena (municipality of Mesetas, Department of Meta). By December 2016, a total of 40,723m<sup>2</sup> had been cleared, eight contaminated areas had been identified, and 67 mines were destroyed.<sup>27</sup>

On 7 August 2018, Iván Duque Márquez, winner of Colombia's presidential election, assumed office. President Duque, and his political mentor former president Uribe, have refused to recognize key pillars of the peace deal and have promised to "modify" it once in power. This fosters further uncertainty in a country whose transition to peace is under threat from groups struggling for power in the vacuum left behind by a demobilised FARC. This includes FARC dissidents, the National Liberation Army (ELN), and drug-trafficking groups, especially the largest among them, the Gaitán Self-Defence Forces. Most of the fight for control is concentrated in about one-quarter of the country's municipalities, just 5% of which are under state control. For humanitarian demining groups this impacts their ability to conduct survey and clearance.<sup>28</sup>

Mine action operations will only be undertaken with the local community's agreement and in areas where mistrust of the state is high community members are often sceptical of the operator's intentions. In 2017–18, in the Vista Hermosa municipality, The HALO Trust and NPA have had their vehicles seized and burned while CCCM had their vehicle seized for a month as a warning that they were not welcome to conduct demining in certain areas.<sup>29</sup> Unfortunately, these are often areas with the highest suspected contamination. Humanitarian demining operators will not conduct demining in areas where they have not received agreement from the local community. In ELN strongholds, such as the coastal department of Chocó, it has been reported that actors are emplacing mines in order to protect their territory.<sup>30</sup>

## PROGRAMME MANAGEMENT

Established on 30 July 2002 under Law No. 759/2002, the National Interministerial Commission on Anti-personnel Mine Action (Comisión Intersectorial Nacional para la Acción contra Minas Antipersonal, CINAMAP) was the national mine action authority responsible for implementing the APMBC, including developing a national plan and policy, and coordinating international assistance.<sup>31</sup>

The Presidential Programme for Comprehensive Mine Action (Programa Presidencial para la Acción Integral contra Minas Antipersonal, PAICMA) previously served as the technical secretary for CINAMAP, responsible for coordinating implementation of the 2009–2019 Integrated Mine Action Plan.<sup>32</sup> In September 2014, however, Decree 1649 modified the structure of the Presidency's Administrative Department, creating the Directorate for Comprehensive Mine Action (Dirección para la Acción Integral contra minas Antipersonal, DAICMA) to replace PAICMA. DAICMA retained the same mandate and functions as PAICMA; the only change being that DAICMA was now supporting the Minister-Advisor for Post-Conflict, Human Rights, and Security as well as the Minister-Advisor's office in the strategic management of the national mine action programme. In April 2017, following the adoption of a Presidential Decree, DAICMA became Dirección para la Acción Integral contra Minas Antipersonal – Descontamina Colombia, and 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 and regulating state and non-state operators, and elaborating and implementing national standards, though in practice it also serves as the national mine action centre.<sup>33</sup>

In 2011, Decree 3750 created the Instancia Interinstitucional de Desminado Humanitario (IIDH – Interinstitutional Court of Humanitarian Demining) which is composed of a representative from the Ministry of National Defense, 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 Defense and, determining and assigning demining tasks.<sup>34</sup>

Descontamina Colombia's ability to coordinate has come under scrutiny, as it has been locking in operators to tasks before the extent of the challenge is known and without a clear appreciation of operators' future capacities. In the view of UNMAS, in Descontamina Colombia's push to assign tasks demonstrating the peace accord's new opportunities, operators often deployed into new areas which were disconnected from their existing areas of operation, without prior consideration of their capacity and efficient resource deployment.<sup>35</sup> Descontamina Colombia are willing to permit international demining operators to swap tasks between themselves but see this as an internal organisational decision rather than something that should happen at a national level, and in reality very few tasks have been swapped.<sup>36</sup> 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.

## Strategic Planning

Colombia's APMBC Article 5 deadline extension request projected, improbably, that all mined areas would be released by 2020.<sup>37</sup> This will not occur. Colombia's 2011–13 operational plan was to address 6,000 dangerous and mined areas in 14 of 660 municipalities where the presence of mines is suspected, covering an estimated 15km<sup>2</sup>.<sup>38</sup> Colombia did not attain that target either.

Colombia was due to submit an operational plan for 2014–20 at the Thirteenth Meeting of States Parties in December 2013, but did not do so. Colombia did present a demining “action plan” for 2014–16 at the Third APMB Review Conference in Maputo in July 2014.<sup>39</sup> The plan foresaw a first phase of mine action in 91 municipalities and steadily increasing national army demining capacity to 54 units, as well as the number of non-technical survey teams to 15 by 2016.<sup>40</sup> By 2016, two new national standards had been adopted, seven non-state operators and two state operators had been accredited, and 1,342 people had been accredited by the OAS to conduct humanitarian demining.<sup>41</sup>

Colombia developed a five-year strategic plan for 2016–21. The aim of which is to address anti-personnel mine contamination in 199 high-impact municipalities, 291 medium-impact municipalities, and 183 low-impact municipalities, covering a total estimated area of 51km<sup>2</sup>.<sup>42</sup> As at August 2018, the suspicion of mines has been removed in 270 municipalities,<sup>43</sup> though in only 99 of these was this achieved through actual survey or clearance. Moreover, anti-personnel mines were found in only 17 of the 99 municipalities. In around 160 of the contaminated municipalities, access for humanitarian demining organisations is constrained by the prevailing security situation and therefore they have yet to be assigned for demining.<sup>44</sup>

Colombia prioritises its task allocation according to the IIDH and the Strategic Plan for Comprehensive Action against Antipersonnel Mines 2016–2021. The IIDH takes into account 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. In the strategic plan, municipalities have been categorised according to three typologies: type I comprise incidents involving anti-personnel mines or UXO registered on IMSMA since 2010; type II are incidents involving anti-personnel mines and UXO registered on IMSMA before 2010; and type III are IMSMA “events” without human impact.<sup>45</sup> Operators can only bid for tasks in type I areas while the armed forces have been assigned all type II and III areas, many of which it has been able to cancel and release through discussion with the local community and local security councils.<sup>46</sup>

As at December 2017, Descontamina Colombia reported that 27km<sup>2</sup> had been allocated for humanitarian demining operations: half of the total contamination estimated in the strategic plan.<sup>47</sup> It further reported that, by July 2018, two departments and two hundred and sixty-four municipalities had been liberated of the suspicion of mines, while 192 municipalities currently have mine action operations. As a result, it claims that 6.94km<sup>2</sup> of area has been “liberated” and 6,007 items destroyed since operations began. In terms of capacity, 5,692 personnel and 24 MDDs have been accredited for demining; and there are 12 mine action operators, including both national and civil society capacity.<sup>48</sup>

## Legislation and Standards

Colombia has legislation mandating the establishment of the CINAMAP, PAICMA, DAICMA, and most recently Descontamina Colombia, as well as the IIDH which acts as a decision-making body. Decree 3750 of 2011 also called for the elaboration of National Standards for Humanitarian Demining and regulates the external monitoring of demining operations. Decree 3750 defines humanitarian demining activities as non-technical survey, technical survey, and clearance.<sup>49</sup> In July 2017, Decree 1195 was promulgated with a view to reducing the impact of demining on the environment. The main objective of the decree is to outline the mitigation and correction measures that must be applied by operators when undertaking demining in National Parks and other areas of ecological value. This is intended to reassure the environmental authorities that mine clearance can take place in these areas without causing unnecessary ecological damage.<sup>50</sup>

Colombia now has 15 national mine action standards in place, including a glossary of mine action terms, up from just three when the 2016–21 strategic plan was launched.<sup>51</sup> In 2017, nine new national mine action standards were adopted, which include standards on clearance, mechanical demining, MDDs, and explosive ordnance disposal (EOD).<sup>52</sup> The national standard on technical survey was approved by Descontamina Colombia in December 2017.<sup>53</sup> The Swiss Foundation for Mine Action (FSD) and UNMAS have both been supporting Descontamina Colombia with the development and implementation of national standards.<sup>54</sup>

In 2017, ten existing national standards were modified, some more than once. According to Descontamina Colombia, most of the amendments were at the request of the operators.<sup>55</sup> In the case of task assignment and clearance, the national standards were modified three times during the year. This has caused difficulties for both the operators and the Organization of American States (OAS), as each modification of the standard means that operators’ standing operating procedures (SOPs) must also be changed, which then need to be approved by OAS. The national standard on non-technical survey has had seven modifications.<sup>56</sup> Operators have raised this with Descontamina Colombia, who have agreed to suspend modifications to standards to allow operators to develop more efficient operations using the standards that have been elaborated.<sup>57</sup>

## Quality Management

The OAS serves as the body for accreditation and monitoring of humanitarian demining in Colombia. They have received some criticism 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 of national standards and/or SOPs, leading to delays in operations.<sup>58</sup>

At the request of Descontamina Colombia, FSD has been seeking to build capacity in the OAS, including through revision of the non-conformity checklists and corresponding monitoring reports with the aim of improving processes in place by refocusing monitoring on quality assurance (QA), and quality control (QC), rather than on minor administrative non-conformities. As at August 2018, the new and simplified non-conformity checklist had been approved by Descontamina Colombia and the OAS but had not yet been implemented.<sup>59</sup> There have also been long waiting times after paperwork has been submitted, which has delayed operations. The HALO Trust reported that once a non-technical survey report has been submitted to the OAS there can be a significant delay before the report gets approved.<sup>60</sup> NPA waited 127 days for approval to use its mechanical assets, with MDD assets standing idle as a result, despite the dog teams having already been accredited.<sup>61</sup>

The OAS have also been accused of being too rigid in their processes which has hindered operators. For example, NPA reduced 5,278m<sup>2</sup> by technical survey in Loma Linda, Vista Hermosa, and although this was completed in February 2018, OAS have refused to approve the land release because the technical survey was not in the clearance plan, even though the clearance plan was written before the technical survey standard was approved.<sup>62</sup> According to Descontamina Colombia, the technical survey standard was valid before the clearance plan was approved.<sup>63</sup> The OAS is also responsible for the accreditation and re-accreditation of MDDs. Re-accreditation takes place annually at a centre in Guatavita, which is an hour outside of Bogota in an area with a very cold climate. MDDs must travel from their operation base to the OAS centre and with time for acclimatisation the MDDs are away from operations for a month, although this is dependent on how long the MDDs take to be accredited.<sup>64</sup>

As at August 2018, a new national standard in quality management was in the process of being implemented. This standard includes the implementation of confidence levels which will be ascribed to an operator and should improve efficiency. An operator with good confidence levels will be subject to less frequent visits from OAS, allowing them to focus on operators that need more support.<sup>65</sup>

Each operator carries out their own internal quality control in accordance with the provisions in the Quality Management national standard and their organisational SOPs. From June 2016 to June 2018, Descontamina Colombia had a team of Quality Managers that provided technical assistance to the operators on issues such as accreditation of personnel and demining techniques, interpretation of and compliance with national standards, and conflicts between the OAS and the operators.<sup>66</sup>

## Information Management

Poor information management has been a feature of Colombia's mine action programme since its inception. While lack of access has undoubtedly played a role in this, efforts to verify and consolidate meaningful mine action data have proved inadequate. Government Decree 1649 of 2014 assigned Descontamina Colombia responsibility for maintaining the IMSMA database and to "compile, systematise, centralise, and update relevant information" to serve as a basis for programme planning.<sup>67</sup> This remains a central challenge for the programme.

In July 2016, NPA began supporting Descontamina Colombia on information management with the purpose of developing and improving their information management capacities. The specific objective of the project was to ensure Descontamina had the capacity to manage IMSMA and all related tools and the flow of information from stakeholders, in order to plan and prioritise mine action activities without relying on external support.<sup>68</sup> This programme came to an end in 2018 and, in March, FSD took over information management support from NPA. Descontamina Colombia in conjunction with FSD has been training the OAS to use IMSMA and states that the quality of the database is improving. In Colombia, IMSMA is now available online.<sup>69</sup>

The "events" on the IMSMA database that form part of the prioritisation of demining are beset with errors, including duplications and inaccuracies. It has been suggested that Descontamina is not interested in cleaning up and improving the dataset, as the calculation for national baseline contamination is reliant on these figures. However, inaccurate data leads to inefficiencies at an operational level as operators waste time and resources investigating IMSMA events that do not correspond with actual contamination.<sup>70</sup>

## Operators

The Armed Forces former Humanitarian Demining Battalion (BIDES), now the Humanitarian Demining Brigade (Brigada de Desminado Humanitario (BRDH)), has been conducting humanitarian demining since 2005, when it began clearance of 35 military bases. It completed the clearance in 2010.<sup>71</sup> As at June 2018, it had been assigned tasks in 214 municipalities across the departments of Antioquia, Boyacá, Caldas, Caquetá, Casanare, Cauca, Cesar, Chocó, Córdoba, Cundimarca, Guaviare, Huila, Magdalena, Meta, Nariño, Putumayo, Quindío, Risaralda, Santander, Tolima, and Valle del Cauca.<sup>72</sup> As at October 2018, 4,450 personnel had been accredited as well as 18 MDDs and three mechanical assets.<sup>73</sup> As at September 2018, the OAS was investigated two incidents of an explosive item being found after clearance in Planadas and Pennsylvania had been conducted by MDDs.<sup>74</sup>

The Marine Corps Explosives and Demining Association (AEDIM) was created and activated through CARMA Decree 41 of 30 December 2014. It has a Humanitarian Demining company, made up of three platoons, and which conducts clearance and destruction of anti-personnel mines and ERW in areas under the jurisdiction of the National Navy.<sup>75</sup> As at June 2018, it had been assigned tasks in twelve municipalities across the departments of Bolivar and Sucre.<sup>76</sup> As at April 2018, 240 personnel had been accredited.<sup>77</sup>

In 2013, The HALO Trust became the first non-governmental organisation (NGO) to conduct demining in Colombia when it began clearance operations at the El Morro minefield, Nariño municipality, in Antioquia department.<sup>78</sup> In 2015–16, HALO Trust Colombia was conducting survey, mine clearance, risk education, and some victim assistance. Its main office was in Bogotá and operations were taking place in eight municipalities across three departments: Antioquia, Meta, and Tolima. Based on the peace agreement, Descontamina Colombia assigned HALO Trust 14 “rapid-response” municipalities for immediate post-conflict intervention. As at June 2018, HALO Trust had been assigned tasks in 23 municipalities across Antioquia, Cauca, Meta, Nariño, Putumayo, Tolima, and Valle del Cauca.<sup>79</sup>

In 2017, HALO Trust employed 347 operational personnel (split between non-technical survey and manual demining).<sup>80</sup> The HALO Trust employs a number of ex-combatants from various NSAGs when the respective donor’s policy allows it.<sup>81</sup> In 2018, HALO Trust was looking to develop its capacity and has acquired a mechanical asset for vegetation clearance. As at August 2018, it was in the process of developing its SOPs with the support of FSD and will begin using the mechanical asset once the SOPs have been approved. The HALO Trust is also conducting field trials of four MDDs in the department of Meta. As at September 2018, results suggest that weather conditions in Meta, with its high soil humidity and frequent heavy rainfall, impede the MDDs’ ability to consistently locate simulated explosive items. As such, The HALO Trust is considering relocating the MDDs to another location within Colombia to trial the dogs in a different climate. The HALO Trust conducts EOD using thermite or a disruptor, and in 2018 it purchased a drone. On a number of occasions, this was used together with thermite to identify if its use could be improved.<sup>82</sup>

NPA formally initiated a mine action programme in April 2015, having taken part in the peace talks between the government and the FARC that concerned demining. The first step in the process of implementing the agreement on demining was to conduct non-technical survey of suspected contamination in the departments of Meta and Antioquia. The parties chose two pilot projects, one in the village of El Orejón (Antioquia) and a second in the village of Santa Helena (Meta). NPA’s role has been to lead and supervise a mine clearance project as a trust-building exercise between the Government of Colombia and the FARC. The Colombian army has been conducting the mine clearance, with NPA providing verification with two MDD teams, while the FARC has given information on contaminated areas.<sup>83</sup>

In 2017, NPA was supporting the Demining Brigade with its MDD and dog handler training, including by sourcing funds for a project to support their puppy and breeding project.<sup>84</sup> NPA began conducting clearance operations with manual deminers in March 2017. In October 2017, MDD and mechanical assets were deployed with an immediate increase in productivity of 224%. NPA deployed almost 170 personnel in 2017 with five survey and seven clearance teams, including three teams of MDDs and three mechanical teams.<sup>85</sup> Since November 2017, NPA has employed FARC ex-combatants as “local guides” which has improved the safety and efficiency of clearance operations. As at June 2018, NPA had been assigned tasks in ten municipalities in the departments of Antioquia, Caquetá, Choco and Meta. As at August 2018, NPA were using a disruptor for EOD but were planning to acquire thermite.<sup>86</sup>

In 2018 NPA had two incidents where NPA manual capacity found mines after clearance had been conducted by MDD teams, one in April in Vista Hermosa and one in August in Briceno. NPA has conducted internal investigations as well as thorough MDD review from the Global Training Centre to assess the use of MDDs in Colombia and why incidents occurred. The incident in Briceno was also subject of formal Descontamina Board of Inquiry. All reports conclude that it was the way in which MDD assets were used and not the effectiveness of the assets as such that were the issue. NPA has developed detailed corrective action plans to address identified issues in the reports and is confident that MDDs are an effective asset for Colombian scenario when used correctly.<sup>87</sup>

CCCM began humanitarian demining work in Colombia in 2017. UNMAS have supported CCCM to go from an advocacy organisation to a demining operator, assisting in the development and review of operational plans and providing initial funding to CCCM for this transition.<sup>88</sup> CCCM conducts clearance using manual techniques only, though in December 2017 it presented a proposal for clearance using MDDs that was classified by the OAS as non-compliant in March 2018 and was under internal review as at October 2018.<sup>89</sup> In 2017, CCCM had five clearance teams with a total of twenty deminers, nine demining leaders/supervisors, and four paramedics.<sup>90</sup> CCCM also employs FARC ex-combatants as part of its survey and clearance teams. As at June 2018, CCCM had been assigned tasks in three municipalities across Antioquia, Cauca, and Huila.<sup>91</sup>

HI began humanitarian demining in Colombia in 2017. In 2017, HI employed a total of 62 personnel for non-technical survey and clearance.<sup>92</sup> HI currently conducts clearance using only manual demining but was hoping to start machine-assisted clearance in the course of 2018. HI plans to rent a tiller for vegetation clearance for three months in 2018. Once they have the mechanical asset in place, HI will consider the cost-benefit of MDDs.<sup>93</sup> As at September 2018, HI had begun operations in five municipalities across the departments of Caquetá, Cauca and Meta.<sup>94</sup> As at August 2018, HI had approval to use thermite and a disruptor for EOD and were planning to expand their capacity with a team undergoing EOD training.<sup>95</sup>

The Danish Demining Group (DDG) is in the process of setting up its mine action programme in Colombia and is currently providing mine risk education to affected communities in the departments of Meta and Cundinamarca. In March 2017, DDG received Phase 1 accreditation to conduct demining in Colombia.<sup>96</sup>

Humanicemos DH, the FARC demining organisation, was accredited in August 2017.<sup>97</sup> In 2017, NPA trained 28 ex-combatants in clearance and non-technical survey, ten of whom were also trained as section leaders and five as team leaders.<sup>98</sup> Between CCCM and Humanicemos DH, with UNMAS support, an additional 100 ex-combatants are trained in the same technical areas.<sup>99</sup> As at August 2018, 124 ex-combatants were awaiting accreditation.<sup>100</sup> Due to funding limitations of their main donors, the OAS is unable to QA/QC ex-combatant deminers. The Government of Colombia has therefore decided to mandate UNMAS to assume this role, though the formal mandate to do so was still unsigned as at September 2018. This has led to delays in Humanicemos being able to start clearance operations with personnel sitting idle while they wait for their accreditation.<sup>101</sup> The United States (US) still recognises the FARC as a terrorist organisation, which means that ex-combatants cannot be associated with any US-funded projects.<sup>102</sup>

Since 2010, UNMAS has been advising Descontamina Colombia (and its predecessor). UNMAS provides technical assistance to the national authority and provides training and capacity building with a focus on national operators. In 2016-17, as noted above, UNMAS worked closely with CCCM supporting them in the transition from advocacy to demining organisation. In 2018-19, UNMAS plans to work closely with Humanicemos DH to support capacity development with the ultimate aim of it becoming a fully self-sufficient operator. Depending on the progress of the peace process, UNMAS is ready to support possible peace-building pilot projects where (ex-)combatants could be working with the military to clear mines.<sup>103</sup>

FSD has been providing technical assistance to Descontamina Colombia since early 2016. In 2017, it provided capacity building with four specialists: one each for, MDDs, mechanical assets, environmental protection and EOD, supporting the development of its national mine action standards in these areas. FSD also supported the elaboration of Decree 1195 of 2017, which regulates the impact of demining on the environment. At the request of Descontamina Colombia, FSD has also been providing support to the OAS to improve processes and simplify the forms around SOPs and accreditation. In 2018, FSD planned to support implementation of the national mine action standards.<sup>104</sup>

## LAND RELEASE

In 2017, just under 1km<sup>2</sup> was released by clearance and survey, with under 0.4km<sup>2</sup> cleared and the remainder cancelled or reduced by survey. In 2016, Colombia cleared less than 0.3km<sup>2</sup> of mined area. Just under 1.2km<sup>2</sup> was “released” through data clean-up in 2017.<sup>105</sup> This occurs in low impact areas after discussions between the armed forces and the local security councils.<sup>106</sup> A further 1.2km<sup>2</sup> of land was confirmed as contaminated with anti-personnel mines.

## Survey in 2017

Colombia reported that in 2017, 110 SHAs were cancelled through non-technical survey covering 239,068m<sup>2</sup>, while 346,301m<sup>2</sup> was reduced by technical survey. A total of 192 areas were confirmed as contaminated with anti-personnel mines, covering 1,165,237m<sup>2</sup>.<sup>107</sup>

**Table 1: Survey in 2017<sup>108</sup>**

Department	Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )	Areas confirmed	Areas confirmed (m <sup>2</sup> )	Areas reduced by TS
Antioquia	BRDEH	5	24,947	23	97,766	69,200
Antioquia	HALO	13	26,082	32	105,330	5,500
Bolivar	AEDIM	3	29,742	4	37,565	29,742
Caldas	BRDEH	4	17,562	10	40,174	73,325
Caqueta	BRDEH	12	50,616	11	47,090	78,614
Cauca	HI	0	0	8	21,701	0
Huila	BRDEH	0	0	2	9,768	0
Huila	CCCM	0	0	9	16,435	0
Meta	NPA	0	0	8	70,055	0
Meta	BRDEH	4	4,346	17	366,424	1,600
Meta	CCCM	0	0	2	5,001	0
Meta	HI	1	400	10	34,284	0
Meta	HALO	40	28,274	14	86,039	0
Putumayo	BRDEH	0	0	1	2,382	0
Santander	BRDEH	4	9,442	0	0	36,165
Sucre	AEDIM	0	0	1	9,673	0
Tolima	BRDEH	16	44,800	15	85,368	50,467
Tolima	HALO	8	2,857	18	76,497	1,688
Valle Del Cauca	BRDEH	0	0	4	31,434	0
Valle Del Cauca	HALO	0	0	3	22,251	0
<b>Totals</b>		<b>110</b>	<b>239,068</b>	<b>192</b>	<b>1,165,237</b>	<b>346,301</b>

Operators are often conducting survey in communities that have been inaccessible in previous years due to the security situation and are sceptical of governmental initiatives. All the operators stressed the importance of community liaison and of working with local people when conducting non-technical survey as a way of both building relationships with the community and as a source of accurate information about the existence of contamination.<sup>109</sup> The HALO Trust, for example, spent four months on community liaison in Cauca to gain the trust of the local community before beginning non-technical survey.<sup>110</sup> NPA, The HALO Trust, and CCCM have been employing “local guides” who have either direct or indirect links with the FARC.<sup>111</sup> At one of their sites in Vista Hermosa, NPA’s information came from an ex FARC explosives expert who gave them exact information on how many mines had been planted and where.<sup>112</sup>

## Clearance in 2017

Colombia reported clearance of 383,951m<sup>2</sup> in 2017 across nine departments: Antioquia, Bolivar, Caldas, Caquetá, Cauca, Huila, Meta, Santander and Tolima, destroying 104 anti-personnel mines.<sup>113</sup>

Table 2: Mine clearance in 2017<sup>114</sup>

Department	Operator	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	UXO destroyed
Antioquia	BRDEH	21	62,325	31	3
Antioquia	HALO	12	60,200	21	0
Bolivar	AEDIM	8	30,390	0	1
Caldas	BRDEH	6	33,798	35	1
Caqueta	BRDEH	10	29,515	2	0
Cauca	HI	1	408	0	0
Huila	CCCM	1	3,591	0	0
Meta	BRDEH	5	31,090	3	1
Meta	CCCM	1	1,426	0	0
Meta	HALO	14	81,904	6	0
Santander	BRDEH	1	150	2	0
Tolima	BRDEH	4	8,298	4	6
Tolima	HALO	9	40,856	0	0
<b>Totals</b>		<b>93</b>	<b>383,951</b>	<b>104</b>	<b>12</b>

In 2017, a further 140 anti-personnel mines and 47 items of UXO were destroyed during EOD spot tasks.<sup>115</sup>

### Deminer Safety

In June 2017, an NPA vehicle was set on fire in Santa Helena, Mesetas municipality of the department of Meta by dissidents of the FARC-EP. NPA evacuated its personnel and has not been able to return to the area.<sup>116</sup>

In September 2017, while conducting a non-technical survey a deminer from the Humanitarian Demining Brigade was injured by a UXO.<sup>117</sup>

In April 2018, FARC dissidents in La Reforma, San Martin municipality in the department of Meta seized a CCCM vehicle and held it for just over a month before returning it to CCCM. When non-technical survey had been conducted in the area, the FARC dissidents had felt ignored but after consultation CCCM were allowed to conduct operations.<sup>118</sup>

In July 2018, The HALO Trust had a vehicle seized and set on fire in the village of Santander, Uribe municipality, in the department of Meta. An armed group of 15 FARC dissidents detained a team of four people conducting non-technical survey, forcing them to leave the vehicle before setting it on fire. The group threatened the non-technical survey team and informed them that they did not want The HALO Trust operating in the Uribe or Mesetas municipalities.<sup>119</sup>

### Progress in 2018

In 2018, Descontamina Colombia was aiming to increase the operational capacity and improve the efficiency of demining. It planned to establish a second Humanitarian Demining Brigade and increase the number of accredited deminers. It expects the operators to establish agreements with Humanicemos DH to improve and increase the mechanisms for receiving information from FARC ex-combatants.<sup>120</sup>

The HALO Trust has funding to sustain projects in all operational locations until the end of 2018 and beyond. In 2018, HALO Trust opened a fifth location serving the departments of Putumayo and Nariño, in the south of the country. HALO Trust's operations expanded considerably in 2017 with a similar level of expansion anticipated in 2018. HALO Trust is in the process of introducing a mechanical asset for vegetation clearance which should increase efficiency of its clearance programmes.<sup>121</sup>

NPA planned to improve productivity in 2018 with the introduction of a full demining toolbox. NPA will continue to collaborate with Humanicemos/FARC to ensure the inclusion of local guides into its operations. NPA has begun to use technical survey in its operations since the national standard was introduced in December 2017.<sup>122</sup>

In 2018, HI was seeking funding to acquire a mechanical demining asset and to increase its capacity by two non-technical survey teams and two clearance teams. HI has also been considering the possibility of transforming part of its teams into Multi-Task Teams (MTTs) in municipalities where EOD spot tasks are more needed than mine clearance.<sup>123</sup>

In 2018, CCCM aimed to improve its processes around information management and secure funding to begin demining operations in the remaining areas it has been allocated. CCCM is planning to introduce MDDs to its operations in 2019.<sup>124</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB (and in accordance with the ten-year extension granted by states parties in 2010), 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 1 March 2021. It is not on target to meet the deadline, though the current national strategic plan still envisions that Colombia will fulfil its demining obligations by 2021.

Colombia does not have a meaningful understanding of baseline contamination and its estimation of contamination at 51km<sup>2</sup> is based on IMSMA data that operators have found to be consistently unreliable. The report from Descontamina Colombia that 27km<sup>2</sup> of the contaminated area has been allocated for humanitarian demining operations may seem impressive but operators have found that tasks have been allocated in a way that does not allow them to work efficiently. Tasks may be spread across the country forcing operators to set up multiple location bases with all the resources that entails.

The areas that have so far been declared free of mines have had very low or even no contamination. The majority of the high-impact areas are not yet assigned due to the difficult security situation in those areas. The ongoing issues with security, with the rise of FARC dissidents, the ELN and drug traffickers, means that it is unlikely humanitarian demining organisations will be able to access these areas until the security situation changes.

Non-technical and technical survey are vital to efficient demining operations and are particularly important in Colombia when the initial information given at the task allocation stage has been found to be so unreliable. Non-technical survey, and the associated community liaison, is also vital to building trust with communities to enable access to these areas.

The national standard for technical survey was approved in 2017 and it is hoped that the greater use of non-technical and technical survey will more accurately determine the location and extent of actual contamination, and cancel areas not contaminated. Costs of demining are high in Colombia, on average between US\$8 and US\$20 dollars per square metre, and the amount of clearance varies widely depending on the demining techniques used and the terrain. In Briceño, NPA have been conducting manual excavation which per deminer is as little as only one to five square metres a day.<sup>125</sup> Descontamina Colombia reports that across all the operators productivity per deminer ranges from 5 to 20m<sup>2</sup> per day.<sup>126</sup>

There was a substantial increase in capacity in 2017 following the signature of the peace deal between the Colombian Government and the FARC-EP in 2016, with humanitarian demining playing an important part in the implementation of the peace process. Funding from the international community rose in 2018 and it is anticipated that funding will continue to rise as Colombia is still high on the agenda for many whilst the peace deal is implemented. It is difficult to predict whether funding will continue to rise year on year, and Colombia is at risk of donor fatigue if the demining programme does not begin to operate efficiently in the near term.

**Table 3: Mine clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )
2017	0.38
2016	0.29
2015	0.36
2014	0.54
2013	0.47
<b>Total</b>	<b>2.04</b>

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# CROATIA

**ARTICLE 5 DEADLINE: 1 MARCH 2019**  
(SEVEN-YEAR EXTENSION REQUESTED TO 1 MARCH 2026)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
<b>Problem understood</b>	7	7
<b>Target date for completion of mine clearance</b>	7	7
<b>Targeted clearance</b>	5	7
<b>Efficient clearance</b>	8	8
<b>National funding of programme</b>	7	7
<b>Timely clearance</b>	6	7
<b>Land-release system in place</b>	7	7
<b>National mine action standards</b>	6	6
<b>Reporting on progress</b>	7	7
<b>Improving performance</b>	5	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.5</b>	<b>6.9</b>

## PERFORMANCE COMMENTARY

Croatia's mine action programme performance in 2017 was again mixed, as it had been the previous year. Officially, annual clearance output of almost 30km<sup>2</sup> was 20% lower than the 38km<sup>2</sup> cleared in 2016 (reported to be due to a change in administrative reporting processes for recording clearance output, rather than a drop in actual clearance output), with almost 0.5km<sup>2</sup> of additional clearance by the Croatian Armed Forces of the 32km<sup>2</sup> of mined area on military facilities. Furthermore, 13 of the 73 mined areas cleared in 2017 did not contain mines, equating to roughly 10% of the total area cleared, and is proportionally a significant increase on 2016, when only 1% of the total area cleared was found not

to contain mines. This calls into question the efficiency of some of the demining operations, and indicates the need for better use of pre-clearance survey to confirm contamination before time- and cost-intensive full clearance is undertaken on mined areas recorded by the Croatian Mine Action Centre (CROMAC) as "confirmed". In more positive news, some 6.6km<sup>2</sup> was released by non-technical and technical survey in 2017, double that of the previous year. Furthermore, the CROMAC continued to make efforts to build its survey resources, employing members of the dissolved national demining organisation, MUNGOS, to bolster survey and quality control (QC) capacity.

## RECOMMENDATIONS FOR ACTION

- CROMAC should ensure that it has sufficient non-technical and technical survey capacity in place to meet the survey targets outlined in the 2018 Anti-Personnel Mine Ban Convention (APMBC) extension request, and to confirm evidence of contamination before full clearance is undertaken or to discredit suspected areas that are not contaminated.
- Croatia should ensure that its Ministry of Defence (MoD) has concrete plans and sufficient demining capacity in place to address mined area on military land, in line with the 2018 Article 5 deadline extension request.
- Much of the remaining mined area in Croatia is in forested and mountainous terrain. CROMAC should therefore fulfil the pledge in its 2018 extension request to explore the potential to better use mine detection dogs (MDDs) to enhance the efficiency of technical survey and clearance operations.
- Croatia should revisit the 2015 Law on Mine Action to rectify the unintended challenges it poses to the implementation of mine action operations.
- Croatia should assess the effectiveness of revised procedures in place to investigate demining accidents since the adoption of the 2015 Law, including whether it would be preferable to re-establish and strengthen CROMAC's role in accident investigation, given its technical expertise.

## CONTAMINATION

Croatia is affected by mines and, to a much lesser extent, explosive remnants of war (ERW), including cluster munition remnants (CMR), a legacy of four years of armed conflict associated with the break-up of the former Yugoslavia in the early 1990s (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Croatia for further information).

At the end of 2017, Croatia had a total of 411km<sup>2</sup> of mined area (0.73% of the entire land mass of Croatia), excluding military areas.<sup>1</sup> Of this total, 269km<sup>2</sup> across 57 sites was confirmed hazardous area (CHA), while mines were suspected to cover a further 142km<sup>2</sup>, across 47 suspected hazardous areas (SHAs) (see Table 1).<sup>2</sup> This represents a decrease compared to the 281km<sup>2</sup> across 64 CHAs, and 162km<sup>2</sup> across 52 SHAs, as at the end of the previous year.<sup>3</sup> A total of 30km<sup>2</sup> was released by clearance and 6.6km<sup>2</sup> by survey in 2017, while 5.7km<sup>2</sup> of previously unknown mined area was identified.<sup>4</sup>

A further 32.7km<sup>2</sup> of confirmed mined area exists in areas under military control, said to contain 25,299 anti-personnel mines and 1,040 anti-vehicle mines. More than 90% of this mined area is across three military training sites, but a barracks and three storage sites are also believed to be contaminated. The Demining Battalion of the Engineering Regiment is responsible for clearance of all military facilities.<sup>5</sup> The MoD submits its demining plan for military facilities to CROMAC annually.<sup>6</sup>

**Table 1: Mined area by county (at end-2017)\*7**

County	CHAs	Area (km <sup>2</sup> )	SHAs	Area (km <sup>2</sup> )
Karlovac	7	17.25	5	32.5
Lika-Senj	9	105.90	8	32.30
Osijek-Baranja	12	36.18	9	19.48
Požega-Slavonia	2	21.17	2	2.82
Split-Dalmatia	3	16.79	2	3.35
Sisak-Moslavina	10	42.44	9	28.13
Šibenik-Knin	7	16.14	6	6.08
Zadar	7	13.64	6	17.29
<b>Totals</b>	<b>57</b>	<b>269.51</b>	<b>47</b>	<b>141.95</b>

\* A further 31.4km<sup>2</sup> of mined area exists in areas under military control.<sup>8</sup>

Eight of Croatia's twenty-one counties are still mine-affected, containing an estimated 32,830 anti-personnel mines and 6,441 anti-vehicle mines.<sup>9</sup> This represents an increase in the estimated number of anti-vehicle mines, compared to the figure of 6,115 from the previous year. It is due to CROMAC having revised its estimate following a more detailed analysis of minefield records in preparation for its second Article 5 extension request.<sup>10</sup> Clearance in the county of Brod-Posavina was completed at the end of 2017.<sup>11</sup> Sisačko-moslavačka and Ličko-senjska counties are the most heavily contaminated with anti-personnel mines, containing an estimated 12,741 and 11,390 anti-personnel mines, respectively, and accounting for 73.5% of the total number of anti-personnel mines emplaced.<sup>12</sup>

In July 2017, media incorrectly reported that 34 landmine explosions had been triggered in southern Croatia, in an area thought to be mine-free, following the spread of a forest fire from neighbouring Montenegro.<sup>13</sup> However, this information was wrong, and the reported explosions were in fact caused by a local resident firing a gas-fuelled sound cannon to deter wild boars.<sup>14</sup>

The impact of mines in Croatia is predominantly socio-economic and at local level, preventing safe use of land for livestock and forestry-related activities. At the end of 2017, 89% of mine contamination was on forested land; 10% on agricultural land; and 1% on other areas (e.g. water, marshland, and coastal areas).<sup>15</sup> Of the total 411.5km<sup>2</sup> of combined SHA and CHA, 59.7% is defined as Nature 2000 protected area.<sup>16</sup> Much of the remaining mined area is in mountainous areas and has not been accessed for twenty years, so the terrain and conditions will pose challenges to demining.<sup>17</sup>

Croatia calculates that approximately 485,537 inhabitants, in 59 towns and municipalities in the eight affected counties, are directly exposed to the threat of mines.<sup>18</sup> However, there is comprehensive hazard marking of mined areas, and the last civilian victim of a mine incident in Croatia was reported in 2014, with the last mine incident involving a child a decade earlier, in 2004.<sup>19</sup>

## PROGRAMME MANAGEMENT

CROMAC was established on 19 February 1998 as the umbrella organisation for mine action coordination.<sup>20</sup> CROMAC is responsible for the collection, processing, and recording of data on mine and ERW contamination, survey, and clearance; marking of contaminated areas; non-technical survey; QC of clearance; technical survey, and the planning of demining and technical survey operations.<sup>21</sup> CROMAC is accountable to the government of Croatia through the Managing Board (formerly known as the CROMAC Council) whose members are representatives of the relevant ministries and other stakeholders, appointed by the government.<sup>22</sup>

The mandate of the previous government-appointed members expired in August 2016,<sup>23</sup> and between August 2016 and the establishment of the CROMAC council by Government Decree in July 2017, the council did not meet monthly, as was foreseen. During this period, the lack of a government decree posed administrative challenges, such as delay in the CROMAC's annual

workplan being sent for government approval as well as restrictions regarding recruitment.<sup>24</sup> A new Director of CROMAC, Zdravko Modrušan, was appointed at the end of September 2017.<sup>25</sup>

In April 2012, the government created the Office for Mine Action (OMA), reporting to the Prime Minister's office, to function as a focal point for mine action, strengthen coordination among stakeholders and funding agencies, and raise public awareness about mine and ERW hazards.<sup>26</sup> The OMA does not sit above CROMAC; rather, it is the government institution dealing with the political aspects of mine action whereas CROMAC deals with operations.<sup>27</sup> The OMA includes a Unit for European Union (EU) Funds, tasked with promoting access to a range of EU funds to support the mine action sector.<sup>28</sup> The establishment of the OMA has elevated the status of mine action within the country as it can politically pressure the government and international actors in ways that CROMAC, as a technical body, cannot.<sup>29</sup>

## Strategic Planning

CROMAC has a National Mine Action Strategy 2009–2019, which was approved by the Croatian Parliament in September 2009, and includes the goal of all mine clearance by 2019.<sup>30</sup> Croatia subsequently submitted a request to extend its APMB Article 5 deadline from 1 March 2019 to 1 March 2026.

Croatia's initial 2008 Article 5 deadline extension request set out annual demining targets and strategic goals, including elimination of the mine threat to housing and areas planned for the return of displaced people (by 2010); concerning infrastructure (by 2011); on agricultural land (by 2013); and in forest areas (by 2018).<sup>31</sup> While clearance of the mine threat to housing and infrastructure was completed, Croatia missed its targets on agricultural land and forested area.

In its 2018 Article 5 deadline extension request, Croatia has prioritised the remaining mined areas according to those which affect safety; those which pose barriers to the socio-economic development; and those that impact ecology in other ways. While priorities at the operative level are elaborated in annual demining action plans, Croatia's goal is to clear all areas intended for agriculture by the end of 2018 and to demine all known minefields by the end of 2024.<sup>32</sup> In addition, Croatia plans to complete clearance of all CMR by the end of 2018.

Based on the approved funding, CROMAC drafts annual workplans which are submitted to the responsible ministries, the OMA, and other state bodies for comment and approval.<sup>33</sup> The national annual mine action plan for 2018 was officially approved by the Croatian government in March 2018.<sup>34</sup>

## Legislation and Standards

A new Mine Action Law was adopted by the Croatian Parliament on 21 October 2015, incorporating developments from the latest International Mine Action Standards (IMAS), and specifically those relating to the use of technical survey to confirm the presence of contamination or discredit it in an SHA.<sup>35</sup> The 2015 law introduces a new procedure for "supplementary general survey" (i.e. non-technical survey) and enables "exclusion" (i.e. reduction) of SHAs through technical survey, which was not possible under the previous law.<sup>36</sup> Under the new law, CROMAC can use technical survey to release land, and to better define and confirm minefields for which it has no record.<sup>37</sup> The 2015 Law on Mine Action has eliminated the need for standing operating procedures (SOPs), as all aspects of mine action are now clearly defined in the new law.<sup>38</sup> National mine action standards are also encompassed within it.<sup>39</sup>

The 2015 Law, the elaboration of which was initiated by the OMA with the text drafted by the Ministry of Interior, marks an improvement in certain respects on earlier operational procedure (for instance, by permitting land release through technical survey), but also poses challenges to the efficient and effective running of

Croatia's mine action programme. For instance, under the new law, CROMAC staff no longer have the authority to control personnel and technical equipment prior to and during demining operations, and instead only undertake QC of executed demining operations.<sup>40</sup> Furthermore, the 2015 Law has limited CROMAC's supervision of commercial operators, including with regard to decisions relating to the rates of demining, the level of pressure faced by companies, and quality assurance (QA).<sup>41</sup>

The new law reportedly works in a more prescriptive way, with significant sanction for failure to comply, but lacking preventive measures to combine safety and promote better quality of work.<sup>42</sup> Another consequence of the new law is that CROMAC no longer has responsibility for investigating demining accidents. This responsibility now lies with the State Attorney, under the oversight of the Ministry of Interior, rather than with the body with the requisite technical expertise. CROMAC only receives accident report summaries from the Ministry.<sup>43</sup>

Article 143 of the Law on Mine Action required that by-laws be adopted to cover a number of issues, including demining methodology. Accordingly, a working group under the Ministry of Interior developed two supplementary regulations. The first by-law, "Regulations on demining, quality control, non-technical and technical surveys and marking of suspected hazardous areas", entered into force in May 2016, and included, among other aspects, distinct technical survey procedures for mines and CMR, respectively. The second by-law, "Regulations on personal supervisory booklet and ID card of mine action employees and record forms", entered into force in June 2016.<sup>44</sup>

In March 2017, the amendments to the "By-law on the Method of Conducting Demining Operations, Quality Control, General and Technical Survey and Marking of Suspected Hazardous Area", were published in the Official Gazette, after which they entered into force.<sup>45</sup> Amendments adopted through this by-law elaborate in more detail the provisions in the 2015 Law on Mine Action relating to the implementation of demining activities. Adoption of the amended by-law is said to require that demining activities be systematically monitored "in order to eliminate or correct possible deficiencies or imperfections that slow down or hamper the demining process".<sup>46</sup> Unfortunately, however, it is said that the by-law does not help to rectify the negative impacts of the 2015 demining law on efficient and effective implementation of clearance operations. Instead, CROMAC believes it further weakens the final QC criteria for demined areas.<sup>47</sup>

Under the 2015 Law, the Ministry of Interior assesses authorised legal entities to conduct demining; this was formerly CROMAC's responsibility.<sup>48</sup> With regard to accreditation, the Ministry of Interior now provides three separate permits: approval for manual mine detection, approval for mechanical mine detection, and approval for operations by mine and UXO detection dogs. This replaces the former unified accreditation license.<sup>49</sup>

## Quality Management

With the adoption of the 2015 Law on Mine Action, CROMAC now undertakes only QC of executed demining operations,<sup>50</sup> and QA operations are performed by the Ministry of Interior.<sup>51</sup> Supervision during and after survey and clearance has been replaced by ongoing QC of cleared land during demining operations, and final QC, when the company has reported completion of demining of an area. Required “ongoing QC” for clearance operators has increased to 5% of each worksite, no later than three working days from the last conducted QC, in order to increase safety and quality. In addition, CROMAC QC officers review a minimum of 5% of control samples at least every three days, and final quality control of 1% of the total demined surface is conducted by the QC committee. The committee is appointed by the director of CROMAC and consists of two authorised CROMAC employees and one representative of the Humanitarian Demining Inspectorate under the Ministry of Interior.<sup>52</sup>

The QC requirements of the 2015 Law are said to pose a significant capacity challenge for both operators and CROMAC.<sup>53</sup> The considerable increase in the area required to be subject to QC, in comparison with the 1996 Law on Humanitarian Demining, necessitated reorganization of CROMAC’s work, which negatively impacted its Article 5 implementation plans.<sup>54</sup>

## Information Management

For the purposes of information management, CROMAC established a mine information system (MIS), which is compliant with IMAS and customised to meet CROMAC’s needs. The MIS uses databases and a geo-information system (GIS), to deliver a fully integrated information management system.<sup>55</sup> The CROMAC MIS portal reportedly allows internet users insight into SHA/CHA.<sup>56</sup>

## Operators

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.<sup>57</sup>

As at 1 January 2018, 40 commercial companies, with a total capacity of 676 deminers (121 deminers, 28 “QA deminers”, and 11 QA officers), 45 machines, and 99 MDDs, were accredited to conduct mine and CMR clearance.<sup>58</sup> This represents roughly the same capacity as the previous year, but with an increase in use of MDDs.<sup>59</sup> NGOs are barred from competing for commercial tenders as CROMAC views their subsidy by other funds as unfair.<sup>60</sup>

The state-owned enterprise, MUNGOS, which was previously directly assigned a sufficient number of tasks by CROMAC to keep it solvent while it slowly phased down clearance operations,<sup>61</sup> was finally dissolved and its assets auctioned during the first half of 2018.<sup>62</sup> In December 2017, the Croatian government decided to transfer MUNGOS employees to CROMAC, to help enhance QC activities and increase survey capacity.<sup>63</sup>

As barriers to entry into the mine clearance market are relatively low there is considerable fragmentation. Of the 21 companies demining in 2017, 10 cleared less than one square kilometre (see Table 2).<sup>64</sup> The United Nations Development Programme (UNDP) 2014 needs assessment observed that in the years preceding the assessment the number of demining companies in Croatia had grown, but capacity overall had decreased.<sup>65</sup> A representative of the Croatian Employers’ Association (CEA) – Humanitarian Demining Association – reported that the 2015 Mine Action Law had resulted in an increase in the number of demining organisations in Croatia.<sup>66</sup> This rise is in part due to deminers becoming dissatisfied and starting up new firms, and the 2015 Law requires a minimum of only five deminers per company.<sup>67</sup> The current number of demining companies is disproportionate to the number of deminers, and according to a representative from CROMAC, it would be more realistic to have half the number of companies, but to ensure each one is properly managed.<sup>68</sup>

Lower demining costs are said to make it more difficult for firms to make a profit on clearance. Larger firms claimed they were hampered by earlier over-investment in mechanical assets and equipment based on assumptions that funding would match the levels outlined in the 2009–19 mine action strategy.<sup>69</sup> Some companies have sought to diversify with operations outside Croatia, but given the relatively higher wages of Croatian deminers, lack of international experience, and lack of brand recognition, they have found it difficult to compete for tenders.<sup>70</sup> An NGO representative claimed that the quality of demining suffers when the price of demining is low.<sup>71</sup> A director of a commercial demining firm echoed this concern, saying that lower prices put greater pressure on deminers to clear more square metres a day.<sup>72</sup> The Humanitarian Demining Association indicated that the 2015 Law on Mine Action has resulted in more pressure on deminers to work longer periods each year, as the new law does not set a minimum wage.<sup>73</sup> In 2018, CROMAC reported that the average price of demining operations had increased compared to the previous year, which it believed is due to market stabilisation activities in the mine action system.<sup>74</sup>

In 2014, CROMAC reported it had started issuing larger value tenders, to allow companies to reduce the cost of their operations, saying that this had provided an incentive for companies to do better planning and to cooperate with each other.<sup>75</sup> 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.<sup>76</sup>

However, bigger contracts, some of which covered areas as large as 5km<sup>2</sup>, resulted in companies needing to form large consortia to compete for the new tenders. It was envisaged that four or five companies would form each consortium, but CROMAC has seen instances of 25 companies per consortium, and even of 30 companies bidding together.<sup>77</sup> In some instances this has resulted in disputes over the allocation of funds and areas assigned for clearance within the consortia, often to the disadvantage of smaller organisations.<sup>78</sup> Very large project tenders are also more complicated to draft and demand more time and resources to administer and monitor.<sup>79</sup>

The new Acting Director of CROMAC has subsequently tended towards much smaller project sizes (0.5km<sup>2</sup>–1km<sup>2</sup>, excluding the EU polygons already procured), which encompass single, specific types of land, e.g. forested areas or agricultural land.<sup>80</sup> These are also easier to administer, monitor, and analyse.<sup>81</sup> 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 mine clearance.<sup>82</sup> However, CROMAC plans operations on a yearly basis, in accordance with the annual and three-year demining plans, which are set by the Government. CROMAC is unable to award multi-year contracts because it has to budget year-by-year, and in accordance with its own by-laws it is not possible to contract and reserve funds for the next year until the budget is set.<sup>83</sup> Tenders are awarded to the lowest priced bidder, but if bids are unusually low, CROMAC requests additional information on wages and other costs and tenders are rejected if the costs do not add up.<sup>84</sup>

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 drafted once the law is changed.<sup>85</sup> The Humanitarian Demining Association reported that it would be preferable if, where possible, technical survey was already undertaken on project tasks prior to tendering them, so that commercial companies have as much information as possible to accurately plan for the tender.<sup>86</sup>

With the adoption of the new law, which enables use of technical survey, CROMAC planned to target demining on confirmed mined areas and to conduct technical survey on the remaining SHA.<sup>87</sup> As noted previously, CROMAC took on employees from the dissolved national clearance operator MUNGOS at the end of 2017, to help increase survey and QC capacity. Use of MDDs, which are now easier to deploy under the 2015 Law, has also been increased and CROMAC plans to further explore how MDDs can be used to expedite release of land.<sup>88</sup>

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## LAND RELEASE

In 2017, nearly 30.4km<sup>2</sup> of mined area was released by clearance (29.9km<sup>2</sup> by operators working under the direction of CROMAC and a further 0.48km<sup>2</sup> by the Croatian army).

A further 6.6km<sup>2</sup> was released by technical survey and non-technical survey.<sup>89</sup>

### Survey in 2017

CROMAC released 6.6km<sup>2</sup> through technical and non-technical survey in 2017.<sup>90</sup> This is double the 3.16km<sup>2</sup> released through survey in 2016.<sup>91</sup> A further 5.7km<sup>2</sup> of previously unknown contamination was confirmed as mined in 2017.<sup>92</sup>

### Clearance in 2017

Commercial demining operators working under the direction of CROMAC cleared nearly 30km<sup>2</sup> across 73 mined areas in 2017, with the destruction of 1,271 anti-personnel mines, 18 anti-vehicle mines, and 519 items of UXO (see Table 2).<sup>93</sup> This is a 20% decrease on the 38km<sup>2</sup> cleared across 106 mined areas in 2016.<sup>94</sup> The main reason for this decrease is said to be a decree from the Ministry of Interior which changed the rules regarding what land can be formally reported as clearance output (i.e. “only the areas for which an official CROMAC confirmation of exclusion has been published”). According to CROMAC, the actual clearance output for 2017 was 38.5km<sup>2</sup>, but 8.6km<sup>2</sup> of this was not formally reported, because the “necessary administrative processes” had not yet been completed.<sup>95</sup> Of the 73 mined areas cleared in 2017, some 13 areas totalling some 3.17km<sup>2</sup>, were found not to contain mines.<sup>96</sup> This equates to roughly 10% of the total area cleared, and is proportionally a significant increase on 2016, when only 1% of the total area cleared was found not to contain mines.<sup>97</sup>

In addition, the Croatian army cleared just over 0.48km<sup>2</sup> of military facilities in 2017. No anti-personnel mines or anti-vehicle mines were discovered during army clearance operations, but 279 items of UXO were found and destroyed.<sup>98</sup> This is a small decrease in clearance output on the 0.45km<sup>2</sup> cleared in 2016.<sup>99</sup>

Also, as part of the continued “less arms, fewer tragedies” programme, the Croatian Police (under the Ministry of Interior), and in partnership with the UNDP, collected 122 anti-personnel mines and 22 anti-vehicle mines, in addition to explosives, hand grenades, and other weapons and explosive ordnance, which were subsequently transported to and destroyed at Croatian military facilities.<sup>100</sup>

Table 2: Mine clearance in 2017<sup>101</sup>

Operator	County	Areas cleared	Area cleared [m <sup>2</sup> ]
Alfa	Šibenik-Knin	1	4,080
Alfa	Karlovac	1	3,583
Capsula Interna	Zadar	2	320,337
Capsula Interna	Šibenik-Knin	1	180,526
Cor	Posavina	1	287,099
Cor	Šibenik-Knin	1	198,988
Cor	Zadar	1	268,844
Cor	Brod-Posavina	1	168,693
Cor	Sisak-Moslavina	1	761,149
Credo	Sisak-Moslavina	1	7,610
Diz-Eko	Sisak-Moslavina	2	989,555
Diz-Eko	Šibenik-Knin	2	718,263
Diz-Eko	Požega-Slavonia	2	896,934
Dok-Ing	Sisak-Moslavina	3	831,501
Dok-Ing	Zadar	1	994,398
Dok-Ing	Lika-Senj	1	642,427
Dok-Ing	Požega-Slavonia	1	167,127
Fas	Split-Dalmatia	1	68,348
Fas	Lika-Senj	1	2,092,518
Harpija	Zadar	3	243,046
Harpija	Sisak-Moslavina	1	109,945
Istraživač	Zadar	2	1,471,319
Istraživač	Sisak-Moslavina	2	817,116
Istraživač	Osijek-Baranja	2	1,876,734
Istraživač	Požega-Slavonia	1	268,443
Istraživač Benz	Sisak-Moslavina	1	70,242
Mapper	Šibenik-Knin	2	211,396
Mina Plus	Zadar	1	715,125
Mka Deming	Sisak-Moslavina	1	38,020
Mungos	Brod-Posavina	1	1,174,047
Mungos	Požega-Slavonia	1	407,594
Piper	Osijek-Baranja	1	511,492
Piper	Zadar	1	354,830
Piper	Požega-Slavonia	2	761,607
Piper	Šibenik-Knin	1	214,037
Piper	Sisak-Moslavina	1	455,717
Piton	Požega-Slavonia	1	209,110
Piton	Split-Dalmatia	1	1,016,836
Piton	Šibenik-Knin	1	183,448
Rumital	Šibenik-Knin	2	362,024
Rumital	Lika-Senj	2	1,547,461
Rumital	Sisak-Moslavina	1	2,086,603
Titan	Osijek-Baranja	1	355,643
Titan	Brod-Posavina	1	516,211
Titan	Šibenik-Knin	1	604,288
Titan	Split-Dalmatia	1	755,389
Titan	Lika-Senj	1	29,358
Tnt-7	Brod-Posavina	1	62,693
Tornado	Zadar	1	86,438
Zeleni Kvadrat	Požega-Slavonia	2	355,855
Zeleni Kvadrat	Šibenik-Knin	2	352,852
Zeleni Kvadrat	Zadar	2	847,181
Zeleni Kvadrat	Brod-Posavina	1	67,923
Zeleni Kvadrat	Karlovac	1	1,010,570
Zeleni Kvadrat	Lika-Senj	1	132,494
<b>Totals</b>		<b>73</b>	<b>29,885,067</b>

AP = Anti-personnel AV = Anti-vehicle

In July 2016, Croatia signed a contract to demine its border with Hungary, as part of a cross-border cooperation project. The total area to be covered by the project was 1.46km<sup>2</sup>, and 1.45m<sup>2</sup> was demined in 2016, with the destruction of 137 anti-personnel mines, 103 anti-vehicle mines, and 66 items of UXO. Of the total project, 3,400m<sup>2</sup> remained to be cleared as at the end of 2016, as it was under water.<sup>102</sup> Demining of the remaining mined area was subsequently completed in the first half of 2017.<sup>103</sup>

As at April 2018, a further 1.2km<sup>2</sup> of suspected mine contamination remains on Croatia's border with Hungary, at a distance of 1km from the border.<sup>104</sup>

According to its 2017 Annual Plan of Mines Action, CROMAC had planned to release 58.3km<sup>2</sup> through survey and clearance in 2017. Actual 2017 output fell short of this goal, with a total of 36.5km<sup>2</sup> released in 2017 (29.9km<sup>2</sup> through clearance and 6.6km<sup>2</sup> through survey), in addition to the 0.49km<sup>2</sup> demined by the Croatian Armed Forces.<sup>105</sup>

## Deminer Safety

There were no mine-related accidents in 2017.<sup>106</sup> This is a significant decrease on the five mine-related accidents in 2016.<sup>107</sup>

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## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB (and in accordance with the ten-year extension request granted by states parties in 2008), 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 2019. Croatia will not meet the deadline and has requested a seven-year extension.

In November 2016, Croatia acknowledged that mine clearance activities in 2016 had not achieved the levels forecasted, but said that the Croatian government and all mine action stakeholders in Croatia were still determined to solve the mine problem and systematise mine action activities so that the main goal and objective of completion by 2019 was still attainable.<sup>108</sup> CROMAC had reported that achieving Article 5 completion depended solely on financing the necessary resources, as the demining capacities and experience are more than suitable. In May 2017, however, it highlighted that meeting the 2019 Article 5 deadline "will be very challenging", based on the overall pace of progress.<sup>109</sup> In December 2017, Croatia announced it would be submitting a request for an extension of its Article 5 deadline.<sup>110</sup>

In March 2018, Croatia submitted a seven-year extension request to its Article 5 deadline, until 1 March 2026, 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."<sup>111</sup> 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."<sup>112</sup>

During Croatia's first 2008 extension period (2009 to 2019), only half of its land release plan was achieved. Failure to meet the plan is attributed primarily to insufficient demining funds (especially for the period 2010–14, due to the global economic crisis), but also to: overly ambitious targets with regards to planned release of forested area; insufficient CROMAC capacity preventing the planned release of mined area through non-technical and technical survey; restriction of certain demining methods in national parks or Natura 2000 areas for environmental protection reasons; insufficient capacity, especially in QC following the 2015 Law on Mine Action; and the fact that 91.3km<sup>2</sup> of new mined area was identified in 2008–17.<sup>113</sup>

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, leaving only administrative/paperwork issues to be settled in the beginning of 2026.<sup>114</sup>

The remaining mined area to be addressed during the period of Croatia's second extension (1 March 2019 to 1 March 2026) covers 387.3 km<sup>2</sup>. Implementing the extension request will require clearance of CHA (with minefield records), totalling 173.9 km<sup>2</sup> (including 32km<sup>2</sup> of mined area on MoD land); clearance of CHA (with no minefield records, but for which there is evidence of contamination), totalling 79.5 km<sup>2</sup>; and survey and release of SHA totalling 133.9 km<sup>2</sup> (see Table 3).<sup>115</sup> Survey will take place between 2019 and 2025, but any resulting clearance required, expected to be completed by the end of 2025.<sup>116</sup>

**Table 3: Planned demining output in km<sup>2</sup> (2019–26)<sup>117</sup>**

Area		2019	2020	2021	2022	2023	2024	2025	1 March 2026	Totals
Demining of known mined area (with minefield records)	Authorised demining organisations	29.4	28.7	28.3	24.7	20.8	10	0	0	141.9
	Croatian Army (MoD area)	5	5	5	6	6	5	0	0	32
	Totals	34.4	33.7	33.3	30.7	26.8	15.0	0	0	173.9
Demining of mined area (no minefield records)		6	6	8.2	12.5	16.3	19.5	11	0	79.5
Survey		14	14	14	14	15.5	23.7	38.6	0	133.9
<b>Sum totals</b>		<b>54.4</b>	<b>53.7</b>	<b>55.5</b>	<b>57.2</b>	<b>58.6</b>	<b>58.2</b>	<b>49.7</b>	<b>0</b>	<b>387.3</b>

Considering the current capacity and the type of terrain and structure of remaining mined area, Croatia expects to be able to release roughly 56 km<sup>2</sup> per year over the next seven years.<sup>118</sup> For comparison, in the seven-year period 2011–17, a total of 440km<sup>2</sup> was released: 238km<sup>2</sup> through clearance and 202km<sup>2</sup> through survey, which included significant amounts of cancellation between 2011 and 2015.<sup>119</sup> Considering that most of the remaining mined area is in more challenging terrain, which will significantly reduce the use of demining machinery, the 253.4km<sup>2</sup> of clearance (and 133.9km<sup>2</sup> of survey) forecast over the next seven years is very ambitious, without increased capacity or improved efficiency.

Demining of military facilities/MoD area is conducted by Demining Battalion of the Engineering Regiment, according to plan made by the MoD.<sup>120</sup> The 5 to 6km<sup>2</sup> per year planned for in the 2018 extension request, is substantially more than 0.5km<sup>2</sup> per year cleared by the armed forces over the last two years.

Croatia reportedly has sufficient mine action capacity for release of remaining mined area on its territory by 2026 but asserts that completion of Article 5 by 2026 is contingent on securing the necessary budget.<sup>121</sup>

In 2017, Croatia contributed approximately €19 million (approx. US\$22 million) for demining, representing 40.75% of the total funds realised. The largest share of financing for demining (58.48%) was again from the EU, while funds through donations accounted for 0.76%.<sup>122</sup> The Annual Mine Action Plan for 2018 anticipated the continued high share of financing from EU funds, with total planned funds for mine clearance in 2018 from all sources amounting to €53.2 million.<sup>123</sup>

Funds from the EU have steadily increased over the last few years, surpassing funds from the state budget in recent years. CROMAC was in the final stage of securing funding from ESI funds (structural and cohesion funds, cross border cooperation fund, etc.), which gives it confidence in financing the implementation of the land release goals set in the 2018 extension request. Croatia expected to also secure funding from the public company “Croatian Forests” (state budget of forest management positions).<sup>124</sup>

Since the APMBBC entered into force, more than €727 million has been invested in humanitarian demining activities, of which Croatia’s national budget had accounted for the majority (€417 million) for the Article 5 implementation.<sup>125</sup> Croatia estimates that the fulfilment of its Article 5 obligations will cost a total of a further €459 million.<sup>126</sup> Funding for the remainder of demining under the extension request is expected to come from the national budget (52.3%); EU/ESI funds (21.8%); EU/ cross border cooperation with BiH (15.3%); state budget of forest management positions (10.2%); and from donations (0.4%).<sup>127</sup>

According to its 2018 Annual Plan of Mine Action, CROMAC planned to release a total of 56.5km<sup>2</sup> in 2018: 39.8km<sup>2</sup> through clearance and 16.7km<sup>2</sup> through technical survey and supplementary general survey (during which control samples are taken to determine the absence of mines and UXO).<sup>128</sup> CROMAC’s priorities for demining in 2018 included completion of CMR clearance, under Croatia’s Article 4 obligation under the Convention on Cluster Munitions; completion of mine clearance operations in Brodsko-Posavska county; and completion of clearance of all mined agricultural land. In addition, Croatia planned to continue clearance of economically prioritised forests in Karlovac, Lika-Senj, Požega-Slavonia, and Sisak-Moslavina counties, and to begin clearance of approximately 25km<sup>2</sup> of protected and Nature 2000 protected areas of Osijek-Baranja county.<sup>129</sup>

Operators are restricted in their use of demining machines on mountainous, rocky, or forested terrain.<sup>130</sup> Croatia’s 2018 extension request stresses that as the remaining areas to be cleared are mainly forested (89.7%), there will be a significant reduction in the use of demining machinery, especially medium and heavy machine.<sup>131</sup> Croatia foresees that use of demining machines will be limited to small, mobile machines that can be efficiently transported and used in such areas, and that the resulting increase in manual demining will reduce productivity and increase the cost of clearance and technical survey. Croatia plans 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.<sup>132</sup>

Almost 180km<sup>2</sup> of mined area in Croatia has been cleared over the last five years (see Table 4). However, while annual clearance output exceeds the targets in Croatia's 2009–19 mine action strategy,<sup>133</sup> the amount of land released by survey each year has fallen well behind the yearly targets outlined in the strategy. In order to ensure Croatia meets its Article 5 obligation by 1 March 2026, CROMAC will need to increase its capacity and implementation of survey operations, including the use of non-technical and technical survey to more accurately determine the size and location of contamination, and to cancel and reduce areas in which no evidence of contamination is found.

**Table 4: Mine clearance in 2012–17<sup>134</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	*30.4
2016	**38.8
2015	40.6
2014	37.7
2013	32.3
<b>Total</b>	<b>179.8</b>

\*Includes 0.48km<sup>2</sup> cleared by the Ministry of Defence

\*\*Includes 0.45km<sup>2</sup> cleared by the Ministry of Defence

1 Second APMBC Article 5 deadline Extension Request, 29 March 2018, p. 31 (hereafter, 2018 Article 5 deadline Extension Request).

2 APMBC Article 7 Report (for 2017), Form C; and email from Davor Laura, Head of Quality Control, CROMAC, 6 April 2018.

3 Email from Nataša Mateković, Assistant Director and Head of Planning and Analysis Department, CROMAC, 2 May 2017.

4 Email from Dejan Rendulić, Advisor, CROMAC, 11 September 2018.

5 APMBC Article 7 Report (for 2017), Form C. In Croatia's APMBC Article 7 report, Form C, table 2 lists the number of anti-personnel mines in Croatia's military facilities as 25,292, but the sum of the table values totals 25,299. The total number of anti-vehicle mines is listed as 1,033 on the Article 7 report, but the sum of the table values totals 1,040.

6 2018 Article 5 deadline Extension Request, p. 25.

7 Email from Davor Laura, CROMAC, 6 April 2018.

8 In Croatia's APMBC Article 7 Report (for 2017), Form C, this was reported to be 32.66km<sup>2</sup>; and in Croatia's 2018 Article 5 deadline Extension Request, as 32km<sup>2</sup>.

9 Article 7 Report (for 2017), Form C; and 2018 Article 5 deadline Extension Request, pp. 26, 32 & 33.

10 Email from Dejan Rendulić, CROMAC, 11 September 2018.

11 Article 7 Report (for 2017), Form C; and email from Davor Laura, CROMAC, 6 April 2018.

12 2018 Article 5 deadline Extension Request, p. 33.

13 "Forest fire triggers landmine explosions in Croatia", CTV News, 23 July 2017, at: <http://www.ctvnews.ca/world/forest-fire-triggers-landmine-explosions-in-croatia-1.3515359>.

14 "Ne pucaju mine, nego top koji plaši veprove", Dubrovački Vjesnik, 24 July 2017, at: <http://dubrovacki.slobodnadalmacija.hr/zupanija/konavle/clanak/id/498334/ne-pucaju-mine-nego-top-koji-plasi-veprove>; and email from Nataša Mateković, CROMAC, 30 August 2018.

15 Email from Davor Laura, CROMAC, 6 April 2018; Article 7 Report (for 2017), Form C; and 2018 Article 5 deadline Extension Request, p. 35.

16 Email from Davor Laura, CROMAC, 6 April 2018; and Article 7 Report (for 2017), Form C.

17 Interview with Nataša Mateković, CROMAC, Sisak, 18 May 2017.

18 2018 Article 5 deadline Extension Request, p. 37.

19 Ibid., p. 7.

20 CROMAC, "National Mine Action Strategy of Croatia 2009–2019", Zagreb, June 2009, p. 2.

21 2018 Article 5 deadline Extension Request, p. 24.

22 Ibid., p. 25.

23 Emails from Miljenko Vahtarić, CROMAC, 24 August 2016; and Nataša Mateković, CROMAC, 20 June 2017.

24 Email from Davor Laura, CROMAC, 6 April 2018; interviews with Hrvoje Debač, Acting Director, Government Office for Mine Action (OMA), 17 May 2017, Zagreb; and Neven Karas, Assistant Director and Head of Sector for General and Financial Affairs, CROMAC, Sisak, 18 May 2017.

25 Interview with Hrvoje Debač, OMA and Davor Laura, CROMAC, in Geneva, February 2018; and email from Davor Laura, 6 April 2018.

26 Interviews with Dijana Pleština, Director, OMA, in Geneva, 23 May 2012 and 10 April 2014; and email from Miljenko Vahtarić, CROMAC, 4 July 2013.

27 Email from Miljenko Vahtarić, CROMAC, 3 June 2016.

28 Interview with Miljenko Vahtarić, CROMAC, in Geneva, 11 April 2013; and email, 4 July 2013.

29 Interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014.

30 Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 2015), Form B.

31 National Mine Action Strategy of the Republic of Croatia, 2008, at: <http://www.hcr.hr/pdf/Strategija%20eng.pdf>.

32 2018 Article 5 deadline Extension Request, pp. 8 and 11.

33 Ibid., p. 25; and email from Davor Laura, CROMAC, 6 April 2018.

34 Email from Davor Laura, CROMAC, 6 April 2018.

35 Article 7 Report (for 2017), Form A.

36 Ibid.; and emails from Miljenko Vahtarić, CROMAC, 13 and 18 May 2016.

37 Email from Miljenko Vahtarić, CROMAC, 9 June 2015.

38 Article 7 Report (for 2017), Form A; and email from Miljenko Vahtarić, CROMAC, 13 May 2016.

39 Ibid.

40 Email from Nataša Mateković, CROMAC, 30 August 2017.

41 Interview with Tomislav Ban, CROMAC, Sisak, 18 May 2017.

42 Ibid.

43 Ibid.; and interview with Ante Brkljačić, CROMAC, Geneva, 9 June 2017; and email from Davor Laura, CROMAC, 6 April 2018.

44 Emails from Miljenko Vahtarić, CROMAC, 18 May 2016 and Nataša Mateković, CROMAC, 20 June 2017; Statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016; and Article 7 Report (for 2017), Form A.

45 Statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016; and Article 7 Report (for 2017), Form A.

46 Ibid.

47 Email from Nataša Mateković, CROMAC, 30 August 2017.

48 Email from Miljenko Vahtarić, CROMAC, 24 August 2016.

49 Ibid.

50 Email from Nataša Mateković, CROMAC, 30 August 2017; and 2018 Article 5 deadline Extension Request, p. 28.

51 2018 Article 5 deadline Extension Request, p. 28.

52 Emails from Miljenko Vahtarić, CROMAC, 13 May 2016; Nataša Mateković, CROMAC, 2 May and 20 June 2017; and 2018 Article 5 deadline Extension Request, p. 28.

53 Interviews with Tomislav Ban, CROMAC, Sisak, 18 May 2017; and a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.

- 54 2018 Article 5 deadline Extension Request, p. 29.
- 55 CROMAC website, "CROMAC's Mine Information System", accessed 26 June 2018, at: <https://www.hcr.hr/pdf/MISWebENG.pdf>.
- 56 Article 7 Report (for 2017), Form C; and 2018 Article 5 deadline Extension Request, p. 14.
- 57 Ibid.
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- 60 Interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014.
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- 62 Email from Dejan Rendulić, CROMAC, 11 September 2018.
- 63 Email from Davor Laura, CROMAC, 6 April 2018.
- 64 Ibid.
- 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, OMA, 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 Zeljko Romić, Piper Demining, Zagreb, 17 March 2015.
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- 73 Interview with a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.
- 74 Email from Davor Laura, CROMAC, 6 April 2018.
- 75 Interview with Miljenko Vahtarić, CROMAC, in Zagreb, 16 March 2015.
- 76 Ibid.
- 77 Interview with Tomislav Ban, CROMAC, Sisak, 18 May 2017.
- 78 Interviews with Hrvoje Debač, OMA, 17 May 2017, Zagreb; a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017; and Tomislav Ban, CROMAC, Sisak, 18 May 2017.
- 79 Interview with Kristina Dorosulić, Head of Public Procurement, CROMAC, Sisak, 18 May 2017.
- 80 Interviews with Tomislav Ban, CROMAC, Sisak, 18 May 2017; and Kristina Dorosulić, CROMAC, Sisak, 18 May 2017.
- 81 Interview with Kristina Dorosulić, CROMAC, Sisak, 18 May 2017.
- 82 UNDP, "Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia", 2014, p. 4.
- 83 Interview with Hrvoje Debač, OMA, 17 May 2017, Zagreb.
- 84 Interview with Kristina Dorosulić, CROMAC, Sisak, 18 May 2017.
- 85 UNDP, "Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia", 2014, p. 4.
- 86 Interview with a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.
- 87 Email from Miljenko Vahtarić, CROMAC, 21 October 2016.
- 88 Email from Davor Laura, CROMAC, 6 April 2018.
- 89 Ibid; and APMB Article 7 Report (for 2017), Form C.
- 90 Ibid.
- 91 Statement of Croatia, Clearance Session, APMB 15th Meeting of States Parties, Santiago, 29 November 2016.
- 92 Emails from Davor Laura, CROMAC, 6 April 2018; and Dejan Rendulić, CROMAC, 11 September 2018.
- 93 Ibid; and Article 7 Report (for 2017), Form C.
- 94 Email from Nataša Mateković, CROMAC, 2 May 2017; and Article 7 Report (for 2016), Form C.
- 95 Email from Dejan Rendulić, CROMAC, 11 September 2018.
- 96 Email from Davor Laura, CROMAC, 6 April 2018.
- 97 Email from Nataša Mateković, CROMAC, 2 May 2017; and Article 7 Report (for 2016), Form C.
- 98 Email from Davor Laura, CROMAC, 6 April 2018; and Article 7 Report (for 2017), Form C.
- 99 Article 7 Report (for 2016), Form C; and CCW Protocol V Article 10 Report (for 2016), Form A.
- 100 Article 7 Report (for 2017), Form C.
- 101 Email from Davor Laura, CROMAC, 6 April 2018; and APMB Article 7 Report (for 2017), Form C. According to CROMAC, the area cleared relates to tasks on which final QC has been completed and certificates issued in 2017. The total number of AP mines, AV mines, and other UXO is the cumulative total relating to all items destroyed in 2017, and not only those from tasks with completion certificates issues.
- 102 Email from Nataša Mateković, CROMAC, 2 May 2017.
- 103 Email from Nataša Mateković, CROMAC, 30 August 2017.
- 104 Email from Davor Laura, CROMAC, 6 April 2018.
- 105 Statement of Croatia, Intersessional Meetings, Geneva, 7 June 2018.
- 106 Email from Davor Laura, CROMAC, 6 April 2018; and 2018 Article 5 deadline Extension Request, p. 7.
- 107 Email from Nataša Mateković, CROMAC, 2 May 2017; Article 7 Report (for 2016), Form C; CCW Protocol V Article 10 Report (for 2016), Form A; CCW Amended Protocol II Article 13 Report (for 2016), Form B; and Statement of Croatia, Intersessional Meetings, 8 June 2017.
- 108 Statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016.
- 109 Email from Nataša Mateković, CROMAC, 2 May 2017.
- 110 Statement of Croatia, Clearance Session, 16th Meeting of States Parties, Vienna, 19 December 2017.
- 111 2018 Article 5 deadline Extension Request, p. 8.
- 112 2018 Article 5 deadline Extension Request, additional information submitted 21 June 2018, p. 1.
- 113 2018 Article 5 deadline Extension Request, pp. 16 and 36.
- 114 2018 Article 5 deadline Extension Request, additional information submitted 21 June 2018, p. 1.
- 115 2018 Article 5 deadline Extension Request, p. 39.
- 116 Ibid., pp. 41 and 42.
- 117 Ibid.
- 118 2018 Article 5 deadline Extension Request, pp. 36, 39, and 44.
- 119 See Mine Action Review and Landmine Monitor reports on clearance in Croatia covering 2011–16.
- 120 Ibid., p. 43.
- 121 Ibid., p. 39.
- 122 APMB Article 7 Report (for 2017), Form C; Statement of Croatia, APMB Standing Committee meetings, Geneva, 7 June 2018; and email from Davor Laura, CROMAC, 6 April 2018.
- 123 Statement of Croatia, APMB Standing Committee meetings, Geneva, 7 June 2018.
- 124 2018 Article 5 deadline Extension Request, pp. 36 and 39.
- 125 Ibid., p. 8.
- 126 Ibid., p. 44.
- 127 Ibid., p. 45.
- 128 Email from Davor Laura, CROMAC, 6 April 2018.
- 129 Ibid.
- 130 Ibid.
- 131 2018 Article 5 deadline Extension Request, p. 43.
- 132 Ibid., pp. 43, 44, and 45; and additional information submitted 21 June 2018, p. 1.
- 133 National Mine Action Strategy of the Republic of Croatia, 2008, p. 10.
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# CYPRUS

**ARTICLE 5 DEADLINE: 1 JULY 2019**  
(EXTENSION REQUESTED TO 1 JULY 2022)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	6	5
Target date for completion of mine clearance	5	5
Targeted clearance	8	8
Efficient clearance	8	8
National funding of programme	4	4
Timely clearance	5	5
Land-release system in place	7	7
National mine action standards	7	7
Reporting on progress	4	4
Improving performance	4	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.8</b>	<b>5.8</b>

## PERFORMANCE COMMENTARY

No anti-personnel mines are believed to remain in minefields on territory under the control of the Republic of Cyprus. Incremental progress was made in 2017 through survey and clearance towards releasing mined areas in Turkish Cypriot-controlled territory in northern Cyprus. The United Nations Peacekeeping Force in Cyprus (UNFICYP) also undertook a complete review of demining records which resulted in a reduction in the number of recorded suspected hazardous areas (SHAs), from 67 to 47, and the estimated contaminated area nationwide, from just over 3.1km<sup>2</sup> to just over 1.7km<sup>2</sup>.

In Turkish Cypriot-controlled territory in northern Cyprus, the UN Mine Action Service (UNMAS) coordinated technical survey and clearance through its implementing partner, Mines Advisory Group (MAG). Survey in 2017 removed legacy minefields that were recorded as SHAs but no longer contained any explosive hazards. The minefields were part of a package of confidence-building measures between the two sides agreed in May 2015 in support of discussions towards a final settlement agreement. Clearance was also conducted in the Mammari minefield just north of the buffer zone between the two sides.

In November 2017, following the breakdown of settlement talks between the two sides the previous July, the UNFICYP's demining capacity was demobilised.

## RECOMMENDATION FOR ACTION

- The Republic of Cyprus and the Turkish Cypriot authorities in northern Cyprus should heed the UN Security Council's renewed call for access to all remaining mined areas within and outside the buffer zone.<sup>1</sup>

## CONTAMINATION

Cyprus is contaminated by anti-personnel and anti-vehicle mines. The island has been divided geographically and politically by what was once a heavily mined, 180km-long buffer zone since 1974, 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. The exact extent of the remaining mine contamination across the island is not known, and permission for UNFICYP to access areas outside the buffer zone remains limited.<sup>2</sup>

UNFICYP data indicates that at the end of 2017, 29 SHAs and 18 confirmed hazardous areas (CHAs) remained across Cyprus covering just over 1.7km<sup>2</sup>. Contamination in these areas is either mixed (anti-personnel and anti-vehicle mines), of unknown nature, or from anti-vehicle mines only (see Table 1).<sup>3</sup>

In 2017, UNFICYP undertook a complete review of all demining documentation and records, which resulted in a reduction in the number of recorded SHAs, from 67 to 47, and in the estimated contaminated area nationwide, from just over 3.1km<sup>2</sup> to just over 1.7km<sup>2</sup>.<sup>4</sup>

**Table 1: Contamination (as at end of 2017)<sup>5</sup>**

Location	CHAs	Type of contamination	Area (m <sup>2</sup> )	SHAs	Type of contamination	Area (m <sup>2</sup> )
South of the buffer zone (in territory controlled by the Republic of Cyprus)	13	AV mines	418,543	15	AV mines	299,898
Buffer Zone	4	AV mines (3), Unknown (1)	703,581	0	N/A	N/A
North of the buffer zone (in territory controlled by Turkish Cypriot authorities)	1	Mixed	170,493	14	Unknown	130,784
<b>Totals</b>	<b>18</b>		<b>1,292,617</b>	<b>29</b>		<b>430,682</b>

AV = Anti-vehicle

## **Territory controlled by the Republic of Cyprus**

Cyprus has reported that no anti-personnel mines remain in the minefields laid by the National Guard that are on territory under its effective control.<sup>6</sup> In total, between becoming a state party on 1 July 2003 and its original Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline of 1 July 2013, Cyprus released all 20 mined areas under its effective control.<sup>7</sup>

### **Buffer Zone**

Previously, 81 mined areas had been located within the buffer zone (13 of which contained mines laid by the National Guard) containing a total of 27,174 mines and extending over almost 11km<sup>2</sup>.<sup>8</sup> In November 2013, Cyprus reported that no minefields under its control remained in the buffer zone, after its clearance of two mined areas in Dali in 2012 and a further mined area at Potamia by July 2013, in accordance with its National Plan.<sup>9</sup>

According to the Republic of Cyprus, the sole remaining minefield in the buffer zone is located in Turkish Forces-controlled area, close to the village of Deryneia<sup>10</sup> (also spelt Derynia or Dherynia). In 2017, the Turkish Forces rejected the request made by UNFICYP to clear a small portion of land around one of its permanently manned positions adjacent to the Deryneia/Derinya minefield for “safety reasons”.<sup>11</sup>

In July 2015, however, a report of the UN Secretary-General on the UN operation in Cyprus noted that “no progress was registered on the issue of access to the four known remaining minefields in the buffer zone, of which three are under the control of the National Guard and one is under the control of the Turkish forces, despite requests by UNFICYP”.<sup>12</sup> This was restated in subsequent reports of the Secretary-General, most recently in July 2018, in which it was reported that, “the two sides have not begun clearance of the four known remaining minefields in the buffer zone, of which three belong to the National Guard and one to the Turkish forces. While the Turkish Cypriot side has indicated that it would accept the clearance of all four areas as a package, the Greek Cypriot side maintains the position that its three minefields are required to counter a perceived threat.”<sup>13</sup>

In May 2016, in response to a request for clarification, a government diplomat in Geneva clarified that the Government of the Republic of Cyprus considers the three minefields to be under its control and not within the buffer zone. In addition, the official stated that the three minefields in question do not contain anti-personnel mines.<sup>14</sup> UNFICYP reported that as at December 2017 three of the mined areas in the buffer zone are contaminated with anti-vehicle mines and that contamination in the fourth mined area is unknown.<sup>15</sup>

In its latest resolution the UN Security Council calls on “both sides to continue to engage, as a matter of urgency and while respecting UNFICYP’s mandate, in consultations with UNFICYP on the demarcation of the buffer zone, and on the United Nations 1989

aide-memoire, with a view to reaching early agreement on outstanding issues.”<sup>16</sup> Reiterating the statement made in previous resolutions.<sup>17</sup> According to UNFICYP, such demarcation would, in particular, help to resolve any ambiguity or lack of agreement between the sides and the UN about the precise location of the buffer zone.<sup>18</sup>

### **Turkish Cypriot-controlled territory in northern Cyprus**

The extent of mine contamination in areas controlled by Turkish Forces is not known. However, the Republic of Cyprus claimed in its latest Article 7 transparency report (for 2017) 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.<sup>19</sup> According to the UN, some military mine clearance appears to have been conducted over most locations that are still recorded as minefields.<sup>20</sup>

During a meeting on 15 May 2015, the President of the Republic of Cyprus, Nicos Anastasiades, provided the leader of the Turkish Cypriot community, Mustafa Akinci, with coordinates of the 28 known minefields laid by the National Guard prior to Turkey’s military action in 1974.<sup>21</sup> These minefields, located north of Nicosia towards the Pentadaktylos mountain range, in what is today Turkish Cypriot-occupied area, contained 1,006 anti-personnel mines.<sup>22</sup>

On 4 June 2015, leader of the Turkish Cypriot community asked for assistance to address the 28 minefields. In response, and with a view to facilitating future demining, UNFICYP and UNMAS worked to refine the data and map the minefields, which were suspected to contain both anti-vehicle and anti-personnel mines.<sup>23</sup>

Survey of the minefields was conducted and completed in the summer of 2015 by UNMAS, supported by Turkish Engineering Forces, in conjunction with UNFICYP.<sup>24</sup> The survey resulted in three of the twenty-eight areas being found to have a higher risk of mine contamination and to require technical survey, as well as an additional two suspected locations identified by the local community. UNFICYP support for clearance of these areas occurred under an agreement known as “3+2” support.<sup>25</sup> In July 2017, a report of the UN Secretary-General stated that “UNFICYP had completed demining operations on the last 2 of the 28 legacy minefields, the locations of which were provided to the Turkish Cypriot leader by the Greek Cypriot leader as part of a package of confidence-building measures announced in May 2015”.<sup>26</sup>

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.<sup>27</sup> In 2017, a small area of the Mammari minefield was cleared by a Croatian commercial operator contracted by the Turkish Armed Forces.<sup>28</sup>

## PROGRAMME MANAGEMENT

UN-supported mine action operations in Cyprus are coordinated by UNMAS on behalf of UNFICYP.<sup>29</sup> In July 2016, UNMAS became an integral component of UNFICYP, providing its expertise in mine action planning and coordination, QA oversight, and management of mine action information.<sup>30</sup>

UN-facilitated settlement talks between the two sides in Crans-Montana, Switzerland, in July 2017, came to an abrupt halt after 10 days. Since the breakdown of these talks, no further access has been granted to the SHAs in the UN's Information Management System for Mine Action (IMSMA) database.<sup>31</sup> The lack of access resulted in the demobilisation of the UN demining capacity on 20 November 2017. UNFICYP retains a technical capacity and non-technical survey contingency to conduct new activities when access is permitted.<sup>32</sup>

UNMAS also provides assistance to the Committee on Missing Persons (CMP) to ensure safe access to areas it conducts activities and to UNFICYP for explosive ordnance disposal call-out tasks.<sup>33</sup>

### Legislation and Standards

All UN-supported mine action operations in Cyprus are said to be conducted in accordance with International Mine Action Standards (IMAS).<sup>34</sup>

In 2016, to guide UN operations, 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.<sup>35</sup>

### Quality Management

UNMAS is responsible for conducting QA and quality control of all UN-supported mine action operations in Cyprus. In addition, all task documentation was quality controlled by UNMAS before acceptance by UNFICYP and the relevant authorities.<sup>36</sup>

### Information Management

UNFICYP uses the IMSMA database. 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 over 950,000m<sup>2</sup>) from the database.<sup>37</sup>

### Operators

In 2017, MAG conducted survey and clearance on behalf of UNMAS and UNFICYP using a 17-strong team that included seven deminers. In July 2017, the team was reduced to five deminers, a medic, and a driver. The entire team was then demobilised in November 2017 due to a budget reduction by UNFICYP following the failure of talks at the Conference on Cyprus in July 2017.<sup>38</sup>

Clearance of the Mammari minefield was conducted by DOKING, a Croatian commercial operator, and the Quality Assurance was conducted by MAG. Both companies were directly contracted by the Turkish Armed Forces.<sup>39</sup>

## LAND RELEASE

In Turkish Cypriot-controlled territory in northern Cyprus, 22,000m<sup>2</sup> was released through clearance in 2017, 306,237m<sup>2</sup> was cancelled by non-technical survey, and 15,853m<sup>2</sup> reduced through technical survey.<sup>40</sup> As noted above, database clean-up also removed almost 1km<sup>2</sup> from IMSMA.

### Survey in 2017

In 2017 in northern Cyprus, MAG, the implementing partner of UNMAS in the region, undertook non-technical survey of six minefields and non-technical and technical survey of one minefield, cancelling 306,237m<sup>2</sup> by non-technical survey and reducing 15,853m<sup>2</sup> by technical survey (see Table 2).<sup>41</sup>

Table 2: Survey of mined area in 2017<sup>42</sup>

Location	Area Cancelled (m <sup>2</sup> )	Area Reduced (m <sup>2</sup> )
Gungor	154,791	15,853
Mouttes	67,989	0
Mazeri	60,278	0
Mia Milia	3,384	0
Lapithos	3,607	0
Argidaki	2,937	0
Koutsoventis	13,251	0
<b>Totals</b>	<b>306,237</b>	<b>15,853</b>

## Clearance in 2017

DOKING cleared a small area of Alakoy, in Mammari in northern Cyprus, adjacent to an area where flooding had previously washed mines into the buffer zone. A total of 22,000m<sup>2</sup> was cleared with the destruction of 88 anti-personnel mines and 87 anti-vehicle mines.<sup>43</sup>

## Progress in 2018

In 2018, UNMAS and UNFICYP were planning to support activities in accordance with the priorities and requests for assistance from the two sides. Through its advocacy and engagement in 2018, the UN was encouraging the two sides to:

- Establish a Mine Action Dialogue Mechanism to identify SHAs and/or CHAs for reciprocal survey and removal
- Conduct a review of SHA data with UNFICYP to initiate the removal of legacy information from IMSMA for areas that no longer pose a threat
- Restart the process of non-technical and technical survey to properly identify the scope and content of SHAs and CHAs; and
- Advocate/assist/conduct clearance to continue progress towards a mine-free Cyprus.

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## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with a second three-year extension granted by states parties in December 2015), the Republic of Cyprus 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 2019. It will not meet this deadline and in 2018 it submitted a request for a further extension of three years until 1 July 2022. The request consisted of a single page, referring back to the 2015 request.

Cyprus has 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. A three-year extension to its Article 5 deadline until 1 July 2016 was requested and approved in 2012, due to anti-personnel mines remaining in territory occupied by the Turkish forces, which it was unable to clear.<sup>44</sup>

On 27 March 2015, Cyprus submitted a second Article 5 deadline extension request, seeking a further three-year extension, until 1 July 2019. The reason cited for the second extension request was the same as the first, namely that Cyprus does not have effective control over remaining contaminated areas.<sup>45</sup> According to the website of the Permanent Mission of Cyprus in Geneva, "Once Turkey ceases the military occupation of Cyprus and returns control of the occupied areas under proper conditions to the authorities of the Republic, they [the Republic of Cyprus] will be able to assume full responsibility and compliance with the provisions of Article 5 for the entire sovereign territory of the Republic of Cyprus."<sup>46</sup> On 2 February 2018, Cyprus submitted a third Article 5 deadline request, seeking a further three-year extension until 1 July 2022. The reason cited for the third extension request was the same as the second and the first, namely that certain parts of Cyprus are occupied by the Turkish Armed Forces and therefore outside of the control of the government.<sup>47</sup>

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.<sup>48</sup>

At the Intersessional Meetings in June 2015, Cyprus stated that "negotiations for a settlement of the Cyprus question have recently resumed and there are good reasons for being hopeful that this will in fact be the last extension request that Cyprus needs to submit."<sup>49</sup>

The July 2016 report by the Secretary-General also noted that both the Greek Cypriot leader and the Turkish Cypriot leader have "continued to engage in settlement talks with dedication and perseverance", and "underlined their commitment to intensify their efforts in the coming months with the aim of reaching a comprehensive settlement agreement within 2016".<sup>50</sup> Settlement talks between the two sides were held in July 2017 in Switzerland but broke down after ten days.<sup>51</sup>

The UN Security Council, most recently in July 2018, has called on both sides to facilitate clearance of all remaining mined areas on the island.<sup>52</sup> The Council noted with regret "that the sides are withholding access to the remaining minefields in the buffer zone, and that demining in Cyprus must continue". The Council also noted "the continued danger posed by mines in Cyprus", referring to "proposals and discussions as well as positive initiatives on demining", and urging "rapid agreement on facilitating the recommencement of demining operations and clearance of the remaining minefields".<sup>53</sup> The Council called on "both sides to allow access to deminers and to facilitate the removal of the remaining mines in Cyprus within the buffer zone", and urged "both sides to extend demining operations outside the buffer zone".<sup>54</sup>

A January 2018 report of the UN Secretary General, noted the completion of the outstanding non-technical surveys from the list of 28 legacy minefields and also the comprehensive review of the UNFICYP mine action database. However, it was also observed that the “two sides have not begun clearance of the four known remaining minefields in the buffer zone” and that “no additional areas have been released for survey or clearance”.<sup>55</sup> There are currently no demining operations forecasted for UNMAS-UNFICYP in 2018.<sup>56</sup>

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- 1 UN Security Council Resolution 2430 (2018), para. 15.
- 2 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 26 September 2017.
- 3 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 4 Ibid.
- 5 Ibid.
- 6 Article 7 Reports (for 2018), Form C.
- 7 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.
- 8 “Analysis of the request submitted by Cyprus for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention”, 4 October 2012.
- 9 Response to Landmine Monitor questionnaire by George Stavrinou, Security Policy Department, Cypriot Ministry of Foreign Affairs, 25 November 2013.
- 10 APMBC Article 7 Reports (for 2012, 2013, 2014, 2015, 2017, and 2018), Form C.
- 11 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/25, 9 January 2018, para. 14.
- 12 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2015/517, 2 July 2015, para. 14.
- 13 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/676, 6 July 2018, para. 44.
- 14 Interview with Demitris Samuel, Deputy Permanent Representative, Cyprus Permanent Mission to the UN in Geneva, Geneva, 19 May 2016.
- 15 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 16 UN Security Council Resolution 2430 (2018) para. 13.
- 17 UN Security Council Resolution 2338 (2017), para. 9; and UN Security Council Resolution 2398 (2018) para. 12.
- 18 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.
- 19 Article 7 Report (for 2017), Form C.
- 20 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Mike Holgate, Mine Action Officer, UNFICYP), 6 October 2016.
- 21 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2015/517, 2 July 2015, para. 3.
- 22 Article 7 Report (for 2014), Form C.
- 23 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2015/517, 2 July 2015, para. 13.
- 24 Ibid.; and email from Julie Myers, UNMAS (based on information provided by Timothy Roberts, Chief of Operations, UNMAS Lebanon), 4 October 2015.
- 25 Emails from Julie Myers, UNMAS (based on information provided by Timothy Roberts, UNMAS Lebanon), 4 October 2015; and (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 26 September 2017.
- 26 Report of the Secretary-General on the UN operation in Cyprus, UN doc. S/2017/586, 10 July 2017, p. 3.
- 27 Ibid.; and email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.
- 28 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 29 Ibid.
- 30 UNMAS, “Cyprus” webpage, accessed 27 July 2017, at: <http://www.mineaction.org/programmes/cyprus>.
- 31 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 32 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/25, 9 January 2018, para. 14.
- 33 Ibid, para 12.
- 34 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.
- 35 Ibid.
- 36 Ibid.
- 37 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 38 Ibid.
- 39 Ibid.
- 40 Ibid.
- 41 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 42 Ibid.
- 43 Ibid.
- 44 Article 5 deadline Extension Request, 30 April 2012.
- 45 Second Article 5 deadline Extension Request, 27 March 2015.
- 46 Permanent Mission of Cyprus in Geneva, “Disarmament and Non-proliferation” webpage, accessed 27 July 2017, at: [http://www.mfa.gov.cy/mfa/PermRep/PermRepUN.nsf/ecsw31\\_en/ecsw31\\_en?OpenDocument](http://www.mfa.gov.cy/mfa/PermRep/PermRepUN.nsf/ecsw31_en/ecsw31_en?OpenDocument).
- 47 Article 5 deadline Extension Request, 2 February 2018.
- 48 Turkey’s Article 5 deadline Extension Request, 29 March 2013.
- 49 Statement of Cyprus, Standing Committee on Mine Action, Geneva, 25 June 2015.
- 50 Report of the Secretary-General on the UN operation in Cyprus, UN doc. S/2016/598, 8 July 2016, p. 1.
- 51 “Cyprus reunification talks collapse amid angry scenes”, *The Guardian*, 7 July 2017, at: <https://www.theguardian.com/world/2017/jul/07/cyprus-reunification-talks-collapse-amid-angry-scenes>.
- 52 UN Security Council Resolutions 2026 (2011), 2197 (2015), 2234 (2015), 2263 (2016), 2300 (2016), and 2338 (2017).
- 53 UN Security Council Resolution 2430 (2018), twelfth preambular paragraph.
- 54 Ibid, para. 11.
- 55 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/25, 9 January 2018, paras. 12 and 14.
- 56 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.

# DEMOCRATIC REPUBLIC OF CONGO

ARTICLE 5 DEADLINE: 1 JANUARY 2021  
(ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE	2017	2016
Problem understood	9	8
Target date for completion of mine clearance	9	8
Targeted clearance	7	6
Efficient clearance	6	6
National funding of programme	2	3
Timely clearance	5	5
Land-release system in place	6	6
National mine action standards	6	6
Reporting on progress	2	3
Improving performance	5	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.7</b>	<b>5.6</b>

## PERFORMANCE COMMENTARY

The Democratic Republic of Congo (DRC)'s mine action programme's land release output increased in 2017, with a small increase in anti-personnel mine clearance reported and a larger increase in survey. Overall, though, mine clearance projects were carried out only on a small scale with limited funding and duration. It remains on track to meet its Anti-Personnel Mine Ban Convention (APMBC) Article 5 clearance deadline by 2021.

In 2017, a new National Mine Action Strategy for 2018–19 was developed, which focuses on fulfilling the country's APMBC Article 5 obligations by 2020. As at mid-2018, according to the United Nations Mine Action Service

(UNMAS) and international mine action operators, the DRC could indeed complete clearance by 2020 with existing capacity and sufficient funding. This is, however, considerably after the 2016 deadline set out in its 2012–16 national mine action strategy.<sup>1</sup> Moreover, throughout 2017, the national mine action programme continued to be hampered by lack of coordination between stakeholders and critical information management challenges. The ability of the authorities to produce a clear and accurate estimate of remaining mine and explosive remnants of war (ERW) contamination remained questionable.

## RECOMMENDATIONS FOR ACTION

- DRC should establish a realistic and accurate understanding of the remaining mine and ERW contamination, including through re-survey of all remaining suspected hazardous areas (SHAs), many of which are thought to be inaccurate or outdated, and adjust its work plan for coordinated completion of clearance accordingly.
- As soon as it is safe to do so, the DRC should conduct survey in Aru and Dungu territories.
- Further efforts are needed to ensure that the Congolese Mine Action Centre (Centre Congolais de Lutte Antimines, CCLAM) can provide effective information and quality management to the national programme. Significant efforts should be made to ensure the national mine action database is accurate, up to date, and effectively managed and resourced by the national authorities. Updated information should be regularly shared with all mine action stakeholders.
- Mine action data should be recorded and reported according to International Mine Action Standards (IMAS) land release terminology.
- Resources should be provided by the Government of the DRC and international donors to support CCLAM to enable it to carry out essential functions autonomously, without relying on financial support from mine action operators.
- Regular coordination meetings should be held with the national authorities, the United Nations, and mine action operators to share information and improve the implementation of mine action.
- Donors and international stakeholders should seek to complete mine and ERW clearance in the face of the humanitarian crises in the DRC.
- A focus should be placed on building sufficient national capacity to address residual contamination following the exit of international operators.

## CONTAMINATION

The DRC is affected by anti-personnel and ERW, a result of armed conflict involving neighbouring states, militias, and armed opposition groups, which have increased since the late 1990s.<sup>2</sup> According to UNMAS, at the end of 2017, a total of 36 confirmed hazardous areas (CHAs) and suspected hazardous areas (SHAs) with a total size of 502,591m<sup>2</sup> remained to be released. There were two SHAs with a total size of just under 4,000m<sup>2</sup> and 34 CHAs with a combined size of nearly 498,500m<sup>2</sup>.<sup>3</sup> Previously, at the end of 2016, a total of 54 CHAs and SHAs with a total size of 851,228m<sup>2</sup> remained; the total comprised seven confirmed mined areas covering just over 60,000m<sup>2</sup>, and 47 SHAs covering just over 0.78km<sup>2</sup>.<sup>4</sup>

At the end of 2017, six of the DRC's former eleven provinces still contained confirmed or suspected mine contamination, as set out in Table 1.<sup>5</sup> The figures for contamination provided by UNMAS in Table 1 are not entirely consistent with data given previously to Mine Action Review, but were said to be accurate.

**Table 1: Anti-personnel mine contamination by province (at end-2017)<sup>6</sup>**

Province	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Ituri	0	0	5	48,471
Maniema	2	3,993	2	74,726
North-Kivu	0	0	9	5,704
North-Ubangi	0	0	8	163,077
South-Ubangi	0	0	6	174,795
Tshopo	0	0	4	31,825
<b>Totals</b>	<b>2</b>	<b>3,993</b>	<b>34</b>	<b>498,598</b>

In April 2014, DRC reported that 130 SHAs suspected to contain landmines remained in eight provinces (then Equateur, Kasai Occidental, Kasai Oriental, Maniema, North Kivu, Katanga, Province Orientale, and South Kivu). These areas were estimated to cover a total of 1.8km<sup>2</sup> on the basis of the results of a nine-month-long National Landmine Contamination Survey (NLCS) launched in March 2013.<sup>7</sup> The Aru and Dungu territories in former Orientale Province, however, were not surveyed due to insecurity, and survey had still to be carried out as at June 2018.<sup>8</sup>

According to figures reported by CCLAM, from 1 January 2014–31 December 2017, a total of 103 mined areas were addressed, releasing a total of just over 1.7km<sup>2</sup>, including 333,934m<sup>2</sup> in 2014; 493,066m<sup>2</sup> in 2015; 379,859m<sup>2</sup> in 2016; 445,150m<sup>2</sup> in 2017; and 65,318m<sup>2</sup> from January–March 2018, and four additional mined areas with a size of 90,229m<sup>2</sup> were “suspended” or “closed”.<sup>9</sup> It reported a total of 370 anti-personnel mines had been destroyed, including 49 anti-personnel mines found in 2014; 36 anti-personnel mines in 2015; 162 anti-personnel mines in 2016; 26 anti-personnel mines in 2017; and two anti-personnel mines in the first quarter of 2018.<sup>10</sup> These figures are not entirely consistent with previous survey and clearance figures reported by CCLAM, nor with data reported previously to Mine Action Review by UNMAS and international mine action operators.

As at 6 June 2018, the CCLAM claimed that a total of 58 hazardous areas with a size of approximately 600,000m<sup>2</sup> remained to be addressed. On request of the CCLAM, Norwegian People’s Aid (NPA) agreed to assist with a re-survey of areas in the provinces of Bas Uele, Ituri, Maniema, North Kivu, North Ubangi, South Kivu, Tanganyika, and Tshopo.<sup>11</sup> As at August 2018, NPA was preparing to implement a project aimed at reassessing all recorded and newly reported SHAs to allow for better planning and coordination of clearance efforts.<sup>12</sup>

UNMAS reported that mine contamination remaining in DRC in 2017 was limited and that only small numbers of anti-personnel mines were found on an annual basis by operators. Areas suspected to contain anti-personnel mines often proved to contain unexploded ordnance (UXO), abandoned ordnance (AXO), or small arms ammunition instead.<sup>13</sup> In 2017, mine clearance projects were carried out only on a small scale with limited funding and duration, and progress remained relatively static compared with the previous year.<sup>14</sup>

NPA stated that it continued to find primarily only UXO in the SHAs it addressed in 2017, and stated that frequently many SHAs contained no anti-personnel mines at all.<sup>15</sup> Humanity and Inclusion (formerly Handicap International, HI) reported that of the two regions where it was operational through local partner AFRILAM in 2017, only two were found to contain anti-personnel mines.<sup>16</sup> Mines Advisory Group (MAG) did not report encountering any anti-personnel mines in its operations in 2017.<sup>17</sup>

The impact of remaining mine and ERW contamination in 2017 was predominantly socio-economic. Released land is used for agriculture and settlement development, in addition to opening up access to markets, water, and firewood.<sup>18</sup> In 2017, in one example, clearance of the Bongala road by NPA which is a shortcut linking Gbadolite in North Ubangi province with Gemena in South Ubangi province, reduced the travel time and distance from 185km<sup>2</sup> and up to seven hours to 155km, taking up to five hours.<sup>19</sup> HI reported that land released to local inhabitants in Tshopo province, which had previously been blocked from cultivation or restricted access to resources, such as water, for many years, was being put to use for socio-economic and community activities such as the construction of houses and agriculture.<sup>20</sup>

In 2018, UNMAS and operators confirmed that with existing mine action capacity and the maintenance of sufficient funding, the DRC could complete clearance of all contamination in the remaining provinces of Bas-Uele, Equateur, Ituri, Maniema, North-Kivu, Tanganyika, Tshuapa, Tshopo, and South and North Ubangi, before its extended Article 5 deadline of 1 January 2021.<sup>21</sup>

Despite the positive prognosis for completing clearance prior to 2021, in 2018, explosive ordnance continued to pose a significant risk to civilians in DRC, increased by the recent resurgence in armed conflict which has resulted in new ERW contamination, particularly in the eastern and central regions. UNMAS reported that a number of SHAs remained in geographically challenging areas where large numbers of internally displaced persons (IDPs) and refugees were seeking shelter. Children continued to make up nearly four fifths of total reported victims of ERW. For the period 2002–18, UNMAS reported that a total of 2,643 victims of mines and ERW had been recorded in DRC.<sup>22</sup>

## PROGRAMME MANAGEMENT

CCLAM was established in 2012 with support from the UN Mine Action Coordination Centre (UNMACC) and UNMAS.<sup>23</sup> Subsequently, UNMAS provided capacity-building support to CCLAM for its operations until the transfer of responsibility for coordinating mine action activities to CCLAM was completed in early 2016.<sup>24</sup>

Previously, UNMACC coordinated mine action operations through offices in the capital, Kinshasa, and in Goma, Kalemie, Kananga, Kisangani, and Mbandaka.<sup>25</sup> UNMACC was part of the UN Stabilization Mission in the DRC (MONUSCO) peacekeeping mission. UN Security Council Resolution 1925 mandated UNMACC to strengthen national mine action capacities and support reconstruction through road and infrastructure clearance.<sup>26</sup>

In 2013, demining activities were transferred to the UN Country Team and the Congolese authorities.<sup>27</sup> As a consequence, UNMAS operated two separate projects, splitting its activities between support for the Government of the DRC and its in-country team on the one hand, and activities in support of MONUSCO on the other.<sup>28</sup> Since 2014, demining has no longer been part of MONUSCO's mandate.<sup>29</sup> In 2017–18, UNMAS was assisting MONUSCO operations and mitigating the threat from ERW through explosive ordnance disposal (EOD) operations and risk education.<sup>30</sup>

Although CCLAM took over responsibility from UNMAS as the national focal point for demining in early 2016, its capacity to carry out accreditation, issue task orders, and report on mine action activities remained very limited in 2017. Its lack of capacity to manage an up-to-date national database and carry out quality management activities continued to be highlighted by operators as critical areas of concern. Little, if any, improvement was seen during the year.<sup>31</sup>

### Strategic Planning

The DRC's national mine action strategic plan for 2012–16 set the goal of clearing all areas contaminated with anti-personnel mines or submunitions by the end of 2016.<sup>32</sup> Neither goal was met.

In 2017, under CCLAM's coordination, with support from the Geneva International Centre for Humanitarian Demining (GICHD), UNMAS, and the Government of Japan, a new National Mine Action Strategy for 2018–19 was developed in a series of workshops in collaboration with mine action operators.<sup>33</sup> The strategy focuses on fulfilling the country's APMB Article 5 obligations by 2020, one year ahead of its 2021 deadline.<sup>34</sup>

The new strategy contains the following three strategic objectives: effective and efficient management of the explosive threat; ensuring the national programme has the capacity to manage residual contamination in a sustainable manner; and strengthening the legal framework of the mine action programme. These objectives are to be achieved through the adoption of national laws and other implementing measures, by adherence to relevant treaties, through the integration of mine action into national development and poverty reduction strategies, and as a result of the mobilisation of adequate resources.<sup>35</sup> According to CCLAM, a workshop on the strategy's implementation would be held in the second half of 2018.<sup>36</sup>

### Legislation and Standards

There is no national mine action legislation in DR Congo, based on available information. In 2017, UNMAS said it would provide technical support to CCLAM to complete the revision of DRC's outdated National Technical Standards and Guidelines (NTSGs) for mine action.<sup>37</sup> Revised NTSGs had been drafted by the middle of 2016, but were still under review as at August 2018.<sup>38</sup>

### Quality Management

HI, MAG, and NPA reported that internal quality assurance (QA)/quality control (QC) systems were in place in 2017.<sup>39</sup> In 2017, CCLAM controlled external QA/QC after the handover of responsibility for quality management from UNMAS in 2016.<sup>40</sup> Operators reported that CCLAM carried out QA/QC on all operations and tasks in 2017; however, they also stated that CCLAM staff did not have adequate material and financial resources to plan and carry out autonomous inspection visits during the year. Operators reported having to cover some of CCLAM's costs to allow it to carry out monitoring operations in the field.<sup>41</sup>

### Information Management

CCLAM assumed responsibility from UNMAS for information management in January 2016. Since then, and despite many years of capacity-building support from UNMAS, and again from NPA in 2017, serious concerns have persisted over the quality of the database and CCLAM's capacity and resources to manage it. Gaps in the data, a lack of maintenance, a lack of capacity to extract and share information from the database, and the absence of coordination meetings with operators, all remained evident in 2017.<sup>42</sup>

NPA held refresher training courses on information management and use of the Information Management System for Mine Action (IMSMA) database and geographic information system (GIS) for CCLAM staff during the year. It reported that while CCLAM had competent technical staff, its limited administrative and financial resources continued to adversely affect its ability to maintain the database, and that, as a consequence, a system of parallel reporting to CCLAM and UNMAS had developed. The situation even appeared to deteriorate in 2017.<sup>43</sup> CCLAM once again did not provide information in response to Mine Action Review's requests for data in 2018.

## Operators

Four international operators carried out demining operations in the DRC in 2016: DanChurchAid (DCA), HI, MAG, and NPA, along with one national clearance organisation, AFRILAM, and a second national organisation, AAAD, which conducted non-technical survey and mine risk education.<sup>44</sup>

In January–April 2017, NPA deployed five technical survey teams with a total of 22 demining personnel. From April, the project configuration changed to include both demining and the provision of risk education, with the number of technical survey teams reduced to three 15-strong teams and two four-strong risk education teams. It focused on completing clearance of SHAs in Bolomba and Ikela territories in Equateur and Tshuapa provinces, respectively.<sup>45</sup>

In 2017, MAG deployed two multi-task teams (MTT) and two community liaison teams in North and South Ubangi provinces and two MTTs and one community liaison team in Tanganyika province. Personnel totalled 26 deminers and 15 community liaison staff. MAG carried out community liaison, EOD spot tasks, battle area clearance (BAC), and other clearance activities.<sup>46</sup>

With support from HI, AFRILAM deployed three teams with a total of twenty deminers and two community liaison officers in 2017. AFRILAM carried out clearance and EOD spot tasks during the year; however, as funding for 2018 was unable to be secured, AFRILAM and HI's operations ceased on 31 December 2017.<sup>47</sup>

## LAND RELEASE

UNMAS and operators reported figures to Mine Action Review that a total of 0.86km<sup>2</sup> of mined area was released in 2017, of which 0.42km<sup>2</sup> was by clearance and technical survey, and a further 0.44km<sup>2</sup> cancelled by non-technical survey.<sup>48</sup> This is an increase from the total mined area in DRC released in 2016 of just under 0.4km<sup>2</sup> of mined area, including 0.36km<sup>2</sup> by clearance and technical survey, and a further 0.04km<sup>2</sup> by non-technical survey, largely due to a sizeable increase in cancellation by non-technical survey.<sup>49</sup>

### Survey in 2017

In 2017, operators cancelled a total of nearly 444,300m<sup>2</sup> by non-technical survey and reduced a further nearly 192,500m<sup>2</sup> of anti-personnel mined area through technical survey, while confirming just under 264,500m<sup>2</sup> as mined.<sup>50</sup> This is a large increase in survey in comparison with results in 2016 when nearly 37,700m<sup>2</sup> mined area was cancelled by non-technical survey, 127,300m<sup>2</sup> of mined area was reduced, and 120,000m<sup>2</sup> was confirmed as mined.<sup>51</sup>

MAG reported that its large increase in non-technical survey cancellation in 2017 was due to deploying to North and South Ubangi to address significantly overestimated SHAs, along with increased access to address areas following cutting of vegetation, enabling a larger amount of SHA to be cancelled.<sup>52</sup> According to NPA, its survey output increased in 2017 due to a large SHA in Bongala which proved to have very little contamination resulting in significant cancellation, and the erroneous recording of a second task as having a size of 16,000m<sup>2</sup>, which in fact proved to be 160,000m<sup>2</sup>.<sup>53</sup>

Table 2: Mine survey in 2017<sup>54</sup>

Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )	SHAs confirmed as mined	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
AAAD	0	0	1	50	0
AFRILAM	6	74,870	5	134,949	43,153
DCA	0	0	4	126,302	0
MAG	2	100,000	0	0	13,000
NPA	1	269,402	1	3,157	136,289
<b>Totals</b>	<b>9</b>	<b>444,272</b>	<b>12</b>	<b>264,458</b>	<b>192,442</b>

TS = Technical survey

## Clearance in 2017

A total of just over 226,000m<sup>2</sup> was reportedly released by clearance in 2017, with the destruction of 32 anti-personnel mines and 3,173 items of UXO.<sup>55</sup> This is almost the same as clearance in 2016 (just over 230,300m<sup>2</sup>).<sup>56</sup>

HI reported that the significant increase in land release output by AFRILAM in 2017 compared with 2016 was due to the fact that 2016 was dedicated to the recruitment, mobilisation, and accreditation of demining teams, whereas in 2017 the focus was on implementing clearance.<sup>57</sup>

**Table 3: Mine clearance in 2017<sup>58</sup>**

Operator	Areas cleared	Area cleared (m <sup>2</sup> )	Anti-personnel mines destroyed	UXO destroyed
AFRILAM	4 <sup>59</sup>	18,078	20	2
DCA	3	48,990	9	50
MAG	0	0	1	3,094
NPA	10	158,957	2	27 <sup>60</sup>
<b>Totals</b>	<b>17</b>	<b>226,025</b>	<b>32</b>	<b>3,173</b>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the six-year extension request granted by states parties in June 2014), 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 January 2021. It is on track to meet this deadline. As stated above, according to its National Mine Action Strategy for 2018–19, the DRC expects to complete its APMBC Article 5 obligations by 2020, one year ahead of its 2021 deadline. However, this is three years after the DRC previously expected to complete clearance.

In 2018, operators and UNMAS confirmed that it is likely that DRC can clear all mined areas on its territory by its extended Article 5 deadline of 1 January 2021.<sup>61</sup> DRC's first Article 5 deadline request in 2011 largely blamed poor survey by demining operators for the failure to meet its deadline, though poor management and insufficient national ownership of the programme were also major factors.<sup>62</sup> Initially intending to submit a request for an extension of its initial November 2012 deadline by four years, DRC instead requested a 26-month interim extension primarily to carry out the national survey to provide it with the information needed to submit another definitive extension request in 2014.<sup>63</sup>

In April 2014, DRC submitted a second request to extend its Article 5 deadline starting in January 2015. The extension indicated that at least 30% of the total mined area could be released through technical survey, indicating that some 1.3km<sup>2</sup> would need to be cleared.<sup>64</sup> The extension request estimated that on average 0.21km<sup>2</sup> would be cleared each year.<sup>65</sup>

The purpose of its current (second) Article 5 deadline extension is to “[a] conduct technical surveys and clear the 130 identified mined areas; and [b] conduct non-technical and technical surveys as well as clear and/or release areas in the territories of Aru and Dungu in the Orientale province”.<sup>66</sup>

Over five years in 2013–17, demining organisations cleared a total of just under 1.1km<sup>2</sup> of mined area (see Table 4).

**Table 4: Mine clearance in 2013–17**

Year	Area cleared (m <sup>2</sup> )
2017	226,025
2016	211,293
2015	314,562
2014	225,484
2013	110,961
<b>Total</b>	<b>1,088,325</b>

The DRC has reported that challenges for implementing its current extension request plan milestones include funding and logistics, security, geography, and climate, including dense vegetation and heavy rainy seasons.<sup>67</sup> Operators attributed the DRC's inability to finish clearance by the end of 2016 to a lack of access and the remote, difficult terrain of remaining areas, and additional concerns over sustained funding, upcoming elections, and deteriorating security in certain areas.

NPA planned to complete clearance of SHAs in North and South Ubangi in 2018, and from 2019–20, with sufficient funding and if the security situation permits, to conduct clearance in North Kivu province and other areas which are confirmed as contaminated after resurvey in early 2018.<sup>68</sup> As noted above, HI and AFRILAM's operations ended in December 2017 due to a lack of funding.<sup>69</sup>

In 2018, MAG, HI, NPA, and UNMAS reiterated concerns over an ongoing decline in funding for mine action operations to address the problem of mines and ERW in the DRC. They reported that with the deteriorating political climate in the country, donors were reluctant to support mine action, prioritising funding to higher-impact humanitarian crises such as cholera and yellow fever outbreaks, flooding, and population displacement.<sup>70</sup>

CCLAM is not known to have received financial resources for mine action from the Government of the DRC in 2017.<sup>71</sup> In 2018, operators reported that CCLAM was entirely dependent on external financial support.<sup>72</sup> NPA reported that a donor mapping exercise was conducted in 2017 while HI said a mine action resource mobilisation strategy was planned to be developed and approved by the government by the middle of 2018.<sup>73</sup>

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1 Email from Steven Harrop, Chief of Operations, UNMAS, 23 April 2018; Jean-Denis Larsen, Country Director, Norwegian People's Aid (NPA), 5 March 2018; Guillaume Zerr, Programme Director DRC, Humanity and Inclusion, (formerly Handicap International, HI), 24 May 2018; and Bill Marsden, Regional Director, East and Southern Africa, Mines Advisory Group (MAG), 11 May 2018.

2 An escalation of conflict between rebel group M23 and Armed Forces of DRC (FARDC) with support of the UN Stabilization Mission in DRC (MONUSCO), from August to November 2013, prior to the disbanding of M23, also resulted in new contamination of large areas of land, including roads and access routes, with UXO. UNMAS, "2015 Portfolio of Mine Action Projects, Democratic Republic of the Congo", at: [http://www.mineaction.org/sites/default/files/print/country\\_portfolio4906-1070-78801.pdf](http://www.mineaction.org/sites/default/files/print/country_portfolio4906-1070-78801.pdf).

3 Email from Steven Harrop, UNMAS, 23 April 2018.

4 Email from Steven Harrop, UNMAS, 20 September 2017. CCLAM, however, reported in December 2016 that a total of 65 confirmed and SHAs, comprising 36% of all known mine contamination, remained to be addressed, primarily in the north and east of the country. Statement by Sudi Alimasi Kimputu, Coordinator, CCLAM, 15th Meeting of States Parties, Santiago, 3 December 2016.

5 Email from Steven Harrop, UNMAS, 4 September 2017. On 9 January 2015, the National Assembly of the DRC passed a law which redistributed the DRC's then 11 provinces into 25 provinces, plus Kinshasa.

6 Email from Steven Harrop, UNMAS, 23 April 2018.

7 Second Article 5 deadline Extension Request, 7 April 2014, p. 10; and UNMAS, "2015 Portfolio of Mine Action Projects, Democratic Republic of the Congo".

8 Ibid.; and statement by Sudi Alimasi Kimputu, CCLAM, Intersessional Meetings, Geneva, 7 June 2018.

9 Article 7 Report (for 2017), Form D, p. 10.

10 Ibid., p. 15; and Statement of DRC, Intersessional Meetings, Geneva, 7 June 2018.

11 Statement of DRC, Intersessional Meetings, Geneva, 7 June 2018; and Article 7 Report (for 2017), Form D, p. 12. According to the DRC's latest Article 7 report, as at 17 April 2018, a total of 56 areas with a size of 535,359m<sup>2</sup> remained to be addressed: 27 mined areas in the nine provinces identified in its initial survey and 29 newly identified mined areas. The total of 56 areas included 16 areas with a total size of 286,640m<sup>2</sup> and 15 areas with a size yet to be determined.

12 Email from Jean-Denis Larsen, NPA, 13 August 2018.

13 Email from Pehr Lodhammar, UNMAS, 5 April 2017.

14 Email from Steven Harrop, UNMAS, 23 April 2018.

15 Email from Jean-Denis Larsen, NPA, 5 March 2018.

16 Email from Guillaume Zerr, HI, 24 May 2018.

17 Email from Bill Marsden, MAG, 11 May 2018.

18 Emails from Jean-Denis Larsen, NPA, 5 March 2018; and Guillaume Zerr, HI, 24 May 2018.

19 Email from Jean-Denis Larsen, NPA, 5 March 2018.

20 Email from Guillaume Zerr, HI, 24 May 2018.

21 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Guillaume Zerr, HI, 24 May 2018; and Bill Marsden, MAG, 11 May 2018; and UNMAS, "2018 Portfolio of Mine Action Projects, DRC", at: [http://www.mineaction.org/sites/default/files/print/country\\_portfolio7490-951-81488.pdf](http://www.mineaction.org/sites/default/files/print/country_portfolio7490-951-81488.pdf).

22 UNMAS, "2018 Portfolio of Mine Action Projects, DRC".

23 Response to questionnaire by Michelle Healy, UNMACC, 29 April 2013.

24 UNMAS, "About UNMAS Support of One UN and the GODRC", March 2016, at: <http://www.mineaction.org/print/programmes/drc>.

25 UNMAS, "DRC, Overview", updated August 2013.

26 UN Security Council Resolution 1925, 28 May 2010.

27 UN Security Council Resolution 2098, 28 March 2013.

28 UNMAS, "DRC: Support to UN Country Team and the Government".

29 UN Security Council Resolution 2147, 28 March 2014; and UNMAS, "DRC Overview", updated April 2014.

30 UNMAS, "Support to one UN and the GO of DRC", March 2018, at: <http://www.mineaction.org/programmes/drc>.

31 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Bill Marsden, MAG, 11 May 2018; and Guillaume Zerr, HI, 24 May 2018.

32 DRC, "Plan Stratégique National de Lutte Antimines en République Démocratique du Congo, 2012–2016" ["National Mine Action Strategic Plan in DRC, 2012–2016"], Kinshasa, November 2011, p. 28, at: [http://www.macc-drc.org/IMG/pdf/Plan\\_strategique\\_LAM\\_2012-2016.pdf](http://www.macc-drc.org/IMG/pdf/Plan_strategique_LAM_2012-2016.pdf).

33 "Stratégie Nationale de Lutte Antimines en République Démocratique du Congo 2018–2019", CCLAM, November 2017.

34 Ibid.

35 Ibid., p. 5.

36 Statement of DRC, Intersessional Meetings, Geneva, 7 June 2018.

37 Email from Pehr Lodhammar, UNMAS, 5 April 2017.

38 Email from Jean-Denis Larsen, NPA, 13 August 2018.

- 39 Response to questionnaire by Gerard Kerrien, MAG, 8 May 2017; and email from Jean-Denis Larsen, NPA, 19 May 2017.
- 40 Ibid.
- 41 Emails from Jean-Denis Larsen, NPA, 5 March 2018; and Bill Marsden, MAG, 11 May 2018; and Guillaume Zerr, HI, 24 May 2018.
- 42 Ibid.
- 43 Email from Jean-Denis Larsen, NPA, 18 April 2017.
- 44 Email from Steven Harrop, UNMAS, 14 August 2018.
- 45 Email from Jean-Denis Larsen, NPA, 5 March 2018.
- 46 Each MTT was composed of one Technical Field Manager, a team leader, five deminers, a medic, and two drivers. The community liaison teams consisted of a community liaison manager, four community liaison officers, a medic and two drivers. Email from Bill Marsden, MAG, 11 May 2018.
- 47 Email from Guillaume Zerr, HI, 24 May 2018.
- 48 Emails from Steven Harrop, UNMAS, 23 April 2018; Jean-Denis Larsen, NPA, 5 March 2018; Guillaume Zerr, HI, 24 May and 30 August 2018; and Bill Marsden, MAG, 11 May 2018.
- 49 Responses to questionnaire by Gerard Kerrien, MAG, 8 May 2017; and Seydou N'Gaye and Maryam Walton, HI, 23 March 2017; and emails from Jean-Denis Larsen, NPA, 18 April 2017; and emails from Steven Harrop, UNMAS, 4 September 2017 and 20 September 2017.
- 50 Emails from Steven Harrop, UNMAS, 23 April 2018; Jean-Denis Larsen, NPA, 5 March 2018; Guillaume Zerr, HI, 24 May and 30 August 2018; and Bill Marsden, MAG, 11 May 2018.
- 51 Responses to questionnaire by Gerard Kerrien, MAG, 8 May 2017; and Seydou N'Gaye and Maryam Walton, HI, 23 March 2017; and emails from Jean-Denis Larsen, NPA, 18 April 2017; and Steven Harrop, UNMAS, 4 and 20 September 2017.
- 52 Email from Gerard Kerrien, MAG, 29 August 2018.
- 53 Email from Jean-Denis Larsen, NPA, 13 September 2018.
- 54 Emails from Steven Harrop, UNMAS, 23 April 2018; Jean-Denis Larsen, NPA, 5 March 2018; Guillaume Zerr, HI, 24 May and 30 August 2018; and Bill Marsden, MAG, 11 May 2018. UNMAS reported discrepancies between the figures reported here by operators and the information contained in the national database. DCA declined to provide data to Mine Action Review in 2018 and figures are those reported by UNMAS instead. Figures for AFRILAM were provided by HI, however, HI reported that the total figures for land reduction through technical survey included a figure of 28,987m<sup>2</sup> for AFRILAM's operations in Tshopo province, which it could not verify as accurate, nor confirm if the figure reported was for a period which extended beyond the 2017 reporting period.
- 55 Emails from Steven Harrop, UNMAS, 23 April 2018; Jean-Denis Larsen, NPA, 5 March 2018; Guillaume Zerr, HI, 24 May 2018; Gerrard Kerrien, MAG, 28 August and 30 August 2018; and Bill Marsden, MAG, 11 May 2018.
- 56 Responses to questionnaire by Gerard Kerrien, MAG, 8 May 2017; and Seydou N'Gaye and Maryam Walton, HI, 23 March 2017; and emails from Jean-Denis Larsen, NPA, 18 April 2017; and Steven Harrop, UNMAS, 4 and 20 September 2017.
- 57 Email from Guillaume Zerr, HI, 24 May 2018.
- 58 Emails from Steven Harrop, UNMAS, 23 April 2018; Jean-Denis Larsen, NPA, 5 March 2018; Guillaume Zerr, HI, 24 May and 30 August 2018; Gerrard Kerrien, MAG, 28 August 2018; and Bill Marsden, MAG, 11 May 2018. UNMAS reported discrepancies between the figures reported here by operators and the information contained in the national database. DCA declined to provide data to Mine Action Review in 2018 and figures are those reported by UNMAS instead. Figures for AFRILAM were provided by HI, however, HI reported that the total figures for land released through clearance included a figure of 15,215m<sup>2</sup> for AFRILAM's operations in Tshopo province, which it could not verify as accurate, nor if the figure reported was for a period which extended beyond the 2017 reporting period.
- 59 Email from Guillaume Zerr, HI, 24 May 2018. HI reported that clearance of these areas was not fully completed.
- 60 NPA reported that 11 items of UXO were found and destroyed as spot tasks. Email from Jean-Denis Larsen, NPA, 5 March 2018.
- 61 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Bill Marsden, MAG, 11 May 2018; and Guillaume Zerr, HI, 24 May 2018.
- 62 Article 5 deadline Extension Request, 31 March 2011, pp. 3 and 49.
- 63 Ibid; and Statements of DRC, Standing Committee on Mine Action, Geneva, 21 June 2011 and 27 May 2013.
- 64 Second Article 5 deadline Extension Request, 7 April 2014, p. 48.
- 65 Ibid., p. 49. The extension request included annual projections of progress to be made during the extension period, though without providing a detailed workplan for each operator in each area in order to achieve them. It also foresaw expenditure of US\$20 million, of which some \$19.4 million would go to demining the 130 mined areas, while the remainder would be spent on survey and clearance in Aru and Dungu. It announced that the Government of the DRC had committed to contribute FC580 million (about \$600,000) a year to mine action activities, starting in January 2015. However, no such funding was provided by the government.
- 66 Analysis of DRC's Article 5 deadline Extension Request, submitted by the President of the Third Review Conference on behalf of the States Parties mandated to analyse requests for extensions, 18 June 2014, p. 5.
- 67 Analysis of DRC's Article 5 deadline Extension Request, 18 June 2014, pp. 5–6. The DRC had estimated that on the basis of operational and financial capacity for demining in 2009–13, mine clearance could be completed within four years; however, additional time would be needed to conduct survey and clearance in the Aru and Dungu territories, thereby totalling the six years requested.
- 68 Email from Jean-Denis Larsen, NPA, 5 March 2018.
- 69 Email from Guillaume Zerr, HI, 24 May 2018.
- 70 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Bill Marsden, MAG, 11 May 2018; and Guillaume Zerr, HI, 24 May 2018; and Pehr Lodhammar, UNMAS, 5 April 2017.
- 71 Emails from Jean-Denis Larsen, NPA, 5 March 2018.
- 72 Email from Bill Marsden, MAG, 11 May 2018.
- 73 Emails from Jean-Denis Larsen, NPA, 5 March 2018; and Guillaume Zerr, HI, 24 May 2018.

# ECUADOR

3.5

**ARTICLE 5 DEADLINE: 31 DECEMBER 2022**  
(UNCLEAR WHETHER ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE	2017	2016
Problem understood	5	6
Target date for completion of mine clearance	1	1
Targeted clearance	7	7
Efficient clearance	2	2
National funding of programme	8	8
Timely clearance	4	3
Land-release system in place	6	6
National mine action standards	7	7
Reporting on progress	5	7
Improving performance	2	2
<b>PERFORMANCE SCORE: POOR</b>	<b>4.7</b>	<b>4.9</b>

## PERFORMANCE COMMENTARY

In 2017, Ecuador sought and was granted a five-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline through to 31 December 2022, despite its obligation to clear anti-personnel mines “as soon as possible”. Ecuador has provided contradictory figures for its outstanding mine contamination and its annual clearance plans do not appear to address all reported contamination. It cleared only some 15,000m<sup>2</sup> in 2017, yet that was itself an increase on the meagre 1,400m<sup>2</sup> of clearance the previous year.

## RECOMMENDATIONS FOR ACTION

- Ecuador should accelerate its demining operations to ensure it finally completes clearance.
- Ecuador should provide an accurate estimate of mine contamination and a revised annual clearance plan that reflects the amount of outstanding contamination.

## CONTAMINATION

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. As at the end of 2017, 97,469m<sup>2</sup> of contaminated area was reported to remain across five mined zones down from 132,976m<sup>2</sup> in 2016. Contamination was believed to include a total of 3,673 anti-personnel mines.<sup>1</sup>

Two of Ecuador's twenty-four provinces still have mined areas, as set out in Table 1. The two provinces are located in the south of the country along the border with Peru.

**Table 1: Mine contamination by province (at end-2017)<sup>2</sup>**

Province	Contaminated zones	Area (m <sup>2</sup> )
Morona Santiago (Tiwinza)	1	7,595
Zamora Chinchipe	4	89,874
<b>Totals</b>	<b>5</b>	<b>97,469</b>

In its 2017 Article 5 deadline extension request Ecuador reported 65,006m<sup>2</sup> of mined area remaining in Zamora Chinchipe and 35,490m<sup>2</sup> in Morona Santiago (Tiwinza).<sup>3</sup> In its APMBBC Article 7 report for 2017 these numbers are revised to the figures given in Table 1 above, but no clear explanation is given for the change in figures beyond a reported non-technical survey during 2017 in the Tiwinza square kilometre.<sup>4</sup>

Ecuador reported that mines impact local communities by restricting their movement across the border, limiting communication between groups and trade in traditional goods and services. The communities have become increasingly vulnerable to mine incidents in recent years as declining space for hunting and gathering has forced them deeper into the forests where there is greater mine contamination. Mines have also been displaced due to heavy rains, moving to areas where there is an increased chance that people will detonate them.<sup>5</sup>

## PROGRAMME MANAGEMENT

The national mine action programme is managed by the National Centre for Humanitarian Demining (CENDESMI). The Ecuadorian government created CENDESMI through Executive Decree no. 1297, on 22 September 1999.<sup>6</sup> It is an interministerial body chaired by the Ministry of Foreign Affairs and Human Mobility and is made up of the Ministry of National Defense, 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).<sup>7</sup>

### Strategic Planning

In its 2017 Article 5 deadline extension request Ecuador included a National Plan for Humanitarian Demining 2018–2022, which provides information on techniques, resources, mitigating factors, opportunities, and risks, as well as annual clearance targets. The clearance plan is for the contamination in the Zamora Chinchipe province. The clearance plan given for the Tiwinza square kilometre states that the operations will be carried out by the Ecuador-Peru Binational Demining Unit.<sup>8</sup>

**Table 2: Planned Mine Clearance in Zamora Chinchipe in 2018–22 (Extension Request)<sup>9</sup>**

Year	District	Mined areas	Mined area (m <sup>2</sup> )
2018	Gualaquiza	2	31,215
2019	Gualaquiza	9	9,590
2020	Miazi	12	14,734
2021	Chinapintza	10	1,946
2022	Condor Mirador; Machinaza Alto; Miazi; and Paquisha	26	7,521
<b>Totals</b>		<b>59</b>	<b>65,006</b>

Ecuador’s Article 7 report for 2017 also includes a clearance plan for 2018–22. Although it reports 89,874m<sup>2</sup> of area to be cleared in Zamora Chinchipe, the plan is for a total of 65,006m<sup>2</sup>. The clearance plan for the Tiwinza square kilometre is vague, noting only that there is one mined area of 7,594.61m<sup>2</sup> that will be cleared in the five-year period.<sup>10</sup>

**Table 3: Planned mine clearance in 2018–22 (Article 7)<sup>11</sup>**

Year	Province	Mined areas	Area (m <sup>2</sup> )
2018	Zamora Chinchipe	2	26,159
2019	Zamora Chinchipe	9	12,555
2020	Zamora Chinchipe	12	8,431
2021	Zamora Chinchipe	10	10,340
2022	Zamora Chinchipe	26	7,521
<b>Totals</b>		<b>59</b>	<b>65,006</b>

## Legislation and Standards

CENDESMI was set up by Executive Decree. There is no other national mine action legislation.

Under the Binational Cooperation Programme (Programa Binacional de Cooperación) established in 2000, Ecuador and Peru adopted a Binational Manual for Humanitarian Demining (Manual Binacional de Desminado Humanitario) in April 2013 to unify the demining procedures of both states in accordance with the International Mine Action Standards (IMAS).

## Quality Management

In March 2001, Ecuador and the Organization of American States (OAS) signed an agreement to implement the Assistance Program for Integral Action against Antipersonnel Mines in Ecuador.<sup>12</sup> Until October 2013, under this Agreement the OAS provided technical oversight and quality assurance (QA) of clearance.<sup>13</sup>

CENDESMI is responsible for observing and monitoring compliance of the demining, including quality control and certification of clearance operations.<sup>14</sup>

## Information Management

Ecuador uses the Information Management System for Mine Action (IMSMA) database.<sup>15</sup>

## Operators

Demining operations are conducted by the Battalion of Engineers No. 68 “COTOPAXI” and the CGDEOD with a combined total of 140 trained deminers, including 3 women.<sup>16</sup> In the past they have deployed 16 manual demining teams and 2 mechanical demining teams (using an MV-4 remotely controlled flail), as well as one mine detection dog (MDD) team.<sup>17</sup> However, in the additional information provided alongside its 2017 extension request, Ecuador stated that the remaining clearance will only be carried out by manual demining teams, due to the unsuitability of the terrain for the machine.<sup>18</sup>

In December 2013, the joint Ecuador-Peru Binational Humanitarian Demining Unit of 30 deminers conducted its first exercise in Morona Santiago. In October 2015, the Unit began operations in a mined area estimated to extend over 43,500m<sup>2</sup> within the Tiwinza square kilometre (an area at the centre of the conflict between the two nations).<sup>19</sup> In 2017, all survey and clearance within the Tiwinza square kilometre was performed by the Unit. They conducted clearance of 6,495m<sup>2</sup> and destroyed 391 anti-personnel mines, cancelled 10,919m<sup>2</sup> through non-technical survey, and reduced 7,332m<sup>2</sup> through technical survey.<sup>20</sup>

## LAND RELEASE

Ecuador released more than 33,000m<sup>2</sup> of mined area in 2017 in the two affected provinces, an increase in output from the less than 5,000m<sup>2</sup> of mined area released in 2016.

### Survey in 2017

In 2017, 7,332m<sup>2</sup> was reduced by technical survey and 10,919m<sup>2</sup> was cancelled by non-technical survey in the Tiwinza square kilometre, covering a total of 18,251m<sup>2</sup>.<sup>21</sup>

### Clearance in 2017

A total of 15,476m<sup>2</sup> was released by clearance in 2017 across two provinces, with the destruction of 453 anti-personnel mines and 5 explosive remnants of war (ERW).<sup>22</sup> In 2016, no mined areas were released and clearance covered a meagre 1,410m<sup>2</sup>, with the destruction of 565 anti-personnel mines and 2 ERW.

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2017), Ecuador is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2022.<sup>23</sup> This is Ecuador's third Article 5 deadline extension request.

In granting Ecuador's 2008 extension request, the Ninth Meeting of States Parties had noted that based on planned increases in funding and demining capacity, Ecuador "may find itself in a situation wherein it could proceed with implementation faster than that suggested by the amount of time requested."<sup>24</sup> This proved not to be the case. In its presentation to the Article 5 Committee in May 2016, Ecuador, one of the co-chairs of the committee, announced that of the remaining 0.13km<sup>2</sup> of contamination, 0.08km<sup>2</sup> would be cleared in 2016 and the remaining 0.05km<sup>2</sup> in 2017 prior to October.<sup>25</sup> This did not occur.

**Table 4: Mine clearance in 2013–17**

Year	Area cleared [m <sup>2</sup> ]
2017	15,476
2016	1,410
2015	66,414
2014	39,660
2013	12,331
<b>Total</b>	<b>135,291</b>

On 28 November 2016, Ecuador unexpectedly submitted a second request to extend its mine clearance deadline. The request was granted at the Fifteenth Meeting of the States Parties and a new deadline set for 31 December 2017. In the letter it sent seeking the request, Ecuador stated that "the technical study and clearing in the Provinces of Zamora Chinchipe and Morona Santiago (Tiwinza square kilometre) is about to conclude, pending the destruction of 5,478 anti-personnel mines in an area of 137,653 square metres." The letter 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.<sup>26</sup>

In granting the extension request, the Fifteenth Meeting of States Parties noted that Ecuador and the Convention as a whole would benefit from a full extension request process taking place, and agreed to grant Ecuador a three-month extension until 31 December 2017. "In addition, the Meeting requested that Ecuador submit a detailed request, in accordance with the established process, by 31 March 2017, in order for Ecuador and the States Parties to benefit from a cooperative exchange on the request."<sup>27</sup>

In its Article 7 report for 2016, however, 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, which included annual clearance targets in 2018–22 (see Table 2) and an annual demining budget. Ecuador has allocated a budget of \$20,937,735.36 for humanitarian demining operations of which it has spent a total of \$8,730,063.08.<sup>28</sup>

In addition to the 65,006m<sup>2</sup> (or 89,874m<sup>2</sup>) of mine contamination left in Zamora Chinchipe, there is also 7,595m<sup>2</sup> (or 35,490m<sup>2</sup>) to be cleared in San Juan Bosco district, Morona Santiago province (the Tiwinza square kilometre) which has yet to be included in the annual targets.<sup>29</sup> Clearance of this area will be carried out by the Ecuador-Peru Binational Demining Unit. In the additional information provided by Ecuador alongside its 2017 extension request, clearance of the 26 hazardous areas in the vicinity of the Tiwinza square kilometre is planned to be carried out in 2018–20 amounting to a total of 122,880m<sup>2</sup> of clearance.<sup>30</sup> This is seemingly contradicted in Peru's "Updated National Plan for Humanitarian Demining 2018–2024" where clearance in Tiwinza was planned for 2018 covering five mined areas totalling 70,100m<sup>2</sup>.<sup>31</sup>

The amount of outstanding mine contamination in its Article 7 report for 2017 differs from the Article 5 deadline extension request. However, while the Article 7 report includes the revised figure for the contamination in Tiwinza (7,595m<sup>2</sup>), the clearance plan for Zamora Chinchipe in the same Article 7 report is based on the original figure of 65,006m<sup>2</sup> rather than the revised figure of 89,874m<sup>2</sup>.<sup>32</sup>

Ecuador's new five-year extension does not appear to represent an act of good faith. Its compliance with the duty under Article 5 of the APMBC to complete clearance "as soon as possible" is in serious doubt.

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- 1 APMBC Article 7 Report (for 2017), Form D.
  - 2 Article 7 Report (for 2017), Form D.
  - 3 2017 Article 5 deadline Extension request, p. 45.
  - 4 Article 7 Report (for 2017), Form D.
  - 5 2017 Article 5 deadline Extension request, p. 52.
  - 6 Executive Decree No. 1297, issued on 22 September 1999.
  - 7 2017 Article 5 deadline Extension request, Annex 1.
  - 8 Ibid., p. 45.
  - 9 Ibid.
  - 10 Article 7 Report (for 2017), Form D.
  - 11 Ibid.
  - 12 Ibid., Annex 1.
  - 13 Email from Carl Case, General Coordinator, Comprehensive Action against Antipersonnel Mines and Assistance for Control of Arms and Munitions, OAS, Washington, 19 March 2014.
  - 14 2017 Article 5 deadline Extension request, p. 39.
  - 15 Ibid, p. 25.
  - 16 Ibid, pp. 39–40.
  - 17 Statement of Ecuador, APMBC 14th Meeting of States Parties, Geneva, 1 December 2015.
  - 18 2017 Article 5 deadline Extension Request, Additional Information provided on 8 September 2017, p. 1.
  - 19 Ibid.
  - 20 Article 7 Report (for 2017), Form D.
  - 21 Ibid.
  - 22 Ibid.
  - 23 2017 Article 5 deadline Extension Request.
  - 24 Article 5 deadline Extension Request, Decision, 28 November 2008.
  - 25 Statement of Ecuador, Committee on Article 5 Implementation, Geneva, 19 May 2016.
  - 26 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.
  - 27 Decisions on the request submitted by Ecuador 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.
  - 28 2017 Article 5 deadline Extension Request, p. 95.
  - 29 Ibid., p. 45.
  - 30 2017 Article 5 deadline Extension Request, Additional Information provided on 8 September 2017, p. 10.
  - 31 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 17.
  - 32 Article 7 Report (for 2017), Form D.



# ERITREA

**ARTICLE 5 DEADLINE: 1 FEBRUARY 2020**  
(NOT ON TRACK TO MEET DEADLINE AND IN VIOLATION OF THE APMBC)

## PROGRAMME PERFORMANCE

	2017	2016
<b>Problem understood</b>	4	4
<b>Target date for completion of mine clearance</b>	0	1
<b>Targeted clearance</b>	3	4
<b>Efficient clearance</b>	3	4
<b>National funding of programme</b>	5	6
<b>Timely clearance</b>	0	1
<b>Land-release system in place</b>	5	5
<b>National mine action standards</b>	5	5
<b>Reporting on progress</b>	0	0
<b>Improving performance</b>	0	0
<b>PERFORMANCE SCORE: VERY POOR</b>	<b>2.5</b>	<b>3.0</b>

## PERFORMANCE COMMENTARY

Eritrea's mine action programme seemingly performed very poorly again in 2017 as in previous years. There is no indication of any progress in mine action since the end of 2013. Eritrea is failing to comply with its obligation under Article 5 of the Anti-Personnel Mine Ban Convention (APMBC) to complete clearance as soon as possible. Eritrea failed to submit an updated Article 5 workplan as required by states parties upon granting its second extension and did not respond to repeated requests for updated information from Mine Action Review in 2018. It last submitted an Article 7 transparency report in 2014, in and of itself a violation of the Convention.

## RECOMMENDATIONS FOR ACTION

- Eritrea needs to return to compliance with its obligations under the APMBC. The authorities should ensure that national demining units immediately undertake survey and clearance operations for humanitarian purposes.
- Eritrea should urgently submit an up-to-date list of all known or suspected areas with anti-personnel mines and a detailed timeline of activities planned under its Article 5 extension request, including annual projections of areas to be addressed and a corresponding budget.
- Eritrea should urgently submit its outstanding annual Article 7 transparency reports, the latest of which was due by 30 April 2018, as well as respond to requests from the international mine action community for updated information in a transparent and timely manner.
- Eritrea should reconsider its policy of excluding international technical assistance from the country, which would support more efficient land release and re-open international funding paths.
- Eritrea should develop and make public a resource mobilisation strategy on the basis of a clear understanding of remaining contamination.

## 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”.<sup>1</sup> The EDA did not respond to repeated requests from Mine Action Review for further information, since 2015, including most recently in 2018.

The last estimate of mine contamination in Eritrea dates back to the end of 2013, when Eritrea reported that 434 mined areas remained over an estimated 33.4km<sup>2</sup>.<sup>2</sup> This was a two-thirds reduction on the earlier estimate of 99km<sup>2</sup> of June 2011,<sup>3</sup> and significantly lower than the 129km<sup>2</sup> identified by the 2004 landmine impact survey.<sup>4</sup>

**Table 1: Mined area by region (at end-2013)<sup>5</sup>**

Zoba (region)	SHAs	Estimated area (m <sup>2</sup> )
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
<b>Totals</b>	<b>434</b>	<b>33,432,818</b>

SHA = Suspected hazardous area

Anti-personnel mines and ERW are reported to negatively affect socio-economic conditions in Eritrea, blocking access to agricultural and pastoral land vital to farmers and animal herders, and preventing the implementation of construction and development projects, including of roads, schools, and clinics.<sup>6</sup>

## 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 reports directly to the Office of the President.

### Operators

In the past, demining has been primarily conducted by the engineering units of the Eritrean defence forces under the supervision of the EDA, which also carries out quality assurance (QA) and quality control (QC) in accordance with Eritrea's National Mine Action Standards.<sup>7</sup> According to its second Article 5 deadline

extension request, submitted in 2014, Eritrea planned to deploy "at least" five demining teams during its second extension period, the same number as then deployed, but might increase the number if adequate financial and logistical support were found.<sup>8</sup> However, the request stated that Eritrea's demining units may be re-tasked toward infrastructure building, such as construction of roads and dams, "at any point".<sup>9</sup>

Following expulsion of international non-governmental organisations (NGOs) in 2005, Eritrea does not allow any international demining operators to conduct survey or clearance in Eritrea.

## LAND RELEASE

Under its 2014 extension request, Eritrea projected that up to 15.4km<sup>2</sup> of mined area could be cleared within five years. It reported that 67.3km<sup>2</sup> of contaminated area had been cancelled through non-technical survey and that 5.7km<sup>2</sup> was cleared over 38 mined areas in 2011–13.<sup>10</sup>

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 in since 2014. Previously, in 2013, Eritrea reported release of 157 SHAs totalling 33.5km<sup>2</sup>, leaving 385 mined areas of close to 24.5km<sup>2</sup> to

be surveyed.<sup>11</sup> Forty-nine new mined areas with a total size of 9km<sup>2</sup> 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.<sup>12</sup>

Likewise, Eritrea has not made public any information on any mine clearance undertaken in 2017 or recent years. In 2013, Eritrea seemingly cleared approx. 2.26km<sup>2</sup> of mined area, almost twice the amount cleared in 2012 (1.2km<sup>2</sup>).<sup>13</sup> The number of anti-personnel and anti-vehicle mines destroyed in 2013 was not reported.

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the three-year extension granted by states parties in 2011 and a further five-year extension granted in 2014), Eritrea 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 2020. It is not on track to meet this deadline and is failing to comply with its Article 5 obligations.

In January 2014, Eritrea submitted a second Article 5 deadline extension request seeking a further five years to continue clearance and complete re-survey of SHAs, but not to fulfil its clearance obligations under the treaty. It is not clear how this is consistent with the terms of Article 5 of the APMBC. In June 2014, however, states parties granted Eritrea its extension request until 2020, 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".<sup>14</sup>

Re-survey during the second extension period is planned to involve both technical and non-technical survey of all remaining mined areas across six regions. Re-survey is planned to run concurrently with clearance in priority areas in the Anseba, Maakel, and Semienawi Keih Bahri regions.<sup>15</sup>

Based on a predicted clearance rate of 0.384km<sup>2</sup> per team per year and 1.92km<sup>2</sup> per five teams per year, Eritrea estimated that five teams operating at this optimum pace could clear almost 15.4km<sup>2</sup> in the five-year period.<sup>16</sup> However, this clearance rate was acknowledged by Eritrea as "ambitious" due to the "inevitable collaboration ... of the demining teams with the survey teams". In addition, while Eritrea seems to have set reasonable estimates for its clearance rates, which roughly match its progress in previous years with similar capacity, this accounts for less than half of the total area Eritrea has estimated as requiring either clearance or re-survey (33.5km<sup>2</sup>), leaving some 18km<sup>2</sup> unaccounted for in the workplan.<sup>17</sup>

Eritrea projected that costs for the extension period would amount to more than US\$7 million, all to be raised nationally.<sup>18</sup> In 2011–13, Eritrea managed to raise only \$257,000 annually. As at December 2013, Eritrea had not received international funding for mine clearance, and in its statement at the Thirteenth Meeting of States Parties, it said that progress in clearing mines would be slow because it "had limited resources and capacity of one small poor nation".<sup>19</sup> It is therefore unclear how Eritrea intends to raise the finances necessary for its survey and clearance activities, particularly in light of its regrettable policy not to accept international technical assistance.

In April 2014, at the APMBC Intersessional Meetings, Eritrea stated that the extension period was designed to gain greater clarity about its mine problem, at which point Eritrea “could plan and think about the financial resources to be allocated for mine action”.<sup>20</sup> It was further stated that Eritrea “won’t complete clearance in the next five years”, and will likely require a third extension.<sup>21</sup> Eritrea has not provided states parties with any information since, nor did it submit an updated Article 5 deadline extension request workplan as requested. It did not attend any meetings of the APMBC in 2017 or the first half of 2018.

**Table 2: Mine clearance in 2013–17<sup>22</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	N/R
2016	N/R
2015	N/R
2014	N/R
2013	2.3
<b>Total</b>	<b>2.3</b>

N/R = Not reported

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1 Email from Habtom Seghid, Deputy General Manager, EDA, 6 May 2015.

2 Second Article 5 deadline Extension Request, 23 January 2014, p. 7. This was despite finding 49 previously unrecorded suspected hazardous areas (SHAs) in five regions across an estimated area of 9km<sup>2</sup> 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 Second Article 5 deadline Extension Request, 23 January 2014, p. 8.

6 Analysis of Eritrea’s Article 5 deadline Extension Request, 20 June 2014, p. 3.

7 Article 7 Report (for 2012), Form F, p. 5.

8 Ibid., p. 10.

9 ICBL interview with Habtom Seghid, EDA, 10 April 2014.

10 Analysis of Eritrea’s Second Article 5 deadline Extension Request, 20 June 2014, p. 2.

11 Second Article 5 deadline Extension Request, 23 January 2014, p. 7.

12 Analysis of Eritrea’s Second Article 5 deadline Extension Request, 20 June 2014, p. 2.

13 Article 7 Report (for 2012), Form F, p. 10.

14 Decision on Eritrea’s Second Article 5 deadline Extension Request, Third Review Conference, Maputo, 26 June 2014.

15 Statement of Eritrea, Standing Committee on Mine Clearance, Geneva, 9 April 2014.

16 Second Article 5 deadline Extension Request, 23 January 2014, p. 10.

17 ICBL Comments on Eritrea’s Article 5 Extension Request, March 2014.

18 Second Article 5 deadline Extension Request, 23 January 2014, p. 11.

19 Statement of Eritrea, 13th Meeting of States Parties, Geneva, 6 December 2013.

20 Statement of Eritrea, Standing Committee on Mine Action, Geneva, 9 April 2014. Notes by ICBL.

21 Ibid.

22 Emails from Habtom Seghid, EDA, 2 March 2010, 21 and 22 July 2011; Article 7 Reports (for 2011 and 2012), Form J; and Second Article 5 deadline Extension Request, 23 January 2014, p. 8.

# ETHIOPIA

**ARTICLE 5 DEADLINE: 1 JUNE 2020**  
(NOT ON TRACK TO MEET DEADLINE)

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	4	5
Target date for completion of mine clearance	0	1
Targeted clearance	1	1
Efficient clearance	1	1
National funding of programme	2	2
Timely clearance	0	0
Land-release system in place	5	5
National mine action standards	6	6
Reporting on progress	2	2
Improving performance	1	1
<b>PERFORMANCE SCORE: VERY POOR</b>	<b>2.2</b>	<b>2.4</b>

## PERFORMANCE COMMENTARY

Ethiopia is failing to comply with its obligations under the Anti-Personnel Mine Ban Convention (APMBC) to clear anti-personnel mines as soon as possible. Its mine action programme showed few signs of progress again in 2017. From being one of the best mine action programmes a decade ago it is now one of the worst, with little meaningful progress since September 2011, more than seven years ago. No survey or clearance of anti-personnel mines occurred for yet another year in 2017.

In December 2017, Ethiopia did submit an updated workplan to accompany its Article 5 extension for 2017–20, which represents a small step forward. However, as yet another year has passed without any progress in demining, and no significant increase in national mine action capacity has been reported, it is difficult to be optimistic that Ethiopia will be able to meet its workplan's targets and complete clearance by June 2020.

### RECOMMENDATIONS FOR ACTION

- Ethiopia should ensure at once that demining activities have re-started in the country and report accordingly to APMBC states parties.
- Ethiopia should ensure the re-established national mine action authority has sufficient resources to establish an effective mine action programme.
- Ethiopia should submit updated annual reports as required by Article 7 of the APMBC. Reports should detail progress in meeting its updated workplan targets for the remainder of its Article 5 extension period, with updates on the number and extent of all mined areas, disaggregated land release, and operational capacity, along with an updated and detailed budget.
- Ethiopia should report on the development of plans to carry out survey on the Eritrean-Ethiopian border as well as on any changes to the security situation which occur that could affect mine action operations.
- All mine action data should be reported and recorded according to International Mine Action Standards (IMAS) land release terminology.
- Ethiopia should develop a resource mobilisation plan and clarify how financial resources will be used to meet its extension request targets. It should also provide greater detail on the projected amounts of international donor assistance required and contributions to be made from the national government.
- Ethiopia should consider re-establishing conditions which would allow for the re-entry of international mine action organisations, should it determine that assistance is required to meet its Article 5 obligations.

## CONTAMINATION

In October 2017, Ethiopia continued to report that a total of 314 confirmed and suspected hazardous areas remained to be addressed across six regions of the country, including 45 confirmed hazardous areas (CHAs) covering a total area of just under 7.2km<sup>2</sup>, along with 269 suspected hazardous areas (SHAs) with a size of nearly 1,186km<sup>2</sup>, of which it expected about only about 2–3% would contain mines.<sup>1</sup> On this basis, Ethiopia reported that in order to declare compliance with its Article 5 obligations, it expected a total of close to 1,162km<sup>2</sup> will be released by survey and up to 31km<sup>2</sup> will be released through clearance.<sup>2</sup>

However, since 2015, 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.<sup>3</sup>

It appears that Ethiopia's updated 2017–20 workplan submitted in December 2017 attempts to clarify conflicting past estimates of remaining contamination by presenting one consistent set of figures throughout the document regarding the number and size of the suspected and confirmed hazardous areas remaining to be addressed as at October 2017, as set out in Table 1.<sup>4</sup> This estimate is reportedly based on re-survey efforts in 2012 following an inflated Landmine Impact Survey (LIS) concluded in 2004.<sup>5</sup>

As at October 2017, CHAs and SHAs continued to remain across six regions (Afar, Benishangul, Gambela, Oromia, Somali, and Tigray), as set out in Table 1. The Somali region is believed to be by far the most heavily affected, followed by the Afar region; however, Ethiopia's updated 2017–20 workplan notes that the full extent of contamination "is not yet fully known, especially in the Somali region as some communities remain inaccessible due to poor infrastructure conditions" near to the border with Somalia.<sup>6</sup>

**Table 1: CHAs and SHAs by region (at October 2017)<sup>7</sup>**

Region	SHAs	Area (km <sup>2</sup> )	CHAs	Area (km <sup>2</sup> )
Afar	8	1.9	6	1.76
Benishangul	0	0	2	0.05
Gambela	20	0.8	0	0
Oromia	5	1.0	8	0.10
Somali	236	1,182.2	26	3.81
Tigray	0	0	3	1.46
<b>Totals</b>	<b>269</b>	<b>1,185.9</b>	<b>45</b>	<b>7.18</b>

It is not possible to definitively reconcile information reported in Ethiopia's updated 2017–20 workplan with statements made in 2017 on its progress in implementing its Article 5 obligations, or information provided in its 2015 extension request, along with other previous reports. Additionally, Ethiopia did not report on progress to meet the projected milestones contained in its extension request for 2015–17, nor does it appear that any progress to meet these targets was actually made.

Ethiopia has also noted that estimates of contamination do not include the area along the Ethiopia-Eritrea confrontation line where no survey has been carried out and the border has not been demarcated. The area was previously under the control of the United Nations Mission in Ethiopia and Eritrea (UNMEE). When asked what efforts it had made to address this contamination, Ethiopia reported in 2015 that it had carried out clearance behind its own defensive lines, but it was not possible to enter or clear the area between the two countries' defensive lines due to security concerns, and clearance would have to wait until the demarcation has been completed.<sup>8</sup>

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 (1997–98), internal conflict (1974–2000), and the Ethiopian-Eritrean war (1998–2000).

In 2001–04, a 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<sup>2</sup> impacting more than 1,492 communities.<sup>9</sup> The Afar, Somali, and Tigray regions accounted for more than four-fifths of impacted communities.<sup>10</sup>

The Ethiopian Mine Action Office (EMAO) believed 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.<sup>11</sup> Indeed, in 2012 Ethiopia reported that subsequent technical survey and non-technical (re-) survey of SHAs identified during the LIS confirmed mine contamination in only 136 areas. However, 60 previously unrecorded hazardous areas were also identified, which were confirmed as mined by technical survey, resulting in a total of 196 areas confirmed as mined.<sup>12</sup> Also in 2012, Ethiopia reported that 358 SHAs across an area of 1,200km<sup>2</sup> from the LIS data needed to be re-surveyed.<sup>13</sup>

EMAO once forecasted expecting to clear some 3km<sup>2</sup> per year,<sup>14</sup> but it appears only very limited clearance of a total of 0.1km<sup>2</sup> has taken place since the transfer of EMAO's responsibilities to the Ministry of Defence in 2012.<sup>15</sup> Ethiopia subsequently requested, and was granted, a five-year extension to its Article 5 clearance deadline of 1 June 2015 until June 2020.

The last known estimate of mine and ERW victims in Ethiopia stems from the 2001–04 LIS, which claimed 16,616 mine and ERW casualties, of whom 9,341 were killed and 7,275 were injured. Ethiopia reported that two-thirds of the victims were engaged in herding and farming at the time of the incidents.<sup>16</sup> Mines and ERW are reported to continue to cause socio-economic harm, including through: denying access to agricultural and pasture land, contributing to food insecurity and serious economic hardship for certain communities; blocking access to water for communities and particularly for nomadic pastoralists; and blocking secondary and tertiary roads important to local communities.<sup>17</sup> In its updated 2017–20 workplan, Ethiopia claimed that the actual and perceived threat of mines and ERW continued to obstruct humanitarian activities, hinder agriculture, development, and construction efforts, and prevent the safe resettlement of displaced populations.<sup>18</sup>

## 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.<sup>19</sup> EMAO developed its operational capacities effectively with technical assistance from Norwegian People's Aid (NPA), the UN Development Programme (UNDP), and the UN Children's Fund (UNICEF).<sup>20</sup> In 2011, however, EMAO's governing board decided that the Ministry of Defence was better suited to clear the remaining mines because Ethiopia had made significant progress in meeting its APMBCC clearance obligations and the remaining threat did not warrant a structure and organisation the size of EMAO. It has further asserted on numerous occasions that a civilian entity such as EMAO would have difficulty accessing the unstable Somali region.<sup>21</sup>

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<sup>22</sup> and had completed the transfer of its remaining 49 mine detection dogs (MDDs) to EMAO and the federal police by the end of April 2012.<sup>23</sup> The Combat Engineers Division took over management of the MDD Training Centre at Entoto where it conducted training in demining in early 2012.

### Strategic Planning

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.<sup>24</sup> In its updated 2017–20 workplan, Ethiopia confirmed that this "autonomous legal entity" had been re-named the EMAO, and was responsible for survey, clearance, and mine risk education activities, accountable to the Ministry of National Defence's Engineering Main Department (MoND-EMD). The workplan includes an organigram of the department, which is structured around a number of sub-departments, including for risk education, information management, quality assurance, training, and operations, under which demining companies, technical survey and explosive ordnance disposal (EOD) teams, and a mechanical demining team are to report.<sup>25</sup>

However, since the re-establishment of the national mine action office was announced in 2015, Ethiopia has continued to report that resource constraints were impeding the construction of the Demining Training Centre started by the former EMAO, and that demining equipment was nearing the end of its operational life.<sup>26</sup>

### Legislation and Standards

In the updated 2017–20 workplan, Ethiopia stated that in 2017, its National Mine Action Standards (NMAS) would be "developed and updated" and that standing operating procedures (SOPs) for mine clearance and land release would be updated according to the current IMAS. It had previously reported that this would happen in 2015, according to its extension request targets.<sup>27</sup>

### Quality Management

Ethiopia has reported that operations have been "employing overall quality management including quality assurance and quality control efforts to ensure that operations are in accordance with NMAS and IMAS".<sup>28</sup> In its 2017–20 workplan, it is stipulated that quality assurance reports on operations will be submitted on a weekly basis.<sup>29</sup>

### Information Management

Ethiopia also reported that, prior to 2015, EMAO had installed and customised a new version of the Information Management System for Mine Action (IMSMA) database and had been working on capacity development to upgrade data processing. However, it stated that database challenges remained and until issues with the IMSMA system were resolved, the National Defence Force would "continue using alternative data processing packages together with IMSMA for planning, reporting, and analysis". In its 2015 extension request and 2017–20 workplan, Ethiopia requested technical advisory and training support to make the IMSMA database fully functional.<sup>30</sup> In June and October 2017, Ethiopia reiterated its appeals for assistance for resources and skills training for personnel to operate the IMSMA database and for strategic planning projects.<sup>31</sup>

### Operators

Under its extension request, Ethiopia stated that from 1 December 2015 to the end of May 2020, it would deploy four demining companies and four survey and rapid-response teams.<sup>32</sup> In its 2017–20 workplan, Ethiopia states that these teams were set to be deployed in November 2017.<sup>33</sup> The workplan lists the following capacity to be deployed for the duration of the extension request period: four manual clearance companies, two technical survey and rapid-response teams, two EOD teams, and six ground preparation machines.<sup>34</sup>

In April 2017, Ethiopia reported that using its own resources, 412 personnel attended a basic demining course.<sup>35</sup> The International Committee of the Red Cross (ICRC) reported that it provided demining training for 45 personnel from the Combat Engineering Division in 2017, as a follow-up to training conducted in 2016, which it said was intended to strengthen its capacity to clear mined areas. However, it also reported that after their training, a number of the recipients were deployed to peacekeeping support missions abroad. It likewise did not report that any demining had begun.<sup>36</sup>

## LAND RELEASE

As at October 2017, Ethiopia did not report that any survey or clearance activities had taken place during the year. As stated above, in its updated 2017–20 workplan, Ethiopia pledged that four demining teams and four technical survey and rapid-response teams would re-start clearance and survey operations in November 2017, despite having reported previously in its extension request that the teams would be deployed in November 2015.<sup>37</sup>

While no survey or clearance operations took place in 2017, or the previous year, Ethiopia reported that in 2016 on the basis of reports from the local population, 30 items of ordnance had been destroyed by the mine action office: 10 anti-vehicle mines and 20 items of UXO.<sup>38</sup>

Previously, in April 2014, Ethiopia had informed states parties to the APMBC that in January–November 2013 its rapid-response teams had visited more than ten ERW-impacted communities in “Amhar, Oromiya, south and Somalia regional states” clearing more than 100,000m<sup>2</sup> and destroying ten anti-personnel mines and 176,000 items of UXO.<sup>39</sup> No details were given as to the exact location of the spot tasks. Historically, in 2002–12, Ethiopia stated that almost 60km<sup>2</sup> of mined areas were cleared while nearly 1,200km<sup>2</sup> of SHAs were released by technical survey, with the destruction of 9,260 anti-personnel mines, 1,466 anti-vehicle mines, and 197,985 items of UXO.<sup>40</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with a five-year extension granted by states parties in 2015) 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 1 June 2020. It is not on track to meet this deadline.

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.<sup>41</sup> 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.

Ethiopia has listed the following reasons for its inability to comply with its initial 2015 Article 5 deadline: 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.<sup>42</sup>

Previously, in 2010, Ethiopia said it would clear all mines by 2013 (two years ahead of its deadline) if sufficient funding were available.<sup>43</sup> In March 2013, however, following the closure of EMAO and transfer of responsibility for mine action to the Ministry of Defence, Ethiopia reported it was unlikely to meet its Article 5 deadline due to secondment of demining units to Sudan, and gaps in training, equipment, and funding.<sup>44</sup>

In its updated 2017–20 workplan, Ethiopia continued to report that funding was its primary concern. However, it also raised concerns that a lack of capacity, lack of technical support, population movements, high metallic content of soil in hazardous areas, and heavy rainy seasons could delay clearance progress. It stated Ethiopia’s hope that international NGOs would provide technical support, materials, and funding to assist with clearance.<sup>45</sup>

The 2017–20 workplan states that it is “realistic” that all 314 areas can be addressed using “all available demining assets in Ethiopia” within the extension time period, while also stating 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”.<sup>46</sup>

According to the workplan, the following milestones will be met:

- 2017: demining course training, establishment of RRT and EOD teams; 26.9km<sup>2</sup> released through non-technical and technical survey and clearance of over 2.8km<sup>2</sup> in Afar, Benishangul, Somali, and Tigray regions
- 2018: address over 518.5km<sup>2</sup> through non-technical and technical survey by concluding survey of Afar, Gambela, Oromia, Afar, and Benishangul regions, along with ongoing survey in Somali region, and the clearance of just under 8km<sup>2</sup>
- 2019: complete clearance of Gambela region and conclude survey in Somali region, addressing 647.8km<sup>2</sup> through non-technical and technical survey and clearing nearly 10.5km<sup>2</sup>
- 2020: continue clearance in Somali region with over 9.6km<sup>2</sup> released by clearance, and “submit by April 2020 an updated development to the [APMBC] States Parties based on more precise information gathered through operations”.<sup>47</sup>

However, with no functioning mine action programme as at the end of 2017 and little progress reported in clearance since September 2011, Ethiopia is unlikely to meet its future extension request plan. The lack of progress since the submission of its extension request in 2015, combined with a lack of any apparent increase in capacity, makes it increasingly difficult to see how Ethiopia will complete clearance by June 2020.

**Table 2: Mine clearance in 2013–17<sup>48</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	0
2016	0
2015	0
2014	0
2013	0.10
<b>Total</b>	<b>0.10</b>

In April 2017, for the first time since 2012, Ethiopia submitted an updated Article 7 report. However, the quality of Ethiopia’s reporting on its mine action activities in recent years has been inconsistent and poor. Its March 2015 extension request is riddled with inconsistent figures and mathematical errors, and the Article 7 report does not contain precise information on the location and size of contaminated areas. While its updated workplan for 2017–20 appears to be an improvement, Ethiopia subsequently failed to submit an updated Article 7 report, which was due by April 2018.

In its 2017–20 workplan, Ethiopia claimed that US\$46.3 million is required to complete clearance of anti-personnel mine contamination by its 2020 deadline, which it reported includes all associated costs to establish a national capacity to address residual mine and ERW contamination.<sup>49</sup> This is despite the previously forecast total of US\$37 million required to complete clearance by June 2020 as reported in its 2015 extension request, and a further seemingly inexplicable increase from the US\$10 million that EMAO reported was required to clear all remaining areas by 2012.<sup>50</sup> According to the 2017–20 workplan, the Government of Ethiopia will contribute 7% of the \$46.3 million required, or approx. \$3.2 million to cover the mine action programme’s administrative costs.<sup>51</sup>

Ethiopia has called on a number of occasions since 2015 for technical and financial support from international NGOs to meet its mine clearance obligations.<sup>52</sup> In June 2017, it requested assistance and training in information management and planning, stating it faced a shortage of resources and skilled manpower.<sup>53</sup> It reiterated these requests in its 2017–20 workplan, again stating that Ethiopia would welcome international support and technical assistance.<sup>54</sup>

- 1 Revised National Mine Action Plan for 2017–20, October 2017, pp. 1-3, and 9. See also statement of Ethiopia, Committee on Article 5 Implementation, Geneva, 8 June 2017; and Article 7 Report (for 2016), Form C. In its March 2015 Article 5 deadline extension request, Ethiopia stated that, based on past operational experience, after technical survey as little as 0.5% of the estimated area of SHAs would contain mines, which would amount to a total of less than 5.6km<sup>2</sup>. At the same time, it also reported higher estimates that 2% or 3% of the total size of the SHAs could be expected to be confirmed. Article 5 deadline Extension Request, 31 March 2015, pp. 7 and 42. Ethiopia has also reported different estimates of the percentage of SHAs expected to be confirmed in its Article 7 Report (for 2016) and in its March 2015 Article 5 deadline Extension Request.
- 2 Revised National Mine Action Plan for 2017–20, October 2017, pp. 3 and 9.
- 3 "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.
- 4 Revised National Mine Action Plan for 2017–20, October 2017, pp. 3. and 9.
- 5 Ibid., p. 1.
- 6 Ibid.
- 7 Ibid., p. 2.
- 8 Ibid.
- 9 Norwegian People's Aid (NPA), "Landmine Impact Survey Report, Federal Democratic Republic of Ethiopia", May 2004.
- 10 Survey Action Center, "Landmine Impact Survey, Ethiopia, Final Report", Washington, DC, 2008, p. 9.
- 11 Interviews with Gebriel Lager, Deputy Director, EMAO, in Ljubljana, 14 April 2008, and in Geneva, 4 June 2008.
- 12 P. Simon, "Transitioning Mine Action Programmes to National Ownership: Ethiopia", Geneva International Centre for Humanitarian Demining (GICHD), March 2012, p. 3; and Statement of Ethiopia, Standing Committee on Mine Action, Geneva, 24 May 2012.
- 13 Simon, "Transitioning Mine Action Programmes to National Ownership: Ethiopia", GICHD, p. 3. In its extension request, Ethiopia reported that of the 1,916 SHAs identified by the LIS, 259 areas were later released through "general survey" and 1,207 areas released through technical survey. Article 5 deadline Extension Request, 31 March 2015, p. 7.
- 14 EMAO, "Draft Strategic Planning 2011–13"; and Simon, "Transitioning Mine Action Programmes to National Ownership: Ethiopia", GICHD, p. 3.
- 15 Statements of Ethiopia, Committee on Article 5 Implementation, Geneva, 25 June 2015 and 9 April 2014.
- 16 Article 5 deadline Extension Request, 31 March 2015, p. 6.
- 17 Ibid.
- 18 Revised National Mine Action Plan for 2017–20, October 2017, p. 2.
- 19 Council of Ministers, Regulation No. 70/2001, 5 February 2001.
- 20 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.
- 21 Statements of Ethiopia, Committee on Article 5 Implementation, Geneva, 25 June 2015, April 2014, and 24 May 2012.
- 22 Email from Aubrey Sutherland-Pillai, Programme Manager, NPA, 22 August 2012.
- 23 Emails from Kjell Ivar Breili, Programme Manager, NPA, Ethiopia, 25 May 2010; Aubrey Sutherland-Pillai, NPA, 22 August 2012; and Simon, "Transitioning Mine Action Programmes to National Ownership: Ethiopia", GICHD, p. 11.
- 24 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.
- 25 Revised National Mine Action Plan for 2017–20, October 2017, pp. 2 and 32. In its 2015 extension request, Ethiopia reiterated that the Ministry of Defence was better placed to hold responsibility for the national mine action programme as, in addition to the military having better access to remaining mined areas, it would be better placed to budget for operations with limited funding, and would more effectively employ available mine action capacity, on the basis that Ethiopian forces participate widely in peacekeeping operations around the world. Analysis of Ethiopia's Article 5 deadline Extension Request, 19 November 2015, p. 3.
- 26 Revised National Mine Action Plan for 2017–20, October 2017, p. 8; and Statement of Ethiopia, APMBC 15th Meeting of States Parties, Santiago, Chile, 29 November 2016.
- 27 Revised National Mine Action Plan for 2017–20, October 2017, p. 12; and Article 5 deadline Extension Request, 31 March 2015, p. 11.
- 28 Article 5 deadline Extension Request, 31 March 2015, p. 8.
- 29 Revised National Mine Action Plan for 2017–20, October 2017, p. 11.
- 30 Ibid., pp. 11 and 17; and Article 5 deadline Extension Request, 31 March 2015, p. 37.
- 31 Revised National Mine Action Plan for 2017–20, October 2017, p. 17; and Statement of Ethiopia, Committee on Article 5 Implementation, Geneva, 8 June 2017.
- 32 Article 5 deadline Extension Request, 31 March 2015, p. 44.
- 33 Revised National Mine Action Plan for 2017–20, October 2017, p. 11.
- 34 Ibid., p. 27.
- 35 Article 7 Report (for 2016), Form J; and Statement of Ethiopia, Committee on Article 5 Implementation, Geneva, 8 June 2017.
- 36 ICRC, ICRC Annual Report 2017, p. 140.
- 37 Article 5 deadline Extension Request, 31 March 2015, pp. 11 and 44.
- 38 Statement of Ethiopia, Committee on Article 5 Implementation, Geneva, 8 June 2017; and Article 7 Report (for 2016), Form G. At the Intersectoral Meetings in June 2017, Ethiopia also reported that 109,000m<sup>2</sup> of contamination "which was not identified before" had been cleared. This appears to refer to the just over 100,000m<sup>2</sup> it reported had been cleared in 2013. See statements of Ethiopia, Committee on Article 5 Implementation, Geneva, 25 June 2015 and 9 April 2014.
- 39 Statements of Ethiopia, Committee on Article 5 Implementation, Geneva, 25 June 2015 and 9 April 2014.
- 40 Article 5 deadline Extension Request, 31 March 2015, p. 24. "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. 2.
- 41 Article 5 deadline Extension Request, 31 March 2015, p. 10.
- 42 Article 5 deadline Extension Request, 31 March 2015, pp. 40–41.
- 43 Statements of Ethiopia, Standing Committee on Mine Action, Geneva, 23 June 2010; and 10th Meeting of States Parties, Geneva, 2 December 2010.
- 44 Presentation of Ethiopia, African Union/ICRC Weapon Contamination Workshop, Addis Ababa, 5 March 2013.
- 45 Revised National Mine Action Plan for 2017–20, October 2017, p. 26.
- 46 Ibid., pp. 9 and 27.
- 47 Revised National Mine Action Plan for 2017–20, October 2017, pp. 21–22.
- 48 Simon, "Transitioning Mine Action Programmes to National Ownership: Ethiopia", GICHD, pp. 16–17; and Statement of Ethiopia, Committee on Article 5 Implementation, Geneva, 9 April 2014.
- 49 Revised National Mine Action Plan for 2017–20, October 2017, p. 26.
- 50 Ibid., p. 4; Article 5 deadline Extension Request, 31 March 2015, p. 48; and Statement of Ethiopia, Standing Committee on Mine Action, Geneva, 24 May 2012. Ethiopia also reported that the government had contributed a total of US\$8 million to demining in 2001–12. It reported that over the same period US\$80 million of donor funding had been spent on demining in Ethiopia. Article 5 deadline Extension Request, 31 March 2015, p. 33.
- 51 Revised National Mine Action Plan for 2017–20, p. 26.
- 52 Revised National Mine Action Plan for 2017–20, October 2017, pp. 48–49.
- 53 Statement of Ethiopia, Committee on Article 5 Implementation, Geneva, 8 June 2017.
- 54 Revised National Mine Action Plan for 2017–20, October 2017, p. 26.

# IRAQ

**ARTICLE 5 DEADLINE: 1 FEBRUARY 2028**  
(NOT ON TRACK TO MEET DEADLINE)

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	6	5
Target date for completion of mine clearance	4	4
Targeted clearance	5	5
Efficient clearance	4	4
National funding of programme	5	5
Timely clearance	5	5
Land-release system in place	5	5
National mine action standards	5	5
Reporting on progress	5	5
Improving performance	6	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.0</b>	<b>4.8</b>

## PERFORMANCE COMMENTARY

Iraq's mine action programme underwent major adjustments in 2017 to deal with the extraordinary scale and complexity of contamination found in areas recaptured from Islamic State which has largely eclipsed extensive "legacy" contamination from earlier conflicts in Federal Iraq. In the last quarter of 2017, Federal Iraq took back control of much of the "Grey Area", an area previously under the control of Islamic State, after liberation shared between Federal and Kurdish authorities. As a result, most of the liberated areas under Kurdish management now come under Federal control. The shift caused a hiatus in the operations of international demining organisations that were heavily

concentrated in the Kurdistan region, but also led to a significant and overdue expansion of international capacity in Federal Iraq. Commercial operators continued to focus on clearing infrastructure, public utilities, and buildings in support of stabilisation, while non-governmental organisations (NGOs) largely conducted clearance of belts of mines of an improvised nature in rural areas. Almost no clearance of "legacy" landmine contamination from previous conflicts occurred. The degree of progress was obscured by the lack of reliable data from the national mine action authorities.

## RECOMMENDATIONS FOR ACTION

- The Directorate for Mine Action (DMA) and the Iraq Kurdistan Mine Action Agency (IKMAA) should acknowledge and report contamination by anti-personnel mines of an improvised nature as part of Iraq's Anti-Personnel Mine Ban Convention (APMBC) Article 7 obligations.
- Iraq should update its Article 5 deadline extension request to take account of contamination by landmines of an improvised nature that are outlawed by the APMBC, and set out a strategy for dealing with them.
- In supporting the mine action authorities in Iraq, the United Nations Mine Action Service (UNMAS) should seek to ensure that reporting disaggregates anti-personnel mines of an improvised nature from other types of improvised explosive devices (IEDs), so that Iraq can comply with the provisions of Article 5 and Article 7 of the APMBC.
- The DMA should review its information management to eliminate glaring errors and inconsistencies in the presentation of data, harmonise reporting of demining organisations, and facilitate timely access to accurate data.
- Iraq's Ministry of Defence and Ministry of Interior should submit comprehensive and timely data to the DMA on the results of mine action activities.
- Iraq should streamline visa procedures to eliminate lengthy delays for staff deployments at the expense of Iraq's mine action operations.

## CONTAMINATION

Iraq is the world's most contaminated country by extent of mined area. Legacy mined areas include contamination resulting from the 1980–88 war with Iran, the 1991 Gulf War, and the 2003 invasion by the United States (US)-led coalition account for most known contamination, including barrier minefields along its borders with Iran and Saudi Arabia. In addition, occupation of large areas by Islamic State after 2014 added extensive contamination with mines of an improvised nature and other explosive devices. A high proportion of these explosive devices emplaced are anti-personnel mines prohibited under the APMBC.

Iraq's request for an extension to its APMBC Article 5 deadline, prepared by the DMA and the IKMAA and submitted in March 2017, estimated the remaining threat as 3,554 confirmed hazards covering 1,195km<sup>2</sup>. Three southern governorates accounted for almost two-thirds of Iraq's total mine contamination. Iraq's Kurdistan Region of Iraq (KRI) accounted for one-fifth.<sup>1</sup>

Data provided separately by the DMA and IKMAA to the Mine Action Review reported explosive contamination at the end of 2017 as covering more than 1,300km<sup>2</sup>. This did not include areas contaminated by mines of an improvised nature in areas recaptured from Islamic State, which have not been subjected to large-scale systematic survey but are claimed by national authorities to cover hundreds of square kilometres.<sup>2</sup>

### Federal Iraq

Data provided by the DMA and its information management service provider iMMAP shows Federal Iraq's extraordinary level of mine contamination, but suffer from major inconsistencies. Iraq's latest APMBC Article 7 transparency report identifies 1,072km<sup>2</sup> of anti-personnel mine contamination as at end-2017.<sup>3</sup> In data provided to the Mine Action Review, the DMA reported 1,133km<sup>2</sup> of mined area containing anti-personnel

mines, of which confirmed hazardous areas (CHAs) amounted to more than 1,117km<sup>2</sup>.<sup>4</sup> Updated details provided in September 2018 (see Table 1) claimed a total mined area in Federal Iraq outside the KRI of 1,008km<sup>2</sup>

with what were termed improvised explosive devices (IEDs) affecting a further 185km<sup>2</sup>.<sup>5</sup> Much of this "IED" contamination may in fact amount to anti-personnel mines.

**Table 1: Mine and "IED" contamination in Federal Iraq (at end-2017)<sup>6</sup>**

Device	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )	Total area (m <sup>2</sup> )
AP mines	163	339,769,206	28	19,337,541	359,106,747
AV mines	5	87,593	1	13,319	100,912
Mixed AP/AV	1	647,194,904	160	1,979,762	649,174,666
IEDs	106	0	1	184,646,643	184,646,643
<b>Totals</b>	<b>275</b>	<b>987,051,703</b>	<b>190</b>	<b>205,977,265</b>	<b>1,193,028,968</b>

Iraqi authorities face an additional challenge managing huge quantities of explosives recovered from mined areas and collected in storage areas. Open source reports have identified 23 explosions at ammunition and explosive storage areas since 2016 resulting in 58 reported deaths and 162 injuries, including 13 explosions in the first eight months of 2018. Twenty people were reportedly killed and 120 injured in June 2018 by detonation of explosives stored by a militia under a mosque in Baghdad's Sadr city.<sup>7</sup>

## Kurdistan Region of Iraq

Anti-personnel mines in the KRI are a fraction of the contamination in central and southern Iraq but the mines left from previous decades would still rank the KRI on its own among the world's top five most contaminated regions.

IKMAA estimated that legacy mined areas at the end of 2017 covered nearly 226km<sup>2</sup>, more than half of which is in Sulimaniya (Sleman) governorate, with anti-personnel mines covering almost 211km<sup>2</sup>. Both figures represented a slight drop from the previous year but did not include areas on the border with Turkey which have never been surveyed because of insecurity.<sup>8</sup> Continuing fighting and airstrikes in the area reportedly continue to add mine and explosive remnants of war (ERW) contamination.

The estimate also did not include extensive areas contaminated by Islamic State-produced mines, which have not been subjected to comprehensive survey. However, most of the Grey Area previously shared between the KRI and Federal Iraq returned to the latter's control after October 2017 and in the process the KRI was left with only a few small areas affected by such mines of an improvised nature.<sup>9</sup>

**Table 4: KRI mine contamination by device (at end-2017)<sup>11</sup>**

Type of contamination	CHAs	Area (km <sup>2</sup> )	SHAs	Area (km <sup>2</sup> )	Total area (km <sup>2</sup> )
Anti-personnel mines	2,846	165.20	294	45.59	210.79
Anti-vehicle mines	10	0.25	2	0.003	0.25
Mixed	97	5.43	17	9.35	14.78
Other (not mines)	5	0.12	0	0	0.12
<b>Total</b>	<b>2,958</b>	<b>171</b>	<b>313</b>	<b>54.94</b>	<b>225.94</b>

**Table 2: Mine contamination in Federal Iraq by governorate end-2017<sup>10</sup>**

Province	Mined areas	Total reported area (m <sup>2</sup> )
Babylon	4	192,292,943
Basrah	56	811,120,174
Diyala	4	1,991,255
Missan	208	48,537,781
Muthanna	1	10,479,896
Qadissiya	1	1,000,000
Salah al-Din	13	3,583,399
Thi-Qar	3	3,720,987
Wassit	33	44,782,202
<b>Totals</b>	<b>323</b>	<b>1,117,508,637</b>

**Table 3: Federal Iraq "IED" contamination by governorate (at end-2017)**

Governorate	SHAs	Area (km <sup>2</sup> )
Anbar	33	112.39
Babylon	1	2.24
Baghdad	4	63.35
Diyala	6	0.001
Kirkuk	5	0.75
Ninewa	111	5.91
<b>Totals</b>	<b>160</b>	<b>184.64</b>

**Table 5: Anti-personnel mine contamination in the KRI by province (at end-2017)**

Governorate	CHAs	Area [km <sup>2</sup> ]	SHAs	Area [km <sup>2</sup> ]	Total area [km <sup>2</sup> ]
Duhok	405	20.21	0	0	20.21
Erbil	335	48.58	0	0	48.58
Garmyan	156	7.73	113	11.75	19.48
Slemani	1,950	88.68	181	33.84	122.52
<b>Totals</b>	<b>2,846</b>	<b>165.20</b>	<b>294</b>	<b>45.59</b>	<b>210.79</b>

## Mines of an improvised nature

International operators have encountered a wide variety of improvised devices left by Islamic State but report that the vast majority are victim-activated and meet the APMBC treaty definition of an anti-personnel mine. These mines are mostly activated by a pressure plate or “crush necklace” wires sufficiently sensitive to be detonated by the weight of a child and connected to ammonium nitrate-based explosives and fuel. The size of the charge ranges from 3kg to 100kg, which is capable of destroying a vehicle.<sup>12</sup> Mines Advisory Group (MAG) and Janus Global Operations working in northern and central Iraq, respectively, in 2017 both reported such devices made up well over 90% of the items they cleared.<sup>13</sup>

Islamic State used mines of an improvised nature in conventional lanes in open country and around the perimeter of villages and access to key buildings. As an example of the scale of the contamination, MAG identified three mine “panels” in the vicinity of Bashiqa (Ninewa

governorate) in 2017 stretching over distances of 12km, 18km, and 24km, respectively, with multiple rows of devices spaced at intervals of between one and several metres in straight lines or zigzag patterns. It has also encountered devices loaded with chemical agents.<sup>14</sup>

Islamic State also mined the approaches to buildings and public infrastructure, and extensively booby-trapped private houses and property, posing a lethal threat to civilians returning to their homes. Operators have encountered devices activated remotely, by command wire, or victim initiated by the breaking of an infrared beam. Devices had been concealed in household appliances, furniture, and even syringes. Devices that are not victim activated do not meet the definition of an anti-personnel mine. Where sensitive anti-handling devices are fitted, however, this would typically be considered an anti-personnel mine.<sup>15</sup> In Mosul in 2018, operators have continued to find dead bodies wearing suicide vests.<sup>16</sup>

## PROGRAMME MANAGEMENT

Mine action in Iraq is managed along regional lines. The DMA, set up by the Ministry of Environment in Baghdad in 2008, coordinates and manages the sector in Federal Iraq in central and southern Iraq. IKMAA, created in 2004, manages mine action in the four northern governorates that fall within the KRI.

The operating areas of the two authorities changed in 2017. From September 2015, DMA and IKMAA shared operations in a so-called Grey Area, an area of about 69,000km<sup>2</sup> that was controlled or contested by Islamic State forces after 2014. The line separating DMA and IKMAA areas of responsibility in the Grey Area was determined by which forces had liberated areas from Islamic State and taken control of the territory. Much of Kirkuk governorate was occupied by the *pehmerga*.<sup>17</sup> After a referendum in the KRI in September 2017 voted for independence, Iraqi forces took over control of historically contested areas, including Kirkuk governorate, ending the Grey Area.

UNMAS established a presence in Iraq in mid-2015 to assess the extent of the threat of explosive weapons in areas retaken from Islamic State and to help the DMA develop an emergency response. UNMAS has provided “explosive hazard management” to support stabilisation and recovery, including the return of people displaced by conflict. Under that mandate, UNMAS contracted implementing partners to undertake assessment, survey, “high-risk” search, and battle area clearance in liberated areas on tasks supporting UN Development Programme (UNDP) stabilisation initiatives and in support of the Government of Iraq. It also provided training for selected security service and mine action personnel.

By late July 2018, UNMAS had a total of 70 staff, of whom 46 were internationals, working from offices in Baghdad and Erbil. In 2017, it received \$70.5 million from international donors and by July 2018 had received a further \$26 million and pledges of \$22 million up to the end of 2018. Implementing partners in 2017 included Optima Group and Danish Demining Group (DDG), who operated in Anbar, Kirkuk, Ninewa, and Salah al-Din, governorates.<sup>18</sup>

## Federal Iraq

The DMA implements policy set by a National Higher Council for Mine Action (NHCMA) created by, and reporting to, the prime minister, in which the ministries of defence, interior, and oil are major actors. The NHCMA is supported by a Technical Committee, functioning as its secretariat.<sup>19</sup> The Ministry of Oil contracts and manages commercial operators conducting clearance supporting the oil sector.

The DMA has three regional mine action centres (RMACs):<sup>20</sup>

- North: covering the governorates of Anbar, Diyala, Kirkuk, and Salah ad-Din
- Middle Euphrates (MEU): Babylon, Baghdad, Karbala, Najaf, Qadisiyah, and Wassit
- South: Basrah, Missan, Muthanna, and Thi-Qar.

RMAC-North, based in DMA headquarters in Baghdad covers areas liberated from Islamic State, accounting for Iraq's contamination by landmines of an improvised nature. In 2018, Norwegian People's Aid (NPA) seconded a technical adviser to support RMAC-North.

RMAC-South, based in Basra, which accounts for 71% of confirmed anti-personnel mine contamination (see Table 2) as well as 95% of Iraq's cluster munition remnants (CMR) contamination, was active tasking and coordinating operations by humanitarian clearance agencies but since 2016 has focused on cluster munition remnants not mines.<sup>21</sup>

## KRI

IKMAA functions as a regulator and operator. It reports directly to the office of the Prime Minister in the Kurdish Regional Government and coordinates four directorates in Dohuk, Erbil, Garmian, and Sulimaniya (Sleman). Despite financial constraints which have halved salaries for all staff, it also operates 27 12-strong manual demining teams, 7 mechanical teams, 5 survey teams, 3 explosive ordnance disposal (EOD) teams, and 35 quality assurance (QA) teams responsible for accreditation and monitoring the work of all operators.<sup>22</sup>

IKMAA's priorities for areas affected by legacy minefields include clearing agricultural land and infrastructure, tackling CHAs close to populated areas and areas reporting most mine incidents and casualties.<sup>23</sup>

Operators identified areas affected by mines of an improvised nature for clearance in consultation with district-level authorities and submitted requests for task orders to IKMAA. Areas to which communities were returning were the main priority. IKMAA teams conducted QA.

## Strategic Planning

Iraq's Article 5 deadline extension request, submitted in April 2017, is Iraq's formal strategic plan, though it has been overtaken and rendered largely obsolete by the conflict with Islamic State. Federal Iraq's mine action priority is tackling the massive contamination by mines of an improvised nature as well as ERW in liberated areas to facilitate the return of internally displaced persons, rehabilitation of public services, and restoration of the economy. The scale of the challenge has largely marginalised efforts to address legacy minefields in Federal Iraq.<sup>24</sup>

IKMAA continued to identify extension request targets and clearance of legacy minefields as a priority. IKMAA's priorities for areas affected by legacy minefields include clearing agricultural land, infrastructure, tackling CHAs close to populated areas as well as areas reporting most mine incidents and casualties. Operators have already completed clearance of high-risk areas and are now focused on medium-risk tasks, including mined areas close to villages and impacting key infrastructure. IKMAA started work on a five-year strategy in the last quarter of 2017 after the referendum and the loss of control over much of the Grey Area.<sup>25</sup>

The extension request prepared with the support of UNMAS set out separate two-year and ten-year workplans for the DMA and for IKMAA which detail projected expenditure but provide no information on operations or priorities. It said the two-year work plans were based on existing capacity and described the ten-year plans as "aspirational" and dependant on attracting international donor funding.<sup>26</sup>

The DMA envisaged expenditure of \$30 million in 2018–19 and \$238 million over the 10-year period to the end of 2027. IKMAA proposed expenditure of almost \$25 million in 2018–19 and \$247 million over the same 10-year period. The projected expenditure targeted clearance of legacy minefields only and not the cost of operations tackling mines of an improvised nature, CMR, or other ERW.<sup>27</sup>

The request identifies a range of factors that have slowed the progress of mine action:<sup>28</sup>

- Insecurity due to the conflict with Islamic State
- Extensive additional contamination as a result of conflict
- Lack of funding
- Lack of information because the Ministry of Defence lost all minefield maps after the change of regime in 2003
- Lack of technical expertise and capacity.

## Legislation and Standards

It is planned to revise Iraq's national mine action legislation. Its national mine action standards are largely consistent with the International Mine Action Standards (IMAS) and include small adjustments to reflect national conditions. The DMA introduced a national standard on IEDs in 2016 and is working with UNMAS to update the standard on IEDS based on the experience gained in tackling dense contamination in areas liberated from Islamic State since 2016.<sup>29</sup>

In the meantime, accreditation for IED disposal has been based on military standards with operators adapting mine clearance and battle area clearance (BAC) operating procedures to suit security conditions and the local environment in their areas of activity. Operators employed national staff to conduct technical survey and mark items for clearance and restricted mines of an improvised nature and IED disposal to team leaders, supervisors, and international staff. In areas close to active hostilities, operators applied their own minimum security criteria. These included an absence of Islamic State activity for a specified period of time, minimum distances from, and no line of sight to, an Islamic State frontline position.<sup>30</sup> As noted by Mine Action Review last year, clearance of mines by deminers offering an operational benefit to one party to an armed conflict to the detriment of another may amount to direct participation in hostilities, making the deminers a lawful target of attack under international humanitarian law.<sup>31</sup>

## Quality Management

The DMA and IKMAA both undertake QA/quality control (QC). The DMA has five teams based in Baghdad undertaking QA or QC as required in different locations and further QA/QC capacity in RMAC-N and RMAC-S. The extent of their operations is unclear. The DMA also contracts other organisations to conduct QC. DDD undertakes QC on clearance operations by commercial companies under contract to the Ministry of Oil.<sup>32</sup>

UNMAS Iraq requires implementing partners to have internal quality management systems providing for QA/QC. It says that it conducts joint QA with the DMA, and that staff from its Explosive Hazard Management project conduct in-progress and post-clearance inspection of each individual task as required.<sup>33</sup>

IKMAA reported it had 37 active teams conducting QC in the KRI and Kurdish-controlled areas of the Grey Area in 2017.<sup>34</sup>

## Information Management

The DMA and IKMAA operate Information Management System for Mine Action (IMSMA) NG databases which are operated by iMMAP, a commercial service provider working under contract to the United States Department of State's Office of Weapons Removal and Abatement (WRA). The DMA central database is located at its Baghdad headquarters. RMAC South maintains a database in Basra, receiving reports from demining organisations in its area of operations, and which is synchronised with Baghdad at irregular intervals that are determined by the volume of data to be uploaded. UNMAS implementing partners report directly to UNMAS, which in turn forwards the data to the DMA.

Operators are required to submit results in hard copy delivered by hand to the DMA every month, which then uploads results into the database. The procedure meets Iraqi legal requirements, which do not recognise electronic copies, but causes delays of several months in uploading survey and clearance data. This has caused problems with task orders.<sup>35</sup> The DMA is trialling electronic data entry for risk education results and plans to expand it to other mine action activities.<sup>36</sup>

## Operators

From 2016, the capacity of operators has sharply expanded in Iraq and from the last quarter of 2017 the distribution of that capacity started to shift from the KRI to Federal Iraq. At the end of 2016, five international demining organizations deployed a total of 133 staff in Federal Iraq and more than 630 in the KRI. Only two international demining NGOs operated in Federal Iraq with total of 132 staff. By the end of 2017, those five organisations employed close to 800 staff in Federal Iraq and around 400 in the KRI.<sup>37</sup>

Operators are required to be accredited with the DMA in Federal Iraq and with IKMAA in the KRI. Visa-free entry and a more stable regulatory environment in the KRI made it easier for operators to establish a presence in the KRI. After a Kurdish referendum on independence in September 2017, Iraqi forces took back control of much of the Grey Area. This moved much of the area liberated from Islamic State and which was heavily contaminated with mines of an improvised nature under the authority of the DMA, increasing pressure on operators to seek DMA accreditation.

In Federal Iraq, operators need to register with the NGO Directorate before seeking DMA accreditation, an opaque process that has sometimes taken years and posed a major obstacle to scaling up capacity for an emergency response to tackling post-Islamic State contamination. Revision of these procedures in 2017 allowed provisional accreditation of five organisations resulting in 2018 opening the way for a rapid expansion of capacity as increased donor funding became available for Iraqi mine action.

**Table 6: International mine action NGOs active at end-2017<sup>38</sup>**

Operator	Personnel in Federal Iraq (DMA)		Personnel in KRI (IKMAA)	
	Teams	Personnel	Teams	Personnel
DDG	20	101	6	50
FSD	0	0	4	35
HI	0	0	1	7
MAG	60	600	42	280
NPA	10	68	6	32
<b>Totals</b>	<b>90</b>	<b>769</b>	<b>59</b>	<b>404</b>

### Federal Iraq

National organisations undertaking mine clearance include army engineers tasked by the Ministry of Defence. Civil Defence, under the Ministry of Interior, operates around 600 EOD technicians and has a presence in every governorate. It clears ERW, including conventional mines and cluster munitions, but does not tackle mines of an improvised nature or IEDs, which are dealt with by another unit of the Ministry of Interior.<sup>39</sup>

National commercial companies accredited in 2017 included Al-Fahad Co. for Demining, Al-Safsafa, Akad International Co. for Mines, and Al-Danube. Two international commercial companies, Janus Global Operations and Optima, lacked accreditation and provided management for mine action teams provided by Al-Fahad.

Until late 2017, only two international NGOs — DDG and NPA — were active in Federal Iraq but neither conducted clearance of mines, whether commercially produced or of an improvised nature. DDG more than doubled its capacity in Federal Iraq in 2017 to around 100 staff. It started with an office in Basra where it had two BAC teams conducting CMR clearance and QC on behalf of the RMAC South. In the course of the year, it added offices in Mosul and Kirkuk as well as a shared office in Anbar and was contracted by UNMAS to carry out assessments/survey in Mosul governorate.<sup>40</sup> In 2017, DDG declined to undertake clearance of mines of an improvised nature or IEDs, though it received IED accreditation from the DMA in May 2018.<sup>41</sup>

MAG, the longest established international operator after more than 25 years in Iraq, was already much the biggest at the start of 2017. It expanded rapidly during the year, adding 27 teams, and is due to grow further in 2019. Until 2018, MAG operated exclusively in the KRI but after more than three years of trying it received registration in Federal Iraq in January 2018 and accreditation from the DMA in March. By September 2018, MAG had a total of 65 teams and around 650 personnel working in districts that, until September 2017, had come under IKMAA jurisdiction. MAG has funding to add a further 15 teams by May 2019 and planned to increase its operations in Nineveh governorate.<sup>42</sup>

NPA is on a similar growth trajectory. At the start of 2017, NPA had two teams with 49 staff based in Erbil in the KRI and 92 staff in Basra. At the end of the year it restructured its presence in Iraq, moving its country

management team to Baghdad in December and was preparing to expand operations into new areas. NPA Basra started 2017 with three survey and five EOD/BAC teams focused on survey and clearance of CMR, but added three teams more in the course of 2017. NPA opened offices in Mosul in April 2018 and in Anbar governorate in July 2018. By the end of 2018, NPA expected to have a total of 330 personnel working in Federal Iraq.<sup>43</sup>

The HALO Trust received provisional accreditation in May 2018 and started operating in Anbar province in July 2018 with a survey team and a mechanical clearance team in Fallujah clearing large defensive mine belts and smaller clusters around houses. It planned to deploy two mechanical clearance teams in Salah ad-Din and two risk education/non-technical survey teams belonging to Baghdad Organisation, a local NGO, for a project funded through UNMAS.<sup>44</sup>

### KRI

IKMAA's operating capacity remained unchanged from the previous year: 37 demining teams (444 personnel), 7 mechanical teams, 3 EOD teams, 5 survey teams, 37 QA teams, and 10 risk education teams. IKMAA teams are focused on clearing legacy minefields, prioritising agricultural land, but it operated under severe financial constraints that led it in 2016 to cut salaries in half.<sup>45</sup>

MAG remained much the biggest international operator with 24 teams operational in the KRI at the end of 2017, including ten survey and clearance teams, two multi-task teams, a mechanical and mechanical support team, and ten community liaison teams. MAG continued to clear legacy mined areas and CMR contamination but the main focus was on removing belts of mines of an improvised nature in areas liberated from Islamic State in Ninewa governorate.<sup>46</sup>

Three other international NGOs also concentrated on Islamic State's legacy in liberated areas. NPA had two survey teams and four search teams working in Hamdaniya district of Ninewa governorate.<sup>47</sup> The Swiss Foundation for Mine Action (FSD), which started operations in Iraq in 2016, had four teams and a total of 35 staff who conducted clearance in Erbil, Kirkuk, and Mosul governorates.<sup>48</sup> Humanity and Inclusion (formerly Handicap International) had three teams, also focused mainly on clearing mines of an improvised nature in Kirkuk province.<sup>49</sup>

## LAND RELEASE

Iraq's top priority in 2017 was clearance of massive contamination by mines of an improvised nature as well as IEDs from areas liberated from Islamic State in order to facilitate the return of hundreds of thousands of people displaced by conflict, the restoration of public services, and economic recovery. In Federal Iraq, operators focused on tackling dense and complex contamination in key population centres such as Fallujah, Mosul, and Ramadi, facing multiple varieties of mines and IEDs and a wide array of unexploded ordnance (UXO). UNMAS reported in 2018 that, in Mosul alone, 24 square kilometres had been searched and cleared of devices ranging from suicide vests, to mortars, grenades, rockets, and air-dropped ordnance.<sup>50</sup>

The extent of land released in Iraq in 2017 could not be determined with any degree of accuracy from the data for Federal Iraq provided by the DMA and iMMAP. The information provided to Mine Action Review suggested that some 97km<sup>2</sup> of land affected by conventional and mines of an improvised nature was released by clearance in Federal Iraq and the KRI in 2017. This is simply not credible. The amount of land released by non-technical survey and technical survey in Federal Iraq was also unclear.

In 2017 across Iraq, Mine Action Review has estimated that total mine clearance amounted to 23.3km<sup>2</sup>: an estimated 13.8km<sup>2</sup> (based on 25% of the 55.3km<sup>2</sup> reported by the DMA) of clearance of anti-personnel mines of an improvised nature laid by Islamic State forces in Federal Iraq, and clearance of 2.6km<sup>2</sup> of legacy anti-personnel mine contamination and 6.9km<sup>2</sup> of anti-personnel mines of an improvised nature laid by Islamic State forces in the KRI. Vast areas of reported clearance without the destruction of significant numbers of landmines or without disaggregation of device are not considered as mine clearance and are not included in Mine Action Review's national or global totals. This may significantly underestimate the number of mines actually destroyed.

### Survey in 2017

#### Federal Iraq

The DMA reported that survey in 2017 identified a total of 26.7km<sup>2</sup> of CHA, of which 24.6km<sup>2</sup> was confirmed by the commercial company, Arabian Gulf.<sup>51</sup>

The DMA also reported that non-technical survey was conducted over an area of 1,102km<sup>2</sup> in 2017, of which 95% was attributed to two Ministry of Interior agencies, Civil Defence and the EOD Directorate, but it did not report any area cancellation as a result. The DMA did not clarify the basis for this finding, which defies logic.<sup>52</sup>

As Iraqi security forces established control of areas occupied by Islamic State forces, commercial operators tasked by UNMAS deployed assessment teams followed up by high-risk search and survey teams, focusing on key population centres.

#### KRI

IKMAA was unable to fulfil plans to complete "preliminary technical survey" of mined areas in 2017 due to lack of funds and unspecified logistical problems. Survey teams continued working in Sulimaniya and Garmyan governorates and reported some new finds of mined area, but also released 18.4km<sup>2</sup> through cancellation and area reduction.<sup>53</sup>

International operators conducted "high-risk" survey of contamination from mines of an improvised nature in liberated areas combining non-technical survey, hazardous area reports from Kurdish *peshmerga* security forces, local authorities, and community liaison teams, and limited technical survey to define mine lines and polygons or hazard perimeters.<sup>54</sup>

### Clearance in 2017

Clearance of legacy mined areas left from earlier conflicts continued in the KRI at about the same level as in 2016, but the limited clearance capacity and resources available in Federal Iraq in 2017 was focused on liberated areas. Some clearance of conventional mines may have been conducted by commercial companies operating under contract to the Ministry of Oil but no capacity was otherwise available for clearance of Iraq's massive barrier minefields bordering Iran and Saudi Arabia.<sup>55</sup>

#### Federal Iraq

National clearance efforts were led by the Ministry of Defence and the Ministry of Interior's EOD Directorate but results of their operations were not clear. The DMA records mines of an improvised nature as IEDs and reported clearance of 55.3km<sup>2</sup> of area affected by IEDs (see Table 7) but did not identify the organisations responsible or specify device types.<sup>56</sup>

**Table 7: "IED" clearance in Federal Iraq in 2017<sup>57</sup>**

Province	Area cleared (m <sup>2</sup> )	"IEDs" destroyed
Anbar	1,476,321	2,212
Diyala	0	166
Kirkuk	13,572,350	2,258
Ninewa	27,555,612	8,341
Salah al-Din	12,656,910	235
<b>Totals</b>	<b>55,261,193</b>	<b>13,212</b>

In 2017, international organisations conducting clearance in liberated areas were limited to two commercial companies and their national partners. Optima, working in partnership with local operator al-Danube and under contract to UNMAS, conducted clearance in the city of Falluja where it has operated since 2016, and in 2017 it started working in Mosul. Janus Global Operations, funded by the WRA and working in partnership with al-Fahad Co. for Demining, focused clearance on the city of Ramadi.

Operating initially in insecure areas close to military front lines, operators focused on emergency assessments and spot tasks to enable humanitarian access before undertaking clearance tasks supporting UNDP stabilisation initiatives. UNMAS reported that implementing partners cleared an area of 2,976,413m<sup>2</sup> and assessed or cleared 622 priority critical infrastructure sites. In the process, it said they cleared 45,124 explosive hazards (IEDs and ERW) but did not disaggregate the device types.<sup>58</sup>

The DMA reported clearance of almost 30km<sup>2</sup> of legacy mined area in 2017, of which more than three-quarters was land contaminated by anti-vehicle mines but the location and organisations conducting the clearance were not reported, and as such this is not included in Mine Action Review's estimation of the national total.<sup>59</sup>

**Table 8: Reported mine clearance in 2017<sup>60</sup>**

AP mined area (m <sup>2</sup> )	AV mined area (m <sup>2</sup> )	Mixed AP/AV mined area (m <sup>2</sup> )	Total (m <sup>2</sup> )
15,097	23,147,092	6,783,610	29,945,799

## KRI

IKMAA reported mine clearance of 2.6km<sup>2</sup>, down slightly from the previous year, but international operators reported less clearance than IKMAA attributed to them, suggesting a lower total.<sup>61</sup>

According to Iraq's Article 7 report for 2017, of the 2,597,680m<sup>2</sup> addressed, 2,051,667m<sup>2</sup> was cleared (226,167m<sup>2</sup> cleared with MDD; 113,425m<sup>2</sup> cleared by full excavation; 1,606,205m<sup>2</sup> cleared "electronically"; and 105,870m<sup>2</sup> cleared mechanically), and the 546,013m<sup>2</sup> was reduced.<sup>62</sup>

Geographically, of the 2.6km<sup>2</sup> total, 516,378m<sup>2</sup> was reported to have been cleared in the governorate of Erbil; 1,468,550m<sup>2</sup> in the governorate of Sulaymaniyah, and 612,752m<sup>2</sup> in the governorate of Dohuk.<sup>63</sup>

IKMAA teams cleared almost exactly the same amount of land as in 2016, again concentrating on legacy mined areas rather than liberated areas affected by mines of an improvised nature. This decision perhaps reflected the higher costs associated with clearing mines of an improvised nature and the lack of training, procedures, and equipment for dealing with it.

**Table 9: Clearance of legacy mined areas in the KRI in 2017<sup>64</sup>**

Operator	Mined areas released	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
IKMAA	19	1,328,138	2,658	12	730
MAG	19	1,215,885	389	3	689
FSD	0	4,409	1	0	0
DDG	1	49,248	148	0	15
<b>Totals</b>	<b>39</b>	<b>2,597,680</b>	<b>3,196</b>	<b>15</b>	<b>1,434</b>

MAG continued to work on legacy mines, reporting that it cleared 844,394m<sup>2</sup> and 390 anti-personnel mines working on legacy tasks. MAG deployed ten mine action teams, two multi-task teams and seven community liaison teams as well as mechanical assets and mine detection dogs. MAG also deployed multi-task teams and mechanical assets to address long belts of mines of an improvised nature in liberated areas but after Federal Iraqi troops took back control of most of the Grey Area in September 2017, most of these areas came under the authority of the DMA. MAG had to suspend operations there until it received DMA accreditation in April 2018 but in the meantime, was able to reassign some multi-task teams to tackle legacy mine clearance.<sup>65</sup>

Despite the loss of operations in liberated areas in the last quarter of the year, MAG cleared nearly 6km<sup>2</sup> of land affected by mines of an improvised nature (see Table 10), a little more than in 2016, and also cleared 5,649 devices, the vast majority of them pressure-plate anti-personnel mines.<sup>66</sup> FSD, the other humanitarian organisation engaged in clearing mines of an improvised nature in the KRI in 2017, increased the area it cleared by two-thirds and doubled the number of devices it tackled.<sup>67</sup>

**Table 10: Clearance of mines of an improvised nature in the KRI in 2017<sup>68</sup>**

Operator	Governorates	Area cleared (m <sup>2</sup> )	Mines destroyed
FSD	Erbil, Kirkuk, Mosul	904,906	3,686
MAG	Ninewa	5,960,804	5,649
<b>Totals</b>		<b>6,865,710</b>	<b>9,335</b>

## Deminer Safety

A MAG deminer died after detonating a mine of an improvised nature in Hamdaniya district in April 2017. An internal investigation determined that the deminer's detector search head had accidentally initiated the device's pressure plate. IKMAA also convened an inquiry

into the incident and took disciplinary action against the supervisor for the area and the team leader.<sup>69</sup> A Civil Defence EOD technician was killed in Ramadi by an anti-handling device that detonated as he attempted to clear an item of UXO.<sup>70</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBBC (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.

The scale of Iraq's landmine contamination presents a challenge that will not be met within the 10-year extension to its Article 5 deadline. Iraq's extension request provides little guidance as to how the deadline could be met, underscoring obstacles posed by insecurity, new contamination added by continuing conflict, lack of capacity and expertise and, critically, lack of funding. Iraq will submit an update to its extension request two years into its extension period, but key issues are shrouded in uncertainty.

Iraq needs, as a priority, to clarify the scope of its Article 5 obligations. Areas liberated from Islamic State forces since 2016 include potentially hundreds of square kilometres contaminated by mines of an improvised nature laid by Islamic State. Iraq does not categorise or report any of these devices as mines, but as IEDs. Unless

that position changes, the DMA says it will not include information relating to them in the update to its extension request<sup>71</sup> suggesting it will not recognise mines of an improvised nature as falling under the APMBBC. This will be a serious violation of the treaty as each state party is obligated to clear "all" anti-personnel mines in mined areas under its jurisdiction or control.

The Sixteenth Meeting of States Parties invited Iraq to report annually on funding available from external sources and the government for its treaty implementation efforts but there is little clarity on funding for the sector. The extension request envisaged expenditure from government sources of \$30 million in 2018–19 and \$238 million over the 10-year period to the end of 2027 but the DMA was unable to give details of government funding available to mine action in 2017 or 2018. Most funding is provided by international donors through UNMAS which received \$70 million in 2017, though concerns have been expressed by operators about transparency and efficiency in the application of the funds.

- 1 Article 5 deadline Extension Request, March 2017, pp. 78 and 85. The three governorates, all under the supervision of RMAC South, are Basrah, Missan, and Muthanna.
- 2 Emails from Ahmed Al Jasim, Manager, Information Department, DMA, 6 April 2017; and Khatab Omer Ahmed, Planning Manager, IKMAA, 8 April 2017.
- 3 Article 7 Report (for 2017), Form C.
- 4 Email from Ahmad Al Jasim, DMA, 10 April 2018.
- 5 Email from Ahmad Al Jasim, DMA, 13 September 2018.
- 6 Ibid.
- 7 Media reports monitored by the International NGO Safety Organisation.
- 8 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 9 Email from Portia Stratton, Country Director, MAG, 9 September 2018.
- 10 Email from Ahmad Al Jasim, DMA, 10 April 2018. The table as presented has been amended to remove contamination in Kirkuk governorate which was reported as consisting of two CHAs totalling 1m<sup>2</sup>.
- 11 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 12 Interviews with Mick Beeby, Technical Operations Manager, MAG, 24 July 2017; and Craig McInally, Northern Iraq Operations Manager, Norwegian People's Aid (NPA), 22 July 2017.
- 13 Interview with Nina Seecharan, Country Director; Mick Beeby; and Kathy Keary, Grants and Liaison Officer, MAG, Erbil, 23 July 2017; "An Initial Study into Mine Action and Improvised Explosive Devices", Geneva International Centre for Humanitarian Demining (GICHD), February 2017, p. 21. Janus and the GICHD study refers to the munitions as IEDs.
- 14 Interview with Nina Seecharan, Mick Beeby, and Kathy Keary, MAG, Erbil, 23 July 2017.
- 15 See Art. 2[3], APMBCC.
- 16 Interview with Kelvin Windsor, Country Manager–Iraq, Optima, Baghdad, 6 September 2018.
- 17 Email from Isam Ghareeb, iMAP, 1 August 2016; and interview with Obaid Ahmad, General Director of Technical Affairs, IKMAA, Erbil, 22 July 2017.
- 18 Email from Pehr Lodhammer, Senior Programme Adviser, UNMAS, 15 August 2018.
- 19 Interview with Baker Saheb Ahmed, Assistant Director General, DMA, Baghdad, 5 September 2018; DMA presentation to 2015 Mine Action Country Planning Workshop for Iraq, Istanbul, 13 May 2015.
- 20 Article 5 deadline Extension Request, March 2017, p. 24.
- 21 Interview with Mats Hektor, Project Manager South Iraq, NPA, Erbil, 22 July 2017.
- 22 Email from Khatab Omer Ahmed, IKMAA, 8 April 2017; and interview, Erbil, 27 July 2017.
- 23 Email from Khatab Omer Ahmed, IKMAA, 20 May 2016.
- 24 Interview with Baker Saheb Ahmed, DMA, Baghdad, 5 September 2018.
- 25 Emails from Khatab Omer Ahmed, IKMAA, 8 May 2018; and from Steven Warner, MAG, 10 April 2018.
- 26 Article 5 deadline Extension Request (Revised), August 2017, p. 13.
- 27 Ibid., pp. 96–98.
- 28 Ibid., pp. 10–12 and 88.
- 29 Interview with Baker Saheb Ahmed, DMA, Baghdad, 5 September 2018; and information in email from Abigail Hartley, Chief of Policy, Advocacy and Public Information, UNMAS, 5 October 2018.
- 30 Interviews with international operators, Erbil, 22–27 July 2017.
- 31 Mine Action Review, *Clearing the Mines 2017*, 2017, p. 6.
- 32 Interview with DMA, Baghdad, 6 September 2018.
- 33 Email from Per Lodhammer, UNMAS, 15 August 2018.
- 34 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 35 Interviews with operators, Baghdad, 4–12 September 2018.
- 36 Interview with Ahmed Al Jasim, DMA, Baghdad, 9 September 2018.
- 37 Emails from Lene Rasmussen, Regional Manager MENA, DDG, 3 June 2018; Peter Smethers, Programme Manager/Country Director, FSD, 3 May 2018; Fanny Del, Operations Coordinator, HI, 18 May 2018; Steven Warner, Desk Officer, MAG, 10 April 2018; Gus Guthrie, Country Director, NPA, 2 April 2018.
- 38 Compiled by Mine Action Review from data provided by the international humanitarian operators cited.
- 39 Email from Ahmed Al Jasim, DMA, 6 April 2017.
- 40 Email from Lene Rasmussen, DDG, 3 June 2018.
- 41 Ibid.
- 42 Telephone interview with Portia Stratton, Country Director, MAG, 7 September 2018; and email, 26 September 2018; and email from Steven Warner, MAG Desk Officer, 10 April 2018.
- 43 Interview with Gus Guthrie, NPA, Baghdad, 7 September 2018.
- 44 Interview with Dorinda ten Brinke, Deputy Programme Manager, HALO Trust, Baghdad, 5 September 2018 and 2 October 2018.
- 45 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 46 Email from Steven Warner, MAG, 10 April 2018.
- 47 Email from Gus Guthrie, NPA, 2 April 2018.
- 48 Email from Peter Smethers, FSD, 3 May 2018.
- 49 Email from Fanny Del, HI, 18 May 2018.
- 50 UNMAS Iraq website, at: [unmas.shorthandstories.com/unmas-in-iraq/index.html](http://unmas.shorthandstories.com/unmas-in-iraq/index.html).
- 51 Email from Ahmed Al Jasim, DMA, 10 April 2018. Iraq's Article 7 Report for 2017 reported confirmation of 26.9km<sup>2</sup> (at p. 18).
- 52 Email from Ahmed Al Jasim, DMA, 10 April 2018.
- 53 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 54 Interviews with international operators, Erbil, 22–27 July 2017.
- 55 Email from Ahmed Al Jasim, DMA, 10 April 2018; and interview, Baghdad, 10 September 2018; and email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 56 Data received from DMA showed that the Ministry of Defence cleared 28.7km<sup>2</sup> and the Ministry of Interior's EOD Directorate cleared 26km<sup>2</sup> but did not destroy any items in doing so. Email from Ahmed Al Jasim, DMA, 10 April 2018.
- 57 Email from Ahmed Al Jasim, DMA, 10 April 2018. The DMA later reported clearance of 93.4km<sup>2</sup> of IED contamination and 32,227 devices in 2017. Email from Ahmed Al Jasim, DMA, 13 September 2018.
- 58 Email from Pehr Lodhammer, UNMAS, 15 August 2018.
- 59 Article 7 Report (for 2017), p. 68.
- 60 Ibid.
- 61 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 62 Article 7 Report (for 2017), p. 69.
- 63 Ibid.
- 64 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 65 Email from Steven Warner, MAG, 10 April 2018.
- 66 Ibid.
- 67 Email from Peter Smethers, FSD, 3 May 2018.
- 68 Emails from Steven Warner, MAG, 10 April 2018; and Peter Smethers, FSD, 3 May 2018.
- 69 Email from Steven Warner, MAG, 10 April 2018.
- 70 Interview with Police Col. Sihad Ahmed Abd, Head of EOD, Civil Defence, Baghdad, 6 September 2018.
- 71 Interviews with Ahmad Al Jasim, DMA; and Shawkat Tayeh Massod, Head of Operations, DMA, Baghdad, 8 September 2018.



# JORDAN

**ARTICLE 5 DEADLINE: 1 MAY 2012**  
(IN VIOLATION OF THE DEADLINE)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
<b>Problem understood</b>	7	7
<b>Target date for completion of mine clearance</b>	5	5
<b>Targeted clearance</b>	6	6
<b>Efficient clearance</b>	6	6
<b>National funding of programme</b>	5	5
<b>Timely clearance</b>	7	6
<b>Land-release system in place</b>	6	6
<b>National mine action standards</b>	7	7
<b>Reporting on progress</b>	6	6
<b>Improving performance</b>	7	7
<b>PERFORMANCE SCORE: AVERAGE</b>	6.2	6.1

## PERFORMANCE COMMENTARY

Jordan again made solid progress in its verification and release of land in 2017, deploying four teams and halving the total contaminated area in the Jordan Valley during the course of the year. Furthermore, Jordan subsequently reported that the sampling and verification project in the Jordan Valley had been completed in June 2018.

In addition, Jordan's military have reportedly conducted checks in areas on the northern borders, and as such, further quality control (QC) by the National Committee

for Demining and Rehabilitation (NCDR) may not be required. However, due to the Syrian crisis, the NCDR has not been able to check the work of the army or determine if any follow-up is needed by NCDR.

Until all areas in need of verification or QC on the northern borders are safely released, Jordan has an obligation under Anti-Personnel Mine Ban Convention (APMBC) Article 5.

## RECOMMENDATIONS FOR ACTION

- As soon as conditions permit Jordan should verify the "checks" conducted by the Jordanian army on the northern borders and determine whether or not QC is required by NCDR to safely release mined areas.
- Jordan should publish a revised strategic work plan to reflect progress to date and its plans for completion.

## CONTAMINATION

Jordan is contaminated by mines and explosive remnants of war (ERW). Contamination is primarily the result of the 1948 partition of Palestine, the 1967 Arab-Israeli conflict, the 1970 civil war, and the 1975 confrontation with Syria. Military training ranges and cross-border smuggling have added to the ERW problem.

Jordan declared that it had fulfilled its Article 5 clearance obligations on 24 April 2012, having determined that no areas under its jurisdiction or control remained in which anti-personnel mines were known or suspected.<sup>1</sup>

However, in formally declaring completion of its Article 5 obligations at the Twelfth Meeting of States Parties in December 2012, Jordan noted that: "While all mined areas that Jordan had made every effort to identify were cleared by 24 April 2012, Jordan, as a responsible State Party, has proceeded with verification efforts in two parts of the country, with these verification efforts having resulted in the discovery of additional mined areas."<sup>2</sup> This pertains first to the need for verification in the Jordan Valley, as earlier clearance by the Jordanian Armed Forces' Royal Engineering Corps (REC) did not comply with national and international standards and was not subject to quality control;<sup>3</sup> and second to verification that is needed along Jordan's northern border with Syria, due to a considerable discrepancy (estimated to be more than 10,000 mines<sup>4</sup>) between the recorded number of emplaced mines and the number actually cleared. Most of the difference in the figures is thought to be due to the migration of mines outside identified areas due to flooding and terrain fluctuations, detonations,<sup>5</sup> and unrecorded clearance operations by the army or by smugglers.<sup>6</sup>

As at the end of 2017, the total area in need of verification for missing mines was just under 4.25km<sup>2</sup>, across a total of 56 areas. This comprised 1.4km<sup>2</sup> across 36 areas in the Jordan Valley and 2.8km<sup>2</sup> across 18 areas in the northern borders.<sup>7</sup> In September 2018, Jordan reported to Mine Action Review that the sampling and verification project in the Jordan Valley had been completed in June 2018. Furthermore, the Jordanian military had reportedly "checked" the areas in the northern borders for military use and further QC by NCDR may not be required in this region. However, NCDR will only be able to check the work of the army and confirm if any further action is required, once security conditions allow.<sup>8</sup>

With respect to the Jordan Valley, Jordan reported in its December 2012 declaration of Article 5 completion that 5km<sup>2</sup> remained to be verified in an effort expected to take two years.<sup>9</sup> As at May 2013, the estimated area requiring verification had fallen to 4.4km<sup>2</sup>,<sup>10</sup> before rising to 4.85km<sup>2</sup> as at the end of 2014.<sup>11</sup> In its 2015–20 National Plan, Jordan reported that 5.4km<sup>2</sup> remained to be sampled, verified, and released according to national standards.<sup>12</sup> Jordan reported that as at end-2017, 1.4km<sup>2</sup> across 38 areas still needed verification in the Jordan Valley.<sup>13</sup> Most recently, in September 2018, Jordan reported to Mine Action Review that sampling and verification in the Jordan Valley had been completed in June 2018, as noted above.<sup>14</sup>

With respect to the northern border, in its 2012 Article 5 Declaration of Completion, Jordan reported that some 6.9km<sup>2</sup> remained to be verified, and that the process being undertaken by Norwegian People's Aid (NPA) had been delayed for security reasons.<sup>15</sup> NPA's verification

procedure involved a mixture of visual inspection of areas adjacent to the mine belt, ground preparation with mechanical assets, and limited involvement of manual deminers, with full technical survey of areas where evidence and experience pointed to a risk of contamination.<sup>16</sup> By May 2013, the estimated area needing verification had been reduced to around 5km<sup>2</sup>, but operations by NPA were halted because of the security situation.<sup>17</sup> In its 2015–20 National Plan, Jordan reported that 3.7km<sup>2</sup> remained to be verified and inspected by QC teams along the northern border.<sup>18</sup>

Jordan reported that, as at end-2017, just over 2.8km<sup>2</sup> across 18 areas along the northern border still needed verification.<sup>19</sup> This is the same area reported for 2016<sup>20</sup> and 2015.<sup>21</sup> Furthermore, as already mentioned, it was reported to Mine Action Review that the Jordanian military had searched the remaining area required for QC and further action may not be required by NCDR. Once the situation on the Syrian border has calmed down, NCDR planned to check the work of the Jordanian military and determine if any further action is required. NCDR's operations in the north remained suspended as at October 2018, due to the ongoing Syrian crisis.<sup>22</sup>

## PROGRAMME MANAGEMENT

Jordan established the NCDR under a Royal Decree, which the government subsequently incorporated into law.<sup>23</sup> NCDR's board of directors includes representatives of the Jordanian Armed Forces, the government, non-governmental organisations (NGOs), landmine survivors, and the media.<sup>24</sup> The NCDR did not, though, become fully operational until 2004, when a new administration, chaired by Prince Mired Raad Zeid al-Hussein, was appointed.<sup>25</sup> The NCDR is responsible for coordinating, accrediting, regulating, and quality-assuring all mine action organisations, as well as for fundraising.<sup>26</sup> It is also responsible for ensuring mine action is integrated into the country's wider development strategies.<sup>27</sup>

### Strategic Planning

The NCDR's 2010–15 National Plan, published in June 2010, aimed to complete clearance of all known mines, including 65,000 mines from the northern border, by May 2012, and to clear all ERW by December 2012.<sup>28</sup> Jordan had planned to complete verification and clearance in the Jordan Valley by the end of 2015, but later said the date of completion would depend on available resources.<sup>29</sup>

The NCDR's current 2015–20 National Plan aimed to verify, sample, and release the remaining 5.4km<sup>2</sup> in the Jordan Valley within 36 months (by the end of 2017), by deploying six manual clearance teams and one mechanical demining team at a projected cost of US\$2 million.<sup>30</sup> In April 2017, the NCDR reported that it was not on target to complete verification of the Jordan Valley by the end of the year, and that it would update its work plan in 2018.<sup>31</sup> In April 2018, the NCDR reported that it planned to finish verification of the Jordan Valley in 2018.<sup>32</sup> Resuming verification and release of the remaining mined areas along the northern border with Syria will depend on the security situation but, according to the 2015–20 National Plan, would require one year's work with three manual teams and one mechanical team, at an expected cost of \$1 million.<sup>33</sup> The plan also aimed to eliminate all ERW contamination by 2017.<sup>34</sup> As at September 2018, ERW clearance had not yet started, due to a lack of funding.<sup>35</sup> The NCDR prioritises areas in need of development for verification.<sup>36</sup>

In addition, Jordan's national plan reports that the NCDR will transition from a national institution focusing largely on its own mine clearance, to one that will concentrate on assisting other conflict-affected countries to overcome the challenges of mine action and ERW removal.<sup>37</sup>

### Legislation and Standards

Jordan does not have national mine action legislation in place, based on available information.

### Information Management

The NCDR uses the Information Management System for Mine Action (IMSMA) database.<sup>38</sup>

### Quality Management

Quality assurance (QA) and QC is conducted in all projects by the NCDR quality management team.<sup>39</sup>

### Operators

The verification and demining operations in Jordan are conducted by the NCDR and REC. Since October 2015, Jordan has deployed four operational teams, totalling 35 deminers. This represents a doubling of capacity compared to the two operational teams, totalling 17 deminers, deployed previously.<sup>40</sup> From January 2018, capacity was reduced to three operational teams.<sup>41</sup> According to the NCDR, a shortage of funds prevents it from deploying mechanical assets and mine detection dogs (MDDs) in its Jordan Valley operations.<sup>42</sup>

## LAND RELEASE

### Survey and Clearance in 2017

In 2017, Jordan verified and released just under 1.44km<sup>2</sup> of land, across 38 areas in the Jordan Valley, during which 75 anti-personnel mines (72 M14 mines and 3 M35 mines) and 2 anti-vehicle mines were destroyed.<sup>43</sup> This represents a slight increase on the 1.36km<sup>2</sup> verified and released in 2016.<sup>44</sup>

## ARTICLE 5 COMPLIANCE

Jordan does not currently have an extension request granted by states parties. Jordan reported to Mine Action Review that it has now completed its sampling and verification project in the Jordan Valley and that its military had conducted “checks” on its northern borders. As soon as conditions permit, the national authorities plan to confirm if any quality control of earlier clearance is still needed on the northern borders. Only at this stage will become clear if Jordan has fulfilled its obligations under Article 5.

Jordan declared completion of its Article 5 obligations on 24 April 2012, just ahead of its 1 May 2012 Convention deadline, in accordance with the three-year extension request granted by states parties in 2008. It submitted its formal declaration of completion to the Twelfth Meeting of States Parties in December 2012.<sup>45</sup> On announcing completion, however, Prince Mired acknowledged that “a residual risk could remain in areas where landmines have been emplaced”,<sup>46</sup> and noted that verification efforts had resulted in the discovery of additional mined areas.<sup>47</sup> The verification efforts, which are ongoing in the Jordan Valley, and which are currently suspended along the northern border due to insecurity, continue to result in the discovery and clearance of mined areas.<sup>48</sup>

In August 2016, Jordan informed Mine Action Review that its Article 5 issue would be discussed during the next APMBC Meeting of States Parties”,<sup>49</sup> which was held in Santiago, Chile, from 28 November to 2 December 2016. This did not occur, however, and most recently in April 2018, Jordan reported that it was not planning to submit an Article 5 extension request.<sup>50</sup>

In the last five years Jordan has verified and released just over 5km<sup>2</sup> of mined area (see Table 1).

According to its 2015–20 National Plan, Jordan would need three years to finish the verification process, aiming for completion by December 2017.<sup>51</sup> However, the head of the NCDR has reported that Jordan is not on target to meet this completion date, given that the National Plan assumed a capacity of six national teams from 1 January 2015, which is less than current capacity.<sup>52</sup> The doubling of operational capacity in October 2015, from two teams to four, was a welcome development, and resulted in a doubling of the area of land verified and released in 2016, compared to 2015.<sup>53</sup> However, Jordan reported that capacity in 2018 was being reduced to three teams,<sup>54</sup> which is well short of the six teams specified in Jordan’s 2015–2020 National Mine Action Plan.<sup>55</sup>

In April 2018, the NCDR confirmed that a work schedule existed for the remaining areas of the Jordan Valley, and that it expected to complete verification of this region in 2018.<sup>56</sup> In September 2018, Jordan reported to Mine Action Review that the sampling and verification project in the Jordan Valley had been completed in June 2018.<sup>57</sup>

Furthermore, Jordan’s military reportedly “checked” the areas on the northern borders for military use and as a result further QC by NCDR may not be required in this region. However, verification of the army’s work and determination by NCDR on whether or not any further action is required, is contingent on an improvement in the security situation. As at October 2018 NCDR verification activities remained suspended.<sup>58</sup>

In 2017, the Jordanian government provided US\$311,000 Jordanian Dollars towards the cost of the NCDR and US\$70,000 for verification of areas.<sup>59</sup> The NCDR expected funding to remain constant in 2018.<sup>60</sup>

Table 1: Mine clearance in 2013–17

Year	Area cleared (km <sup>2</sup> )
2017	1.44
2016	1.36
2015	0.65
2014	0.55
2013	1.10
<b>Total</b>	<b>5.1</b>

1	Declaration by Jordan of completion of implementation of Article 5, 12th Meeting of States Parties, 3–7 December 2012 [hereafter, Jordan 2012 Article 5 Declaration of Completion].	28	NCDR, “2010–2015 NCDR National Plan”, undated but June 2010, p. 3.
2	Jordan 2012 Article 5 Declaration of Completion.	29	Email from Mohammad Breikat, NCDR, 22 March 2015.
3	Statement of Jordan, 16 <sup>th</sup> Meeting of States Parties, Vienna, December 2017.	30	NCDR, “2015–2020 NCDR National Plan”, Amman, undated.
4	Email from Mikael Bold, then Programme Manager, Norwegian People’s Aid (NPA), 12 February 2012. NPA estimated the number of mines missing from the mine belt at between 9,345 and 10,083.	31	Email from Mohammad Breikat, NCDR, 10 April 2017.
5	Jordan 2012 Article 5 Declaration of Completion; and Statement of Jordan, 16 <sup>th</sup> Meeting of States Parties, Vienna, December 2017.	32	Email from Mohammad Breikat, NCDR, 14 April 2018.
6	Email from Mikael Bold, NPA, 12 February 2012.	33	NCDR, “2015–2020 NCDR National Plan”, Amman, undated.
7	Article 7 Report (for 2017), Form D; and email from Mohammad Breikat, National Director, NCDR, 14 April 2018.	34	Ibid.
8	Emails from Mohammad Breikat, NCDR, 30 September and 7 October 2018.	35	Email from Mohammad Breikat, NCDR, 30 September 2018.
9	Jordan 2012 Article 5 Declaration of Completion.	36	Email from Mohammad Breikat, NCDR, 14 April 2018.
10	Statement of Jordan, Standing Committee on Mine Action, Geneva, 29 May 2013.	37	NCDR, “2015–2020 NCDR National Plan”, Amman, undated.
11	Email from Mohammad Breikat, NCDR, 22 March 2015.	38	Email from Mohammad Breikat, NCDR, 14 April 2018.
12	NCDR, “2015–2020 NCDR National Plan”, Amman, undated.	39	Email from Mohammad Breikat, NCDR, 30 September 2018.
13	Article 7 Report (for 2017), Form D; and email from Mohammad Breikat, NCDR, 14 April 2018.	40	Emails from Mohammad Breikat, NCDR, 25 August 2016, 10 April 2017, and 14 April 2018.
14	Email from Mohammad Breikat, NCDR, 30 September 2018.	41	Email from Mohammad Breikat, NCDR, 14 April 2018.
15	Jordan 2012 Article 5 Declaration of Completion.	42	Email from Mohammad Breikat, NCDR, 30 September 2018.
16	Email from Jamal Odibat, Operations Reporting Officer, NCDR, 8 May 2014.	43	Article 7 Report (for 2017), Form D; and email from Mohammad Breikat, NCDR, 14 April 2018.
17	Statement of Jordan, Standing Committee on Mine Action, Geneva, 29 May 2013; Third APMBC Review Conference, Maputo, June 2014; and email from Mohammad Breikat, NCDR, 10 April 2017.	44	Article 7 Report (for 2016), p. 4; and email from Mohammad Breikat, NCDR, 10 April 2017.
18	NCDR, “Jordan’s National Mine Action Plan 2015–20”, Amman, undated.	45	Jordan 2012 Article 5 Declaration of Completion.
19	Article 7 Report (for 2017), Form D; and email from Mohammad Breikat, NCDR, 14 April 2018.	46	“Jordan becomes the first Middle Eastern country free of all known landmines”, Press release, 24 April 2012.
20	Article 7 Report (for 2016), p. 4; and email from Mohammad Breikat, NCDR, 10 April 2017.	47	Jordan 2012 Article 5 Declaration of Completion.
21	Article 7 Report (for 2015).	48	Article 7 Report (for 2017), Form D; and email from Mohammad Breikat, NCDR, 14 April 2018.
22	Emails from Mohammad Breikat, NCDR, 30 September and 7 October 2018.	49	Email from Mohammad Breikat, NCDR, 25 August 2016.
23	Jordan 2012 Article 5 Declaration of Completion.	50	Email from Mohammad Breikat, NCDR, 14 April 2018.
24	NCDR, “Jordan’s National Mine Action Plan 2005–2009”, Amman, June 2005, pp. 1–2.	51	NCDR, “2015–2020 NCDR National Plan”, Amman, undated.
25	Ibid.; and Jordan 2012 Article 5 Declaration of Completion.	52	Email from Mohammad Breikat, NCDR, 10 April 2017.
26	NCDR, “Jordan’s National Mine Action Plan 2005–2009”, Amman, June 2005, pp. 1–2.	53	Ibid.
27	Email from Muna Alalul, NCDR, 31 July 2011.	54	Email from Mohammad Breikat, NCDR, 14 April 2018; and NCDR, “2015–2020 NCDR National Plan”, Amman, undated, p. 13.
		55	NCDR, “2015–2020 NCDR National Plan”, Amman, undated, p. 13.
		56	Email from Mohammad Breikat, NCDR, 14 April 2018.
		57	Ibid., 30 September and 7 October 2018.
		58	Ibid.
		59	Email from Mohammad Breikat, NCDR, 30 September 2018.
		60	Email from Mohammad Breikat, NCDR, 14 April 2018.

# MAURITANIA



**ARTICLE 5 DEADLINE: 1 JANUARY 2021**  
(CLEARANCE COMPLETED)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	8	8
Target date for completion of mine clearance	10	7
Targeted clearance	8	8
Efficient clearance	8	8
National funding of programme	6	6
Timely clearance	6	5
Land-release system in place	8	8
National mine action standards	8	8
Reporting on progress	5	5
Improving performance	7	7
<b>PERFORMANCE SCORE: GOOD</b>	<b>7.4</b>	<b>7.0</b>

## PERFORMANCE COMMENTARY

After completing clearance of known anti-personnel mine contamination in 2015, Mauritania requested a second Anti-Personnel Mine Ban Convention (APMBC) Article 5 extension period until 2021 to confirm whether suspected contamination along its undelimited northern border with Western Sahara was within its territory. Following technical survey in early 2017, Mauritania

confirmed that a 1km<sup>2</sup> mined area within its territory contained anti-personnel mines. Clearance of this area was completed in December 2017. As at July 2018, a proposal had been submitted to the government of Mauritania regarding issuing a declaration of compliance regarding its Article 5 obligations.

## RECOMMENDATIONS FOR ACTION

- Mauritania should take all necessary measures to establish that it has no mined areas remaining and declare completion of its Article 5 obligations well in advance of its 2021 extension request deadline.
- Mauritania should ensure that sufficient capacity is maintained to address any residual contamination that may be discovered in the future.

## CONTAMINATION

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<sup>2</sup>, in Ain Bintilli district, Tiris Zemmour region.<sup>1</sup> The area contained both anti-personnel and anti-vehicle mines.<sup>2</sup>

At the end of 2015, Mauritania had reported it had released all known areas of anti-personnel mine contamination. This totalled 40 mined areas covering 67km<sup>2</sup>.<sup>3</sup> However, 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.<sup>4</sup> In its 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”.<sup>5</sup>

Mauritania’s mine contamination was a legacy of the conflict over Western Sahara in 1975–78. A 2006 Landmine Impact Survey (LIS) had found a total of 65 suspected hazardous areas (SHAs) covering 76km<sup>2</sup> 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.<sup>6</sup>

## PROGRAMME MANAGEMENT

The National Humanitarian Demining Programme for Development (Programme National de Déminage Humanitaire pour le Développement, PNDHD) coordinates mine action operations in Mauritania.<sup>7</sup> Since 2007, the programme has been the responsibility of the Ministry of Interior and Decentralisation, with oversight from an interministerial steering committee.<sup>8</sup> The PNDHD has its headquarters in the capital, Nouakchott, and a regional mine action centre (RMAC) in Nouadhibou.

### Strategic Planning

In March 2017, Mauritania reported that a new national mine action strategic plan for 2016–20 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.<sup>9</sup>

The main aims of Mauritania’s workplan for 2017–20 were to achieve clearance of the remaining contaminated areas, establish a strategy for residual contamination, and declare their compliance with Article 5 before 1 January 2021.<sup>10</sup>

As at July 2018, clearance of mined areas was complete and a proposal had been submitted to the Government of Mauritania that a declaration of compliance with their Article 5 obligations be made.<sup>11</sup>

### Quality Management

In 2017, the PNDHD deployed its quality assurance (QA) and quality control (QC) capacity during clearance of the Sebkhath Fogra minefield.<sup>12</sup>

## Information Management

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.<sup>13</sup>

## Operators

In accordance with a 2006 decree, all clearance activities were conducted by the Army Engineer Corps operating under the PNDHD. In 2011, Norwegian People's Aid (NPA) signed a memorandum of understanding 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.<sup>14</sup>

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## LAND RELEASE

Mauritania reported that nationally funded technical surveys and administrative checks carried out in late 2016 and early 2017 resulted in the identification and confirmation of a mined area in Sebkhata Fogra, Ain Bintilli district covering an estimated 1km<sup>2</sup> and containing both anti-personnel and anti-vehicle mines.<sup>15</sup> It stated that assessment undertaken had confirmed that the area was located within Mauritanian territory

and that the area had been clearly marked with warning signs in Arabic and French.<sup>16</sup> Mauritania reported that it had released all 1km<sup>2</sup> by 15 December 2017 (835,467m<sup>2</sup> reduced by technical survey and 164,533m<sup>2</sup> released by clearance).<sup>17</sup> During the clearance, 93 anti-personnel mines and 35 anti-vehicle mines were found and destroyed.<sup>18</sup>

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## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension request granted by states parties in 2015), Mauritania 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 January 2021.<sup>19</sup> Mauritania has now completed clearance and is working towards making a formal declaration of compliance with its Article 5 obligations.

In September 2017, the PNDHD informed Mine Action Review that funding had been secured from the United Nations Development Programme (UNDP) for clearance of the remaining area and that it expected to deploy teams following a two-week refresher training course. Clearance was completed on 15 December 2017. It stated that no further suspected mined areas remained on Mauritanian territory and no further survey or efforts to clarify the border demarcation were required.<sup>20</sup>

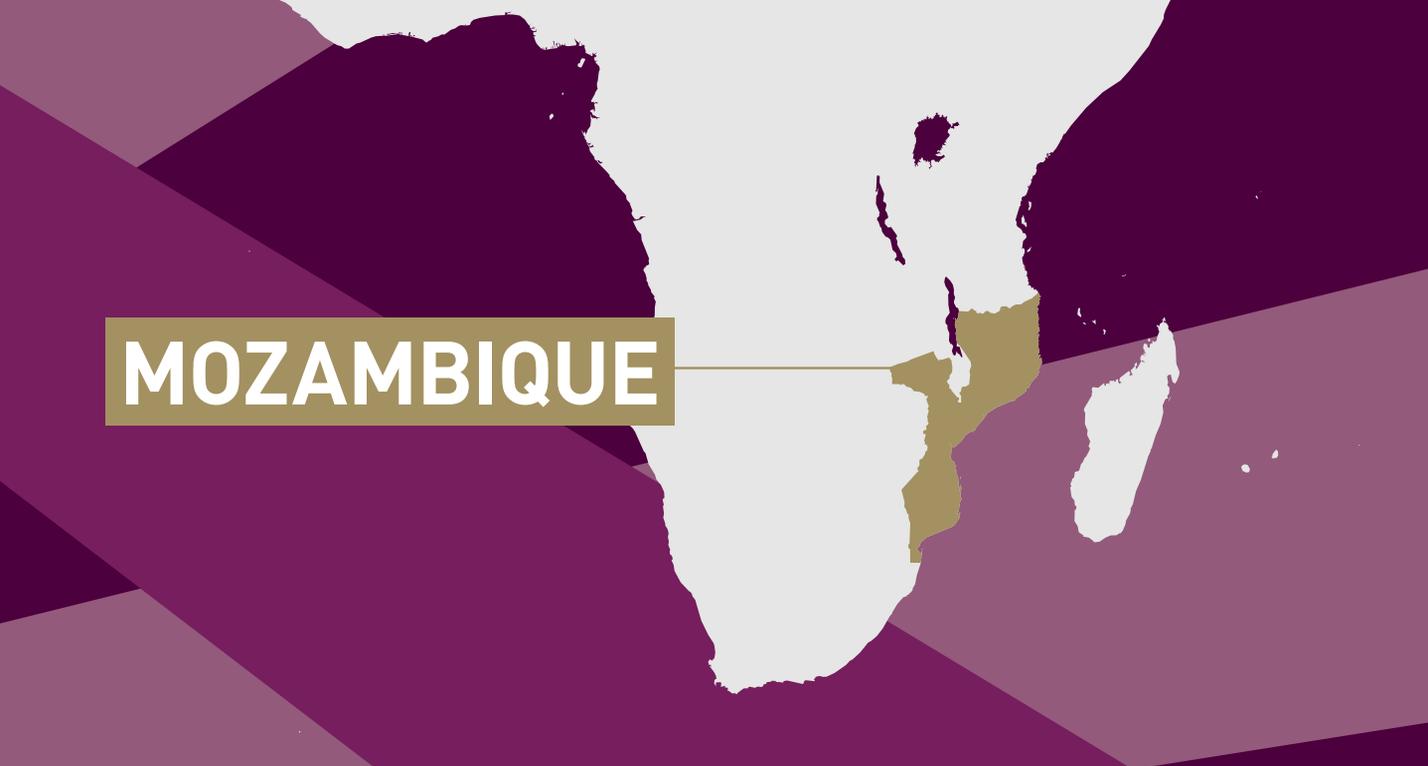
Previously, in June 2017, Mauritania projected that with external funding of US\$75,000 it could complete clearance of the newly confirmed 1km<sup>2</sup> area by the end of the year and declare itself in compliance with APMBC Article 5 at the forthcoming meeting of states parties in December 2017. It appealed for donor support to reach this goal.<sup>21</sup>

The PNDHD reported that the Government of Mauritania provided US\$385,000 in 2017–18 to cover the cost of the national mine action programme, the same amount that was provided in 2016.<sup>22</sup> It reported no change to its national mine action capacity in 2017, which included the management staff of the PNDHD, its QA/QC team, and eight teams of deminers from the Engineer Corps, consisting of nearly 60 persons in total.<sup>23</sup>

Mauritania has explained that the reasons for its inability to meet its initial Article 5 deadline of 1 January 2016 included lack of financial resources, insufficient progress in demining, use of only manual clearance, and difficult soil and climatic factors.<sup>24</sup> In its second extension request, Mauritania undertook to initiate and maintain dialogue with stakeholders with the aim of acquiring relevant topographic and cartographic information to determine the exact location of its northern border and to develop plans to address any contaminated areas identified within its jurisdiction.<sup>25</sup>

In September 2017, Mauritania informed Mine Action Review that survey of areas along the border had not revealed any further evidence of the presence of mines and no further dialogue with stakeholders on border clarification needed to be undertaken.<sup>26</sup> As at July 2018, Mauritania's priorities for survey and clearance were to focus on any residual contamination.<sup>27</sup>

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- 1 Email from Aliouneould Menane, National Coordinator, PNDHD, 23 July 2018.
  - 2 Article 7 Report (for 2016), Form D; Statement of Mauritania, Committee on Article 5 Implementation, Geneva, 8 June 2017; and email from Aliouneould Menane, PNDHD, 29 March 2017.
  - 3 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.
  - 4 *Ibid.*, 21 April 2014.
  - 5 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".
  - 6 Revised Second Article 5 deadline Extension Request, 6 September 2010, p. 3; and email from Melissa Andersson, Norwegian People's Aid (NPA), 17 September 2015.
  - 7 Decree No. 1960/MDAT/MDN establishing the PNDHD, 14 August 2007.
  - 8 Decree No. 001358/MDAT establishing the Steering Committee of the PNDHD, 3 September 2007.
  - 9 Email from Aliouneould Menane, PNDHD, 29 March 2017; and interview, in Geneva, 5 September 2017.
  - 10 Email from Aliouneould Menane, PNDHD, 23 July 2018.
  - 11 *Ibid.*
  - 12 *Ibid.*
  - 13 Article 7 Report (for 2017), Form D.
  - 14 Emails from Aliouneould Menane, PNDHD, 1 September 2016; and Melissa Andersson, NPA, 12 September 2016 and 13 March 2017.
  - 15 Statement of Mauritania, Committee on Article 5 Implementation, Geneva, 8 June 2017.
  - 16 *Ibid.*; and Article 7 Report (for 2016), Form D.
  - 17 Emails from Aliouneould Menane, PNDHD, 23 July and 18 September 2018.
  - 18 Email from Aliouneould Menane, PNDHD, 23 July 2018; and Article 7 Report (for 2017), Form D.
  - 19 It submitted the request in April 2015, despite being on track to complete clearance of all known areas containing anti-personnel mines by the end of the year. Under the five-year extension, the Mauritanian government would enter into a dialogue with "all of the stakeholders in the Western Sahara conflict" so as to clarify "the status of the suspected areas". Second Article 5 deadline Extension Request, 2 April 2015, p. 4.
  - 20 Interview with Aliouneould Menane, PNDHD, in Geneva, 5 September 2017 and Article 7 Report (for 2017) Form D.
  - 21 Statement of Mauritania, Committee on Article 5 Implementation, Geneva, 8 June 2017.
  - 22 Email from Aliouneould Menane, PNDHD, 23 July 2018; and Article 7 Report (for 2017), Form D.
  - 23 Emails from Aliouneould Menane, PNDHD, 1 September 2016, 29 March 2017, and 23 July 2018.
  - 24 Article 5 deadline Extension Request, 3 February 2010, pp. 3–4.
  - 25 Decision on the request submitted by Mauritania for a Second Article 5 deadline Extension Request, 4 December 2015.
  - 26 Interview with Aliouneould Menane, National Coordinator, National Humanitarian Demining Programme for Development (Programme National de Déminage Humanitaire pour le Développement, PNDHD), Intersessional Meetings, Geneva, 5 September 2017.
  - 27 Email from Aliouneould Menane, PNDHD, 23 July 2018.



# MOZAMBIQUE

## ARTICLE 5 DEADLINE: 1 JANUARY 2015

(DECLARED COMPLETION BUT HAS OUTSTANDING SUSPECTED MINED AREAS)

### PERFORMANCE COMMENTARY

Mozambique announced it had fulfilled its Anti-Personnel Mine Ban Convention (APMBC) Article 5 survey and clearance obligations in September 2015, to date one of the most heavily affected states to have done so. However, in 2016, additional anti-personnel mine contamination was discovered in Cabo Delgado province, which was subsequently surveyed and cleared, with the release of nearly 139,000m<sup>2</sup> in May 2017. Mozambique informed APMBC states parties of the discovery and clearance of this previously unknown and unreported anti-personnel mine contamination at the Convention's Intersessional Meetings in June 2017.

As at September 2018, four small areas suspected to contain anti-personnel mines, previously disclosed by Mozambique, remained submerged in Inhambane province. Mozambique reported the area had again been surveyed in June 2018 to confirm the mined areas are still under water, and it reiterated its pledge to continue to monitor the situation and to release the mined areas as soon as dry access can be gained.<sup>1</sup>

### RECOMMENDATIONS FOR ACTION

- Mozambique should undertake all efforts to address the four remaining submerged suspected mined areas as soon as possible, ensure that they are clearly marked and monitored, and report on the status of the areas to APMBC states parties regularly.
- Mozambique should ensure sufficient national capacity remains in place to deal with mine or explosive remnants of war (ERW) contamination. If future mine contamination is suspected or confirmed, Mozambique should inform states parties to the APMBC of all mined areas found, request another extended APMBC Article 5 deadline if required, and report on the status of programmes for their release.
- Mozambique should ensure that the national mine action database is transferred to an appropriate government ministry and that resources are allocated to maintain the database.

## CONTAMINATION

Mozambique formally declared compliance with its Article 5 obligations at the APMBF Fourteenth Meeting of States Parties in December 2015, after announcing its completion of anti-personnel mine clearance on 17 September 2015.<sup>2</sup> In a public ceremony, Oldemiro Baloi, the Minister for Foreign Affairs and Cooperation, declared the country to be free of the “threat” of mines following survey and clearance of more than 3,000 areas across a total of more than 55km<sup>2</sup> in 2008–14 and the destruction of more than 86,000 anti-personnel mines.<sup>3</sup>

In March 2016, APOPO, an international demining non-governmental organisation (NGO), identified a mined area covering 63,000m<sup>2</sup> during non-technical survey in Nangade district, Cabo Delgado province, near the border with Tanzania.<sup>4</sup> As the National Demining Institute (IND) stated it did not have sufficient funding or capacity to address the area in Nangade, at its behest Norwegian People’s Aid (NPA) secured funding to clear the mined area in early 2017. After clearance operations began in February 2017, subsequent investigation by NPA identified two further mined areas nearby, one covering approximately 14,000m<sup>2</sup> and a second with an estimated size of 8,000m<sup>2</sup>.<sup>5</sup> Clearance of all areas was completed on 29 May 2017, with a total of just under 139,000m<sup>2</sup> released, and the destruction of 115 anti-personnel mines and three items of UXO.<sup>6</sup>

According to the IND, four small suspected mined areas with a combined size of 1,881m<sup>2</sup> remain underwater in Inhambane province.<sup>7</sup> At the Intersessional Meetings in June 2018, Mozambique again informed APMBF states parties that the areas remained submerged and that regular monitoring was ongoing. This included a visit by IND monitoring teams during the first week of June. It reiterated its commitment that the remaining areas would be addressed once the water level had receded and dry access could be gained.<sup>8</sup>

Mozambique previously reported the existence of “suspended” mined areas in its declaration of completion of Article 5 obligations submitted in December 2015, which it defined as “suspected hazard areas that remain seasonally or permanently submerged under water in Inhambane province”. It further stated that all suspended areas “were subjected to technical survey and clearance up to the water line during the annual dry season with no direct evidence found to confirm the presence of mines in any of these areas. Nevertheless the portion of the SHA [suspected hazardous area] that remains underwater will be marked and regularly monitored to confirm if the area ever dries enough to allow further technical survey”.<sup>9</sup> In June 2018, Mozambique reiterated that it “should have made it more clear, in its Completion Declaration, that there may be very little probability that mines would be detected in those submerged areas”.<sup>10</sup>

**Table 1: Mined areas by province (at June 2018)<sup>11</sup>**

Province	Suspected areas	Area (m <sup>2</sup> )
Inhambane	4	1,881
<b>Totals</b>	<b>4</b>	<b>1,881</b>

Mozambique was contaminated with mines, mostly anti-personnel, as a legacy of nearly 30 years of conflict that ended in 1992. Mozambique also has residual contamination from ERW, including unexploded ordnance (UXO).

According to NPA, the mined area identified in Nangade district had both a social and economic impact on the local border community, whose economic activity primarily consists of small scale cross-border trade on a key transit route between Tanzania and Mozambique.<sup>12</sup> Clearance of the mined area ensures safe passage of individuals between the two countries, and for the community of Mungano, the nearest settlement to the minefield, frees extra land for cultivation, and allows children to attend the Mungano primary school, located only 20 metres from the minefield, without the fear of landmines.<sup>13</sup>

## PROGRAMME MANAGEMENT

There is no national mine action authority as such in Mozambique. The IND serves as the national mine action centre in Mozambique, reporting to the Ministry of Foreign Affairs. Provincial demining commissions have been created to assist in planning mine action operations. Due to a growing national economic crisis, the government put in place strict austerity measures which saw financial support to the IND reduced drastically, resulting in the downsizing of the institution, with only key staff remaining at the start of 2017, and continuing downsizing occurring during the year.<sup>14</sup> NPA has expressed concern at the IND’s lack of resources and its ability to maintain a capacity to address residual mine and ERW contamination.<sup>15</sup>

### Strategic Planning

In June 2018, Mozambique reported that a government strategy to develop a sustainable national capacity to address residual mine and ERW contamination had been developed and was being implemented with the training of national police units and military personnel. Under the strategy, police units in both the District and Provincial Police Commands were being trained to respond to and destroy any items of UXO and isolated mines reported, and to provide community awareness raising on the threat of residual contamination.<sup>16</sup> Any additional mined areas discovered would be responsibility of the Mozambique Armed Forces’ specialised regional

demining units. If, however, the scale of contamination cannot be addressed by the capacity and resources of the authorities, Mozambique will notify the other APMBC states parties and request assistance, stating that, as per the strategy, its residual institutional capacity must not only be ready to address contamination, but also to be an interlocutor with states parties, if additional mined areas are discovered.<sup>17</sup>

## Quality Management

In its operations in Nangade, NPA stated that in addition to regular internal quality assurance (QA) and quality control (QC) activities, external QA was provided by IND QA officers in the form of a one-week visit in April 2017.<sup>18</sup>

## Information Management

The IND had planned to shift responsibility of the national Information Management System for Mine Action (IMSMA) database to a government ministry, the Ministry of Land, Environment, and Rural Development. As at September 2018, however, this had not yet occurred.<sup>19</sup>

## Operators

From February to the end of May 2017, NPA deployed two teams of a total of 16 deminers to conduct manual clearance of the mined area identified in Nangade. It had remained in Mozambique in 2016 to clear Mozambique's last remaining cluster munition remnant contamination.<sup>20</sup> Previously, in 2016, APOPO maintained a presence of some 50 staff, primarily to clear ammunition around the Malhazine weapons depot in Maputo city. It seconded personnel for ad hoc survey, explosive ordnance disposal (EOD), and clearance of residual risk tasks, on a call-out basis.<sup>21</sup>

In April 2017, APOPO closed its programme in Mozambique after it was unable to secure funding to complete its ammunition clearance operations at the Malhazine weapons depot complex.<sup>22</sup> Following an official handover ceremony on 1 June 2017, NPA demobilised its mine clearance operations in Nangade district. It stated that no new reports of suspected mined areas in Nangade district, or in the wider Cabo Delgado province, were received.<sup>23</sup>

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## LAND RELEASE

According to Mozambique, in April 2016, following two suspected mine incidents in Nangade district, Cabo Delgado province, a mined area covering an estimated 63,000m<sup>2</sup> was confirmed through non-technical and technical survey carried out by APOPO and IND survey teams along the Mozambique-Tanzania border.<sup>24</sup>

NPA began clearance activities on the 63,000m<sup>2</sup> area at Mungano in Nangade on 1 February 2017. Following completion of clearance of that mined area, further investigation by technical survey identified two additional

mined areas, one with a size of 14,000m<sup>2</sup> in Chicamba village, approximately 3.5km from Mungano, and a third area with a size of 8,000m<sup>2</sup>, some 500 metres from the larger minefield at Mungano, which, according to NPA, formed part of an old mine belt at the Mozambique-Tanzania border.<sup>25</sup> Clearance of all areas was completed on 29 May 2017, with a total of 138,958m<sup>2</sup> released, including 7,537m<sup>2</sup> by manual clearance and 27,885m<sup>2</sup> by technical survey, with the destruction of 115 anti-personnel mines and 3 items of UXO.<sup>26</sup>

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## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with its second extension for a period of ten months granted by states parties in December 2013), Mozambique was required to destroy all anti-personnel mines in mined areas under its jurisdiction or control no later than 1 January 2015. On 1 December 2015, at the Fourteenth Meeting of States Parties in Geneva, Mozambique officially declared that it had completed its Article 5 obligations on 17 September, nine months after its legal deadline had expired.

Concerns were raised during the phasing out of Mozambique's national mine action programme, specifically including difficulties in digitalising demining completion reports from NGO operators and the need for a back-up system to avoid the loss of data.<sup>27</sup> The transfer of the database, along with information management staff, to the Ministry of Land, Environment, and Rural Development and the proposed transfer of database copies for storage with the Ministry of Interior and the Ministry of State Administration, had still to occur as at September 2018. The future of the IND, which employed 11 staff, also remained uncertain.<sup>28</sup>

Mozambique stated in its declaration of completion of its Article 5 obligations that if previously unknown areas of mine contamination were subsequently discovered, it would:

- Immediately inform states parties of any discovery and report any mined areas in accordance with its Article 7 transparency obligations and at APMBC meetings
- Ensure the effective exclusion of civilians from any contaminated areas
- Destroy all anti-personnel mine contamination as soon as possible, and
- If it cannot destroy all contamination in the mined area before the next meeting of states parties, submit a request for another extended Article 5 clearance deadline in accordance with its obligations as an APMBC state party.<sup>29</sup>

While noting that it had not followed the course indicated in its declaration of completion by failing to inform states parties to the APMBC of the discovery of additional contamination at the subsequent Meeting of States Parties in December 2016, or to submit a request for another extended Article 5 clearance deadline, Mozambique reported in detail on the discovery of the mined area in Nangade in its Article 7 report submitted in April 2017 and informed states parties of its identification and clearance in June 2017, at the Convention's Intersessional Meetings.<sup>30</sup> As noted above, Mozambique also announced that the IND would continue to assess the status of the remaining four submerged mined areas in Inhambane province and clear them once dry access could be gained.<sup>31</sup> The IND reported visiting the areas in June 2017 and again in June 2018, and confirmed they remained underwater and inaccessible for operations.<sup>32</sup>

The Government of Mozambique did not provide any funding for field operations in 2017, though it continued to pay the salaries of key IND staff. The IND expected it would continue to do so, for as long as it remained the coordinating authority for mine action-related activities. However, the IND emphasised to Mine Action Review that with the reduction in financial support from the government, its activities and outreach would be severely affected in 2018.<sup>33</sup>

1	Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2018.	16	Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2018. Under the Government strategy, in order to ensure consistency in capacity and avoid any gaps in the case of transfer of trained officers, the Government decided to train two police officers in each District Police Command and an equal number in each Provincial Command. It reported that trained police officers had since carried out destruction of UXO reported in Mocuba, Zambezia province and Magunda and Catuane, in Maputo province.
2	Email from Hans Risser, Chief Technical Advisor, Mine Action, United Nations Development Programme (UNDP), 13 October 2015.	17	Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2018.
3	UNDP in Mozambique, "Mozambique declared 'mine free'", undated but accessed 19 October 2015 at: <a href="http://www.mz.undp.org/content/mozambique/en/home/ourwork/environmentandenergy/successstories/Mozambique_Declared_Mine_free/">http://www.mz.undp.org/content/mozambique/en/home/ourwork/environmentandenergy/successstories/Mozambique_Declared_Mine_free/</a> .	18	Email from Afedra Robert Iga, NPA, 4 May 2017.
4	Email from Ashley Fitzpatrick, Project Manager, APOPO, 17 October 2016; and information confirmed by IND in email from Lucia Simao, UNDP, 18 October 2016. APOPO remained in-country after September 2015 and responded to a number of isolated mine and ERW tasks in southern, central, and northern provinces of Mozambique in coordination with the IND.	19	Interview with IND staff member, Convention on Cluster Munitions 8th Meeting of States Parties, Geneva, 4 September 2018.
5	Information confirmed by IND in email from Lucia Simao, UNDP, 18 October 2016; Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2017; and email from Afedra Robert Iga, Programme Manager, NPA, 5 June 2017. NPA maintained operations in Mozambique clearing the last remaining cluster munition remnants (CMR) in the country in 2016.	20	Emails from Afedra Robert Iga, NPA, 25 April 2017 and 5 June 2017.
6	Email from Afedra Robert Iga, NPA, 5 June 2017.	21	Email from Ashley Fitzpatrick, Grant and Regional Manager, APOPO, 29 May 2017.
7	Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2018; and Article 7 Report (for 20 April 2017–1 April 2018), Form F. Mozambique erroneously reported that the total of the areas was "18,888 square meters" in its June statement to the Intersessional Meetings and "1.118m <sup>2</sup> " in 4 tasks in its latest Article 7 transparency report.	22	Emails from Ashley Fitzpatrick, APOPO, 29 May and 7 September 2017.
8	Statements of Mozambique, Intersessional Meetings, Geneva, 8 June 2018; and 8 June 2017; and Article 7 Report (for 2016), Forms C and F. The areas were initially recorded as having a total size of 5,107m <sup>2</sup> , which, following clearance of 3,226m <sup>2</sup> by Handicap International (HI) in 2015, left a total of 1,881m <sup>2</sup> remaining to be addressed in 2016. In its April 2017 Article 7 report, Mozambique reiterated that the "total areas suspended due to inaccessibility due to the high-level of water are 1,881m <sup>2</sup> with 4 tasks remaining" and confirmed that the areas are "earmarked for future clearance once access is regained". The report also erroneously lists the size of remaining contamination in the four areas as 3,226m <sup>2</sup> .	23	Email from Afedra Robert Iga, NPA, 5 June 2017.
9	Declaration of completion of implementation of Article 5, submitted by Mozambique, 16 December 2015, p. 5. The HALO Trust, which had been tasked by the IND to address 24 mine tasks all with a size of less than 1,000m <sup>2</sup> in Inhambane province in 2015, confirmed that while it was able to resurvey and cancel or clear the majority of the areas, a number were inaccessible due to being underwater and would require to be released at a later date when the water had subsided. HALO Trust reported that the areas were among patches of standing water, swamps, and rivers, and only were accessible during the drier months of the year. It deployed three manual teams to resurvey thirteen of the mined areas, clearing six (finding no anti-personnel mines) and cancelling a further three, and reported that the remaining areas were inaccessible due to their being entirely underwater. Emails from Chris Pym, Southern Africa Regional Director, HALO Trust, 17 May 2017; and Calvin Ruysen, Regional Director for Central Asia, HALO Trust, 15 September 2016.	24	Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2017.
10	Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2018.	25	Ibid.; and email from Afedra Robert Iga, NPA, 3 May 2017. According to NPA, the area measuring 14,000m <sup>2</sup> was reported as mined by locals to NPA during clearance operations at Mungano.
11	Ibid.; and Article 7 Report (for 20 April 2017–1 April 2018), Form F.	26	Emails from Afedra Robert Iga, NPA, 5 June 2017 and 28 August 2017. At the first area in Mungano, with an initial estimated size of 63,000m <sup>2</sup> , a total of 112,723m <sup>2</sup> was released and 99 anti-personnel mines found and destroyed, including 5,252m <sup>2</sup> by manual clearance, 19,383m <sup>2</sup> by technical survey, and 88,088m <sup>2</sup> through cancellation. At the second area at Chicamba, with an initial estimated size of 14,000m <sup>2</sup> , a total of 14,800m <sup>2</sup> was released with the destruction of eight anti-personnel mines, in the course of clearance of 1,115m <sup>2</sup> , reduction of 4,229m <sup>2</sup> by technical survey, and cancellation of 9,456m <sup>2</sup> . At the third area, with an initial estimated size of 8,000m <sup>2</sup> , a total of 11,435m <sup>2</sup> was released with the destruction of eight anti-personnel mines: 1,170m <sup>2</sup> by clearance, 4,273m <sup>2</sup> reduced by technical survey, and 5,992m <sup>2</sup> cancelled. The mines destroyed were of the types M969 and AUPS fragmentation and blast anti-personnel mines. Mozambique subsequently reported different figures in June 2018, stating that 127,522m <sup>2</sup> was released, including 11,218m <sup>2</sup> cancelled, 86,326m <sup>2</sup> reduced, and 29,979m <sup>2</sup> cleared, with the destruction of 107 anti-personnel mines and 1 item of UXO. Its Article 7 report, however, contains inconsistent figures which do not tally to the sums reported by NPA or in its June 2018 statement. Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2018; and Article 7 Report (for 20 April 2017–1 April 2018), Form C.
12	Ibid.; and email from Afedra Robert Iga, NPA, 5 June 2017.	27	Email from Lucia Simao, UNDP, 18 October 2016.
13	Email from Afedra Robert Iga, NPA, 4 May 2017.	28	Interview with IND staff member, Convention on Cluster Munitions 8th Meeting of States Parties, Geneva, 4 September 2018.
14	Email from Afedra Robert Iga, NPA, 23 March 2017.	29	Declaration of completion of implementation of Article 5, submitted by Mozambique, 16 December 2015, p. 8.
15	Skype interview with Afedra Robert Iga, NPA, 7 June 2016.	30	Article 7 Report (for 2016), Form I.
		31	Statement of Mozambique, Intersessional Meetings, Geneva, 8 June 2017; and email from Afedra Robert Iga, NPA, 5 June 2017. Mozambique's Article 7 report stated that NPA was scheduled to conduct the survey of the submerged areas; however, this plan changed and the IND carried out the assessment instead, in June 2017. Article 7 Report (for 2016), Form I.
		32	Email from Afedra Robert Iga, NPA, 17 August 2017.
		33	Interview with IND staff member, Convention on Cluster Munitions 8th Meeting of States Parties, Geneva, 4 September 2018.



# NIGER

**ARTICLE 5 DEADLINE: 31 DECEMBER 2020**  
(UNCLEAR WHETHER ON TRACK TO MEET DEADLINE)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
<b>Problem understood</b>	7	9
<b>Target date for completion of mine clearance</b>	1	1
<b>Targeted clearance</b>	8	8
<b>Efficient clearance</b>	6	6
<b>National funding of programme</b>	6	6
<b>Timely clearance</b>	5	5
<b>Land-release system in place</b>	6	6
<b>National mine action standards</b>	6	6
<b>Reporting on progress</b>	5	4
<b>Improving performance</b>	6	7
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.6</b>	<b>5.8</b>

## PERFORMANCE COMMENTARY

Norwegian People's Aid (NPA) undertook an assessment mission to Niger in 2017 and identified three hazardous areas contaminated with anti-personnel mines, one of which was previously unknown. In April 2018, Niger submitted its first Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report since 2012, which included a demining workplan for 2017–20. However, this workplan is based on clearance of only one of the three mined areas and will need to be revised once the extent of the contamination is confirmed.

## RECOMMENDATIONS FOR ACTION

- Niger should provide an updated workplan based on the new assessment of contamination, with benchmarks against which progress can be assessed, including a monthly and annual breakdown of areas to be addressed and a corresponding budget.
- Niger should provide regular updates on progress in addressing its APMBC Article 5 obligations and continue to submit an annual Article 7 report that includes up-to-date information on contamination and clearance.
- Niger should develop a resource mobilisation plan that includes the new assessment of contamination to meet funding needs beyond expected national contributions.
- Niger should ensure that its national mine action standards are in accordance with international standards and that there is a quality management system in place to safeguard the quality of demining operations.

## CONTAMINATION

The extent of anti-personnel mine contamination in Niger is unclear. In April 2018, Niger reported that it had two mined areas in Madama, a military base in the north-east of the country: a confirmed hazardous area (CHA) of 39,394m<sup>2</sup> (Area 1) and a suspected hazardous area (SHA) of 196,243m<sup>2</sup> (Area 2).<sup>1</sup> Niger deployed a team of 60 deminers to the CHA in November 2014, and reported that, as at November 2015, more than 17,000m<sup>2</sup> had been cleared with 750 mines destroyed.<sup>2</sup> On 25 October 2016, Niger confirmed that all 39,304m<sup>2</sup> had been demined, with the destruction of 1,075 mines.<sup>3</sup> However, this is contradicted in its latest Article 7 report, where Niger stated that only half of Area 1 has been cleared, which would give a new contamination estimate of 19,697m<sup>2</sup>.<sup>4</sup>

NPA undertook an assessment mission to Niger on 4–11 December 2017, travelling to Madama, and identified a total of three hazardous areas (Area 1, Area 2, and also a third previously unknown mined area – Area 3). Although deminers were deployed to Area 1, a perimeter minefield encircling a former French military position, from November 2014 to January 2016, NPA found uncertainty as to whether the area had been fully cleared. There are differing reports of the extent of clearance, which range from 29,000 up to 39,304m<sup>2</sup> and the national authority told NPA about an issue with an item found during quality control. Area 2, a fenced minefield immediately south of the former French military position, is believed to contain Model 51/55 bounding fragmentation anti-personnel mines and may also contain M51 blast anti-personnel mines. Area 3, a minefield close to Area 2 seemingly laid to prevent traffic between two oases, is an unfenced and unsurveyed minefield the size of which is unknown but mines were reportedly laid in a single straight line north-west to south-east.<sup>5</sup> Twelve M51 blast anti-personnel mines have been cleared in an ad-hoc manner by the Niger Armed Forces (FAN) who were using the area for military exercises. This was reported to NPA during the assessment mission and NPA also observed one M51 mine in the area, which was visible from a frequently used path.<sup>6</sup>

Niger also identified five additional SHAs in the Agadez region (in the Achouloulouma, Blaka, Enneri, Orida, and Zouzoungga) but they were believed to contain only anti-vehicle mines.<sup>7</sup> Niger reported that non-technical and technical survey in May 2014 had removed the suspicion of the presence of anti-personnel mines.<sup>8</sup> The areas are all located in Niger's Agadez region, in the north 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.<sup>9</sup>

Niger's contamination includes other areas that contain only anti-vehicle mines, which are the result of rebellion in 1990–2000 as well as fighting in 2007 between the Nigerien army and a non-state armed group, the Nigerien Justice Movement (Mouvement des Nigériens pour la Justice), and some splinter factions.

In 2017, there were numerous reports of casualties and incidents involving the use of landmines by Boko Haram in Nigeria close to the border with Niger (see Mine Action Review's *Clearing the Mines* report on Nigeria for further information). In January 2016, at least six Nigerien soldiers were reported to have been killed by an explosion when an army vehicle detonated a mine 10km from Kabalewa, in Diffa region, on the banks of the Yobe river along the border with Nigeria.<sup>10</sup> In its latest Article 7 report (for 2013 to April 2018) Niger reported that the region of Diffa has become difficult for humanitarian agencies for fear of mines, explosive remnants of war (ERW), and improvised devices because of the actions of Boko Haram.<sup>11</sup>

## 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.

### Strategic Planning

Niger's first extension request in 2013 included a workplan for 2014–15 requiring clearance of the Madama mined area, technical survey in the northern Kawar (Kaouar) department (Agadez region), and verification of other suspected mined areas. Niger's third extension request submitted in 2016 contains a vague workplan for 2016–20, but does not contain details of annual clearance outputs or milestones.<sup>12</sup>

In its latest Article 7 report, Niger included a workplan for 2017–20 of the SHA covering 196,253m<sup>2</sup> with clearance purported to begin in June 2018.<sup>13</sup> In its statement at the June 2018 APMBC Intersessional Meetings, however, Niger stated that clearance would begin by the end of the year.<sup>14</sup>

### Legislation and Standards

Niger reported that, as at November 2015, it had drafted national mine action standards (NMAS) in accordance with the International Mine Action Standards (IMAS). No information has been provided on whether Niger's NMAS have been finalised and adopted.

### Operators

Niger reported that, as at November 2015, it was in the process of training deminers and eight community liaison officers for deployment in Kawar. It has reportedly had between 60 and 90 deminers operating at Madama since November 2014; in mid-2015, however, it acknowledged that due to lack of adequate equipment, it was not possible for all deminers to work at the same time.<sup>15</sup>

In May 2015, NPA conducted an evaluation mission in Niger and subsequently offered to provide assistance to national demining efforts by donating equipment to enable the deployment of more deminers and short-term technical support to improve Niger's clearance productivity.<sup>16</sup> In December 2017, NPA conducted a second monitoring mission in Niger to assess the possibility of assisting Niger to reach its Article 5 clearance deadline. Three possible options for intervention are being explored with a follow-up mission planned for the end of 2018.<sup>17</sup>

## LAND RELEASE

There was no clearance or survey undertaken in Niger in 2017. Niger stated that this was because it had insufficient funds to carry out demining activities given the financial situation of the country. It is unclear how much land was actually cleared in Madama from 2014 to 2016 with reports from ranging from 19,697m<sup>2</sup> to full clearance of 39,304m<sup>2</sup>.<sup>18</sup> During NPA's monitoring mission in December 2017 reports of clearance ranging from 29,000–39,304m<sup>2</sup> were given.<sup>19</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the four-year extension request granted by states parties in 2016), 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 2020.

States parties decided to grant this second request while noting, as with its previous extension request, that Niger had failed to provide a detailed annual workplan for clearance and benchmarks against which to assess progress. As such, Niger was requested by states parties to provide a revised detailed workplan with a list of all areas known or suspected to contain anti-personnel mines, along with monthly and annual projections of which areas would be addressed during the extension period. The importance of submitting an updated Article 7 report on an annual basis was further emphasised.<sup>20</sup>

In April 2018, Niger submitted its first Article 7 report since 2012. Unfortunately, much of the report is repetition of the same information from its 2015 and 2016 Article 5 deadline extension requests. Niger did include a workplan for demining a total of 196,253m<sup>2</sup> in 2017–20. However, the figures given in the table are inaccurate and some of the totals are illegible.<sup>21</sup>

Niger's Article 5 clearance deadline under its first extension request expired on 31 December 2015. It stated that due to greater than expected contamination at Madama and the identification of the other area of suspected mine contamination, it would not meet this deadline. On 12 November 2015, just a few weeks before the Fourteenth Meeting of States Parties, Niger submitted a second request for a five-year extension until 31 December 2020.

Instead, states parties decided to grant Niger a one-year extension only, noting that Niger had failed to submit its request within the agreed timeline prior to the meeting and thus had not permitted time for sufficient analysis or discussion. The decision “noted that Niger and the Convention as a whole would benefit from a full extension process taking place” and requested that, as such, Niger “submit a request, in accordance with the established process, by 31 March 2016”.<sup>22</sup> The decision also observed that the plan presented by Niger in the request was “workable but lacks ambition” and requested that Niger provide, in its revised submission, an updated workplan with an up-to-date list of all areas known or suspected to contain anti-personnel mines and annual clearance projections during the period covered by the request.<sup>23</sup>

In April 2016, Niger re-submitted its extension request for a period of four years, until 31 December 2020.<sup>24</sup> The revised submission includes geo-coordinates for the Madama mined area, but fails to include a detailed annual workplan or any specific annual projections for the clearance of the remaining mined areas, despite this being an essential part of any extension request, and it having been explicitly requested to do so by the meeting of states parties.<sup>25</sup>

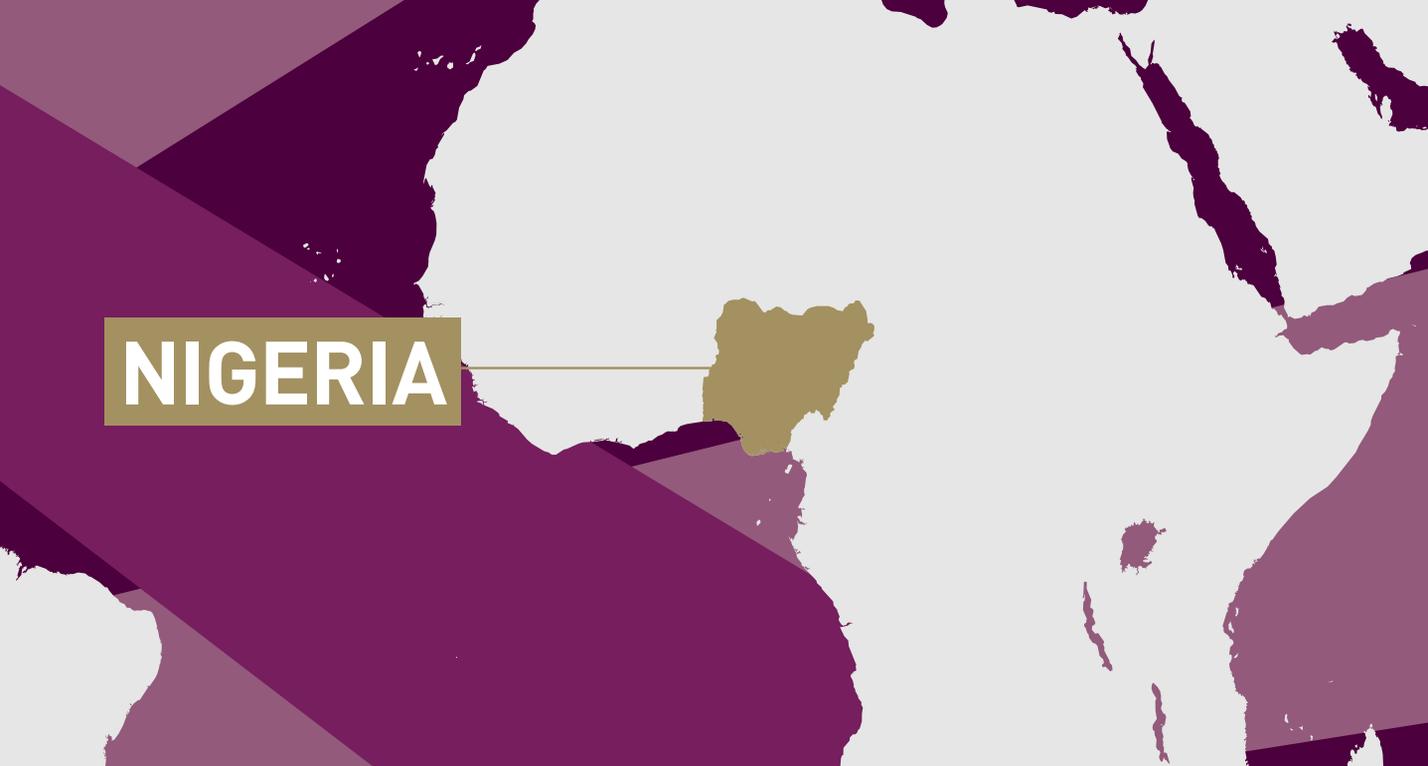
In its extension requests, Niger has noted desert environment, insecurity, and lack of funding as challenges for the implementation of its clearance obligations, along with the remote location of contamination and the need for a weekly military escort to carry out demining.<sup>26</sup>

Niger funded all mine action activities in 2014–15.<sup>27</sup> Under its latest extension request, Niger has said that more than US\$3.2 million in funding is needed to fulfil its remaining Article 5 obligations, including \$1 million for the CNCCAI from the national budget over the five-year period, and \$2.2 million to be mobilised from external donors.<sup>28</sup> In its statement at the June 2018 APBMC Intersessional Meetings, Niger stated that without the support of partners it was unlikely that Niger would be able to complete clearance by its Article 5 deadline and reserved the right to submit another extension request by the end of December 2019.<sup>29</sup>

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.<sup>30</sup> However, as noted above, following an assessment mission to Niger in May 2015, NPA submitted an offer to provide Niger with assistance, including provision of personal protective equipment, so that more deminers could work simultaneously, as well as a technical advisor to evaluate current methodology and trial equipment, which it believed could significantly increase speed and productivity.<sup>31</sup> Danish Demining Group (DDG) also offered to help Niger to complete clearance, but Niger did not respond to either organisation’s offer.<sup>32</sup> In December 2017, NPA undertook a second monitoring mission to Niger as NPA was unable to access Madama during the first mission. NPA planned to conduct a follow-up mission by the end of 2018 and supports the view that Niger should develop a resource mobilisation plan that demonstrates their national commitment to demining.<sup>33</sup>

At the Fifteenth Meeting of States Parties in December 2016, France announced that it would provide support to contribute to the clearance of the area around Madama fort, set to begin in 2017.<sup>34</sup> In June 2017, Niger confirmed that it had accepted France’s offer for technical support for an evaluation of the terrain around Madama, which it stated would better inform its planning and allow it to prepare an updated Article 7 transparency report.<sup>35</sup> In its statement at the June 2018 Intersessional Meetings, Niger stated that it was still waiting on the offer of support from France to manifest.<sup>36</sup>

- 1 Article 7 Report (for 2013–April 2018), Annex I, p. 19.
- 2 Second Article 5 deadline Extension Request, 6 November 2015, p. 8; and Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015, p. 2. Niger’s extension request stated that 17,000m<sup>2</sup> had been cleared and 628 mines destroyed. Second Article 5 deadline Extension Request, 6 November 2015, p. 9.
- 3 Analysis of Niger’s Third Article 5 deadline Extension Request, 25 October 2016, p. 3.
- 4 Article 7 Report (for 2013 to April 2018), Annex I, p. 17.
- 5 Email from Jean-Denis Larsen, DRC Country Director, NPA, 19 July 2017.
- 6 Emails from Jean-Denis Larsen, DRC Country Director, NPA, 19 July 2017 and 3 October 2018.
- 7 Observations on the extension request submitted by Niger by the Committee on Article 5 Implementation, 27 November 2015, p. 4; and Statement of Niger, Standing Committee on Mine Action, Geneva, 11 April 2014.
- 8 Third Article 5 deadline Extension Request, 15 March 2016, p. 6.
- 9 Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015; and statement of Niger, Third Review Conference, Maputo, 24 June 2014.
- 10 “Landmine Explosion Kills 6 Soldiers at Niger-Nigerian Border”, Africa News, 18 January 2016, at: <http://www.africanews.com/2016/01/18/landmine-explosion-kills-6-soldiers-at-niger-nigerian-border/>.
- 11 Article 7 Report (2013 to April 2018) Annex I, p. 17.
- 12 Third Article 5 deadline Extension Request, received 15 April 2016.
- 13 Article 7 Report (2013 to April 2018) Annex I, p. 23.
- 14 Statement of Niger, Committee on Article 5 Implementation, Geneva, 7–8 June 2018.
- 15 Niger stated that in addition to the 60 deminers active at Madama since November 2014, 40 were trained in February 2015, 30 of whom were said to have been deployed by April 2015. Statement of Niger, Committee on Article 5 Implementation, Geneva, 25 June 2015; and interview with Chris Natale, Mine Action Advisor, NPA, in Geneva, 26 June 2015.
- 16 Interview with Chris Natale, NPA, in Geneva, 26 June 2015.
- 17 Emails from Jean-Denis Larsen, NPA, 19 July 2017 and 3 October 2018.
- 18 Analysis of Niger’s Third Article 5 deadline Extension Request, 25 October 2016, p. 3; and Article 7 Report (for 2013 to April 2018).
- 19 Email from Jean-Denis Larsen, NPA, 19 July 2017.
- 20 Additionally, states parties stipulated four areas on which Niger should report, including progress made in accordance to its forthcoming 2016–20 workplan; any negative or positive impacts on implementation deriving from changes in the security situation; efforts to mobilise necessary financial and technical support; and any external finance and assistance received along with resources made available by the Government of Niger. “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”, 15th Meeting of States Parties, Santiago, 1 December 2016.
- 21 Article 7 Report (2013 to April 2018), Annex I, p. 23.
- 22 “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”, 14th Meeting of States Parties, Geneva, 4 December 2015.
- 23 Ibid.
- 24 Third Article 5 deadline Extension Request, 15 March 2016 (received 15 April 2016).
- 25 Historically, from 2002–06, Niger consistently reported the existence of mined areas in the country. However, at the 2008 Intersessional Meetings, Niger declared that no areas on its territory were suspected to contain anti-personnel mines, stating it had evidence only of the presence of anti-vehicle mines. Nonetheless, in May 2012, more than two years after the expiry of its Article 5 clearance deadline, Niger reported to states parties that at least one mined area contained anti-personnel mines in. In July 2013, more than four years after its original deadline expired, Niger submitted its first extension request, following the discovery of one known and five suspected mined areas in the Agadez region in June 2011. In granting the request, states parties regretted the delay between the discovery of contamination and the beginning of demining. See: Article 7 reports for 2002–06; Statements of Niger, Standing Committee on Mine Action, Geneva, 5 June 2008 and 28 May 2012; and Article 5 deadline Extension Request, Decision, 5 December 2013.
- 26 Article 5 deadline Extension Request, 1 July 2013; Executive summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015, p. 2; and Third Article 5 deadline Extension Request, 15 March 2016, p. 14.
- 27 Interview with Youssouf Maïga, CNCCAI, Geneva, 25 June 2015.
- 28 Third Article 5 deadline Extension Request, 15 March 2016, pp. 11–13; and Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015, p. 3.
- 29 Statement of Niger, Committee on Article 5 Implementation, Geneva, 7–8 June 2018.
- 30 Statements of Niger, Committee on Article 5 Implementation, Geneva, 19–20 May 2016; and 14th Meeting of States Parties, Geneva, 1 December 2015; Third Article 5 deadline Extension Request, 15 March 2016, p. 13; and Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015, p. 3.
- 31 Email from Chris Natale, NPA, 29 July 2016.
- 32 Statement of the International Campaign to Ban Landmines, 15th Meeting of States Parties, Santiago, 28 November 2016.
- 33 Emails from Jean-Denis Larsen, DRC Country Director, NPA, 19 July 2017 and 3 October 2018.
- 34 Statement of France, 15th Meeting of States Parties, Santiago, 30 November 2016.
- 35 Statement of Niger, Committee on Article 5 Implementation, Geneva, 8 June 2017.
- 36 Ibid.



# NIGERIA

**ARTICLE 5 DEADLINE: 1 MARCH 2012**  
(NEEDS TO REQUEST EXTENSION)

## RECOMMENDATIONS FOR ACTION

- Nigeria should urgently take all possible measures to clear anti-personnel mines, including those of an improvised nature, on its territory on the basis of humanitarian needs and priorities.
- Nigeria should inform states parties to the Anti-Personnel Mine Ban Convention (APMBC) of the discovery of any contamination from anti-personnel mines and 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.
- As soon as security conditions permit, including as a result of hostilities, non-technical survey should commence in Nigeria's three most conflict-affected provinces: Borno, Yobe, and Adamawa states.
- Where appropriate, Nigeria should encourage and facilitate the provision of assistance and expertise from humanitarian demining organisations and continue to roll out risk education to minimise harm to civilian populations.

## CONTAMINATION

In 2017–18, numerous incidents involving both civilian and military casualties from landmines and a range of other locally produced explosive devices planted by Boko Haram continued to be reported in the north-east of Nigeria. The majority of the reports appear to describe mines of an improvised nature produced or adapted locally by Boko Haram, whether anti-personnel or anti-vehicle.

The extent of contamination from mines and other explosive devices is not known. Incidents involving landmines and other explosive devices have been reported in Borno, Yobe, and Adamawa states, with Borno state the most heavily affected. According to the

Nigerian military, the Sambisa forest in Borno state, Boko Haram's stronghold, has been heavily mined, along with "extensive" mine use by Boko Haram around military positions.<sup>1</sup>

The United Nations Mine Action Service (UNMAS) carried out a scoping mission to the three north-eastern states in April 2017 to assess the extent of the threat from munitions, explosive remnants of war (ERW), and "unconfirmed but credible reports of landmines". It received reports of the use of both anti-personnel and anti-vehicle mines of an improvised nature around defensive positions.<sup>2</sup>

UNMAS confirmed that use of explosive devices by Boko Haram was extensive, and included body-borne, vehicle-borne, pressure plate-activated, and to a lesser extent, command-wire and radio-controlled devices. In particular, Boko Haram had made significant use of pressure-plate-activated mines on main supply routes, primarily to attack military convoys, it said.<sup>3</sup>

A November 2015 assessment in Adamawa and Borno states by international demining organisation Danish Demining Group (DDG) had noted local community reports of a number of local government areas in Borno state they thought needed clearance, including Bama, Dikwa, Gwoza, Kala-Balge, Kukawa, Marte, and Ngala.<sup>4</sup> Interviewees identified contamination including anti-personnel and anti-vehicle mines resembling Chinese No. 4 anti-personnel mines and Type 72 anti-vehicle mines; a variety of body-borne, vehicle-borne, and remotely controlled devices; as well as cluster munition remnants, mortars, rockets, and rocket-propelled grenades, hand grenades, and Man-Portable Air Defence Systems (MANPADS).<sup>5</sup>

In 2015, the Nigerian army warned civilians of the threat of improvised devices using adapted submunitions. Caches of French-made air-delivered BLG-66 “Beluga” cluster munitions were reportedly found in Adamawa state, alleged to have been taken from stockpiles of the Nigerian armed forces or smuggled in from Libya.<sup>6</sup>

Contamination from mines and other explosive devices has had a serious humanitarian impact, impeding the return of internally displaced persons (IDPs) and exacerbating the crisis in the region.<sup>7</sup> In October 2016, the governor of Adamawa state confirmed that many IDPs continued to be unable to return to their farms due to a fear of landmines.<sup>8</sup> Roads were closed to civilian traffic by the military due to the presence of mines or other explosive devices and there were numerous reports of civilian casualties and farmers who feared returning to work their fields, contributing to sharply worsening food shortages.<sup>9</sup> According to UNMAS, as at April 2017, Borno state hosted 80% — 1.5 million — of Nigeria’s IDP population, and 400,000 returnees were living in areas affected by the conflict.<sup>10</sup> It reported that the security situation in Adamawa and Yobe states had improved gradually, but remained volatile, especially in the north-eastern part of Yobe.<sup>11</sup>

According to UNMAS, in 2016–17, the significant majority of the casualties from mines of an improvised nature and other explosive devices were soldiers. More than 300 military casualties were inflicted in December 2016–April 2017, according to a Nigerian Brigade Commander.<sup>12</sup> Mines Advisory Group (MAG) reported that between January 2016 and March 2018 there were 439 casualties from 144 incidents, the overwhelming majority of which involved landmines. Most incidents were in Borno state, but there were also casualties in Yobe and Adamawa. Of the 439 victims, 144 were civilians. Many of the casualties were among security or military personnel accompanying civilian convoys.<sup>13</sup> According to MAG data, the casualty rate in Nigeria has risen from an average of 12 people killed or injured by landmines and unexploded ordnance (UXO) each month in 2016, to almost 19 per month in 2017 and early 2018. Although most incidents took place on roads and against vehicles, MAG consider the landmines to be anti-personnel rather than anti-

vehicle as the operating pressure is as such that it could be activated by a person.<sup>14</sup>

UNMAS also declared that the likelihood of explosive accidents might significantly increase with the planned mass return of more than one million refugees and IDPs.<sup>15</sup> It similarly expected a significant threat to UN and humanitarian agencies with the expansion of relief efforts and increased use of main supply routes.<sup>16</sup>

UNMAS reported that in July 2018 in Borno state, a “road-planted improvised explosive device (IED)” injured one civilian in the vicinity of Fuye, a “road-planted IED” injured one civilian and two security force personnel on Bama-Kwakwa road; and “IEDs” caused three civilian casualties in the south of the state. According to the UN Department for Safety and Security (UNDSS), in April 2018 five people were killed and eleven others injured when a commercial vehicle escorted by security forces detonated a “road planted IED” along the Ngala–Rann road.<sup>17</sup> UNMAS did not specify to Mine Action Review whether or not it considered these explosive devices meet the definition of an anti-personnel mine under the APMBC. In March 2018, four loggers were killed when they stepped on a landmine near Dikwa in Borno state. They had gone to retrieve a vehicle they had abandoned following a Boko Haram ambush.<sup>18</sup> In September 2017, two vehicles struck mines at the Koibe village on the Mafa to Dikwa road in Borno state: two people were killed and several others sustained injuries.<sup>19</sup> In June 2017, three loggers were killed outside Abbari village, in Konduga district of Borno state, when their truck struck a mine laid by Boko Haram.<sup>20</sup>

There were also numerous reports of military casualties from mines or from vehicles driving over explosive devices planted along main roads. According to UNMAS, in August 2018, in Jakana, a military vehicle was “hit by an IED” causing four casualties. In April 2018, on the Bita-Tokumbere axis, an “IED was triggered by a military convoy”, injuring seven soldiers, and an “IED was struck by” a Nigerian military convoy near to Wulgo, killing six soldiers and wounding twelve.<sup>21</sup> UNMAS did not specify to Mine Action Review whether or not it considered these explosive devices meet the definition of an anti-personnel mine under the APMBC. In March 2018, five soldiers were killed when they drove over a mine in the Gworza area of Borno state while on patrol.<sup>22</sup> In October 2017, three soldiers were killed following a Boko Haram ambush when their vehicle hit a mine while en route to Maiduguri.<sup>23</sup> In April 2017, a convoy carrying two Nigerian generals encountered a cluster of four explosive devices at a crossing point near Firgi, Borno state, which were safely destroyed by the army’s explosive ordnance disposal (EOD) unit.<sup>24</sup> In March 2017, a Cameroonian soldier on a joint military operation with the Nigerian army was killed after his vehicle hit a mine laid by Boko Haram in Kumshe, Borno state.<sup>25</sup>

Military casualties have also been reported among soldiers clearing mines. In 2015, two soldiers were killed and two others seriously wounded during clearance operations in Gudumbali town.<sup>26</sup> UNMAS reported in April 2017 that manual render-safe procedures were the primary method used by the Nigerian military EOD teams, which could be contributing to a high number of casualties among EOD personnel.<sup>27</sup>

## PROGRAMME MANAGEMENT

There is no structured mine action programme in Nigeria. Both Nigeria's armed forces and its police carry out EOD activities and ERW clearance. The state police have EOD units that support the army in clearing UXO and explosive devices. The army's ERW clearance is primarily focused on facilitating military operations and clearing roads and areas to facilitate access for troops to carry out attacks on Boko Haram and to keep military supply routes open.<sup>28</sup> The 2016 Buhari Plan for Rebuilding the North East from the Presidential Committee on the North East Initiative (PCNI) includes a plan for demining as part of clean-up operations in reclaimed communities before resettlement of IDPs. It assigns responsibility for clearance to the National Emergency Management Agency (NEMA), the Nigerian Military and Para Military Agencies.<sup>29</sup> In September 2018, it was announced that the federal government was planning to spend \$6.7 billion to deliver the Buhari Plan.<sup>30</sup>

In March 2017, the United States reported donating demining and EOD equipment to Nigeria and providing mine action training for Nigeria's EOD teams at the Nigerian School of Military Engineering.<sup>31</sup> In December 2016, a media source published photos of a "newly-acquired" Slovak-made Bozena demining machine, which it said had been deployed on roads in Borno state.<sup>32</sup> In 2015, it was reported that Nigeria had ordered 10 demining machines from a Slovakian company, with five scheduled for delivery in 2015 and the remainder in 2016.<sup>33</sup> In 2015, 24 Mine-Resistant Ambush Protected Vehicles (MRAPs) were said to have been given to the Nigerian army by the United States.<sup>34</sup>

In April 2017, a senior Nigerian military commander informed UNMAS that due to limited resources, the army's priority was to provide demining support for military operations. Saying that it lacked the capacity to undertake humanitarian demining, he called for additional equipment ongoing support, and refresher training.<sup>35</sup>

The 2017 and 2018 Humanitarian Response Plans from UN Office for the Coordination of Humanitarian Affairs (OCHA) for north-east Nigeria both make reference to mine action activities, in particular emphasising the importance of mine risk education which features in three of the 2018 plan's objectives.<sup>36</sup> In 2017, DDG was delivering mine risk education sessions for community members and humanitarian organisations in the north-east states. It will also provide recommendations to the government regarding how to ensure injury surveillance systems include data on injuries from mines and other ERW. Funded by the European Union (EU), the project is part of a wider initiative to promote stability in Nigeria's north-east and will run from December 2016 to November 2018.<sup>37</sup> In 2017, DDG also delivered initial EOD training to police officers in Maiduguri, Borno state.<sup>38</sup>

MAG has been working in Nigeria since 2016 initially in arms management and destruction. In March 2017, MAG secured funding to begin providing risk education to internally displaced people, refugees and host communities affected by the conflict. MAG is also working to map mine contamination in north-east Nigeria and has conducted non-technical survey in accessible areas of Borno state.<sup>39</sup> In July 2018, UNMAS deployed a rapid response team to Maiduguri in order to develop a programme aimed at coordinating and supporting humanitarian mine action.<sup>40</sup>

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## LAND RELEASE

MAG conducted non-technical survey in Konduga, Gubio, Bama, and Gwoza, in Borno state in 2017 and 2018. Due to issues with access this relatively "light touch" non-technical survey is based on collecting information from individuals during mine risk education sessions. When participants report having seen a suspicious device while they were fleeing the conflict, MAG send staff to verify, and if this is confirmed, they demarcate, take pictures and global positioning system (GPS) coordinates, and hand over the information to the security forces. During this process MAG has located 23 devices across 17 different locations within Borno state.<sup>41</sup>

In March 2018, Colonel Garba Nura, Acting Brigade Commander of the 21<sup>st</sup> Armoured Brigade, reported that demining of roads and general areas was taking place around Bama in Borno state to facilitate the safe return of IDPs to the area.<sup>42</sup>

In April 2017, the Chief of Army Staff, Lieutenant-General Tukur Buratai reported that the army was carrying out limited clearance of routes in forested areas to enable troop movements, but said that humanitarian demining of the Sambisa forest as such had not begun. He called for assistance from the UN and non-governmental organisation (NGO) demining organisations.<sup>43</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, 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.<sup>44</sup>

Under the Convention's agreed framework, in the event a mined area is 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. Nigeria has not submitted an Article 7 transparency report since 2012.

Given the extent of apparent contamination from anti-personnel mines, Nigeria should request a new extended Article 5 deadline, which should be no more than five years. It must also continue to 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.<sup>45</sup> As at September 2018, Nigeria had not made a public declaration of any newly discovered anti-personnel mine contamination to states parties of the APMBC.

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- 45 Final Report of the 12th Meeting of States Parties, Geneva, 21 January 2013, p. 10.



# OMAN

**ARTICLE 5 DEADLINE: 1 FEBRUARY 2025**  
(UNCLEAR WHETHER ON TRACK TO MEET DEADLINE)

## RECOMMENDATIONS FOR ACTION

- Oman should ensure that its report at the Seventeenth Meeting of State Parties to the Anti-Personnel Mine Ban Convention (APMBC) includes information about outstanding landmine contamination, a detailed workplan for survey and clearance, and a clear statement of any needs for international assistance.
- In its annual APMBC Article 7 transparency reports, Oman should provide more detailed information about outstanding contamination and its demining activities, including the location of clearance, amount of land cleared, and the number and type of mines that have been destroyed.

## 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 there were no areas in the Sultanate confirmed to be mined, but reported “many” suspected mined areas in the south, particularly Dhofar Region.<sup>1</sup>

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. After the end of the conflict in 1975, the government made significant efforts to clear the areas, but it is impossible to be sure that the areas have been fully cleared. This is for three reasons: the size of the region (about 99,000km<sup>2</sup>); the lack of maps or marking; and the terrain (which includes mountains and valleys), with many mined areas located on steep slopes. In addition, the rain over the years may have scattered the mines.<sup>2</sup>

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.<sup>3</sup>

## PROGRAMME MANAGEMENT

Oman has not had a functioning mine action programme. In its Article 7 transparency report for 2016, however, it reported that survey and clearance is being performed by its army engineers.<sup>4</sup> In its statement before the Committee on Article 5 Implementation during the June 2018 Intersessional Meetings, Oman reported that it began implementing a national programme in 2017 and was planning to set up a national mine action centre but have not specified when this will occur.<sup>5</sup>

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## LAND RELEASE

Oman declared in its latest Article 7 report that in 2017 a clearance plan was formulated in the “southern strategic sector” and approximately 1,700m<sup>2</sup> of land was cleared. It did not specify where exactly this clearance had taken place nor the number or type of mines that were destroyed.<sup>6</sup>

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## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, Oman is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 February 2025.

It is too early to say whether Oman will meet this deadline but it should be readily achievable if modern land-release approaches are employed successfully. In its Article 7 report for 2017 Oman stated that it is “trying hard” to clear mined areas by 2024.<sup>7</sup> At the June 2018 Intersessional Meetings, Oman promised to provide a comprehensive report at the Seventeenth Meeting of States Parties in November 2018, including all the information that has been requested on demining activities since the 1970s, what has been done as part of their new programme, and the support that they will need to complete clearance.<sup>8</sup>

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1 Initial Article 7 Report, 2015, pp. 4–5.

2 Ibid., pp. 4–5.

3 “Humanitarian Demining”, *Journal of Mine Action*, 2001, p. 49.

4 Article 7 Report (for 2016).

5 Statement of Oman, Committee on Article 5 Implementation, 5–8 June 2018.

6 Article 7 Report (for 2017).

7 Ibid.

8 Statement of Oman, Committee on Article 5 Implementation, 5–8 June 2018.



# PALAU

**ARTICLE 5 DEADLINE: 1 MAY 2018**

(UNCLEAR WHETHER PALAU HAS AN OUTSTANDING ARTICLE 5 OBLIGATION)

## RECOMMENDATIONS FOR ACTION

- Palau should ensure that all relevant information on contamination, survey, and clearance is acquired, including Cleared Ground Demining (CGD) data from Peleliu state, in order to complete population of the national Information Management System for Mine Action (IMSMA) database. This includes obtaining the necessary information regarding the mines reportedly found and cleared by CGD on Peleliu state in 2014–15, in the Umubrogol mountains (Bloody Nose Ridge).
- Palau should ensure that permission is granted for non-technical survey of Peleliu state so as to complete the National Safety Office’s nationwide non-technical survey.
- Palau should ensure that all relevant data is provided to the National Safety Office with regards to CGD’s survey and clearance activities undertaken in 2017–18, to validate whether or not any anti-personnel mines remain on Peleliu. If CGD has completed its investigation of this area and no anti-personnel mines have been discovered, Palau should determine whether this area can be declared as free from the suspicion of mine contamination.

## CONTAMINATION

The extent to which Palau remains contaminated with anti-personnel mines is unclear. Palau is contaminated by explosive remnants of war (ERW), including unexploded ordnance (UXO) on many of its 200 islands, left over from World War II,<sup>1</sup> when it was the scene of a number of land and naval battles between Japanese and American forces. An estimated total of 2,800 tons (2.8 million kg) of ordnance was dropped or fired on Palau.<sup>2</sup> Much of this ordnance failed to detonate or was abandoned after the war, and as a result, an unknown amount of UXO remains on the land and in the sea, including in sunken ships.<sup>3</sup> In February 2017, defensive maps detailing laid aircraft bombs, depth charges, and sea mines were provided to the Palau authorities by

the Japanese military, via a Japanese demining non-governmental organisation (NGO), the Japan Mine Action Service (JMAS).<sup>4</sup>

Clearance efforts to date have included “a combination of ‘spot tasks’ in response to reports of UXO, visual battle area clearance of general areas and sub-surface clearance of specified areas, like walking tracks and around the power station.” In Peleliu the work has reportedly “been ‘complicated’ by the presence of UXO in caves, and also the presence of human remains and war artefacts in the areas where UXO are found.”<sup>5</sup>

In 2011, Palau stated for the first time in its Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report that it had mined areas on its territory. Contamination to date has included Japanese anti-vehicle and anti-personnel mines as well as sea mines, with anti-personnel mines reported in the Umubrogol mountains and Death Valley regions of Peleliu state.<sup>6</sup> In its earlier Article 7 reports, Palau had declared no known or suspected mined areas.<sup>7</sup>

In its subsequent Article 7 report submitted the following year, Palau stated that clearance had been completed of all anti-personnel mines at the only two areas with confirmed contamination. It also reported that areas containing sea mines remained to be cleared. Palau further reported that areas containing abandoned anti-personnel mines remained in caves at Bloody Nose Ridge in the Umubrogol mountains in Peleliu state, recording that: "Landmines have been found stored in the complex cave and tunnel systems of the former battlefield. A total of 608 caves exist – operations have only taken place in 34 caves to date."<sup>8</sup>

At that time, CGD confirmed that anti-personnel mine contamination was only of abandoned stockpiled mines.<sup>9</sup> In December 2011, in its statement to the APMBC Eleventh Meeting of States Parties, Palau claimed that it was not "obligated under the AP Convention to destroy emplaced antipersonnel mines because it never produced, stockpiled, used, nor transported them."<sup>10</sup>

In its Article 7 report for 2012, Palau reported that "AP Landmines have been found on Bloody Nose during the course of ERW clearance over the past three years. The AP landmines have been found emplaced and fused but unarmed in the ground as well as stored within defensive

cave and tunnel complexes", and that "ongoing clearance operations are removing these AP Landmines".<sup>11</sup> In addition, Palau also reported that sea mines had been found in two locations in Airai state, noting that the mines had been used in both anti-boat and anti-personnel roles.<sup>12</sup> Palau also reported that its contamination "was a result of a fiercest battle fought in the Pacific during WWII. With such circumstance, Palau is seeking assistance toward island wide survey to know its mine[d] areas and or suspected mine[d] areas."<sup>13</sup>

Palau did not submit Article 7 reports for 2013, 2014, or 2015, as it is obligated to do by the APMBC. In December 2015, however, CGD reported having cleared emplaced and armed anti-personnel and anti-vehicle mines in Palau between January 2014 and November 2015. The location of clearance was not specified, but was believed to be Bloody Nose Ridge, Peleliu state.<sup>14</sup>

In its UXO Action Plan 2017–19, Palau records that "A total of 43 anti-personnel landmines have been cleared", and that "it has 'cleared all known mined areas' in compliance with the APMBC."<sup>15</sup>

In October 2016, the Palau authorities confirmed they were in the process of applying Palau's UXO Policy and would collect relevant data from clearance operators to build Palau's understanding and awareness of contamination and for its submission of APMBC transparency reports.<sup>16</sup> In 2017, Palau submitted its Article 7 report for 2016, in which it reported that there have "never been validated mined areas that contain or are suspected to contain anti-personnel mines under the jurisdiction or control of Palau".<sup>17</sup> In 2018, Palau did not report any confirmed or suspected mined areas in its Article 7 report covering activities in 2017.<sup>18</sup>

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## PROGRAMME MANAGEMENT

Palau is in the process of establishing a mine action programme to address its ERW/mine contamination. Under the authority of Executive Order No. 335 of 14 May 2013, issued by the Office of the President, a UXO Advisory Committee was established.<sup>19</sup> The Committee has reportedly met a number of times since it was established, and an informal working group established in 2010 had also met prior to the establishment of the Committee.<sup>20</sup>

In June 2015, during meetings between Norwegian People's Aid (NPA) and government officials from the National UXO Advisory Committee, it was decided that a series of capacity-building workshops would be held with the government, with support from NPA and funding from the United States. The aim of the workshops was to support Palau's development of a national UXO policy, a national UXO action plan, and draft national UXO standards. A first workshop was held in July 2015, a second in August 2015, and the third and final workshop in January 2016.<sup>21</sup>

Palau's national mine action programme is now structured according to its UXO Policy, which was enacted by Presidential Executive Order 392 in March 2017, and which authorises the establishment of a national coordination system and a unified database mechanism.<sup>22</sup>

Palau now has capacity to direct trained national personnel to clear priority areas of abandoned explosive ordnance (AXO) and UXO.<sup>23</sup> A new government demolition area became operational in early 2018, which is run by the National Safety Office, and is also used by JMAS.<sup>24</sup>

### Strategic Planning

The UXO Advisory Committee has overseen the development of the UXO Policy and UXO Action Plan 2017–19, which were enacted by Presidential Executive Order 392, signed on 1 March 2017.<sup>25</sup>

The UXO policy outlines national coordination measures and assigns responsibilities to the relevant ministries. It also formally documents the role of the UXO Advisory Committee, which is composed of government ministries, states, agencies, and organisations. The Director of the Bureau of Domestic Affairs within the Ministry of State acts as the secretariat.<sup>26</sup>

Furthermore, a UXO Technical Working Group, chaired by the National Safety Office and consisting of representatives at working level from each ministry,<sup>27</sup> Palau's states, and other concerned organisations, has been established by the Advisory Committee. The UXO Technical Working Group assists the Advisory Committee with its work, particularly on the technical aspects of UXO destruction.<sup>28</sup>

Palau, in conjunction with international partners including NPA, CGD, and JMAS, is implementing a nationwide, non-technical survey, referred to in the UXO Action Plan 2017–19 as a “general UXO survey”, to confirm the UXO-affected areas of the country. NPA has conducted non-technical survey, which “will gather documentary information from a variety of sources, such as previous surveys, NGO progress reports, other ministries, states, police, construction agencies, dive operators and historical records. All data collected during the general survey is to be stored in IMSMA.”<sup>29</sup> In addition, all information from NPA is backed up and delivered to the Palau Automated Land and Resource Information System (PALRIS), in the Office of Planning and Statistics, which sits under the Ministry of Finance.<sup>30</sup>

As at August 2018, non-technical survey had been completed of all states in Palau, with the exception of Peleliu, for which historical survey and clearance data had not yet been made available to the authorities by CGD.<sup>31</sup> In order to better understand the level of remaining contamination and to manage clearance efforts, Palau strongly encourages its international partners, including CGD, in the spirit of cooperation, to share data to be incorporated in Palau's geographic information system (GIS) system for sustainable development.<sup>32</sup>

## Legislation and Standards

In March 2017, Palau enacted Presidential Executive Order 392, which formally adopted the Palau UXO Policy and the Palau UXO Action Plan 2017–19.<sup>33</sup>

The UXO Advisory Committee is also tasked to determine rules and regulations for the quality and standard of work performed by agencies such as the National Safety Office (in the Ministry of Infrastructure, Industries and Commerce), the police, international organisations, NGOs, and foreign militaries. These rules and regulations, known as ‘Palau UXO Standards’, are based on the International Mine Action Standards (IMAS) and have been drafted with the support of NPA.<sup>34</sup>

In July 2017, the draft standards were streamlined to concentrate more on permissions and legalities for the removal of ERW rather than the technical aspects of clearance.<sup>35</sup> As at August 2018, the draft UXO standards had been accepted and disseminated, but had yet to be formally approved and adopted by the national authorities.<sup>36</sup>

In its latest Article 7 report (for 2017), Palau reported that UXO Standard Operating Procedures (SOPs) had been drafted and were undergoing review prior to adoption.<sup>37</sup>

## Information Management

Previously, no centralised database contained historical information/data on, for example, the location and clearance of UXO, which could be retrieved for planning and prioritisation purposes.<sup>38</sup> However, with the support of NPA, the National Safety Office established a national UXO database in January 2017,<sup>39</sup> to help in the coordination of survey and clearance of explosive ordnance.

With the adoption of the UXO Policy and UXO Action Plan 2017–19, the Palau authorities now have a formal mandate to collect historical data from operators conducting UXO and landmine clearance in Palau, and verify and assess data for reporting to the Palau leadership, local communities, and the international community.<sup>40</sup> With the appropriate structure now in place, Palau will be better placed to report on ERW contamination, survey, and clearance to the Palau authorities, local communities, and the international community, including as part of its obligations under the APMB. <sup>41</sup>

The National Safety Office now receives both historical and current data on contamination, survey, and clearance, to populate the IMSMA database.<sup>42</sup> All items found to date have been reported by clearance operators, and entered into the UXO database, with the exception of historical data from CGD.<sup>43</sup> Although CGD is now submitting its 2017 clearance data,<sup>44</sup> as at August 2018, it had yet to submit its data from 2009 to 2016 to the Palau National Safety Office for entry into the national UXO database, and for qualification and validation.<sup>45</sup> In addition, as at August 2018, the US Corps of Engineers had yet to provide details of the location and type of explosive ordnance cleared during decades of clearance and construction work in Palau.<sup>46</sup>

## Operators

CGD has been conducting ERW clearance operations in Palau, both on land and in the sea, since 15 September 2009.<sup>47</sup> The clearance project is focused on Peleliu and Angaur – two southern islands of Palau – and aims to reduce the immediate risk from ERW to local people and tourists.<sup>48</sup>

In 2012, JMAS, a Japanese demining NGO, began working in Palau, with a focus on underwater UXO clearance. JMAS's activities to date have included monitoring of the ‘Helmet Wreck’ off Malakal, Koror, and other wreck sites, and undertaking underwater surveys.<sup>49</sup> JMAC deployed seven personnel for UXO survey and clearance operations in Palau in 2017: four Japanese explosive ordnance disposal (EOD) specialists, a Japanese paramedic, and two Palauan EOD assistants.<sup>50</sup>

In 2015, NPA received a grant to assist Palau to strengthen national capacity to manage and coordinate the UXO sector, and to help undertake surveys and UXO clearance; and subsequently initiated a programme of support. NPA reported that from April 2017 it had begun working under the National Safety Office, as the “ERW/UXO team”. NPA continued to build national capacity in the National Safety Office through 2017, and as at August

2018, the National Safety Office team had an operational capacity of 16 personnel, in addition to two safety officers (responsible for coordinating operations) and an international NPA advisor.<sup>51</sup> National Safety Office ERW/UXO team personnel also provide EOD cover to Palau's water and sewer improvement projects,<sup>52</sup> and will conduct risk assessments for all planned infrastructure work.<sup>53</sup>

All three NGOs rely on direct funding from foreign donors, which Belgium, the Czech Republic, Japan, New Zealand, and the United States.<sup>54</sup>

In addition, mines were also believed to have been encountered during a "Last Human Remains Mission" undertaken in 2015 by Japan in a repatriation operation involving the Palau Historic Preservation Office (HPO), also known as the Bureau of Cultural and Historic Preservation, under the Ministry of Community and Cultural Affairs (MCCA).<sup>55</sup> The Government of Japan will reportedly clear caves on Peleliu as part of the programme to repatriate human remains from World War II.<sup>56</sup>

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## LAND RELEASE

No operators in Palau reported finding any anti-personnel mines in 2017.<sup>57</sup>

NPA started a nationwide non-technical survey on 18 September 2016 and, as at August 2018, NPA had completed non-technical survey of all states in Palau, except for Peleliu, where permission had not yet been granted for non-technical survey. Pre-2017 survey and clearance data had not yet been provided by CGD. NPA has found no evidence of anti-personnel mine contamination in its non-technical survey operations to date.<sup>58</sup>

CGD did not encounter any emplaced anti-personnel mines during its clearance operations in Palau in 2016<sup>59</sup> or in 2017.<sup>60</sup> Previously, however, in December 2015, CGD reported having cleared five type 93 HE blast anti-personnel mines, which were laid and armed, in two separate caves, between January 2014 and November 2015.<sup>61</sup> CGD also reported clearing during the same period: one yardstick anti-vehicle mine, found on a beach; three JB spherical anti-vehicle mines, found in three separate locations (underwater and in mangroves); 12 JE HE blast mines, found in nine different locations (in mangroves and residences); and one mine of an improvised nature (using modified aircraft bomb components), found on a beach.<sup>62</sup> According to CGD, these mines can "be classed as anti-vehicle or anti-personnel (as both of those types deployed in World War II in Palau can be activated by people)".<sup>63</sup> These mines are covered by the APMBC. As at August 2018, CGD had provided data on ERW cleared in 2017, but had yet to provide the National Safety Office with the requested historical information on laid or armed landmines found in Peleliu state.<sup>64</sup> Until this information is provided by CGD, the Palau authorities are unable to validate and assess the information regarding the anti-personnel mines reported by CGD in 2015.<sup>65</sup>

In 2017, CGD concentrated its activities in validating whether any anti-personnel mines remain on Peleliu state, in the vicinity of the caves in the Umubrogol Mountains. CGD's work, which included non-technical survey, technical survey, and clearance, was reportedly requested by the UXO Advisory Committee and Government of the state of Peleliu, and funded by a

consortium of donors including Palau itself, as well as Belgium, the Czech Republic, Ireland, and New Zealand. As part of this process, CGD stated that "methodologically wise any caves surrounding those caves where AP landmine stockpiles were previously found have also been checked thoroughly, and utilising sub-surface landmine detection drills and equipment to search for the presence of emplaced (buried) landmines at the cave entrances, CGD teams have been systematically working their way up and down the valleys and sub-ridges of the Umurbrogol Mountain range." In addition, CGD reported that "...cave search activities are taking place on the fringes of the Ridge, as well as a number of cave systems not actually on Bloody Nose Ridge, even including caves on neighbouring Ngedebus Island, have been searched for the presence of landmines during these last 2 quarters to confirm that no AP mines remain in Palau".<sup>66</sup>

CGD reported undertaking door-to-door survey of every household in Peleliu, during which an example of a landmine found previously on Peleliu was shown. CGD's non-technical survey reportedly also included WWII research, including a 35-page US military report published in 1945, based on the cave system on Peleliu, which does not include any mention or warning of the likelihood of emplaced anti-personnel mines in cave entrances, but rather noted that the entrances were used, for example to roll out artillery or for mortar positions. CGD questions if Japanese military strategy would have emplaced mines in front of cave systems, given that troops frequently reoccupied caves lost to the US forces, and mainly at night under the cover of darkness. This viewpoint was backed by a leading Peleliu historian.<sup>67</sup> Finally, military maps made available by Japan did not indicate the use of anti-personnel mines.<sup>68</sup>

As at August 2018, the National Safety Office was not aware of whether or not CGD had now completed survey of the area of Peleliu in which it had found a small number of anti-personnel mines in 2014/2015.<sup>69</sup> Completion of the CGD survey and provision of the CGD data to the National Safety Office should allow the Palau national authorities to determine whether this area can be declared free of mines.

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, Palau 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 May 2018.

Until recently, it was not believed that Palau had mined areas containing anti-personnel mines, other than a residual risk of contamination. Rather, it was thought the remaining mines were in abandoned stockpiles, which fall under Article 4 of the APMBC. However, in December 2015, CGD reported clearing a number of emplaced anti-personnel mines between January 2014 and November 2015.<sup>70</sup>

As at August 2018, JMAS and NPA had not reported any emplaced, laid, or armed anti-personnel mines since 2012, but CGD had yet to submit its historical data to the National Safety Office for entry into the national UXO database, and for validation and qualification. Failure of CGD to submit its pre-2017 survey and clearance data, including regarding its clearance operations in Peleliu state, is preventing Palau from gaining a full understanding of the national status of explosive ordnance contamination.<sup>71</sup>

In 2017, when asked whether Palau intended to submit an Article 5 extension request, Palau responded that the National Safety Office would “submit its APMBC Article 7 reporting until such time the Palau National Safety Office have validated information about suspicious, laid or armed landmine in its jurisdiction”.<sup>72</sup>

The Palau authorities also affirm that once CGD provides the National Safety Office with the requested CGD survey and clearance data, including information on any laid and armed anti-personnel mines discovered, they will then be in a position to validate and qualify this information, in order to determine whether or not any suspected mined area exists in Palau.<sup>73</sup>

- 1 Statement of Palau, Anti-Personnel Mine Ban Convention (APMBC) Sixth Meeting of States Parties, Zagreb, 29 November 2005.
- 2 US military statistics included in the document provided to Landmine Monitor by email from Cassandra McKeown, Finance Director, CGD, 19 May 2010.
- 3 Government of Palau, "UXO Action Plan 2017–19", 1 March 2017, p. 6; and "UXO Policy", 1 March 2017.
- 4 Emails from Luke Atkinson, Programme Manager, Norwegian People's Aid (NPA), 11 and 12 July 2017.
- 5 Government of Palau, "UXO Action Plan 2017–19", 1 March 2017, p. 12.
- 6 Article 7 Report (for 2010), Form C.
- 7 Article 7 Report, Form C, for the periods 1 May to 14 September 2008 and 16 September 2008 to 16 September 2009.
- 8 Article 7 Report, Form C (for 2011).
- 9 Email from Cassandra McKeown, CGD, 18 July 2011.
- 10 Statement of Palau, 11th Meeting of States Parties, Phnom Penh, 1 December 2011.
- 11 Article 7 Report (for 2012), Form C.
- 12 Ibid.
- 13 Ibid.
- 14 Email from Steve Ballinger, Operations Director, CGD, to the Palau Authorities, 1 December 2015.
- 15 Government of Palau, "UXO Action Plan 2017–19", 1 March 2017, p. 7.
- 16 Email from Eunice Akiwo, Director, Bureau of Domestic Affairs, Ministry of State, 20 October 2016.
- 17 Article 7 Report (for 2016), Form C.
- 18 Article 7 Report (for 2017), Form C.
- 19 Article 7 Report (for 2016).
- 20 Government of Palau, "UXO Policy", 1 March 2017.
- 21 NPA, "Humanitarian Disarmament in Palau", accessed 16 October 2015, at: <https://www.npaaid.org/Our-Work/Humanitarian-Disarmament/Where-we-work/Humanitarian-Disarmament-in-Palau>; email from Balkuu Kumangai, National Safety Officer, National Safety Office, Bureau of Public Works, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017; and Government of Palau, "UXO Action Plan 2017–19", 1 March 2017, p. 3.
- 22 Emails from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017; and Luke Atkinson, NPA, 21 March 2017; Article 7 Report (for 2016), Form J.
- 23 Interview with Luke Atkinson, NPA, 31 August 2018.
- 24 Ibid.
- 25 Article 7 Report (for 2016), Form A.
- 26 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
- 27 Government of Palau, "UXO Policy", 1 March 2017; and email from Eunice Akiwo, Ministry of State, 21 April 2017.
- 28 Government of Palau, "UXO Policy", 1 March 2017.
- 29 Government of Palau, "UXO Action Plan 2017–19", 1 March 2017.
- 30 Email from Luke Atkinson, NPA, 30 August 2017.
- 31 Interview with Luke Atkinson, NPA, 31 August 2018.
- 32 Email from Eunice Akiwo, Ministry of State, 29 September 2017.
- 33 Article 7 Report (for 2017), Form A.
- 34 Government of Palau, "UXO Policy" and "UXO Action Plan 2017–19", 1 March 2017; and Article 7 Report (for 2016).
- 35 Email from Luke Atkinson, NPA, 30 August 2017.
- 36 Interview with Luke Atkinson, NPA, 31 August 2018.
- 37 Article 7 Report (for 2017), Form A.
- 38 Government of Palau, "UXO Action Plan 2017–19", 1 March 2017.
- 39 Email from Eunice Akiwo, Ministry of State, 21 April 2017.
- 40 Article 7 Report (for 2016 and 2017), Form A.
- 41 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
- 42 Government of Palau, "UXO Action Plan 2017–19", 1 March 2017; and email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
- 43 Interview with Luke Atkinson, NPA, 31 August 2018.
- 44 Email from Luke Atkinson, NPA, 11 July 2017.
- 45 Emails from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017; and Eunice Akiwo, Ministry of State, 29 September 2017; and interview with Luke Atkinson, NPA, 31 August 2018.
- 46 Interview with Luke Atkinson, NPA, 31 August 2018.
- 47 CGD, "Republic of Palau Project", accessed 12 October 2016, at: [http://www.clearedground.org/projects\\_palau.aspx](http://www.clearedground.org/projects_palau.aspx); and M. L. Poso, "Team removes WWII ordnance in Palau", *Palau Horizon*, 3 May 2010, at: [www.eastwestcenter.org/pacific-islands-development-program/about-pidph/](http://www.eastwestcenter.org/pacific-islands-development-program/about-pidph/); and B. H. Carreon, "Clearance of landmines, UXO starts in Peleliu", *Palau Horizon*, 7 October 2009, at: [www.mvariety.com](http://www.mvariety.com).
- 48 CGD, "Republic of Palau Project".
- 49 Pacific Islands Report, "Team From Japan Removes Depth Charges From Palau Wreck", 22 December 2015, at: <http://www.pireport.org/articles/2015/12/22/team-japan-removes-depth-charges-palau-wreck/>; Government of Palau, "UXO Action Plan 2017–19", 1 March 2017, p. 6; and email from Yasuo Terada, Programme, JMAS, 17 March 2017.
- 50 Email from Antonina Antonio, JMAS, 18 April 2018.
- 51 Interview with Luke Atkinson, NPA, 31 August 2018.
- 52 Email from Luke Atkinson, NPA, 30 August 2017, and interview, 31 August 2018.
- 53 Email from Luke Atkinson, NPA, 21 March 2017.
- 54 Government of Palau, "UXO Action Plan 2017–19", 1 March 2017, p. 6; interview with Luke Atkinson, NPA, 31 August 2018; and CGD, "2nd and 3rd Quarter Report of GICHD (1st April to 31st October 2017)", 9 November 2017, p. 2.
- 55 Email from Steve Ballinger, CGD, to the Palau Authorities, 1 December 2015.
- 56 Government of Palau, "UXO Action Plan 2017–19", 1 March 2017, p. 13.
- 57 Article 7 Report (for 2017), Form C; email from Antonina Antonio, JMAS, 18 April 2018; and interview with Luke Atkinson, NPA, 31 August 2018.
- 58 Interview with Luke Atkinson, NPA, 31 August 2018.
- 59 Interview with Steve Ballinger and Cassandra McKeown, CGD, Geneva, 9 February 2017.
- 60 Article 7 Report (for 2017), Form C.
- 61 Email from Steve Ballinger, CGD, to the Palau Authorities, 1 December 2015.
- 62 Ibid.
- 63 Ibid.
- 64 Interview with Luke Atkinson, NPA, 31 August 2018.
- 65 Interview with Eunice Akiwo, Ministry of State, in Geneva, 8 February 2017.
- 66 CGD, "2nd and 3rd Quarter Report of GICHD (1st April to 31st October 2017)", 9 November 2017, p. 2 and annex.
- 67 Ibid., p. 3.
- 68 Emails from Luke Atkinson, NPA, 11 and 12 July 2017.
- 69 Interview with Luke Atkinson, NPA, 31 August 2018.
- 70 Email from Steve Ballinger, CGD, to the Palau Authorities, 1 December 2015.
- 71 Interview with Eunice Akiwo, Ministry of State, in Geneva, 8 February 2017; and email from Luke Atkinson, NPA, 21 March 2017.
- 72 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
- 73 Interview with Eunice Akiwo, Ministry of State, in Geneva, 8 February 2017.

# PALESTINE

**ARTICLE 5 DEADLINE: 1 JUNE 2028**  
(UNCLEAR WHETHER ON TRACK TO MEET DEADLINE)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	5	5
Target date for completion of mine clearance	6	6
Targeted clearance	7	6
Efficient clearance	6	6
National funding of programme	3	3
Timely clearance	5	5
Land-release system in place	7	7
National mine action standards	5	5
Reporting on progress	5	5
Improving performance	7	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.6</b>	<b>5.4</b>

## PERFORMANCE COMMENTARY

Palestine acceded to the Anti-Personnel Mine Ban Convention (APMBC) in December 2017, becoming a state party on 1 June 2018. Palestine is required to submit an Article 7 transparency report by 28 November 2018, including formally reporting on any mined areas under its jurisdiction or control. Through 2017, Palestine made progress in demining with the completion of clearance by The HALO Trust of the Surif minefield in the governorate of Hebron in June 2017. Work then began on clearing the Deir Abu Daif minefield in Jenin governorate, which was completed in October 2017.

In addition, in 2017, the Israeli National Mine Action Authority (INMAA) surveyed and subsequently cancelled suspected hazardous areas (SHAs) in the Jordan Valley in the West Bank, while 4M was awarded an Israeli Ministry of Defence tender, beginning clearance of the two minefields in Qalqiliya governorate of the West Bank in late 2017.

## RECOMMENDATION FOR ACTION

- The Palestine Mine Action Centre (PMAC) should report accurately and consistently on the extent of landmine contamination and annual clearance output.

## CONTAMINATION

In Palestine, hazards encompass minefields, military training zones, and areas of confrontation where many explosive devices remain. A 2013 survey by PMAC found that Palestine has mined areas covering a total of 19.9km<sup>2</sup>, marginally less than its previous estimate of 20.4km<sup>2</sup>.<sup>1</sup> A HALO Trust survey of the West Bank in 2012 identified 90 minefields, 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.<sup>2</sup> All minefields, including those laid by the Jordanian military, are under Israeli military control.<sup>3</sup>

According to The HALO Trust, as at the end of 2017, more than 0.4km<sup>2</sup> of confirmed mined area exists (excluding the Jordan Valley) across six minefields in Palestine and two minefields in no-man’s-land between the West Bank and Israel. All eight minefields (see Table 1) were laid by the Jordanian army.<sup>4</sup>

**Table 1: Confirmed mine contamination (at end-2017) (excluding the Jordan Valley)<sup>5</sup>**

Governorate	Minefield Task	Contamination	CHAs	Area (m <sup>2</sup> )
Jenin	Araba	AV and AP mines	1	10,630
	Qabatiya	AV and AP mines	1	11,100
	Yabad	AV and AP mines	1	48,050
Tul Kareem	Nur a-Shams	AV and AP mines	1	37,810
Qalqiliya	Karne Shomron	AV and AP mines	1	66,726
	Jinsafut	AP mines	1	37,810
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
<b>Totals</b>			<b>8</b>	<b>402,060</b>

CHA = Confirmed hazardous area AV=Anti-vehicle AP=Anti-personnel

Four of the twelve governorates in the West Bank contained mined areas, as at the end of 2017.<sup>6</sup> The governorate of Hebron is no longer considered contaminated, after clearance of the Surif minefield was completed on 1 June 2017.<sup>7</sup>

Most mined areas are located in Area C of the West Bank (see below), along the border with Jordan. Area C covers approximately 60% of the West Bank and is under full Israeli control for security, planning, and construction.<sup>8</sup>

According to the United Nations (UN), of the estimated total of 90 minefields in the West Bank, those in more “central areas” – the governorates of Jenin, Qalqiliya, and Tulkarm – are priorities for clearance.<sup>9</sup> In addition to posing a risk to civilians, mines affect the socio-economic development of Palestinian communities. Mined areas are located in, or close to, populated areas,<sup>10</sup> mostly on privately owned agricultural and grazing land or along roads used daily by communities, and are often

either poorly marked or not marked at all.<sup>11</sup> They are accessible to the population, and in the case of Yabad minefield, in Jenin governorate, local farmers cultivate parts of the polygon. In Nur a-Shams minefield, in Tul Kareem governorate, members of the community have

dumped construction waste on part of the minefield.<sup>12</sup> These minefields were laid by the Jordanian military and are all located in areas under Israeli security control. Clearance operations must therefore be coordinated with the Israeli authorities,<sup>13</sup> in addition to PMAC.

## PROGRAMME MANAGEMENT

PMAC was established in accordance with Palestinian Minister of Interior decision on 25 March 2012,<sup>14</sup> 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 to develop mine action legislation and allocate resources for the sector.<sup>15</sup>

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 the UN Mine Action Service (UNMAS).<sup>16</sup> The committee has established a number of sub-committees to deal with technical issues, risk education, legal affairs, foreign affairs, and health and safety.<sup>17</sup>

PMAC, which has ten employees,<sup>18</sup> is staffed with personnel from the Palestinian National Security Forces, Civil Police, and Civil Defence. PMAC also has a team of 30 personnel who were trained by UNMAS for demining a few years ago, but, to date, have not been authorised or equipped to do so, and no agreement has been reached with Israel on this matter.<sup>19</sup> The Civil Police have an explosive ordnance disposal (EOD) unit with 42 personnel in Bethlehem, Hebron, Jenin, Nablus, Qalqilya, Ramallah, and Tulkarm, 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.<sup>20</sup> A new director of PMAC was appointed in July 2017, following the previous director's retirement.<sup>21</sup>

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.<sup>22</sup>

### Strategic Planning

PMAC has a Strategic Plan for 2017–20, whose primary objectives are the clearance of the Araba, Deir Abu Daif, Nur a-Shams, Qabatiya, and Yabad minefields.<sup>23</sup> As at July 2018, clearance of Deir Abu Daif had been completed.

HALO Trust's survey and clearance in the West Bank is prioritised by its international donors, in conjunction with the INMAA and PMAC.<sup>24</sup>

### Legislation and Standards

In November 2016, Palestine announced that it was seeking to adopt and enact a mine action law. Palestine was hopeful that it would complete the legal procedures within a year and present the draft law to the legislative council for endorsement, followed by signature by the President.<sup>25</sup> As at June 2018, however, the process was still ongoing.<sup>26</sup>

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 the INMAA for approval.<sup>27</sup>

### Quality Management

The HALO Trust's work in the West Bank complies with the Israeli Standard 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.<sup>28</sup> In addition, as required by the INMAA, 4CI Security, an external INMAA-certified quality assurance (QA)/QC company, is contracted to monitor HALO Trust's clearance in accordance with Israeli National Mine Action Standards.<sup>29</sup>

### Information Management

The Information Management System for Mine Action (IMSMA) database, Level 1, is used by PMAC.<sup>30</sup>

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 shared with PMAC.<sup>31</sup> As a result, all three entities are in possession of HALO Trust survey and clearance data relating to demining operations in the West Bank.

## Operators

To date, Israel has not authorised demining operations to be conducted by or on behalf of PMAC.<sup>32</sup> In September 2013, however, the INMAA gave formal authorisation for The HALO Trust to clear two minefields in the West Bank deemed high priority by PMAC. Following INMAA authorisation, HALO Trust began mine clearance in the West Bank in April 2014,<sup>33</sup> and has continued clearance operations in the West Bank to the present day.

The HALO Trust works under the auspices of both the INMAA and PMAC.<sup>34</sup> The HALO Trust's manual clearance team in the West Bank is composed of deminers from Georgia with capacity varying according to the task. For the Deir Abu Daif minefield task there were 22 deminers while for the manual section of the Araba minefield task, up to 14 deminers were deployed. In addition, during 2017, HALO Trust deployed three armoured CASE721 wheeled medium loaders, one armoured CAT320B tracked excavator, and one industrial rock crusher. The machines were operated by a Palestinian team.<sup>35</sup>

## LAND RELEASE

The total mined area released by clearance in 2017 was 41,857m<sup>2</sup>, which is a slight increase compared to 34,057m<sup>2</sup> in 2016.

### Survey in 2017

No land was reduced by technical survey in 2017 or cancelled by non-technical survey.

The HALO Trust performs survey as part of its clearance operations of the Jordanian-laid minefields in Area C of the West Bank, which includes joint site visits with PMAC and the INMAA, but it is part of pre-clearance task preparation, and is of CHAs already recorded in PMAC's database and on maps.<sup>36</sup>

### Clearance in 2017

In 2017, The HALO Trust cleared 41,857m<sup>2</sup> of mined area, during which 86 anti-personnel mines, 8 anti-vehicle mines, and 2 other items of UXO were destroyed.

This included completion of Surif minefield in Hebron governorate, from January to June 2017, during which eight anti-personnel mines were destroyed. Upon completion of Surif minefield HALO Trust immediately relocated to Jenin governorate, and commenced clearance of Deir Abu Daif minefield, which was declared free of mines on 1 October 2017. During clearance of Deir Abu Daif minefield, 76 Belgian PRB-M35 anti-personnel mines and 3 British MK5 anti-tank mines were destroyed.<sup>37</sup>

Following completion of Deir Abu Daif minefield, it was agreed with PMAC and the INMAA to scale down mechanical operations over the winter due to wet soil limiting machine use, and to prioritise clearance of the manual segments of Araba, Qabatiya, and Yabad minefields in Jenin governorate. Mechanical clearance recommenced in Spring 2018, as soon as the soil was sufficiently dry.<sup>38</sup>

**Table 2: HALO Trust mine clearance in the West Bank in 2017<sup>39</sup>**

Governorate	Minefield Task	Areas released	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Hebron	Surif	1	11,900	8	0	0
Jenin	Araba	0	3,542	1	1	0
	Deir Abu Daif	1	23,527	76	3	0
	Qabatiya	0	2,888	1	4	2
<b>Totals</b>		<b>2</b>	<b>41,857</b>	<b>86</b>	<b>8</b>	<b>2</b>

In addition, from October 2017 Israel undertook Israeli-funded clearance of the Karne Shomron and Jinsafut minefields, in the Qalqiliya governorate of the West Bank. Israeli operator 4M was awarded the demining tender by the Israeli Ministry of Defence, and clearance of the two minefields was expected to be completed by May 2018.<sup>40</sup> The INMAA did not, however, report the area of land cleared in these two minefields in 2017.

### Progress in 2018

Clearance of the West Bank minefield at Qaser al-Yahud (the baptism site), in the Jordan Valley, commenced in March 2018.<sup>41</sup> The project aims to remove mines and explosive ordnance in the area of the baptism site, which covers a total estimated area of 870,000m<sup>2</sup>.<sup>42</sup> Approximately 90,000m<sup>2</sup> is thought to potentially contain

anti-personnel mines, including improvised explosive devices (IEDs).<sup>43</sup> IDF minefield records provided to The HALO Trust separate the land for clearance outside of the church compounds into eleven areas, all of which contain a potential UXO threat. Six of the eleven areas are known to contain significant numbers of M15 anti-tank mines in multiple lines and over 2,600 anti-tank 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.<sup>44</sup>

The INMAA expected clearance of the baptism site to take between 12 and 16 months,<sup>45</sup> and as at August 2018, HALO Trust expected that the site would be fully cleared by mid-2019.<sup>46</sup>

## ARTICLE 5 COMPLIANCE

Palestine acceded to the APMBC on 29 December 2017, becoming a state party on 1 June 2018. Palestine was required to submit its first Article 7 transparency report by 28 November 2018, to include details of mined areas under its jurisdiction or control.

PMAC planned to complete clearance of mines areas by the end of 2020, if there are not obstacles from the other parties.<sup>47</sup> Clearance in the West Bank is, however, largely constrained by political factors, including the lack of authorisation granted by Israel for Palestine to conduct mine clearance operations.

It is, however, a positive development that The HALO Trust was permitted to begin mine clearance operations in April 2014, and as at July 2018, HALO Trust had completed clearance of five minefields in Area C of the West Bank.

The HALO Trust has completed survey of the Jordanian-laid minefields in the West Bank, and as at the end of 2017, four Jordanian-laid minefields in the governorates of Jenin and Tul Kareem, which fall within HALO Trust's donor agreement, remained to be cleared. Of these, HALO Trust reported that it was well placed to complete the mechanical clearance of Araba, Qabatiya, and Yabad minefields in Jenin governorate during the course of 2018. After completion of the four priority Jordanian-laid minefields, HALO Trust planned to look into clearance of mined areas in the Jordan Valley, the majority of which are Israeli-laid.<sup>48</sup>

The two minefields in Qalqiliya Governorate fall outside of The HALO Trust's funding agreement with international donors, and these two minefields are being cleared by 4M, with Israeli funding, under an Israeli Ministry of Defence tender.<sup>49</sup>

Furthermore, the INMAA began survey of the Jordan Valley minefields in the West Bank in 2017, using Israeli national budget and operating with Israeli companies. The 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. The INMAA planned to invest around ILS 900,000 (approximately US\$250,000) on this project in 2017–19.<sup>50</sup>

**Table 3: Mine clearance in 2013–17<sup>51</sup>**

Year	Area cleared (m <sup>2</sup> )
2017	41,857
2016	34,057
2015	63,411
2014	21,832
2013	7,000
<b>Total</b>	<b>168,157</b>

PMAC does not have its own budget, and the Palestinian authority only provides funding for the salary of PMAC employees and the PMAC office.<sup>52</sup> In 2017, UNMAS provided a grant of \$20,000 to PMAC.<sup>53</sup>

Neither PMAC nor the INMAA provides direct funding for HALO Trust's clearance operations,<sup>54</sup> with the exception of the baptism site clearance task in the West Bank, to which the INMAA contributes ILS 2 million (approximately US\$548,000).<sup>55</sup> The HALO Trust's clearance programme in the West Bank is primarily funded by the governments of the Netherlands, the United Kingdom, and the United States, as well as by private donors.<sup>56</sup>

- 1 Email from Brig. Joma Mousa, then Director, PMAC, 31 March 2014.
- 2 HALO Trust, "West Bank, The problem", at: [www.halotrust.org/where-we-work/west-bank](http://www.halotrust.org/where-we-work/west-bank).
- 3 Emails from Tom Meredith, then Desk Officer, HALO Trust, 24 June and 23 October 2015; and Sonia Pezier, then Junior Programme Officer, United Nations Mine Action Service (UNMAS), 14 April 2015.
- 4 Emails from Ronen Shimoni, Programme Manager, HALO Trust, 22 April, 3 August 2017, and 14 May 2018.
- 5 Emails from Ronen Shimoni, HALO Trust, 14 May 2018; and the Planning Department, PMAC, 26 June 2018. Table 1 refers to Jordanian-laid minefields. The two minefields in no-man's land are located west of the separation barrier in an Israeli controlled area. There were inconsistencies between PMAC and HALO Trust data regarding the size of the Araba, Nur a-Shams, and Qabatiya minefields, as at end of 2017. PMAC's list appeared to contain inaccuracies and included mine contamination at Deir Abu Daif minefield, where clearance was completed in October 2017.
- 6 Email from Ronen Shimoni, HALO Trust, 14 May 2018.
- 7 Emails from Ronen Shimoni, HALO Trust, 14 May and 26 July 2018.
- 8 Email from Celine Francois, Programme Officer, UNMAS, Jerusalem, 5 July 2012; and "UNMAS 2013 Annual Report".
- 9 Email from Celine Francois, Programme Officer, UNMAS, Jerusalem, 5 July 2012; and "UNMAS 2013 Annual Report"; and UNMAS, "State of Palestine", accessed 29 July 2015 at: <http://www.mineaction.org/print/programmes/state-palestine>.
- 10 Statement of Palestine, 16<sup>th</sup> Meeting of States Parties to the APMB, Vienna, 20 December 2017.
- 11 PMAC, "Strategic Plan 2017–2020", undated.
- 12 Email from Ronen Shimoni, HALO Trust, 3 September 2018.
- 13 Email from Sonia Pezier, UNMAS, 14 April 2015; UNMAS, "State of Palestine", accessed 29 July 2015; and email from Tom Meredith, HALO Trust, 23 October 2015.
- 14 Minister of Interior Decision No. 69 [outgoing 1223], 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 Email from the Planning Department, PMAC, 26 June 2018.
- 19 Ibid.
- 20 Ibid.
- 21 Email from the Planning Department, PMAC, 30 August 2018.
- 22 Email from Celine Francois, UNMAS Jerusalem, 5 July 2012.
- 23 PMAC, "Strategic Plan 2017–2020", undated.
- 24 Email from Ronen Shimoni, HALO Trust, 22 April 2017.
- 25 Statement of Palestine, 15th Meeting of States Parties, Santiago, 29 November 2016.
- 26 Email from the Planning Department, PMAC, 26 June 2018.
- 27 Email from Ronen Shimoni, HALO Trust, 14 May 2018.
- 28 Ibid.
- 29 Ibid.
- 30 Email from the Planning Department, PMAC, 30 August 2018.
- 31 Email from Ronen Shimoni, HALO Trust, 3 Sept 2018.
- 32 Email from the Planning Department, PMAC, 26 June 2018.
- 33 Email from Tom Meredith, HALO Trust, 11 May 2015.
- 34 HALO Trust, "West Bank", accessed 17 July 2018.
- 35 Email from Ronen Shimoni, HALO Trust, 14 May 2018.
- 36 Email from the Planning Department, PMAC, 9 May 2016; and telephone interview with Ronen Shimoni, HALO Trust, 3 August 2017.
- 37 Email from Ronen Shimoni, HALO Trust, 14 May 2018.
- 38 Ibid.
- 39 Emails from the Planning Department, PMAC, 26 June 2018; Michael Heiman, formerly the Director of Technology and Knowledge Management, INMAA, 26 May 2018; and Ronen Shimoni, HALO Trust, 14 May 2018. There was a minor discrepancy between HALO Trust data and that provided by INMAA, regarding the Araba minefield. INMAA reported HALO Trust clearance of 3,049m<sup>2</sup>, whereas HALO Trust reported 3,542m<sup>2</sup>. There were bigger unexplained discrepancies between HALO Trust clearance output data for 2017 and that provided by PMAC, which totalled 30,886m<sup>2</sup>, with the destruction of 86 anti-personnel mines, 8 anti-vehicle mines, and 7 items of UXO.
- 40 Michael Heiman, formerly INMAA, 26 May 2018; and "Israel to clear mines from over 15 acres to expand West Bank settlement", *The Jerusalem Post*, 6 November 2017.
- 41 Emails from Ronen Shimoni, HALO Trust, 14 May 2018; and Michael Heiman, formerly INMAA, 26 May 2018.
- 42 Email from Ronen Shimoni, HALO Trust, 14 May 2018.
- 43 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 44 Email from Ronen Shimoni, HALO Trust, 14 May 2018; and telephone interview, 23 August 2018.
- 45 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 46 Telephone interview with Ronen Shimoni, HALO Trust, 23 August 2018.
- 47 Statement of Palestine, 16<sup>th</sup> Meeting of States Parties to the APMB, Vienna, 20 December 2017; and email from the Planning Department, PMAC, 26 June 2018.
- 48 Emails from Ronen Shimoni, HALO Trust, 22 April 2017 and 14 May 2018; and telephone interview, 3 August 2017.
- 49 Interview with Michael Heiman, then INMAA, in Geneva, 15 February 2018; and email, 26 May 2018.
- 50 Interview with Michael Heiman, then INMAA, in Geneva, 15 February 2018; and emails, 23 July, 10 August 2017, and 26 May 2018.
- 51 See Landmine Monitor and Mine Action Review reports on Palestine in 2013–16. HALO Trust previously reported 12,226m<sup>2</sup> of clearance in 2014, but it was subsequently found that this only included manual clearance and excluded 9,606m<sup>2</sup> of mechanical clearance that also took place. The correct revised total for 2014 is 21,832m<sup>2</sup>. Email from Ronen Shimoni, HALO Trust, 18 October 2016.
- 52 Email from the Planning Department, PMAC, 26 June 2018.
- 53 Email from the Planning Department, PMAC, 24 May 2017.
- 54 Email from Ronen Shimoni, HALO Trust, 22 April 2017.
- 55 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 56 Email from Ronen Shimoni, HALO Trust, 22 April 2017; and telephone interview, 3 August 2017.

# PERU

**ARTICLE 5 DEADLINE: 31 DECEMBER 2024**  
(ON TRACK TO MEET DEADLINE)

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	3	3
Target date for completion of mine clearance	2	2
Targeted clearance	5	5
Efficient clearance	3	3
National funding of programme	7	7
Timely clearance	4	4
Land-release system in place	5	5
National mine action standards	7	7
Reporting on progress	3	4
Improving performance	6	6
<b>PERFORMANCE SCORE: POOR</b>	<b>4.5</b>	<b>4.6</b>

## PERFORMANCE COMMENTARY

Peru's clearance output in 2017 was only 9,246m<sup>2</sup>, a huge reduction from the 76,335m<sup>2</sup> cleared in 2015. While Peru did submit an updated workplan in 2018, as requested by the Fifteenth Meeting of the State Parties, there are inconsistencies in the way Peru reports its outstanding mine contamination and its plan for clearance. Peru has until 2024 to complete clearance in accordance with its Article 5 deadline extension, though it should easily be able to complete clearance by 2020 if the full range of land release techniques were used.

### RECOMMENDATIONS FOR ACTION

- Peru should seek to complete clearance in no more than two years.
- Peru should provide a single, accurate estimate of remaining mine contamination and a revised annual clearance plan that reflects that area of contamination.
- Peru should push forward with its strategic objective to use mine detection dogs (MDDs) or other technical survey methods to speed up land release in the Condor mountain range.
- Peru should clarify its understanding of land release and ensure that reporting conforms to the International Mine Action Standards (IMAS).

## CONTAMINATION

Residual 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. As at early August 2016, 140 SHAs were said to cover a total of 479,994m<sup>2</sup> in the districts of Achuime, Cenepa, Santiago and the square kilometre of Tiwinza.<sup>1</sup> Peru variously stated in its Article 7 transparency report for March 2016 to March 2017 that, as at March 2017, remaining mine contamination totalled 475,174m<sup>2</sup> across 140 CHAs, but in the same report it also claimed that as at the end of 2016, 426,325m<sup>2</sup> remained across 134 CHAs.<sup>2</sup> In its latest Article 7 transparency report for March 2017 to March 2018, Peru stated that as at March 2018, remaining mine contamination totalled 426,325m<sup>2</sup> across 134 CHAs and, in the same report, 396,171m<sup>2</sup> across 124 CHAs.<sup>3</sup>

As set out in Table 1 below, though, Peru has planned for clearance beginning in January 2018 of 127 areas covering 491,279m<sup>2</sup>, which is more than the total remaining mine contamination.<sup>4</sup>

The size and extent of mined areas varies widely, with one such area only 5m<sup>2</sup> in size while the largest, by far, is estimated to extend over 160,000m<sup>2</sup>. In fact, most of this large area should be released by survey, without the need for recourse to full clearance.<sup>5</sup> The true amount of contaminated land is probably no more than 100,000m<sup>2</sup> as Peru does not use polygons to delineate hazardous areas, despite having detailed mine maps of almost all the affected areas.

In 2008, Peru claimed that mines have had a "severe" socio-economic impact on those living in affected areas (estimated to number some 400,000 across the Condor mountain range).<sup>6</sup> While some socio-economic impact persists, today this cannot be considered severe. The Cordillera del Condor is a nature reserve.

### Programme Management

The national mine action programme is managed by the Interministerial Executive Council of the Peruvian Mine Action Centre (Centro Peruano de Acción contra las Minas Antipersonal, CONTRAMINAS), which is chaired by the Ministry of Foreign Affairs. CONTRAMINAS is responsible for setting strategy and priorities and for overall coordination of mine action activities.

### Strategic Planning

According to Peru's "Updated National Plan for Humanitarian Demining 2018–2024", which was submitted to the Committee on Article 5 Implementation in May 2018, remaining suspected mine contamination of some 0.49km<sup>2</sup> spread across 127 SHAs will be released by 31 December 2024. Peru expected to clear 8,089 mines from the areas.<sup>7</sup> The plan for the seven years beginning 1 January 2018 is as follows.

**Table 1: Planned clearance in 2018–24 (Updated Plan)<sup>8</sup>**

Year	Sector	Mined areas	Area (m <sup>2</sup> )	Anti-personnel 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
<b>Totals</b>		<b>127</b>	<b>491,279</b>	<b>8,089</b>

This differs from its Article 7 Report for 2017 where Peru stated that it would clear 124 mined areas in 2018–24 (see Table 2).<sup>9</sup>

**Table 2: Planned clearance in 2018–24 (Article 7)<sup>10</sup>**

Year	Sector	Mined areas
2018	Tiwinza	12
2019	Tiwinza	12
2020	Cenepa	20
2021	Cenepa	20
2022	Achuime	18
2023	Santiago	21
2024	Santiago	21
<b>Total</b>		<b>124</b>

Peru also included a plan for the clearance of the Tiwinza square kilometre in its updated plan which, in contrast to the information provided by Ecuador, is for five mined areas totalling 70,100m<sup>2</sup>, which were to be cleared in 2018.<sup>11</sup>

## Legislation and Standards

CONTRAMINAS was created in December 2002 after the issuance of a “Supreme Decree”, in an additional “Supreme Decree” issued in July 2005, which regulates CONTRAMINAS.<sup>12</sup> Directive No. 001 regulates humanitarian demining operations at the Peruvian Army’s Directorate General for Humanitarian Demining (DIGEDEM) while Directive No. 006 regulates compliance under the Anti-Personnel Mine Ban Convention (APMBC).<sup>13</sup>

In April 2013, under the Binational Cooperation Programme (Programa Binacional de Cooperación) established in 2000, Ecuador and Peru adopted a Binational Manual for Humanitarian Demining to unify the demining procedures of both states in accordance with the IMAS.

## Quality Management

Until the end of 2013, the Organization of American States (OAS) provided technical and financial assistance to Peru’s mine action operations, which it initiated in May 2011 through its Assistance Mission for Mine Clearance in South America (MARMINAS). Quality management is now assured through DIGEDEM, headquartered in Lima.<sup>14</sup>

## Information Management

CONTRAMINAS uses the Information Management System for Mine Action (IMSMA) database.<sup>15</sup> In 2016, the Geneva International Centre for Humanitarian Demining (GICHD) was providing information management support to CONTRAMINAS. It is not known if this continued in 2017.

## Operators

DIGEDEM is responsible for carrying out demining on the border with Ecuador with two demining teams each of 60 deminers. The CONTRAMINAS Security Division (DIVSECOM), which is responsible for supporting DIGEDEM with demining operations, has 40 police officers trained in demining.<sup>16</sup>

Peru has not yet used machines for demining, and until 2015 MDDs were only used for quality control after clearance. In 2015, MDDs were used to identify mines for the first time.<sup>17</sup> Their use should be expanded significantly to both identify the location of mined areas and to reduce and release land within those areas. Peru should seek international assistance for this work.

In its revised Second Article 5 deadline extension request, Peru announced that it would be using both machines and MDDs for demining which as at May 2018, have not yet been introduced.<sup>18</sup> In its updated workplan submitted May 2018, Peru one of its specific strategic objectives for 2018–24 included the development, design, and implementation of new humanitarian demining techniques, such as with machines or dogs.<sup>19</sup>

## LAND RELEASE

The total mined area reportedly released in 2017 was 27,154m<sup>2</sup>, a 40% reduction on reported release the previous year.

### Survey in 2017

In 2017, Peru reported that it reduced 7,171m<sup>2</sup> by technical survey and cancelled 10,738m<sup>2</sup> by non-technical survey in Tiwinza.<sup>20</sup>

### Clearance in 2017

In 2017, Peru reported that it cleared 9,246m<sup>2</sup> in Tiwinza, with the destruction of 396 anti-personnel mines.<sup>21</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the seven years and ten months' 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. This is Peru's second Article 5 deadline extension.

In fact, Peru should easily be able to complete clearance by 2020 using the full range of land release techniques and efficient, targeted clearance. At least 75,000m<sup>2</sup> can be cleared each year based on a review of data supplied to Mine Action Review by DIGEDEHUME and on discussions with senior officials at the General Directorate.<sup>22</sup>

In the last five years, though, Peru has reported clearing a total of under 140,000m<sup>2</sup> of mined area with the destruction of about 6,000 mines (see Table 3).

**Table 3: Mine clearance in 2013–17<sup>23</sup>**

Year	Area cleared (m <sup>2</sup> )
2017	*9,246
2016	**18,317
2015	76,335
2014	8,458
2013	25,715
<b>Total</b>	<b>138,071</b>

\* Covers the period April 2017 to March 2018

\*\* Covers the period April 2016 to March 2017

In its revised second extension request, submitted in August 2016, Peru estimated that US\$38.6 million would be needed to finish the job, all of which was due to be funded by the Peruvian government.<sup>24</sup> This estimate was also included in its, May 2018 updated workplan. Peru reported that while \$3.88 million had been costed for 2018, the Executive Council of CONTRAMINAS had set the annual budget at \$2.36 million.<sup>25</sup> Based on the figures it has supplied almost half of this total could be saved by completing clearance within only five additional years.

In granting Peru's extension request, the Fifteenth Meeting of States Parties called on Peru to provide, by 30 April 2018, an updated workplan for the remaining period covered by the extension detailing the results of the activities to meet its strategic objectives, an updated list of all areas known or suspected to contain anti-personnel mines, annual projections of which areas and what area would be dealt with during the remaining period covered by the request and by which organization, and an updated budget.<sup>26</sup> Peru submitted an "Updated National Plan for Humanitarian Demining 2018-2024" on 30 May 2018. Included is an annual plan for demining of 127 areas covering almost 0.5km<sup>2</sup>, which is more than the remaining mine contamination. Peru's estimates of remaining mined area differ, ranging from 396,171m<sup>2</sup> across 124 CHAs, to 426,325m<sup>2</sup> across 134 CHAs, and to 475,174m<sup>2</sup> across 140 CHAs.

- 1 Analysis of 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, Submitted by the Committee on the Implementation of Article 5 (Costa Rica, Ecuador, Ireland and Zambia), para. 9.
- 2 Article 7 Report (for March 2016 to March 2017), Forms C and F2.
- 3 Article 7 Report (for March 2017 to March 2018), Form C and F.
- 4 Updated National Plan for Humanitarian Demining 2018-2024, May 2018, p. 11.
- 5 Discussion with CONTRAMINAS, Lima, 14 March 2016; and with the Peruvian Army's Directorate General for Humanitarian Demining (DIGEDEHUME), Lima, 15 March 2016.
- 6 Revised Article 5 deadline Extension Request, 20 August 2008.
- 7 Updated National Plan for Humanitarian Demining 2018–2024, May 2018. A slightly different figure for remaining contamination as of 1 January 2017 was included in Peru's revised second extension request, dated July 2016 but submitted at the beginning of August 2016: 411,694m<sup>2</sup> as compared with 412,094m<sup>2</sup> in the first version of the request. See Revised Second Article 5 deadline Extension Request, July 2016, p. 4.
- 8 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 11.
- 9 Article 7 Report (for March 2017 to March 2018), Form F.
- 10 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 11.
- 11 Ibid, p. 17.
- 12 Supreme Decree No. 113-2002-RE; and Supreme Decree No. 051-2005-RE.
- 13 Directive No. 001/2009/DIGEDEHUME-SINGE; and Directive No. 006.
- 14 Presentation by DIGEDEHUME, Lima, 15 March 2016.
- 15 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 8.
- 16 Ibid, pp. 10 and 12.
- 17 Presentation by DIGEDEHUME, Lima, 15 March 2016.
- 18 Revised Second Article 5 deadline Extension Request, July 2016, pp. 5–6.
- 19 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, pp. 15–16.
- 20 Article 7 Report (for March 2017 to March 2018), Form F.
- 21 Ibid.
- 22 This is on the basis of 48 military deminers working for 160 days each year and each deminer clearing an average of 10m<sup>2</sup> per day. Discussion with DIGEDEHUME, Lima, 15 March 2016.
- 23 Statement of Peru, Committee on Article 5 Implementation, Geneva, 25 June 2015. Different figures for clearance were reported in 2016: clearance in 2013 was said to amount to 29,025m<sup>2</sup>, while clearance in 2012 was reportedly of 15,377m<sup>2</sup>. Presentation by DIGEDEHUME, Lima, 15 March 2016.
- 24 Revised Second Article 5 deadline Extension Request, July 2016, p. 18.
- 25 Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p.11.
- 26 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. e.

# SENEGAL

**ARTICLE 5 DEADLINE: 1 MARCH 2021**  
(NOT ON TRACK TO MEET DEADLINE)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	3	4
Target date for completion of mine clearance	1	1
Targeted clearance	0	1
Efficient clearance	2	2
National funding of programme	4	5
Timely clearance	0	0
Land-release system in place	6	6
National mine action standards	7	7
Reporting on progress	6	6
Improving performance	1	2
<b>PERFORMANCE SCORE: VERY POOR</b>	<b>3.0</b>	<b>3.4</b>

## PERFORMANCE COMMENTARY

Senegal's mine action programme showed little sign of improvement in 2017. Its submission of an updated workplan in accordance with its Article 5 extension request in May 2017 for the remainder of its extension period, until 1 March 2021, and subsequently a revised version on 13 October 2017, is a welcome step forward. However, the plan contains inconsistencies in its reporting on annual land release targets and the total amount of contamination remaining to be addressed, and lacks detail on work to be carried out after 2018.

Overall progress in land release remained slow for yet another year in 2017, as Senegal continued to fail to make significant strides towards meeting its international legal obligations to demine as soon as possible. This failure,

combined with its apparent unwillingness to clear mines around military bases, raises serious doubt as to Senegal's compliance with its core obligations under the Anti-Personnel Mine Ban Convention (APMBC). It is unclear whether national political will exists to address its remaining mine contamination.

The total amount of land released dwindled to just over 65,000m<sup>2</sup> in 2017 and the destruction of only two anti-personnel mines. Humanity and Inclusion (formerly Handicap International, HI), the only mine action operator in Senegal since 2014, was forced to suspend operations in October 2017 due to a lack of funding. As at August 2018, operations had yet to resume and HI had not been able to secure additional resources.

## RECOMMENDATIONS FOR ACTION

- Senegal should complete non-technical survey as soon as possible and, where security allows, establish a complete and accurate estimate of its remaining mine contamination. It should revise its APMBC Article 5 workplan and extension request milestones on the basis of the results.
- Senegal should clarify the projected annual targets that will enable it finally to meet its extended 2021 Article 5 deadline.
- Senegal should ensure that suspected hazardous areas (SHAs) are recorded on the basis of demonstrable evidence and with specific size estimates and the information should be made public.
- The Government of Senegal should make national funding and resources available to national and international demining organisations to enable a resumption of demining without further delay. It should develop and implement a resource mobilisation strategy to secure increased and sustainable funding.
- It should prioritise clearance and technical survey in readily accessible areas and where the presence of mines is reliably attested.
- The Senegalese National Mine Action Centre (Centre National d'Action Antimines, CNAMS) should continue to improve transparency and to facilitate dialogue between all actors concerned by land release operations
- CNAMS should work actively to restore confidence among donors and international operators in its mine action programme.
- CNAMS should engage the Senegalese Armed Forces to participate in mine action activities, as and where appropriate.
- Senegal should provide regular updates on changes to the security situation which might affect its ability to meet its extension request goals and report on efforts to facilitate dialogue with stakeholders on mine action activities in the ongoing peace talks.

## CONTAMINATION

Senegal has still to establish an accurate assessment of the extent of its mine contamination, nearly 20 years after becoming a state party to the APMBC. In 2017–18, it continued to report inconsistent figures for the amount of confirmed and suspected contaminated areas remaining, as it has in previous years.

According to CNAMS, as at 31 December 2017, a total of 68 areas of anti-personnel mine contamination remained to be addressed with a total size of 282,945m<sup>2</sup>: 42 confirmed hazardous areas (CHAs) with a size of 262,025m<sup>2</sup>, 6 SHAs with a size of 20,920m<sup>2</sup>, and an

additional 20 areas with an unknown size. As in previous years, Senegal continued to also report that a further 144 areas still remained to be surveyed, including 127 areas in Bignona department, 4 in Oussouye, and 13 in Ziguinchor.<sup>1</sup>

In June 2018, however, Senegal informed states parties to the APMBC that 1.2km<sup>2</sup> of contamination remained to be addressed across 81 recorded areas: 30 in Bignona department, 25 in Goudomp department, 9 in Ziguinchor department, and 17 in Oussouye department. This is in addition to the 144 unsurveyed areas in Bignona,

Oussouye, and Ziguinchor departments. It claimed that as at June 2018, 1,932,717m<sup>2</sup> had been demined, with the destruction of 443 mines, along with the survey of 490 “localities” and the release of 69.<sup>2</sup>

Previously, at the end of December 2016, CNAMS had reported that a total of 81 areas of anti-personnel mine contamination remained to be addressed (61 CHAs covering 305,486m<sup>2</sup> and 20 SHAs of unknown size), along with the 144 unsurveyed areas.<sup>3</sup> In April 2017, however,

CNAMS reported remaining contamination as comprising 52 CHAs (41 covering 529,027m<sup>2</sup> and 11 of unknown size).<sup>4</sup>

Four departments (Bignona, Goudomp, Oussouye and Ziguinchor) of Senegal’s total of forty-five still contain confirmed or suspected mined areas. The affected departments are located in the Casamance region of Senegal, between The Gambia to the north and Guinea-Bissau to the south.

**Table 1: Anti-personnel mine contamination by province (at end-2017)<sup>5</sup>**

Department	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )	Other SHAs of unknown size
Bignona	18	14,670	1	20,020	11
Goudomp	12	140,453	0	0	0
Oussouye	9	77,240	4	N/R	4
Ziguinchor	3	29,662	1	900	5
<b>Totals</b>	<b>42</b>	<b>262,025</b>	<b>6</b>	<b>20,920</b>	<b>20</b>

N/R = Not reported

The figures reported in Table 1 do not tally with the amount of remaining contamination CNAMS reported as at end-2016 or its claim that 18 areas covering a total of 106,658m<sup>2</sup> were released in 2017.<sup>6</sup>

According to HI, given the historical evidence of frequent clashes and rebel bases in the area, the identification of SHAs in north-west Casamance suggests a high probability that other areas of contamination will be found as survey progresses further east, nearer to the northern border.<sup>7</sup> The extent of contamination is better known in the south of Casamance, where previous survey in the region has identified several SHAs, between the Guinea-Bissau border and the Casamance river to the north and the Atlantic Ocean to the west.<sup>8</sup> In August 2018, HI informed Mine Action Review that there were still unsurveyed areas such as north Sindian in Bignona department where significant contamination was suspected. However, for security reasons and a lack of resources, the area had not been addressed.<sup>9</sup>

Mine contamination in Senegal is the result of more than 30 years of fighting between the armed forces and a non-state armed group, the Movement of Democratic Forces of Casamance (Mouvement des Forces Démocratiques de Casamance, MFDC). Sporadic fighting with some factions of the MFDC has continued despite a ceasefire in place since 2004.

In 2017, mine and explosive remnants of war (ERW) contamination continued to pose a threat to local residents in the Casamance region, seriously hindered socio-economic development, prevented the return of displaced populations, and limited access to agricultural land and livelihood activities.<sup>10</sup> As at the end of 2017, Senegal reported a cumulative total of 829 mine casualties, an increase of three from 2016.<sup>11</sup>

In August 2018, HI reported that of the remaining contamination to be addressed, the most important areas were located in the north of Bignona department, along the Gambian border, as increasing numbers of displaced persons were returning to the area following regime change in The Gambia and a lull in the conflict in the Casamance region in recent years. HI also said that the area had great economic potential, making clearance both a humanitarian and a developmental priority.<sup>12</sup>

## Programme Management

The National Commission for the Implementation of the Ottawa Convention serves as the national mine action authority for Senegal. Demining operations in Casamance are coordinated by CNAMS. Regional mine action coordination committees have been established in Kolda, Sédhiou, and Ziguinchor departments.

Sporadic international technical assistance was provided to the programme by the United Nations Development Programme (UNDP) in 2008–14, in particular through a technical or chief technical advisor.<sup>13</sup>

## Strategic Planning

Senegal submitted an updated workplan in accordance with its Article 5 deadline extension request in May 2017 for the remainder of its extension period, until 1 March 2021, and subsequently a revised version on 13 October 2017. The plan contains a list of all known or suspected contaminated areas and establishes annual targets for the amount of contamination to be addressed. However, there are inconsistencies and incompatibilities in its reporting on the total contamination remaining and the size of projected annual milestones for land release. Additionally, Senegal’s extension request is until March 2021, but the plan does not contain details of work to be carried out after 2018.

According to the revised workplan, Senegal would address 17 CHAs with a total size of approximately 169,771m<sup>2</sup> in 2017, 24 CHAs with a size of 343,856m<sup>2</sup>, and 11 CHAs with an unknown size, along with non-technical survey of the remaining 144 areas, in 2018; and any areas confirmed as CHA by survey activities in 2019–20.<sup>14</sup>

In its latest Article 7 report for 2017, however, Senegal reported it would carry out clearance of 14 CHAs totalling 139,174m<sup>2</sup> in September 2018–January 2019, though the calculation of the total surface area is incorrect and, based on the figures given in the table, the total to be cleared would be 150,795m<sup>2</sup>.<sup>15</sup> It further claims that a total of 23 CHAs with a size of 340,291m<sup>2</sup> will be addressed in February–May 2019 in Bignona, Goudomp, and Ziguinchor departments, and 11 CHAs with an unknown size in Bignona and Goudomp departments in November–December 2019. The report also states that the 144 areas which remain to be surveyed will be addressed by non-technical survey in 2018–19, and that any CHAs identified would then be cleared in 2020, depending on security conditions.<sup>16</sup>

From the above figures in its latest Article 7 report, it would appear to indicate that at least 479,465m<sup>2</sup> of CHA will be addressed; although, according to figures in its revised workplan, 513,626m<sup>2</sup> of CHA will be addressed; but according to Senegal's most recent Article 7 transparency report, only about 262,000m<sup>2</sup> of CHA remained as of the end of 2017. As noted above, however, at the APMBIC Intersessional meetings in June 2018, Senegal estimated remaining contaminated area to cover a total of 1.2km<sup>2</sup>.<sup>17</sup>

## Legislation and Standards

Senegal does not have national mine action legislation in place, based on available information. There were no significant developments regarding Senegal's national mine action standards in 2017.<sup>18</sup> According to HI, the standards have not been updated since 2013.<sup>19</sup>

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## LAND RELEASE

The total mined area reported released by HI in Senegal in 2017 through technical survey and clearance was just under 65,400m<sup>2</sup>, with the destruction of two anti-personnel mines.<sup>26</sup> This is less than half the amount of land released by HI in 2016 (147,650m<sup>2</sup>), and a further decrease in output from 2015, when HI released 911,000m<sup>2</sup> by survey, though no clearance occurred that year. CNAMS, however, reported that in 2017 a total of 18 mined areas were addressed with the release of 106,658m<sup>2</sup> and the destruction of three anti-personnel mines.<sup>27</sup>

### Survey in 2017

In 2017, HI reported confirming 16 mined areas with a combined size of 65,393m<sup>2</sup>: one area in Bignona department with a size of 1,000m<sup>2</sup> and 15 areas in Goudomp department with a size of 64,393m<sup>2</sup>, all of which were subsequently released through technical survey and clearance.<sup>28</sup>

## Quality Management

In 2017, HI reported that CNAMS was responsible for managing quality control and carried out activities on a weekly basis.<sup>20</sup>

## Information Management

According to HI, CNAMS's Information Management System for Mine Action (IMSMA) database system was upgraded in 2015.<sup>21</sup>

## Operators

HI remained the only international mine action operator in Senegal in 2017 and as at October 2017, had suspended its demining operations in the country for lack of funding.<sup>22</sup> During the year it employed 26 operational staff, two national managerial staff, and an expatriate operations manager. It deployed a soil preparation and mechanical mine clearance machine, the Digger D-3.<sup>23</sup>

HI was also the sole international demining operator in Senegal until mid-2012, when new clearance capacities were added with the arrival of Mechem and Norwegian People's Aid (NPA). In 2014, however, NPA withdrew from Senegal as a result of "government-imposed limitations on demining activities", which had prevented it from deploying demining resources where necessary clearance could be done safely, and from undertaking non-technical survey in areas suspected to be contaminated but which had not been surveyed.<sup>24</sup> The withdrawal was followed by loss of funding from the European Union (EU), Germany, and Norway.<sup>25</sup> In 2015, Mechem ended its operations in Senegal due to lack of funding.

## Clearance in 2017

In 2017, as stated above, HI reported releasing a total of 65,400m<sup>2</sup> through technical survey and clearance (though it is unable to disaggregate between the two), including one area in Bignona department with a size of 1,000m<sup>2</sup> and 15 areas in Goudomp department with a combined size of 64,393m<sup>2</sup>. These areas were released with the destruction of two anti-personnel mines, one anti-vehicle mine, and one item of unexploded ordnance (UXO).<sup>29</sup>

However, CNAMS reported that 18 CHAs with a total size of 106,658m<sup>2</sup> were cleared in Goudomp department, Ziguinchor region, with the destruction of three anti-personnel mines.<sup>30</sup> According to its updated workplan, Senegal had intended that 17 CHAs with a total size of approximately 169,771m<sup>2</sup> would be addressed in 2017.<sup>31</sup>

## Deminer Safety

There were no accidents involving deminers reported in 2017. However, HI reported that its operations on the Bélaye-Ebinako road in Djiniaky district, Bignona department had to be suspended because of the incursion of armed groups which claimed not to have been part of community meetings about the choice of the particular track of road where operations were to be carried out.<sup>32</sup> The last reported incident occurred

in 2013, when a number of Mechem deminers working in the village of Kailou (Ziguinchor department) were kidnapped, some of whom were held for 90 days, although all were later safely released.<sup>33</sup>

HI has reported that its task orders from CNAMS took into account security conditions first, before focusing on community requests.<sup>34</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2015), 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 2021. It is unlikely to meet this deadline.

In granting the second extension request in December 2015, states parties noted that Senegal “did not have clear knowledge of the size and location of areas that will warrant mine clearance” as well as its commitment “to undertake technical survey activities and to develop a cancellation procedure which may result in implementation proceeding much faster and in a more cost-effective manner”.<sup>35</sup>

Senegal’s previous Article 5 clearance deadline expired on 1 March 2016 under its first extension request approved in 2008. Despite repeatedly asserting its intention, as late as June 2014, not to seek a second extension period and to complete clearance within this deadline, in June 2015 Senegal submitted a request to extend its Article 5 clearance deadline until March 2021.

Senegal has claimed that the circumstances impeding compliance with its international legal obligations include general insecurity; MFDC reticence to agree to demining operations; the eight-month suspension of operations in 2013; ongoing concerns over deminer safety; and a decrease in technical and financial resources in recent years.<sup>36</sup> Senegal has also stated that security conditions and lack of funding could affect its ability to complete clearance in a timely manner.<sup>37</sup>

In fact, since 2013, the apparently wilful lack of land release and concrete political will to address its mine problem, and as a consequence, the inadequate use of clearance capacities, have prevented Senegal from fulfilling its Article 5 obligations. This led to the withdrawal of a major operator and the loss of financial support from key donors, explaining in part the sharp reduction in its clearance capacities. Indeed, while Senegal recorded a significant increase in clearance productivity in 2012–13, the way CNAMS has allocated tasks after the 2013 kidnapping has been criticised for directing resources and clearance assets to areas without credible risk of mine contamination, while requests from operators to conduct survey prior to deploying clearance assets were denied.<sup>38</sup>

In June 2018, CNAMS informed APMBC states parties that it expected approximately €6,475,000 is required to complete clearance of the remaining contaminated areas. It stated that Senegal contributes €460,000 annually for the operating costs of the CNAMS, and €308,000 for the conduct of mine action activities. It stated that with the current pace of performance it was unlikely to be able to meet its clearance objectives of end-2020.<sup>39</sup> Senegal’s revised October 2017 workplan notes that a resource mobilisation plan should be included in the document but does not contain one.<sup>40</sup>

Senegal’s submission of an updated workplan in October 2017 for 2016–21 in accordance with its Article 5 extension obligations is encouraging. However, serious questions remain about the likelihood of its implementation, which is highly dependent, among other things; on security conditions. Senegal has regularly indicated that all demining operations would be conducted within the framework of the ongoing peace talks and would first be approved by MFDC in meetings with Senegalese officials.<sup>41</sup> At the same time, CNAMS has stated that talks with the MFDC are made by authorities in Dakar exclusively, and not by the mine action centre.<sup>42</sup> There is no explanation in the action plan presented in Senegal’s second extension request of how peace negotiations conducted in Dakar by the Reflection Group on Peace in Casamance (Groupe de Réflexion sur la Paix en Casamance, GRPC) will include the issue of mine clearance.

In 2017, CNAMS reiterated that the implementation of the revised workplan and the feasibility of the 2021 mine clearance deadline are based on the assumption that the GRPC obtains the MFDC’s agreement on the inclusion of demining activities in the peace process, in order to allow for the rapid deployment of demining teams.<sup>43</sup> In the workplan, CNAMS stated that it was unable to provide detailed updates on the development of the peace process as it is not a member of the GRPC negotiation group. However, it reported that events in The Gambia had improved the security situation in the north of Casamance, particularly in the department of Bignona, allowing significant numbers of displaced persons to return. It expected that the continued evolution of the peace process would ensure better security conditions and improve access for mine clearance in planned locations.<sup>44</sup>

Previously, in 2015, NPA criticised CNAMS for obstructing dialogue between operators and the armed forces in particular, which could provide the specific locations of mined areas. Other stakeholders echoed that CNAMS was preventing dialogue between parties, including the spokesperson of the MFDC, who stated that there was a complete lack of communication with members of CNAMS.<sup>45</sup>

Despite the positive step of revising and submitting an updated workplan for its Article 5 extension period in October 2017, Senegal still lacks a comprehensive understanding of its mine problem and concerns have been raised about its apparent reluctance to deploy clearance assets in CHAs, and its continued failure to clear contaminated areas around existing military bases verges on use of anti-personnel mines, a violation of Article 1 of the APMBC. According to NPA, there is overwhelming evidence that laying of landmines by rebel forces was sporadic, while the Sudanese Armed Forces placed hundreds, if not thousands, of mines around military outposts in Casamance.<sup>46</sup>

However, in August 2017, CNAMS claimed that it has already demined around all the military bases, with the help of the army where that was necessary.<sup>47</sup> HI has reported that its teams cleared 22,162m<sup>2</sup> in Boutoute-Djibanar in connection with a former army base between 24 April 2015 and 23 December 2016, destroying “around” 19 anti-personnel mines.<sup>48</sup> It is not certain that all other bases have been demined.

In August 2018, HI stated that the probability that Senegal would meet its Article 5 deadline of 1 March 2021 was “more than low” in view of the remaining situation of close to 1.2km<sup>2</sup> of area reported to be contaminated and nearly 144 localities which had not been surveyed, and without the resources to do so. HI additionally cited that the CNAMS’ ability to mobilise resources has been very low in recent years.<sup>49</sup>

HI reported that there were no significant improvements to the national mine action programme in 2017. It remained the only mine action operator in Casamance, but stated it was not involved or poorly consulted on decisions with regards to the national programme. As reported above, it was forced to suspend operations in October 2017 due to lack of funding. It did not expect funding to be made available for mine action by the Government of Senegal in 2018 and was waiting for possibly funding from the United States to resume operations in Goudomp department as at August 2018.<sup>50</sup>

- 1 APMBC Article 7 Report (for 2017), Form D.
- 2 Statement of Senegal, Intersessional Meetings, Geneva, 8 June 2018. It further reported that Bignona department had long been inaccessible due to conflict; however, with a lull in fighting in recent years, it had been possible to carry out non-technical surveys which identified the suspicion of mine contamination around the districts of Sindian and Kataba I, with Oulampane, Kataba I, and Djignaki villages the most affected. The villages of Sindian, Djibidione, and Suelle remained inaccessible for mine action activities, though. In the department of Bignona, the large-scale return of populations to previously abandoned land would need to be preceded and accompanied by CNAMS, it said. In the department of Oussouye, the situation was normalising, and it claimed that humanitarian mine clearance activities carried out by CNMAS had reduced mine contamination to only around the village of Santhiaba Manjack, Kabrousse district, while the district of Loudia Oulof was not expected to be contaminated. In the Sédhiou region, it stated the most affected areas are located in the department of Goudomp, in the districts of Djibanar and Simbandi Brassou, from the National Road No. 6 (RN6) to the border with Guinea Bissau.
- 3 Article 7 Report (for 2016), Form D; CNAMS, "Updated Workplan for Senegal's Article 5 Extension 2016-2021", 13 October 2017; and email from Ibrahima Seck, Head of Operations and Information Management, CNAMS, 18 August 2017.
- 4 CNAMS, "Updated Workplan for Senegal's Article 5 Extension 2016-2021", 13 October 2017, p. 10. The workplan states that the 41 CHAs have a size of "529,027.276m<sup>2</sup>".
- 5 Article 7 Report (for 2017), Form D.
- 6 Ibid.
- 7 Email from Ibrahima Seck, CNAMS, 18 August 2017; and Article 7 Report (for 2016), Form D.
- 8 Ibid.
- 9 Email from Faly Keita, Coordinator, Casamance Site, HI, 8 August 2018.
- 10 Emails from Faly Keita, HI, 8 August 2018; Ibrahima Seck, CNAMS, 18 August 2017; and Julien Kempeneers, HI, 19 April 2017.
- 11 Article 7 Report (for 2017), Form D.
- 12 Email from Faly Keita, HI, 8 August 2018.
- 13 Statement of Senegal, Standing Committee on Mine Action, Geneva, 21 May 2012.
- 14 CNAMS, "Updated Workplan for Senegal's Article 5 Extension 2016-2021", 13 October 2017, pp. 13-14; and Article 7 Report (for 2016), Form D.
- 15 Article 7 Report (for 2017), Form D.
- 16 Ibid.
- 17 Statement of Senegal, Intersessional Meetings, Geneva, 8 June 2018.
- 18 Email from Faly Keita, HI, 8 August 2018.
- 19 Email from Julien Kempeneers, HI, 19 April 2017.
- 20 Email from Faly Keita, HI, 8 August 2018.
- 21 Email from Julien Kempeneers, HI, 1 September 2016.
- 22 Email from Julien Kempeneers, HI, 26 September 2016.
- 23 Email from Faly Keita, HI, 8 August 2018.
- 24 NPA, "Humanitarian Disarmament in Senegal", undated, at: <http://www.npaid.org/Dur-work/Countries/Africa/Senegal>; and K. Millett, "Clearance and Compliance in Casamance: is Senegal doing all it should?", Blog entry, 7 April 2014, at: <https://landmineandclustermunitionblog.wordpress.com/2014/04/07/clearance-and-compliance-in-casamance-is-senegal-doing-all-it-should/>.
- 25 NPA, "Humanitarian Disarmament in Senegal", undated; and Millett, "Clearance and Compliance in Casamance: is Senegal doing all it should?".
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- 27 Article 7 Report (for 2017), Form D.
- 28 Email from Faly Keita, HI, 8 August 2018.
- 29 Ibid.
- 30 Article 7 Report (for 2017), Form D.
- 31 CNAMS, "Updated Workplan for Senegal's Article 5 Extension 2016-2021", 13 October 2017, p. 13.
- 32 Email from Faly Keita, HI, 8 August 2018.
- 33 In March 2013, clearance operations were progressing rapidly as a consequence of the new demining capacity brought by Mechem and NPA. As they approached MFDC-controlled areas, a faction of the rebel group called publicly for a halt to humanitarian demining on the ground that clearance teams had reached a "red line beyond which operators' safety could not be guaranteed". Joint Press Release from MFDC, CNAMS, Geneva Call, the Sao Domingos Prefect, and APRAN-SDP, 20 March 2013.
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- 35 Analysis of Senegal's request for a second Article 5 deadline extension submitted by the Committee on Article 5 Implementation, 17 November 2015, p. 1.
- 36 Ibid., p. 22.
- 37 Ibid.
- 38 Millett, "Clearance and Compliance in Casamance: is Senegal doing all it should?".
- 39 Statement of Senegal, Intersessional Meetings, Geneva, 8 June 2018.
- 40 CNAMS, "Updated Workplan for Senegal's Article 5 Extension 2016-2021", 13 October 2017, p. 20.
- 41 H. Sagna, "Humanitarian demining in Casamance: negotiations and operations still deadlocked", *Enquête*, 17 June 2015.
- 42 Statement of ICBL, 14th Meeting of States Parties, Geneva, 2 December 2015; and email from Ibrahima Seck, CNAMS, 22 August 2016.
- 43 Email from Ibrahima Seck, CNAMS, 18 August 2017.
- 44 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.
- 45 A. Grovestins and A. Oberstadt, "Why landmines keep on killing in Senegal", IRIN, 3 August 2015, at: <https://www.irinnews.org/feature/2015/08/03/why-landmines-keep-killing-senegal>.
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# SERBIA

**ARTICLE 5 DEADLINE: 1 MARCH 2019**  
 (FOUR-YEAR EXTENSION REQUESTED TO 1 MARCH 2023)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
<b>Problem understood</b>	7	7
<b>Target date for completion of mine clearance</b>	5	5
<b>Targeted clearance</b>	5	4
<b>Efficient clearance</b>	6	6
<b>National funding of programme</b>	6	5
<b>Timely clearance</b>	4	4
<b>Land-release system in place</b>	6	6
<b>National mine action standards</b>	5	6
<b>Reporting on progress</b>	6	6
<b>Improving performance</b>	6	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.6</b>	<b>5.4</b>

## PERFORMANCE COMMENTARY

Serbia's mine action programme showed signs of improvement in 2017 even though no full clearance was conducted. During the year, Serbia released just under 0.3km<sup>2</sup> of mined area through technical survey, during which three anti-personnel mines and an item of unexploded ordnance (UXO) were found and destroyed. This represents an increase in output compared to 2016, when no mined area was released. Furthermore, the application of technical survey is also a positive development, demonstrating a willingness by the Serbian Mine Action Centre (SMAC) to adopt more efficient land release methodology in instances where technical survey is more appropriate than full clearance. This might, in turn, encourage greater international funding support which is required for SMAC to implement the work plan outlined in Serbia's second Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request.

## RECOMMENDATIONS FOR ACTION

- Serbia should identify additional funding, including from national and international sources, for the survey and clearance of mined areas.
- Serbia should consider using its armed forces for mine clearance to help meet its treaty obligations and fulfil its Article 5 obligations by 2023.
- SMAC should continue to conduct non-technical and technical survey, rather than full clearance, in instances where survey represents the most efficient means to confirm mine contamination.

## CONTAMINATION

As at March 2018, 12 areas in Bujanovac municipality, covering more than 2.35km<sup>2</sup>, were suspected to contain anti-personnel mines (see Table 1).<sup>1</sup> This slight decrease from the 2.63km<sup>2</sup> of mined area as at April 2017<sup>2</sup> is the result of release of 275,800m<sup>2</sup> in Breznica village in 2017.<sup>3</sup>

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 there are no minefield records.<sup>4</sup>

**Table 1: Anti-personnel mine contamination by village (at April 2018)<sup>5</sup>**

Municipality	Village	SHAs	Area (m <sup>2</sup> )
Bujanovac	Ravno Bučje	3	575,020
	Končulj	5	1,181,820
	Dobrosin	1	248,000
	Djordjevac	1	145,100
	Lučane	1	73,200
	Turija	1	131,400
<b>Totals</b>		<b>12</b>	<b>2,354,540</b>

In 2013, Serbia had reported 1.2km<sup>2</sup> of confirmed mined area and 2km<sup>2</sup> of suspected mined area. However, SMAC subsequently decided to re-categorise all confirmed areas as only suspected, based on a reassessment of earlier survey results that revealed a small number of mines across a relatively large area. In line with more efficient land-release methodology, which emphasises the need for evidence to confirm areas as hazardous, in 2015 SMAC announced its intention to use an integrated approach using survey, manual demining, mine detection dogs (MDDs), and other assets to cancel suspected areas without contamination, and thereby reduce to a minimum the area confirmed as mined, which would be subject to full clearance.<sup>6</sup> However, following a change of director in the final quarter of 2015, the decision was taken to prioritise clearance over survey.<sup>7</sup>

Historically, mine contamination in Serbia can be divided into two phases. The first was 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.<sup>8</sup> Contamination also exists within Kosovo [see Mine Action Review's *Clearing the Mines* report on Kosovo for further information].

The remaining mine contamination is said to have a “severe” socio-economic impact on Bujanovac, which is Serbia’s most underdeveloped municipality. The affected areas are mainly mountainous, but are close to population centres. Mined areas are said to impede safe access to forest products, cattle, and mushroom picking, which represent primary sources of income. In addition, mined areas block access to local roads, affect the environment, increase the risk of fire, and prevent the construction of solar plants and tobacco-processing facilities. Mined areas also negatively impact regional development by impeding the flow of people, goods, and services, and Serbia believes that demining

could prevent locals moving out from the area.<sup>9</sup> There were no mine incidents in 2017, and there were no new reported mine victims between submission of Serbia’s 2013 extension request and submission of the second extension request in March 2018.<sup>10</sup>

Serbia is also contaminated with cluster munition remnants (CMR) and other explosive remnants of war (ERW), which are either the result of the 1999 bombing, remain from previous conflicts, or are the result of explosions or fire at military depots<sup>11</sup> (see Mine Action Review’s *Clearing Cluster Munition Remnants* report on Serbia for further information).

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## 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).<sup>12</sup> The NMAA is responsible for developing standard operating procedures (SOPs), and supervising the work of SMAC.<sup>13</sup>

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 suspected hazardous areas (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.<sup>14</sup> 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, the SMAC was responsible for accrediting demining operators.<sup>15</sup>

A new director of SMAC was appointed by the Serbian government in the autumn of 2015,<sup>16</sup> and as at 2018, SMAC had a total of eight staff.<sup>17</sup> SMAC reported that, in 2016, restructuring resulted in a greater proportion of operational posts more related to survey, project development, and QC.<sup>18</sup>

### Strategic Planning

The Government of Serbia adopts SMAC’s work plan, as well as the Annual Report on its work.<sup>19</sup>

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 the fear of landmines. 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.<sup>20</sup>

### Legislation and Standards

According to SMAC, survey and clearance operations in Serbia are conducted in accordance with the International Mine Action Standards (IMAS).<sup>21</sup>

National mine action standards (NMAS) were said to be in the final phase of development as at September 2015.<sup>22</sup> 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.<sup>23</sup> However, this process has been hindered due to lack of capacity,<sup>24</sup> and as at April 2018, the development of the NMAS was still “in progress”.<sup>25</sup>

Under new directorship, SMAC has reassessed its land release methodology to prioritise full clearance over technical survey of hazardous areas.<sup>26</sup> This does not correspond to international best practice, and is an inefficient use of valuable clearance assets. In February 2016, the 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, its preference is for full clearance of these areas, rather than use of technical survey to more accurately identify the boundaries of contamination.<sup>27</sup> SMAC’s position on its preferred land release methodology remained the same as at April 2018. However, SMAC is prepared 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.<sup>28</sup> Furthermore, in a positive development, SMAC’s willingness to conduct technical survey has been demonstrated in practice and SMAC prepared technical survey projects in 2017 and 2018, in a form adjusted to the context of Serbia.<sup>29</sup>

The remaining suspected mined areas do not have records and mines were planted in groups of mines, not pattern minefields. According to SMAC, incidents involving people or animals have occurred in most of these suspected areas or else mines have been accidentally detected.<sup>30</sup> 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.<sup>31</sup>

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.<sup>32</sup>

Technical survey is employed “to additionally collect information by technical means on a suspected area and in case when the data collected by non-technical survey are not sufficient for suspected areas to be declared hazardous or safe”.<sup>33</sup> The reduction of mined area through technical survey in the municipality of Bujanovac in 2017<sup>34</sup> and plans for further technical survey in 2018 demonstrate SMAC’s greater willingness to adopt more efficient land release practices.

SMAC’s primary reluctance to using technical survey as a next step to further delineate confirmed mined area is its lack of confidence that such survey can effectively identify groups of unrecorded mines, but planted in specific patterns.<sup>35</sup> Most of the remaining suspected mined areas in Serbia are mountainous with challenging terrain and thick vegetation. The fact that these areas have not been accessed since the end of the conflict (2001), due to suspicion of mines, means that the land is unmanaged, making it even less accessible. SMAC deems that most of the suspected mined areas are therefore not appropriate for the use of MDDs or machinery.<sup>36</sup>

## Quality Management

SMAC and its partner organisations undertake quality assurance (QA) and QC of clearance operations in mine- and ERW-affected areas.<sup>37</sup> Previously, on every clearance project, SMAC QC and QA officers were said to sample between 5% and 11% of the total project area, depending on project complexity and size.<sup>38</sup> However, due to limited SMAC quality management capacity, as at April 2018, the total project area to be sampled by SMAC had been reduced to 3%.<sup>39</sup>

## LAND RELEASE

In 2017, 275,800m<sup>2</sup> was released by technical survey, during which three anti-personnel mines and one other item of UXO were found and destroyed. No mined area was released through full clearance. This represents an increase in output compared to 2016, when no mined area was released through technical survey or clearance.<sup>48</sup>

## Information Management

SMAC does not use the Information Management System for Mine Action (IMSMA) at present, but had been discussing for some time the possibility of the system’s future installation with the Geneva International Centre for Humanitarian Demining (GICHD).<sup>40</sup> There had been no further developments as at April 2018.<sup>41</sup>

## Operators

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 ITF Enhancing Human Security (ITF), through international donors.<sup>42</sup>

The Ministry of Interior issues accreditation valid for a period of one year. In 2018, 14 companies/organisations were accredited for demining: seven from Serbia, four from Bosnia and Herzegovina, two from Croatia, and one from Russia.<sup>43</sup>

In 2017, 26 deminers were deployed for the execution of one technical survey project which was completed. No machinery or mine detection dogs were deployed as the terrain was unsuitable.<sup>44</sup> Non-technical survey in Serbia is conducted by SMAC staff.<sup>45</sup>

The Serbian Armed Forces maintain a capability to survey, search for, detect, clear and destroy landmines. This capability includes many types of detection equipment, mechanical clearance assets, disposal experts, and specialist search and clearance teams.<sup>46</sup> An explosive ordnance disposal (EOD) department within the Sector for Emergency Management, in the Ministry of Interior, responds to call-outs for individual items of ERW discovered, and is also responsible for the demolition of items found by SMAC.<sup>47</sup>

## Survey in 2017

In 2017, a total of 275,800m<sup>2</sup> was released through manual technical survey in the village of Breznica, Bujanovac municipality, during which three anti-personnel mines and one item of UXO were found and destroyed.<sup>49</sup> The technical survey was undertaken by Saturnia d.o.o. Belgrade, with funding from the Serbian national budget matched by funding from United States Department of State, through ITF.<sup>50</sup>

SMAC reported that during the elaboration of technical survey and clearance projects in 2017, it used data obtained by an unmanned aerial vehicle.<sup>51</sup>

## Clearance in 2017

No mine clearance was conducted in 2017, due to lack of available funding.<sup>52</sup>

SMAC did not know whether any anti-personnel mines were destroyed in 2017 by the EOD department of the Sector for Emergency Management.<sup>53</sup>

## Progress in 2018

A second technical survey project totalling 113,600m<sup>2</sup>, in Ravno Bučje village, for which funding had been secured, was in progress as at the beginning of 2018. Further technical survey of two areas in Djordjevac village, totalling 535,300m<sup>2</sup> was planned for 2018, but as at April 2018, only national funding was available and no international funding had been secured for these tasks.<sup>54</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2013), 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 2019. Serbia will not meet this deadline. In March 2018, Serbia submitted a second extension request, seeking a further four-year extension to its Article 5 deadline, through to 1 March 2023.

As late as May 2012, Serbia had hoped to meet its original Article 5 deadline,<sup>55</sup> but in March 2013 it applied for a five-year extension. In granting the request, the Thirteenth Meeting of States Parties noted that “implementation could proceed much faster if Serbia was able to cover part of demining costs and thereby become more attractive for external funding.” The states parties further noted that the plan presented by Serbia was “workable, but it lacks ambition, particularly given the small amount of mined area in question”.<sup>56</sup>

Furthermore, Serbia’s claim to continued jurisdiction over Kosovo entails legal responsibility for remaining mined areas under Article 5 of the APMBC. 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.

Serbia reported that it faced several challenges in complying with its Article 5 obligations, foremost of which was the unpredictability of securing financial resources and diminished donor funding through the years, in addition to a preference of donors to fund CMR and UXO clearance. In addition, 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 efforts. Furthermore, climatic conditions prevent access to some mined areas for parts of the year and Serbia deems that most of the suspected area is not appropriate for the use of MDDs or machinery. Lastly, Serbia also highlighted challenges posed by contamination from CMR and other UXO, which also block access to significant resources and hinder development and infrastructural projects.<sup>57</sup>

In the last five years Serbia has cleared less than one square kilometre of mined area (see Table 2).

Table 2: Mine clearance in 2013–17

Year	Area cleared (km <sup>2</sup> )
2017	*0
2016	0
2015	0.41
2014	0.27
2013	0
<b>Total</b>	<b>0.68</b>

\*0.28km<sup>2</sup> was reduced by technical survey, during which three anti-personnel mines were destroyed.

Serbia has fallen well behind the clearance plan it set out in its 2013 Article 5 deadline extension request, which envisaged clearance of 489,276m<sup>2</sup> in 2013; 572,116m<sup>2</sup> in 2014; 414,668m<sup>2</sup> in 2015; 256,185m<sup>2</sup> in 2016; 247,000m<sup>2</sup> in 2017; 160,000m<sup>2</sup> in 2018; and 138,000m<sup>2</sup> in 2019.<sup>58</sup> Serbia subsequently adjusted its work plan in 2015, 2016, and 2017, but fell behind on land release output for each of the updated plans.<sup>59</sup>

In the draft of its latest APMBC Article 5 deadline extension request, submitted on 14 March 2018, Serbia includes a work plan for the completion of demining during the period 2018–23.<sup>60</sup> If the funds for demining operations are available, Serbia intends to use non-technical survey, technical survey, manual clearance, mechanical demining (where applicable), and MDDs (where applicable) to complete clearance in Serbia before the 2023 deadline.<sup>61</sup>

Progress is, however, contingent on funding and Serbia has stated that if it cannot secure international funding for demining, its work plan will be directly affected. On the other hand, if more funds are provided, Serbia maintains it could implement its work plan in a shorter period. As at March 2018, Serbia had not secured funding from international donors for the requested extension period.<sup>62</sup> Serbia has calculated that it

requires an estimated EUR€2.5 million to complete the release of all remaining mined areas, of which EUR€900,000 is planned to come from national budget and around EUR€1.6 million from ITF and other sources of international funding.<sup>63</sup> In addition to approaching potential donors, SMAC will continue to raise awareness of the funding problem and seek funding from state authorities, public enterprises, and local authorities.<sup>64</sup>

SMAC is funded by Serbia, including staff costs and running costs, as well as survey activities, development of project tasks for demining/clearance of areas contaminated by mines, submunitions and other UXO, follow-up on implementation of project tasks, and QA and QC of demining. Around €150,000 per year is allocated to the work of SMAC from the national state budget.<sup>65</sup> In addition, the UXO disposal work of the Sector for Emergency Situations of the Ministry of Interior is also state funded.<sup>66</sup>

Since 2015, Serbia also began allocating national funds for survey and clearance, with roughly €100,000 allocated per year, for 2015, 2016, and 2017. This was in response to the decision of the States Parties in granting the 2013 extension request that Serbia should cover part of the demining cost and that demonstrating national ownership in such a manner could help facilitate

cooperation and assistance efforts. In 2018, the Serbian government allocated double the amount of funds for demining operations (i.e. EUR€200,000), and Serbia expected to continue to allocate the same level of funds for release of land contaminated by mines, CMR, and other UXO, throughout the period of the latest extension request, totalling EUR€900,000 in national funding.<sup>67</sup>

In 2017, the US State Department donated US\$283,330 to demining in Serbia,<sup>68</sup> but as at March 2018 no additional international funding had been secured.

- 1 Second APMBC Article 5 deadline Extension Request, received 14 March 2018, pp. 7, 8, 23 and 24 (hereafter, 2018 Article 5 deadline Extension Request); Article 7 Report (for 2017), Form C; and email from Slađana Košutić, Planning and International Cooperation Advisor, SMAC, 12 April 2018.
- 2 Email from Slađana Košutić, SMAC, 6 April 2017; and APMBC Article 7 Report (for 2016), Form D.
- 3 Article 7 Report (for 2017), Annex III; and email from Slađana Košutić, SMAC, 12 April 2018.
- 4 Interview with Jovica Simonović, Director, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request, p. 7.
- 5 2018 Article 5 deadline Extension Request, pp. 7, 8, 23, and 24; Article 7 Report (for 2017), Form C; and email from Slađana Košutić, SMAC, 12 April 2018.
- 6 Email from Branislav Jovanović, then Director, SMAC, 23 March 2015; Article 7 Report (for 2014), Form C; Statements of Serbia, 14th Meeting of States Parties, Geneva, 1 December 2015, and 15th Meeting of States Parties, Santiago, 29 November 2016; and Article 7 Report (for 2016), Form D.
- 7 Interview with Jovica Simonović, SMAC, in Geneva, 18 February 2016.
- 8 Article 5 deadline Extension Request, March 2013, p. 5; and Article 7 Report (for 2014), Form C.
- 9 2018 Article 5 deadline Extension Request, pp. 7, 11, 25 and 27; and email from Slađana Košutić, SMAC, 12 April 2018.
- 10 2018 Article 5 deadline Extension Request, p. 23.
- 11 *Ibid.*, p. 7.
- 12 Official Gazette of the Republic of Serbia, No. 70/13.
- 13 Emails from Darvin Lisica, then NPA Regional Programme Manager, 6 May and 12 June 2016; and 2018 Article 5 deadline Extension Request, p. 17.
- 14 "Law of Alterations and Supplementations of the Law of Ministries", Official Gazette, 84/04, August 2004; and 2018 Article 5 deadline Extension Request, p. 17.
- 15 2018 Article 5 deadline Extension Request, p. 17.
- 16 Interview with Jovica Simonović, SMAC, in Geneva, 18 February 2016.
- 17 2018 Article 5 deadline Extension Request, p. 16.
- 18 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request, p. 17.
- 19 2018 Article 5 deadline Extension Request, p. 16.
- 20 *Ibid.*, p. 30; and email from Slađana Košutić, SMAC, 12 April 2018.
- 21 2018 Article 5 deadline Extension Request, p. 19.
- 22 Interview with Branislav Jovanović, SMAC, in Dubrovnik, 10 September 2015.
- 23 Email from Slađana Košutić, SMAC, 6 April 2017.
- 24 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017.
- 25 Email from Slađana Košutić, SMAC, 12 April 2018; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.
- 26 Interview with Jovica Simonović, SMAC, in Geneva, 18 February 2016.
- 27 *Ibid.*
- 28 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; email from Slađana Košutić, SMAC, 12 April 2018; and 2018 Article 5 deadline Extension Request, p. 30.
- 29 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018; and Article 7 Report (for 2017), Form C.
- 30 Article 7 Report (for 2017), Form C.
- 31 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017.
- 32 *Ibid.*; and Article 7 Report (for 2017), Form C.
- 33 Article 7 Report (for 2017), Form C.
- 34 Email from Slađana Košutić, SMAC, 12 April 2018.
- 35 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.
- 36 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request, pp. 25 and 30; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.
- 37 Email from Branislav Jovanović, SMAC, 4 May 2015.
- 38 *Ibid.*
- 39 Email from Slađana Košutić, SMAC, 12 April 2018.
- 40 Email from Branislav Jovanović, SMAC, 4 May 2015.
- 41 Email from Slađana Košutić, SMAC, 12 April 2018.
- 42 2018 Article 5 deadline Extension Request, p. 18.
- 43 *Ibid.*, p. 17.
- 44 Email from Slađana Košutić, SMAC, 12 April 2018.
- 45 Email from Slađana Košutić, SMAC, 6 April 2017.
- 46 Article 7 Report (for 2017), Form J.
- 47 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017.
- 48 Email from Slađana Košutić, SMAC, 6 April 2017; and Article 7 Report (for 2016), Form D.
- 49 2018 Article 5 deadline Extension Request, pp. 6 and 12; and email from Slađana Košutić, SMAC, 12 April 2018.
- 50 Email from Slađana Košutić, SMAC, 12 April 2018.
- 51 *Ibid.*
- 52 *Ibid.*
- 53 *Ibid.*
- 54 *Ibid.*
- 55 Statement of Serbia, Standing Committee on Mine Action, Geneva, 23 May 2012.
- 56 Analysis of Serbia's Article 5 deadline Extension Request, submitted by the President of the 12th Meeting of States Parties on behalf of the States Parties mandated to analyse request for extensions, 2 December 2013.
- 57 2018 Article 5 deadline Extension Request, pp. 6, 7, 25, and 27; Article 7 Report (for 2017), Form C; and email from Slađana Košutić, SMAC, 12 April 2018.
- 58 Article 5 deadline Extension Request, March 2013, p. 26.
- 59 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, and provided to Mine Action Review by the ISU upon request; email from Slađana Košutić, SMAC, 6 April 2017; and Article 7 Report (for 2016), Form D.
- 60 2018 Article 5 deadline Extension Request, pp. 8, 9, 31, and 32.
- 61 *Ibid.*, pp. 28; 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018; and Article 7 Report (for 2017), Form C.
- 62 2018 Article 5 deadline Extension Request, pp. 9 and 27.
- 63 *Ibid.*, pp. 9 and 34.
- 64 *Ibid.*, p. 34.
- 65 *Ibid.*, pp. 9 and 16.
- 66 "Mine situation", SMAC, accessed 5 May 2018, at: <http://www.czrs.gov.rs/eng/minska-situacija.php>.
- 67 Email from Slađana Košutić, SMAC, 6 April 2017; interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request, pp. 9, 15, and 34.
- 68 Email from Slađana Košutić, SMAC, 12 April 2018.

# SOMALIA

**ARTICLE 5 DEADLINE: 1 OCTOBER 2022**  
(NOT ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE	2017	2016
Problem understood	7	6
Target date for completion of mine clearance	4	4
Targeted clearance	3	3
Efficient clearance	5	5
National funding of programme	1	1
Timely clearance	4	4
Land-release system in place	6	6
National mine action standards	5	5
Reporting on progress	6	5
Improving performance	7	6
<b>PERFORMANCE SCORE: POOR</b>	<b>4.8</b>	<b>4.5</b>

## PERFORMANCE COMMENTARY

In 2017, mine action management in Somalia continued to be divided into two geographical regions: in the five federal states of south-central Somalia under the Somali Explosives Management Agency (SEMA), and in the self-declared region of Somaliland under the Somaliland Mine Action Centre (SMAC).

For the first time, in 2017, survey and risk education teams were able to be deployed in all five of south-central Somalia's federal states, by Norwegian People's Aid (NPA), in partnership with national mine action organisations. The HALO Trust was able to deploy survey and clearance teams in south-central Somalia despite persistently high levels of insecurity. In Somaliland, NPA joined The HALO Trust in implementing mine clearance and survey operations in 2017, increasing capacity and progress to identify and address contaminated areas.

Considerable further efforts are, however, needed to establish a baseline of anti-personnel mine contamination across Somalia. There is also a need for

much greater support for SEMA to enable it to assume an effective leadership role over mine action. Operators would welcome a greater focus on the implementation of mine action operations.

A concrete step forward, however, occurred at the end of 2017 with the elaboration of a new national mine action strategic plan for 2017–20. In addition, after many years of significant challenges, including difficult working relations with the authorities in the mine action sector, operators reported an improvement during the year, including better coordination between SEMA, its regional offices, and operators.

In July 2018, SEMA submitted its first ever Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report for calendar year 2017, reflecting improvements in its information management and reporting capacity and greater transparency and efforts to engage with the APMBC community.

## RECOMMENDATIONS FOR ACTION

- Somalia should establish a national baseline of anti-personnel mine contamination as soon as security conditions allow.
- Greater priority needs to be accorded to demining by Somalia, including for survey. Somalia should ensure timely survey and clearance of anti-personnel mines in accordance with its APMBC obligations.
- The Federal Government of Somalia (FGS) should intensify efforts to improve security conditions in areas contaminated with mines and explosive remnants of war (ERW) to allow for the safe deployment of mine action teams.
- Somalia should commit more resources for SEMA and mine action operations.
- SEMA should be supported to secure parliamentary approval for its legislative framework and to gain recognition as a salaried civil service government entity.
- SEMA should clarify its structure, organigram, and staffing and ensure greater cohesion between its five federal state offices and state-level consortiums.
- SEMA should ensure a greater focus on output, with less time tied up in coordination and liaison between stakeholders. Bureaucratic blockages should be lifted and permissions and authorisation to carry out mine action activities facilitated.
- Continued efforts should be undertaken to support SEMA to manage the Information Management System for Mine Action (IMSMA) database, with the provision of additional training and resources for its management. Data on mine action should be reported and recorded according to International Mine Action Standards (IMAS) terminology.
- The FGS and Somali Minister of Internal Security should formally endorse Somalia's new National Mine Action Strategic Plan 2017–2020.
- Somalia's National Technical Standards and Guidelines (NTSGs) should be reviewed and revised to ensure their relevance for the Somali-specific country context and present best practices for tackling the nature of the mine and ERW threat in Somalia.
- Somalia should develop a resource mobilisation strategy and initiate dialogue with development partners on long-term support for mine action.

## CONTAMINATION

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 United Nations (UN), anti-personnel and anti-vehicle mines were laid as recently as 2012 in the disputed regions of Sool and Sanaag.<sup>1</sup>

Contamination from mines and ERW exists across Somalia's three major regions: south-central Somalia, including the capital Mogadishu; Puntland; and Somaliland, a self-proclaimed, though unrecognised, state that operates autonomously in the north-west. Landmines along the border with Ethiopia, mainly as a result of legacy minefields, also continued to affect civilians in south-central Somalia.<sup>2</sup>

As at mid-2018, no recent national baseline of mine and ERW contamination had been established, primarily due to a lack of national capacity and a lack of access to many al-Shabaab-controlled territories.<sup>3</sup> In a significant achievement in 2017, survey teams were for the first time to be deployed within all states of Somalia, adding to a better understanding of overall contamination. However,

operators reported that the number of survey teams was limited and their movements at times hindered by insecurity. As such, state-wide surveys were expected to continue in 2018–19, provided funding can be secured.<sup>4</sup>

In July 2018, SEMA reported that it was reclassifying contamination according to a new country structure in its national IMSMA database, consisting of the following seven states: Banaadir, Hirshabelle, Galmudug, Jubaland, Puntland, South West, and Somaliland. It noted that data had yet to be incorporated from Somaliland, along with additional missing information from Banaadir, Jubaland, and Puntland states, but as at December 2017, it reported that a total of 107 confirmed hazardous areas (CHAs) containing mine contamination and 5 suspected hazardous areas (SHAs) had been recorded in the national database.<sup>5</sup>

According to Somalia's Article 7 report for 2017, at the end of the year, a total of 352 areas containing a mix of explosive hazards with a total size of nearly 18.6km<sup>2</sup> had been registered in the IMSMA database.<sup>6</sup> Of these, the following was reported in relation to areas suspected or confirmed to contain mines:

**Table 1: Mine/ERW contamination (at December 2017)<sup>7</sup>**

State	Type of contamination	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Galmudug	AP/AV	6	7,025,941	0	0
	AP/AV/CMR/ERW	1	784,352	0	0
	AP/AV/ERW	1	443,903	0	0
	AV	18	1,456,278	1	40,643
	AV/ERW	1	0	0	0
Hirshabelle	AP	1	240,835	0	0
	AP/AV	2	141,087	0	0
	AV	53	6,663,754	4	124,447
South West	AP/AV	7	2,234,264	0	0
	AV	17	2,106,734	0	0
<b>Totals</b>		<b>107</b>	<b>21,097,148</b>	<b>5</b>	<b>165,090</b>

AP = Anti-personnel AV = Anti-vehicle CMR = Cluster munition remnant

While no comprehensive estimates yet exist of mine and ERW 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.<sup>8</sup> Other contaminated areas lie along the border with Ethiopia, in Galguduud, Gedo, and Hiraan regions.<sup>9</sup> Non-technical survey initiated in 2015 identified more than 6km<sup>2</sup> of mined area and found that 74 of 191 communities were impacted by mines and ERW, of which 13 reported an anti-personnel mine threat.<sup>10</sup>

In mid-2018, The HALO Trust reported that there were 19 mined areas containing a mix of anti-personnel and anti-vehicle mine contamination with a size of just over 6.8km<sup>2</sup> remaining to be addressed in south-central Somalia.<sup>11</sup> In Somaliland, The HALO Trust reported that as at May 2018, a total of 16 mixed anti-personnel and anti-vehicle minefields remained to be cleared with a size of just over 8km<sup>2</sup>, the majority of which are barrier minefields or military base perimeter minefields.<sup>12</sup>

In the Puntland state administration, mine and ERW 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.<sup>13</sup> The LIS was conducted from February to April 2005 and identified 35 communities affected by a total of 47 SHAs. The LIS estimated that about 151,000 people – around 6% of the population of some 2.5 million – live in mine-affected communities.<sup>14</sup>

Insecure and poorly managed stockpiles of weapons and ammunition, as well as use of improvised explosive devices (IEDs) and mines of an improvised nature by non-state armed groups, have a serious humanitarian impact. The extent of the threat is not well known, except in Puntland and Somaliland where a range of surveys have been carried out over the past decade.<sup>15</sup>

In 2018, the United Nations Mine Action Service (UNMAS) reported that mine and ERW contamination in Somalia

continued to restrict community access to basic services and economic opportunities and remained an impediment to stability, security, and ultimately, recovery and development.<sup>16</sup> The HALO Trust reported that threats of minefields constrained pastoral herders from moving their flocks freely and accessing important water sources, which in a harsh desert climate plagued by famine and drought, are essential for community survival.<sup>17</sup>

According to The HALO Trust, in Somaliland anti-personnel mines continued to present an ongoing threat to life among the primarily pastoralist populations, which rely heavily on agriculture and land for livestock grazing. These groups are constantly moving across Somaliland, putting herders and animals at higher risk from the threat of mines and ERW, it said.<sup>18</sup>

According to data from SEMA, a total of 13 victims of anti-personnel mines were recorded in three accidents in Somalia in 2017.<sup>19</sup>

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## PROGRAMME MANAGEMENT

Mine action management in Somalia is divided into two geographical regions: south-central Somalia and Somaliland. The respective centres responsible for mine action in each of these areas are SEMA and SMAC.<sup>20</sup> SEMA maintains a presence across Somalia through its five federal state members: the SEMA Puntland State Office, SEMA Galmudug State Office, SEMA Hirshabelle State Office, SEMA South West State Office, and SEMA Jubaland Office.<sup>21</sup> Under each of the five members is an independent consortium of national non-governmental organisations (NGOs), which implement mine action activities.

SEMA was established in 2013 as the mine action centre for southern Somalia, replacing the Somalia National Mine Action Authority (SNMAA) created two years earlier.<sup>22</sup> SEMA's goal was to assume full responsibility for all explosive hazard coordination, regulation, and management by December 2015.<sup>23</sup> However, SEMA's legislative framework was not approved by the Federal Parliament in 2016 as expected, and was further stalled by elections held in February 2017 which resulted in a period of government paralysis.<sup>24</sup> Due to this lack of parliamentary approval, SEMA has not received funding from the FGS or UNMAS since the expiry of its grant in 2015.<sup>25</sup> In 2017, SEMA reported that it was working hard and lobbying to get legislation passed in Parliament and confirmed that once approved, SEMA will have a dedicated budget line included in the annual FGS budget.<sup>26</sup>

The SEMA Puntland State Office, formerly known as PMAC, was established in Garowe with UN Development Programme (UNDP) support in 1999. Since then, on behalf of the regional government, the SEMA Puntland State Office has coordinated mine action with local and international partners, including Danish Demining

Group (DDG) and Mines Advisory Group (MAG).<sup>27</sup> It runs the only police explosive ordnance disposal, (EOD) team in Puntland, which is responsible for collecting and destroying explosive ordnance. In 2015, it requested assistance to increase its capacity and deploy three EOD teams in Bosaso, Galkayo, and Garowe.<sup>28</sup>

### Somaliland

In 1997, UNDP assisted the Somaliland authorities to establish SMAC, which is responsible for coordinating and managing demining in Somaliland.<sup>29</sup> Officially, SMAC is under the authority of the Vice-President of Somaliland, who heads the interministerial Mine Action Steering Committee.<sup>30</sup>

### Strategic Planning

In late 2017, a National Mine Action Strategic Plan for 2017–2020 was developed with input from SEMA, UNMAS, international operators, national NGO consortia, and international institutions. The process was supported by NPA with funding from the United Kingdom Department for International Development (DFID).<sup>31</sup> As at September 2018, the draft strategic plan was awaiting endorsement from Somali Minister of Internal Security.<sup>32</sup>

The plan focuses on setting achievable goals over the next three-year period, taking into account the challenges faced by the Somali national mine action programme. Five strategic goals are elaborated, along with corresponding strategic objectives and action plans. The critical need to improve information management is highlighted as underpinning many of the challenges the programme faces at every level. According to SEMA, the strategy will be reviewed every six months.<sup>33</sup>

The strategy notes Somalia's status as a state party to the APMBC and its reporting obligations and commits to complying with the Convention. The strategy's five strategic goals, identified by SEMA, are as follows:

- To enhance the capacity and capability of SEMA to lead, direct, and enable effective and efficient mine action and explosives management in Somalia
- To develop the Somali mine action consortia into a wholly national capacity delivering appropriate mine action support to all member states, safely, efficiently and in accordance with national and international standards, expectations and requirements
- To engage with stakeholders in order to understand, and better respond to, their needs and expectations in relation to the impact of mine/ERW contamination in Somalia
- To reduce the risks faced by the people of Somalia to a level that allows them to go about their lives free from the impacts of mines and ERW
- To comply, as much as practicable, with the obligations of those treaties to which Somalia is a signatory and which are relevant to the mine and explosives management programme.

In 2017, the recently elected Somali Government approved the Somalia National Development Plan 2017–2019, outlining priorities for recovery and development. Mine and ERW contamination is recognised as a hindrance to socio-economic development and a security concern for sustainable development initiatives, and identifies mine and ERW clearance as a crucial part of stabilisation efforts in the national development process.<sup>34</sup>

In 2015, Somalia's Ministry of Internal Security and SEMA developed a national strategy document, the "Badbaado Plan for Multi-Year Explosive Hazard Management", in coordination with federal state members, the UN Assistance Mission in Somalia (UNSO), and UNMAS. An updated second "phase" of the five-year plan for the implementation of Somalia's Article 5 obligations was officially launched in Geneva in February 2018. The new National Mine Action Strategic Plan notes that the Badbaado plan "remains extant and identifies a range of locations and tasks consistent with the goals and objectives" of the strategic plan.<sup>35</sup>

Somaliland's latest strategic mine action plan expired in 2014. In May 2018, The HALO Trust reported that it was working with SMAC and other stakeholders to develop a strategy with the hope of completion and first implementation in 2019.<sup>36</sup>

## Legislation and Standards

There is no national mine action legislation in Somalia. UNMAS developed NTSGs for Somalia in 2012–13.<sup>37</sup> The NTSGs are also not specific to the Somali context, and in 2017, there were calls for the NTSGs to be reviewed and revised to ensure they represent best practices for tackling the particular mine and ERW threat in Somalia.<sup>38</sup> No revisions occurred in 2017, but in September 2018, it was reported that SEMA was in the process of revising the NTSGs with the aim of new, fully nationally-owned standards to be finalised by early 2019.<sup>39</sup>

Mine action standards remained in place in Somaliland and no changes were reported in 2017.<sup>40</sup>

## Quality Management

Operators reported that no external quality assurance/quality control (QA/QC) was carried out in 2017 due to limited capacity and resources for SEMA. Internal QA/QC procedures were said to be carried out by operators on a daily basis.<sup>41</sup> In June 2017, SEMA confirmed that clearance projects had been initiated without a strong QA/QC process in place and called for further capacity building of SEMA before the awarding of contracts.<sup>42</sup>

The HALO Trust reported that in Somaliland, SMAC continued to conduct formal handovers of completed areas in 2017 with support from HALO. A large backlog of cleared areas awaiting formal handover remained, however.<sup>43</sup>

## Information Management

In 2017, ownership of the national IMSMA database was fully transferred from UNMAS to SEMA, with support and capacity building from NPA.<sup>44</sup> SEMA reported that it assumed full ownership of the IMSMA database on 2 October 2017 and that a process to update the information in the database according to a new country structure consisting of seven states (Banaadir, Hirshabelle, Galmudug, Jubaland, Puntland, South West, and Somaliland), and four levels (federal state, province, district, and village) was underway, along with a process to verify historical UNMAS data. SEMA noted that data from Somaliland had yet to be integrated into the database, but said that it had initiated a coordination process and communications were continuing to ensure that data is shared and available for Somalia's next transparency report.<sup>45</sup> Data from Banaadir, Jubaland, and Puntland states was also lacking, it reported.<sup>46</sup> NPA stated that reporting forms were standardised throughout the mine action sector during the year, ensuring that all operators were using the same reporting forms.<sup>47</sup>

Somalia's National Mine Action Strategic Plan for 2017–2020 places considerable emphasis on remedying shortcomings in information management. It also sets objectives for SEMA to build on improvements in information management to enable a focus on improving its prioritisation of tasks based on better knowledge of humanitarian needs of affected communities, operational capacities, and the changing needs of internally displaced persons.<sup>48</sup> According to the Plan, a specific national mine action standard on information management will be developed.<sup>49</sup>

In Somaliland, The HALO Trust reported continuing regular checks of its information management system to ensure accuracy of reporting and stated that it transfers all data to SMAC, which then inputs it into its IMSMA database.<sup>50</sup>

## Operators

DDG began operations in the country in 1999 with mine and ERW clearance in Somaliland and has since undertaken programmes in Mogadishu, Puntland, and Somaliland.<sup>51</sup> In 2017, it focused operations on EOD and risk education in Sool and Gurieel regions of Somaliland and south-central Somalia. By the end of 2017, DDG was deploying a single four-strong EOD team and nine two-person risk education teams.<sup>52</sup>

While HALO Trust's mine clearance programme in Somaliland has been ongoing since 1999, the organisation opened a new programme in south-central Somalia in the first half of 2015. Operations continued in south-central Somalia in 2017.<sup>53</sup> The HALO Trust reported employing an average of approximately 175 staff, but in the last quarter of 2017 it had to scale back four manual mine clearance teams as a result of a local security issue.<sup>54</sup>

In Somaliland, The HALO Trust employed 424 demining and operational personnel and deployed three mechanical assets.<sup>55</sup> It focused on the survey and re-survey of former military camp minefields along the Ethiopian border.<sup>56</sup>

In 2017, NPA decided to expand its operations. In February, training of one manual clearance team and two survey teams was finalised and NPA began survey and clearance in Togdheer and Sool, in the disputed areas between Puntland and Somaliland. The two survey teams were merged to form a demining team at the end of 2017, making a total of two demining teams with 12 deminers.<sup>57</sup>

In May, NPA began training five survey teams to be deployed across all five states in south-central Somalia. Each team consisted of two NPA deminers and three additional members from local consortia NGOs. The survey teams, which also carried out risk education activities, became operational in September, making it the first time that mine action survey teams were deployed in all states in Somalia.<sup>58</sup> In 2017, under a DFID-funded partnership project, NPA continued to provide capacity development for SEMA on managing the IMSMA database, conducting non-technical and technical survey, and trainings for SEMA management staff.<sup>59</sup>

UNMAS contracted Ukroboronservice to carry out mine action activities in 2017 with a capacity of four eight-person multi-task teams to conduct ERW clearance, 56 community liaison officers to deliver risk education and liaison activities, and two 18-person manual demining teams. Operations began in December 2017.<sup>60</sup>

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## LAND RELEASE

Just over 0.93km<sup>2</sup> of land was released in total in Somalia and Somaliland in 2017, including just under 0.9km<sup>2</sup> through mine clearance and close to 0.04km<sup>2</sup> reduced by technical survey. Planned operations resulted in the destruction of 91 anti-personnel mines, 9 anti-vehicle mines, and 56 items of UXO. A further 2.4km<sup>2</sup> of mined area was confirmed as containing anti-personnel mines across Somalia and Somaliland during the year.<sup>61</sup>

This compared to 2016, when just over 1.2km<sup>2</sup> of land was released in total in Somalia and Somaliland, including less than 0.04km<sup>2</sup> through mine clearance in Somalia, and close to 1.2km<sup>2</sup> of mined area through survey and clearance in Somaliland. No anti-personnel mines were cleared in Somalia in 2016, though 5.3km<sup>2</sup> was confirmed as mined through survey.<sup>62</sup>

### Survey in 2017

As stated, no comprehensive overview of SHAs exists in Somalia, and as at the end of 2017, no nationwide survey had been conducted, mainly due to the security situation.<sup>63</sup> To this end, however, operators The HALO Trust and NPA reported confirming a total of 104 areas with a size of over 2.4km<sup>2</sup> in south-central Somalia and Somaliland.<sup>64</sup>

The HALO Trust confirmed three areas with a total size of just under 0.9km<sup>2</sup>, two in Galmudug state (total 765,760m<sup>2</sup>) and one in Hirshabelle state (120,830m<sup>2</sup>) in south-central Somalia in 2017.<sup>65</sup> In Somaliland, in 2017, HALO Trust confirmed nearly 0.7km<sup>2</sup> of mine contamination: just over 146,000m<sup>2</sup> in Awdal region, 175,000m<sup>2</sup> in Woqooyi Galbeed region, and 343,800m<sup>2</sup> in Togdheer region.<sup>66</sup>

NPA, which began mine action operations in south-central Somalia in March 2017, confirmed a total of 41 areas with a total size of nearly 418,500m<sup>2</sup> in south-central Somalia, along with a further 57 areas with a size of over 471,000m<sup>2</sup> in Somaliland. It additionally cancelled just under 1,300m<sup>2</sup> of mine contamination in Somaliland through non-technical survey and reduced close to 42,000m<sup>2</sup> during the year.<sup>67</sup>

Table 2: Mined area survey in 2017<sup>68</sup>

Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )	Areas confirmed	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
NPA (Somaliland)	0	1,268	57	471,059	41,984
NPA (Puntland)	0	0	23	294,759	0
NPA (Galmudug)	0	0	14	113,752	0
NPA (Hirshabelle)	0	0	0	0	0
NPA (Jubaland)	0	0	4	10,000	0
NPA (South West)	0	0	0	0	0
HALO (Galmudug)	0	0	2	765,761	0
HALO (Hirshabelle)	0	0	1	120,834	0
HALO (Somaliland)	0	0	3	664,826	0
<b>Totals</b>	<b>0</b>	<b>1,268</b>	<b>104</b>	<b>2,440,991</b>	<b>41,984</b>

TS = Technical survey

## Clearance in 2017

In 2017, The HALO Trust reported clearing two areas in south-central Somalia with a total size of just over 76,660m<sup>2</sup> with the destruction of four anti-personnel mines, two anti-vehicle mines, and thirteen items of UXO. Additionally, 35 anti-personnel mines were destroyed in EOD spot tasks in south-central Somalia during the year.<sup>69</sup> This compared to 2016, when HALO Trust initiated clearance activities in south-central Somalia in the last quarter of the year, and reported clearing three mined areas covering just over 40,000m<sup>2</sup>: one in Hirshabelle state with a size of 5,169m<sup>2</sup> and two in Galmudug state covering 34,860m<sup>2</sup>, however no mines or UXO were found.<sup>70</sup>

In Somaliland, in 2017, HALO Trust reported clearing eight areas containing anti-personnel mines with a total of size of just over 0.75km<sup>2</sup>, with the destruction of 87 anti-personnel mines, 7 anti-vehicle mines, and 43

items of UXO. This included 80,860m<sup>2</sup> in Awdal region, 243,630m<sup>2</sup> in Woqooyi Galbeed region, and 426,500m<sup>2</sup> in Togdheer region. An additional 17 anti-personnel mines were destroyed in EOD call-outs.<sup>71</sup> This compared with 2016, when HALO Trust reported clearing 12 areas containing anti-personnel mines with a size of just over 1.1km<sup>2</sup> in Somaliland.<sup>72</sup>

As noted above, NPA began demining in south-central Somalia in March 2017.<sup>73</sup> It did not, however, undertake any mine clearance there as operations focused on survey.<sup>74</sup> Previously, during 2016, it operated three battle area clearance (BAC) teams for surface ERW clearance in Mogadishu and its outskirts in south-central Somalia.<sup>75</sup> In May 2017, NPA began operations in the northern disputed territories of Sool and Sanaag.<sup>76</sup> It reported clearing two areas with a total size of just over 61,000m<sup>2</sup> in 2017; however no mines or UXO were found or destroyed.<sup>77</sup>

Table 3: Mine clearance in 2017<sup>78</sup>

Operator	Region	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
HALO	Hirshabelle	2	76,661	4	2	13
HALO	Somaliland	8	750,986	87	7	43
NPA	Somaliland	2	61,021	0	0	0
<b>Totals</b>		<b>12</b>	<b>888,668</b>	<b>91</b>	<b>9</b>	<b>56</b>

AP = Anti-personnel AV = Anti-vehicle

## Deminer Safety

In August 2017, three HALO Trust staff members from its community outreach team (COT) were abducted by Al-Shabaab. The team had been conducting work near Fer-fer when al-Shabaab took control of the town. The three COT members were abducted and the team leader was shot although he survived and has since made a full recovery. After several weeks of negotiations between the families of the abducted staff and al-Shabaab, all three employees were released.<sup>79</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB, 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 is not on track to meet this deadline.

In seeking to meet its treaty deadline, Somalia must confront a number of challenges, not least of which is the security situation in much of the country. It does not effectively control mine action operations in Somaliland. In 2018, The HALO Trust and NPA stated that it was highly improbable that Somalia could meet its 2022 Article 5 deadline, primarily due to a lack of access to areas due to conflict and insecurity, an overall lack of resources for survey and clearance, and a lack of capacity of the national authority.<sup>80</sup> While the development of the new National Mine Action Strategic Plan for 2017–2020 is a significant step forward, if the current capacity of the national mine action programme is not increased, the goals of the strategy are likely overly ambitious.<sup>81</sup>

The National Mine Action Strategic Plan for 2017–2020 further elaborates the following as key challenges impeding progress in mine action and towards meeting its Article 5 deadline: strained relations between mine action stakeholders and SEMA and a lack of clarity of respective roles in the sector; pressures of operating in a volatile conflict zone, including lack of access; significant political challenges relating to complex structures of localized power-holders, along with navigating political conflict at the clan, state, and federal levels; a lack of capacity for oversight and quality management; and challenges to formalise the status of local NGO mine action consortia and to move beyond the provision of MRE to implement survey and clearance operations under this model.<sup>82</sup> Additional risks identified included donor fatigue from international donors and the FGS; poor coordination, communication, and policy setting within the programme; and poor management at the implementer level.<sup>83</sup>

SEMA did not receive any government funding for its staff salary costs or to carry out any mine action activities again in 2017.<sup>84</sup> As reported above, UNMAS stopped its funding for SEMA at the start of 2016, in the expectation that its legislative framework was due to be approved by the Federal Parliament and that funding for SEMA would be allocated from the national budget.<sup>85</sup> However, due to claims that it lacks parliamentary approval, SEMA has not received funding from the FGS.<sup>86</sup> In July 2018, SEMA reported that it was working hard and lobbying to get the necessary legislation passed in Parliament, and that once approved, SEMA will have a dedicated budget line included in the annual budget of the FGS.<sup>87</sup>

Operators continued to raise concerns in 2017 that less time should be directed at political liaison between stakeholders, and that facilitating the implementation of demining operations must be given higher priority.<sup>88</sup> Greater clarity on SEMA's role and cohesion between SEMA and its five federal state offices, as well as national consortiums, would also facilitate communication between stakeholders and more efficient implementation of mine action activities.<sup>89</sup> Notably, a strong commitment is elaborated in the 2017–2020 National Mine Action

Strategic Plan that SEMA will work to reduce the effects of barriers, obstacles, and inefficiencies for the implementation of operations, while at the same time setting out clearer expectations on how organisations should coordinate and cooperate to achieve the national programme's strategic and operational objectives.<sup>90</sup>

In 2018, NPA reported that it had increased its capacity from two to three manual demining teams and was continuing its survey capacity throughout south-central Somalia, with five teams. It was piloting a project to introduce the use of mine detection dogs (MDD) in clearance operations during the year and add an MDD team to its capacity and improving the efficiency of land release methodology.<sup>91</sup> Continuing capacity building efforts undertaken in 2017, NPA expected that the linkages between SEMA head office and its state offices were set to improve throughout 2018 with more efficient reporting on mine action activities and stronger information management capacity.<sup>92</sup>

In 2018, The HALO Trust stated its priorities were to continue steady clearance and build capacity for increasing its operations in south-central Somalia, in particular to expand its operations in Galmudug state. It reported that its operational costs had increased slightly due to an operational withdrawal from hard to reach areas along the Ethiopian border due to security concerns for wellbeing and safety of staff.<sup>93</sup>

In 2017, The HALO Trust reported that provided that if operational capacity is maintained, it hoped to complete clearance of the last known and accessible mined area in Somaliland by mid-2019, two years later than the end-2017 date it initially reported, which it said was due to the need to reduce operational capacity and the fact that new hazardous areas identified through survey requiring clearance.<sup>94</sup>

In Somaliland, in 2018, HALO Trust was continuing to prioritise manual and mechanical clearance of confirmed mined areas, along with responding to EOD call-outs and accidents and conducting survey and risk education. It emphasised the need for developing sufficient residual capacity in Somaliland for clearance and ERW disposal, in particular due to the nature of past mine-laying and the likelihood that unknown contaminated areas will be continued to be found after the clearance of all recorded CHAs. The HALO Trust reported it was continuing to work with SMAC, the Ministry of Defence, and NPA to develop a transition plan which moves operational focus away from international donors and international NGOs to a national capacity funded, led, coordinated, and implemented by the Somali state.<sup>95</sup>

- 1 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.
- 2 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", undated, pp. 6 and 12.
- 3 Email from Chris Pym, Programme Manager, HALO Trust, 14 May 2018.
- 4 Email from Claus Nielsen, Programme Manager, NPA, 22 March 2018.
- 5 Article 7 Report (for 2017), Form C.
- 6 Ibid., Form J.
- 7 Ibid.
- 8 UNMAS, "Annual Report 2011", New York, August 2012, p. 68.
- 9 Response to Monitor questionnaire from Klaus Ljøerring Pedersen, Danish Demining Group (DDG), 8 May 2012; and Article 7 Report (for 16 April 2012–30 March 2013), Form C.
- 10 Email from Tom Griffiths, Regional Director North Africa, The HALO Trust, 25 May 2016.
- 11 Email from Chris Pym, HALO Trust, 14 May 2018.
- 12 Ibid.
- 13 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.
- 14 SAC, "Landmine Impact Survey, Phase 2: Bari, Nugaal and Northern Mudug Regions", SAC, 2005, p. 5. Of the 35 communities, nine were categorised as "high impact" and nine as "medium impact", while eight sites were identified for spot-clearance tasking.
- 15 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia".
- 16 UNMAS, "2018 Portfolio of Mine Action Projects, Somalia".
- 17 Email from Chris Pym, HALO Trust, 14 May 2018.
- 18 Ibid.
- 19 Article 7 Report (for 2017), Form J.
- 20 Email from Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.
- 21 Ibid.
- 22 Interview with Mohamed Abdulkadir Ahmed, SEMA, in Geneva, 9 April 2014; and email from Kjell Ivar Breili, UNMAS, 12 July 2015.
- 23 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 24 Emails from Mohamed Abdulkadir Ahmed, SEMA, 14 June 2016; and Hilde Jørgensen, NPA, 3 May 2017.
- 25 Emails from Terje Eldøen, NPA, 22 October 2016; and Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.
- 26 Article 7 Report (for 2017), Form J.
- 27 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", p. 9.
- 28 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 29 SMAC, "Annual Report 2011", Hargeisa, January 2012, p. 2.
- 30 Ibid.
- 31 "Somalia National Mine Action Strategic Plan", Draft Version, February 2018, p. 3. SEMA previously developed a separate national mine action policy, which as at May 2017, had received one reading in the Somali Parliament but had yet to be ratified. The document only existed in Somali and no translations were available, nor had any versions been disseminated to national or international mine action operators. Operators raised concerns that the policy was drafted with little to no input from international mine action stakeholders or the international donor community. Its status as at June 2018 was unclear, however, greater attention and focus was being given to the new National Mine Action Strategic Plan. Emails from Claus Nielsen, NPA, 18 June 2018; Tom Griffiths, HALO Trust, 31 May 2017; and Hilde Jørgensen, NPA, 3 May 2017.
- 32 Emails from Claus Nielsen, NPA, 18 June and 10 September 2018.
- 33 Article 7 Report (for 2017), Form J.
- 34 Federal Government of Somalia, "Somalia National Development Plan Towards Recovery, Democracy, and Prosperity 2017–2019", p. 21, at: <http://mopic.gov.so/wp-content/uploads/2016/11/SOMALIA-NATIONAL-DEVELOPMENT-PLAN-2017-2019.pdf>.
- 35 "Somalia National Mine Action Strategic Plan", Draft Version, November 2017.
- 36 Email from Chris Pym, HALO Trust, 14 May 2018.
- 37 Email from Terje Eldøen, Programme Manager, NPA, 5 June 2016; and response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 38 Email from Tom Griffiths, HALO Trust, 19 May 2017.
- 39 Email from Claus Nielsen, NPA, 22 March and 10 September 2018.
- 40 Email from Chris Pym, HALO Trust, 14 May 2018.
- 41 Ibid.; and emails from Bill Marsden, MAG, 27 April 2018; and Claus Nielsen, NPA, 22 March 2018.
- 42 Email from Mohamed Abdulkadir Ahmed, SEMA, 1 June 2017.
- 43 Emails from Chris Pym, HALO Trust, 14 May 2018.
- 44 Email from Claus Nielsen, NPA, 22 March 2018.
- 45 Article 7 Report (for 2017), Form C.
- 46 Ibid., Form J.
- 47 Ibid.
- 48 "Somalia National Mine Action Strategic Plan", Draft Version, February 2018, p. 5.
- 49 Ibid., p.5
- 50 Email from Chris Pym, HALO Trust, 14 May 2018.
- 51 In 2007, DDG initiated a mine action programme in southern Somalia (in Mogadishu) and in Puntland. DDG's mine action programme in Somaliland ceased mine clearance in 2006. DDG, "South-Central Somalia and Puntland", undated, but accessed 30 April 2014.
- 52 Email from Roger Fasth, Global Operations Manager, DDG, 26 June 2018.
- 53 Emails from Tom Griffiths, HALO Trust, 19 May 2017; and Chris Pym, HALO Trust, 14 May 2018.
- 54 Email from Chris Pym, HALO Trust, 14 May 2018.
- 55 Ibid.
- 56 Ibid.
- 57 Emails from Claus Nielsen, NPA, 22 March and 10 September 2018.
- 58 Ibid.
- 59 Email from Anna Roughley, DfID Project Co-ordinator, NPA, 23 May 2017.
- 60 Emails from Ghirmay Kiros, UNMAS, 20 and 24 June 2018.
- 61 Emails from Tom Griffiths, HALO Trust, 19 May 2017; and Chris Pym, HALO Trust, 14 May 2018.
- 62 Emails from Tom Griffiths, HALO Trust, 19 and 31 May 2017; and Hilde Jørgensen, NPA, 3 May 2017.
- 63 UNMAS, "2017 Portfolio of Mine Action Projects, Somalia".
- 64 Emails from Chris Pym, HALO Trust, 14 May 2018; and Claus Nielsen, NPA, 22 March 2018.
- 65 Email from Chris Pym, HALO Trust, 14 May 2018.
- 66 Email from Tom Griffiths, HALO Trust, 31 May 2017.
- 67 Email from Claus Nielsen, NPA, 22 March 2018.
- 68 Emails from Chris Pym, HALO Trust, 14 May 2018; and Claus Nielsen, NPA, 22 March 2018.
- 69 Email from Chris Pym, HALO Trust, 14 May 2018.
- 70 Email from Tom Griffiths, HALO Trust, 31 May 2017. HALO Trust also destroyed 365 items of UXO during BAC of 66,300m<sup>2</sup> and marked or destroyed 106 items of UXO in 19 completed UXO tasks, out of 124 surveyed.
- 71 Email from Chris Pym, HALO Trust, 14 May 2018. HALO reported clearing a total of 1,103,015m<sup>2</sup> of mined area, including areas with mixed threat contamination, in Somaliland in 2017.
- 72 Email from Tom Griffiths, HALO Trust, 31 May 2017.
- 73 Email from Hilde Jørgensen, NPA, 3 May 2017.
- 74 Email from Claus Nielsen, NPA, 22 March 2018.
- 75 Email from Hilde Jørgensen, NPA, 3 May 2017. NPA completed approx. 32.5km<sup>2</sup> of surface BAC using a mechanical asset in 2016.
- 76 Email from Hilde Jørgensen, NPA, 3 May 2017.
- 77 Email from Claus Nielsen, NPA, 22 March 2018.

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- 78 Emails from Chris Pym, HALO Trust, 14 May 2018; and Claus Nielsen, NPA, 22 March 2018.
- 79 Email from Chris Pym, HALO Trust, 14 May 2018.
- 80 Emails from Chris Pym, HALO Trust, 14 May 2018; and Claus Nielsen, NPA, 22 March 2018.
- 81 Email from Chris Pym, HALO Trust, 14 May 2018.
- 82 "Somalia National Mine Action Strategic Plan", Draft Version, November 2017, p. 12; and Petra L. Aldrich, "Evaluation Report on 'The potential for impact: Humanitarian Mine Action in Somalia'", August 2017.
- 83 "Somalia National Mine Action Strategic Plan", Draft Version, November 2017, p. 15.
- 84 Emails from Chris Pym, HALO Trust, 14 May 2018; Bill Marsden, MAG, 27 April 2018; and Claus Nielsen, NPA, 22 March 2018.
- 85 Emails from Terje Eldøen, NPA, 5 June and 14 June 2016. A seven-month grant from UNMAS expired in December 2015 under which SEMA was expected to have established itself as a sustainable government entity. Email from Mohammad Sediq Rashid, UNMAS, 8 June 2017.
- 86 Email from Mohammad Sediq Rashid, UNMAS, 8 June 2017.
- 87 Article 7 Report [for 2017], Form J.
- 88 Emails from Hilde Jørgensen, NPA, 3 May 2017; and Tom Griffiths, HALO Trust, 19 May 2017.
- 89 Geneva International Centre for Humanitarian Demining, "Somali Explosive Management Authority (SEMA), Key Findings and Recommendations for Capacity Development Support", 3 November 2011; and NPA, "Somalia Capacity Development Project: Phase 1 Final Report, 2015–2017", 22 February 2017.
- 90 "Somalia National Mine Action Strategic Plan", Draft Version, November 2017.
- 91 Email from Claus Nielsen, NPA, 22 March 2018.
- 92 Ibid.
- 93 Email from Chris Pym, HALO Trust, 14 May 2018.
- 94 Email from Tom Griffiths, HALO Trust, 31 May 2017.
- 95 Email from Chris Pym, HALO Trust, 14 May 2018.

# SOUTH SUDAN

**ARTICLE 5 DEADLINE: 9 JULY 2021**  
(NOT ON TRACK TO MEET DEADLINE)

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	6	6
Target date for completion of mine clearance	2	3
Targeted clearance	7	7
Efficient clearance	7	7
National funding of programme	3	3
Timely clearance	6	6
Land-release system in place	7	7
National mine action standards	7	7
Reporting on progress	6	6
Improving performance	7	8
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.8</b>	<b>6.0</b>

## PERFORMANCE COMMENTARY

Release of mined areas plummeted in South Sudan in 2017, from nearly 20km<sup>2</sup> in 2016 to just over 3.7km<sup>2</sup> in 2017. This was largely due to security concerns from the ongoing conflict, which significantly impeded mine action operations during the year. As a result of the heightened insecurity, the programme shifted away from large area clearance to explosive ordnance disposal (EOD) spot tasks using smaller, more mobile teams. This greatly reduced the extent of demining.<sup>1</sup>

In 2018, the United Nations Mine Action Service (UNMAS) stated that South Sudan was unlikely to meet its July 2021 Article 5 deadline. A new national mine action strategy was developed for 2018–22, but the conflict and associated insecurity means the deadline will be subject to further delays.<sup>2</sup> In June 2018, South Sudan's National Mine Action Authority (NMAA) informed states parties to the Anti-Personnel Mine Ban Convention (APMBC) that it intended to submit an additional extension request for a period of five years beyond its July 2021 deadline.<sup>3</sup>

## RECOMMENDATIONS FOR ACTION

- South Sudan should make every effort to minimise the risk to civilians from mines and unexploded ordnance (UXO).
- South Sudan should complete re-survey of areas suspected to contain mines and explosive remnants of war (ERW) with a view to more accurately determining the baseline of contamination.
- Continued efforts should be made to ensure accurate reporting by operators of mine action data and recording according to International Mine Action Standards (IMAS) land release terminology.
- South Sudan should develop a resource mobilisation strategy and initiate policy dialogue with development partners on long-term support for mine action.
- South Sudan should increase its financial support for mine action operations. Greater assistance from the government and international partners should be provided to the NMAA to strengthen its capacity to develop and implement effective policies to address explosive ordnance.
- The mandate of the United Nations Mission in South Sudan (UNMISS) should be changed to include support for the capacity development of government institutions and the national mine action programme.

## CONTAMINATION

South Sudan is heavily contaminated by anti-personnel and anti-vehicle mines, as well as ERW, including cluster munition remnants (CMR). The weapons were used during nearly 50 years of Sudanese civil war in 1955–72 and 1983–2005. The signing of the Comprehensive Peace Agreement in January 2005 led to the independence of South Sudan in July 2011. Following two years of independence and relative peace in South Sudan, heavy fighting erupted in the capital city, Juba, in December 2013, initiating a new multi-dimensional armed conflict across the country.

According to UNMAS, as at the end of 2017, South Sudan had a combined total of 220 areas confirmed and suspected to contain anti-personnel mines covering a total area of almost 80km<sup>2</sup> (see Table 1).<sup>4</sup> At the end of 2016, 254 areas suspected to contain anti-personnel mines covered an estimated 82km<sup>2</sup>.<sup>5</sup>

**Table 1: Mine and Explosive Remnants of War contamination (at end-2017)<sup>6</sup>**

Type of contamination	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Anti-personnel mines	56	2,579,507	164	77,052,215
Anti-vehicle mines	15	132,548	55	1,378,273
CMR	60	2,758,274	83	1,775,408
Other UXO	27	1,867,572	224	1,540,351
<b>Totals</b>	<b>158</b>	<b>7,337,901</b>	<b>526</b>	<b>81,746,247</b>

CHAs = Confirmed hazardous areas SHAs = Suspected hazardous areas

Nine of South Sudan's (formerly ten) states contain suspected mined areas, with Central Equatoria the most heavily contaminated, followed by Eastern Equatoria and Jonglei, according to UNMAS (see Table 2).<sup>7</sup>

**Table 2: Anti-personnel mine contamination by former state (at end-2017)<sup>8</sup>**

State	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Central Equatoria	34	1,576,262	89	1,941,472
Eastern Equatoria	14	846,226	30	3,322,477
Jonglei	3	106,604	23	29,056,642
Lakes	0	0	2	23,500
North Bahr El Ghazal	1	37,500	1	14,862
Upper Nile	1	1,427	5	39,171,872
Warrap	0	0	1	8,400
West Bahr El Ghazal	1	2,500	3	2,827,433
Western Equatoria	2	8,988	10	685,557
<b>Totals</b>	<b>56</b>	<b>2,579,507</b>	<b>164</b>	<b>77,052,215</b>

The full extent of South Sudan's ERW contamination remains unknown. SHAs continue to be identified, while the existing threat is being compounded by the renewed heavy fighting since December 2013, which continues to result in new UXO contamination, particularly in Greater Equatoria, Jonglei, Unity, and Upper Nile states. Ongoing and increasing insecurity persisted in greatly limiting access to many areas of the country, severely impeding efforts to confirm or address contamination, particularly in the Greater Upper Nile region.<sup>9</sup>

In 2017, UNMAS reported that a review of the national Information Management System for Mine Action (IMSMA) database led to the conclusion that many existing hazards may have been over-reported in size. UNMAS consequently initiated a process of targeted re-survey during the year aimed at better defining the estimated size of SHAs. The results of the re-survey were not due to be finalised until the end of 2018, but UNMAS reported that ongoing survey in Upper Nile state, previously reported as the most heavily contaminated in terms of the size of area recorded, has revealed remarkably little contamination. Current projections of the number of minefields and cluster strikes remaining to be addressed are thought to be highly accurate, but markedly less reliable are estimates of their sizes as well as the type of contamination.

Mine Action Review is not aware of any confirmed new use of anti-personnel mines in the renewed conflict that erupted in 2013. Neither the International Campaign to Ban Landmines (ICBL)<sup>10</sup> nor UNMAS<sup>11</sup> believes that anti-personnel mines have been used in the renewed fighting. Thus, while new areas of ERW contamination have resulted from the fighting, new minefields have not been recorded.<sup>12</sup>

In March 2015, however, a group of states monitoring the ceasefire in South Sudan reported that a government army officer "stated clearly that anti-personnel mines had been deployed in the area around Nassir", in Upper Nile state, by government forces.<sup>13</sup> In June 2018, South Sudan informed states parties to the APMBC that on 24 November 2017, a four-person investigation team travelled to Nassir to investigate the March 2015 allegation. The three-day investigation involved formal interviews with Sudan People's Liberation Army (SPLA) officers and the police commissioner, along with a physical inspection of the ground around the SPLA barracks. The NMAA reported that the key finding was that there was no evidence of landmines being laid in the vicinity of Nassir, on or around the alleged date in 2015. It stated that a report had been sent by the Ministry of Foreign Affairs and International Cooperation to the treaty's Standing Committee on Cooperative Compliance for consideration with a view to "closing the case on this matter".<sup>14</sup>

Mines, CMR, and other ERW in South Sudan continue to pose a physical threat to local populations, prevent the delivery of vital humanitarian aid, curtail freedom of movement, and significantly impede development.<sup>15</sup> In 2017, a total of 56 persons were reported as mine and ERW casualties (48 injured and 8 killed). In 2016, a total of 45 mine and ERW casualties were recorded (32 injured and 13 killed).<sup>16</sup> In Pochalla in Jonglei state, UNMAS reported that a camp for internally displaced persons was inadvertently sited on a previously unrecorded minefield. In 2017, after a woman reported seeing a mine, UNMAS found that the land, including a nearby primary school compound, was heavily contaminated with mines.<sup>17</sup>

## 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.<sup>18</sup>

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. UNMAS is responsible for accrediting mine action organisations, drafting national mine action standards, establishing a quality management system, managing the national database, and tasking operators.<sup>19</sup> The NMAA takes the lead on victim assistance and risk education.<sup>20</sup>

While it is planned that the NMAA will ultimately assume full responsibility for all mine action activities, UNMAS has reported that the NMAA's continued serious financial and technical limitations prevented it from managing mine action operations effectively in 2017.<sup>21</sup>

UN Security Council Resolution 1996 authorised UNMISS to support mine action through assessed peacekeeping funds.<sup>22</sup> In May 2014, UN Security Council Resolution 2155, adopted in response to the conflict that broke out in December 2013, effectively ended the mission's mandate to support capacity development of government institutions. In 2018, UNMAS reported that reversing this change in the mission mandate to support the capacity building of government institutions would greatly enhance UNMAS' ability to support the NMAA.<sup>23</sup>

### Strategic Planning

In 2017, the NMAA, with support from the Geneva International Centre for Humanitarian Demining (GICHD) and funding from Japan, developed the South Sudan National Mine Action Strategy 2018–2022.<sup>24</sup> According to UNMAS, the strategy has three goals and a number of associated targets:<sup>25</sup>

**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-/ERW-free South Sudan.

**Strategic Goal 2:** The size of the mine/ERW contaminated 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 livelihoods activities.

The strategy includes a section on gender and diversity, 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 were also incorporated in the strategy.<sup>26</sup>

### Legislation and Standards

According to UNMAS, the National Technical Standards and Guidelines (NTSGs) for mine action in South Sudan are organic documents subject to constant review. In 2017, the medical and quality management chapters were revised.<sup>27</sup> The NTSGs are jointly monitored by UNMAS and the NMAA.<sup>28</sup>

### Quality Management

UNMAS reported that external quality assurance (QA) and quality control (QC) operations were carried out throughout 2017 on all mine action operators in South Sudan, with all teams subject to external inspections by UNMAS and the NMAA.<sup>29</sup>

Due to constraints on the movement of UN staff due to increasing security concerns, at the end of 2016 UNMAS contracted a private company, Janus Global Operations, to conduct external QA/QC on behalf of UNMAS in South Sudan.<sup>30</sup> In 2017, external QA continued to be conducted by Janus as a subcontractor to UNMAS, though QA/QC procedures were updated towards the end of the year.<sup>31</sup> UNMAS stated that external quality management process was adjusted to focus more on mentoring field management.<sup>32</sup> Operators reported improvements in the QA system in 2017 and better collaboration between Janus/UNMAS and mine action operators.<sup>33</sup>

### Information Management

UNMAS reported no significant changes to the information management system or the IMSMA database in 2017.<sup>34</sup> Mines Advisory Group (MAG) reported improvements during the year, including that all demining agencies were now in possession of the IMSMA database on laptops, which provided up-to-date information on contamination throughout South Sudan.<sup>35</sup>

## Operators

Three international demining non-governmental organisations (NGOs) operated in South Sudan in 2017: DanChurchAid (DCA), Danish Demining Group (DDG), and MAG. Three international commercial companies also conducted demining: G4S Ordnance Management (G4S), Mechem, and The Development Initiative (TDI). No national demining organisations were involved in clearance in 2017.<sup>36</sup> As noted above, Janus was engaged in quality management for UNMAS.

According to UNMAS, almost 1,000 people were working in mine action operations in South Sudan in 2017. Mine action capacity deployed included two road assessment and clearance teams with four mine detection dogs (MDDs) each; five mechanical clearance teams with integrated manual deminer support; 16 eight-person multi-task teams (MTTs); eight nine-person quick reaction teams; four 15-person mine action teams; and 12 EOD/survey teams.<sup>37</sup>

UNMAS reported that conflict and ongoing insecurity in 2017 undermined the ability of all operators to conduct sustained clearance operations in many parts of the country. This restricted the deployment of mine clearance teams, leading to a reconfiguration of resources to field more mobile and smaller teams. Focus shifted to addressing EOD spot tasks rather than area clearance and to carrying out re-survey of previously suspected areas thought to have overestimated the size of contamination. UNMAS assigns mine action tasks to operators.<sup>38</sup>

## LAND RELEASE

In 2017, just over 3.7km<sup>2</sup> of mined area was released through survey and clearance: more than 1.7km<sup>2</sup> through clearance and a further 2km<sup>2</sup> through non-technical survey.<sup>39</sup> In total, nearly 12km<sup>2</sup> of hazardous area was released back to local communities, including 8.2km<sup>2</sup> released through battle area clearance, with the destruction of 734 anti-personnel mines, 42 anti-vehicle mines, and 34,600 items of UXO.<sup>40</sup>

This compared to 2016, when nearly 20km<sup>2</sup> of mined area was released through survey and clearance, including more than 2.6km<sup>2</sup> through clearance and technical survey, and a further 17.2km<sup>2</sup> through non-technical survey.<sup>41</sup> This was despite a resurgence of violence that resulted in mine action operations being suspended for much of the second half of 2016 and a dramatic reduction in areas across the country where operations could safely be carried out.<sup>42</sup>

UNMAS has said that the marked decrease in land release output in 2017 was due to the ongoing turmoil and security constraints, which reduced the systematic deployment of mine clearance teams and forced a reconfiguration of resources into more mobile, smaller teams. The teams were focused on spot tasks and re-survey of previously suspected areas.<sup>43</sup>

## Survey in 2017

As summarised in Table 3, in 2017, a total of 13 mined areas covering just over 2km<sup>2</sup> were cancelled through non-technical survey, while 8 areas with a size of just over 0.67km<sup>2</sup> were confirmed as contaminated with anti-personnel mines. No areas were reportedly reduced by technical survey, according to UNMAS records.<sup>44</sup>

This is a huge decrease from survey output in 2016, when a total of 18 mined areas covering just under 17.2km<sup>2</sup> were cancelled through non-technical survey, and almost 71,400m<sup>2</sup> was reduced by technical survey. In addition, 30 areas covering nearly 1.8km<sup>2</sup> were confirmed as mined.<sup>45</sup>

As reported above, UNMAS's belief that the IMSMA database contains many hazardous areas whose size has been significantly over-reported. The targeted re-survey that UNMAS initiated during the year should be finalised before the end of 2018.<sup>46</sup>

**Table 3: Mined area survey in 2017<sup>47</sup>**

Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )	SHAs confirmed as mined	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
DCA	0	0	2	164,982	0
G4S	7	1,123,342	5	480,879	0
MAG	0	0	1	24,149	0
MECHEM	3	813,795	0	0	0
TDI	3	106,069	0	0	0
<b>Totals</b>	<b>13</b>	<b>2,043,206</b>	<b>8</b>	<b>670,010</b>	<b>0</b>

TS = Technical survey

## Clearance in 2017

A total of 20 mined areas covering just over 1.7km<sup>2</sup> were released by clearance in 2017, with the destruction of 734 anti-personnel mines, 42 anti-vehicle mines, and 34,600 items of UXO (see Table 4).<sup>48</sup> In 2016, 74 mined areas covering nearly 2.6km<sup>2</sup> were released by clearance.<sup>49</sup>

Clearance of anti-personnel mine contamination has fallen steadily from nearly 5.1km<sup>2</sup> in 2015, the highest recorded total clearance output since the inception of humanitarian demining in South Sudan in 2004, to 2.6km<sup>2</sup> in 2016, and just over 1.7km<sup>2</sup> in 2017.<sup>50</sup>

**Table 4: Mine clearance in 2017<sup>51</sup>**

Operator	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
MAG	4	322,201	383	5	1,567
MECHEM	2	15,034	1	2	1,565
DCA	2	39,924	10	2	1,799
DDG	0	0	1	3	396
G4S	11	867,562	285	26	24,138
TDI	1	467,368	54	4	5,135
<b>Totals</b>	<b>20</b>	<b>1,712,089</b>	<b>734</b>	<b>42</b>	<b>34,600</b>

AP = Anti-personnel AV = Anti-vehicle

## Deminer Safety

Mine action operators continued to face serious threats to the security of their operations and personnel due to the ongoing conflict. In 2017, there was an ambush on a demining contractor in which four personnel were seriously injured. In June 2018, UNMAS reported that an investigation into the incident found it to have been ethnically motivated. There were also several instances of criminality in which teams were robbed by armed groups during the year.<sup>52</sup>

## ARTICLE 5 COMPLIANCE

In accordance with Article 5 of the APMBC, 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 2021. South Sudan will not meet this deadline and has already announced it will be seeking a five-year extension.

UNMAS has highlighted the serious obstacles posed to mine action operations by ongoing fighting and insecurity, lack of access to contaminated areas, and new UXO contamination, along with the continuing and significant challenges from lack of infrastructure and access to vast areas of the country, as well as the unpredictable rainy seasons.<sup>53</sup> In 2018, UNMAS reported that South Sudan is unlikely to meet its July 2021 Article 5 deadline.<sup>54</sup>

According to a statement by the NMAA to APMBC states parties in June 2018, the Authority expected that by 2021, 100 open hazardous areas will be closed with a total area of over 35km<sup>2</sup> and 111 open hazardous areas with a size of over 43km<sup>2</sup> will remain to be addressed. It stated that this would require a further extension period of five years in order to fulfil its APMBC Article 5 obligations, although a formal proposal for an extension had yet to be submitted to the Government of South Sudan.<sup>55</sup>

**Table 5: Mine clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )
2017	1.71
2016	2.65
2015	5.10
2014	2.72
2013	4.33
<b>Total</b>	<b>16.51</b>

Due to the ongoing conflict, it is not possible to predict when South Sudan might complete clearance of anti-personnel mines on its territory, nor estimate the true extent of contamination.<sup>56</sup> For 2018, UNMAS has decided that the national mine action programme would prioritise re-survey of large SHAs remaining in the database, some of which were recorded as far back as 2003, especially where little evidence supports the original recording. It expects significant cancellation of area to occur as a result, though the effectiveness of the re-survey process is dependent on access.<sup>57</sup>

According to UNMAS, the Government of South Sudan is only able to provide minimal funding and support to all national institutions, including the NMAA. In 2017, all mine action activities were funded by the UN or international bilateral donors.<sup>58</sup> UNMAS thought reduced funding for mine action was likely in 2018, with a corresponding reduction in capacity and limitation on the timeliness of responses. It raised serious concerns over resource mobilisation in the face of overwhelming donor fatigue and frustration due to the ongoing conflict, which continues to exacerbate the humanitarian crisis. Mine action, which is a critical enabler for humanitarian assistance, is not prioritised by donors, who are increasingly unwilling to support Government institutions until a peace agreement is implemented.<sup>59</sup>

A surge in fighting in July 2016 had a significant impact on demining across the country throughout 2017. The security situation dominated all land release operations in 2017, greatly impeding the ability of clearance operators to deploy personnel and move heavy equipment across the country.<sup>60</sup> Security incidents on the majority of road networks severely curtailed transport while increasing support costs compared with previous years. Additionally, the political and ethnic elements of the conflict created a risk for the deployment of deminers based on their ethnicity in certain areas, further restricting areas of mine action operations.<sup>61</sup>

MAG reported that it was concentrating operations in 2018 in Central Equatoria state with the aim of completing survey of the entire state. Areas of confirmed anti-personnel mine contamination would be prioritised for survey and clearance wherever possible, it said.<sup>62</sup> DDG reported it would not seek large amounts of funding for its operations in 2018 due to the conflict, which has significantly reduced the areas in which it is able to operate.<sup>63</sup>

1	Emails from Tim Lardner, Chief, Mine Action, United Nations Mine Action Service (UNMAS), 27 February and 1 March 2018.	27	Ibid.
2	Email from Tim Lardner, UNMAS, 27 February 2018.	28	Email from Robert Thompson, UNMAS, 21 April 2016; and responses to questionnaires by Robert Thompson, UNMAS, 30 March 2015; and Augustino Seja, NPA, 11 May 2015.
3	Statement by Jurkuch Barach Jurkuch, Chairman, South Sudan National Mine Action Authority (NMAA), Intersessional Meetings, Geneva, 8 June 2018.	29	Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
4	Email from Tim Lardner, UNMAS, 27 February 2018.	30	Emails from William Maina, Mine Action Operations Manager, DDG, 2 May 2017; and Bill Marsden, Regional Director East and Southern Africa, MAG, 10 May 2017.
5	Emails from Robert Thompson, UNMAS, 18 April 2017; and Tim Lardner, UNMAS, 21 September 2017.	31	Emails from Katie Shaw, MAG, 10 May 2018; and William Maina, DDG, 6 February 2018.
6	Email from Tim Lardner, UNMAS, 27 February 2018.	32	Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
7	According to UNMAS, the most heavily affected provinces are those with the highest number of SHAs, rather than those with the largest recorded total area size of contamination, as the size of contamination can change dramatically through the process of technical survey. Email from Tim Lardner, UNMAS, 27 February 2018. In October 2015, South Sudan's previously established 10 states were redefined into 28 states by President Salva Kiir, which were then further subdivided by a presidential decree in January 2017 into 32 states.	33	Emails from Katie Shaw, MAG, 10 May 2018; and William Maina, DDG, 6 February 2018.
8	Email from Tim Lardner, UNMAS, 27 February 2018.	34	Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
9	UNMAS, "2018 Portfolio of Mine Action Projects: South Sudan".	35	Email from Katie Shaw, MAG, 10 May 2018.
10	See Landmine Monitor, "Country Profile: South Sudan, Mine Ban Policy", 30 October 2014, at: <a href="http://the-monitor.org/en-gb/reports/2015/south-sudan/mine-ban-policy.aspx">http://the-monitor.org/en-gb/reports/2015/south-sudan/mine-ban-policy.aspx</a> .	36	Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
11	Email from Tim Lardner, UNMAS, 27 February 2018.	37	Ibid.
12	Ibid.	38	Ibid.; and email from Richard Boulter, UNMAS, 6 June 2018.
13	The monitoring group, the Intergovernmental Authority on Development (IGAD) Monitoring and Verification Mechanism, consisting of seven East African states, reported that the officer made the statement on 12 March 2015, in a meeting between senior members of the government armed forces, UN Mission in South Sudan (UNMISS) staff, and members of IGAD. See Intergovernmental Authority on Development Offices of the Special Envoys for South Sudan, "Summary of Latest Reports of Violations of the Cessation of Hostilities Agreement (COHA) Investigated and verified by the IGAD Monitoring and Verification Mechanism in South Sudan from 1–16 March 2015", at: <a href="http://southsudan.igad.int/attachments/article/284/Violations_Summary_V32-35_ENG.pdf">http://southsudan.igad.int/attachments/article/284/Violations_Summary_V32-35_ENG.pdf</a> . See also ICBL-Cluster Munition Coalition (ICBL-CMC), "Concern at Reported Use of Antipersonnel Mines in South Sudan", Press release, Geneva, 31 March 2015, at: <a href="http://www.icbl.org/en-gb/news-and-events/news/2015/concern-at-reported-use-of-antipersonnel-mines-in-south-sudan.aspx">http://www.icbl.org/en-gb/news-and-events/news/2015/concern-at-reported-use-of-antipersonnel-mines-in-south-sudan.aspx</a> ; and I. Gridneff, "South Sudan Army's Landmine Use Escalates War, Monitors Say", Bloomberg Business, 30 March 2015, at: <a href="http://www.bloomberg.com/news/articles/2015-03-30/south-sudan-army-s-use-of-land-mines-escalates-war-monitors-say">http://www.bloomberg.com/news/articles/2015-03-30/south-sudan-army-s-use-of-land-mines-escalates-war-monitors-say</a> .	39	UNMAS email and UNMAS, "IMSMA Monthly Report – December 2017".
14	Statement by Jurkuch Barach Jurkuch, NMAA, Intersessional Meetings, Geneva, 8 June 2018.	40	Email from Richard Boulter, UNMAS, 5 September 2018; and UNMAS, "IMSMA Monthly Report – December 2017".
15	Email from Robert Thompson, UNMAS, 18 April 2017.	41	Emails from Robert Thompson, UNMAS, 18 April 2017; Bill Marsden, MAG, 11 May 2017; and William Maina, DDG, 2 May 2017.
16	UNMAS, "IMSMA Monthly Report", January 2018.	42	Ibid.
17	Email from Tim Lardner, UNMAS, 27 February 2018; and UNMAS, "About South Sudan", updated March 2018, at: <a href="http://www.mineaction.org/programmes/southsudan">http://www.mineaction.org/programmes/southsudan</a> .	43	Email from Tim Lardner, UNMAS, 27 February 2018.
18	"South Sudan De-Mining Authority", undated, at: <a href="http://www.goss-online.org/">http://www.goss-online.org/</a> .	44	Ibid.
19	South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, 2012, p. iv.	45	Email from Tim Lardner, UNMAS, 7 September 2017.
20	Response to questionnaire by Robert Thompson, UNMAS, 24 May 2013.	46	Email from Tim Lardner, UNMAS, 27 February 2018.
21	Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.	47	Ibid; and Article 7 Report (for 2017), pp. 7 and 12.
22	UNMISS, "United Nations Mine Action Coordination Centre [UNMACC]", undated, at: <a href="http://unmiss.unmissions.org/Default.aspx?tabid=4313&amp;language=en-US">http://unmiss.unmissions.org/Default.aspx?tabid=4313&amp;language=en-US</a> .	48	Emails from Tim Lardner, UNMAS, 27 February 2018; and Richard Boulter, UNMAS, 5 September 2018.
23	Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.	49	Email from Robert Thompson, UNMAS, 18 April 2017.
24	Ibid.	50	UNMAS, "IMSMA Monthly Report – December 2015"; email from Robert Thompson, UNMAS, 21 April 2016; Article 7 Report (for 2015), Form C; and email from Richard Boulter, UNMAS, 5 September 2018.
25	Ibid.; and email from Richard Boulter, UNMAS, 6 June 2018.	51	Emails from Tim Lardner, UNMAS, 27 February 2018; Richard Boulter, UNMAS, 5 September 2018; and William Maina, DDG, 6 February 2018. According to UNMAS, the 396 UXO destroyed by DDG were destroyed in 376 spot tasks. DDG, however, reported higher figures of 478 UXO destroyed in 464 spot tasks. South Sudan's Article 7 Report for 2017 reports 9,850,679m <sup>2</sup> cleared in 2017 with the destruction of 734 anti-personnel mines, 42 anti-vehicle mines, and 34,600 items of UXO. Article 7 Report (for 2017), pp. 7 and 12.
26	Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.	52	Emails from Richard Boulter, UNMAS, 6 June 2018; and Tim Lardner, UNMAS, 27 February and 1 March 2018.
		53	UNMAS, "About UNMAS in South Sudan", updated March 2015; and UNMAS "About UNMAS in South Sudan", updated May 2016.
		54	Email from Tim Lardner, UNMAS, 27 February 2018.
		55	Statement by Jurkuch Barach Jurkuch, NMAA, Intersessional Meetings, Geneva, 8 June 2018.
		56	Ibid.; and response to questionnaire by Robert Thompson, UNMAS, 30 March 2015.
		57	Emails from Richard Boulter, UNMAS, 6 June 2018; and Tim Lardner, UNMAS, 27 February and 1 March 2018.
		58	Ibid.; and UNMAS, "2018 Portfolio of Mine Action Projects: South Sudan".
		59	Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
		60	Ibid.
		61	Email from William Maina, DDG, 6 February 2018.
		62	Email from Katie Shaw, MAG, 10 May 2018.
		63	Email from William Maina, DDG, 6 February 2018.

# SRI LANKA

**ARTICLE 5 DEADLINE: 1 JUNE 2028**  
(ON TRACK TO MEET DEADLINE)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	9	9
Target date for completion of mine clearance	8	8
Targeted clearance	8	8
Efficient clearance	8	8
National funding of programme	6	5
Timely clearance	8	8
Land-release system in place	7	7
National mine action standards	6	6
Reporting on progress	4	5
Improving performance	8	8
<b>PERFORMANCE SCORE: GOOD</b>	<b>7.2</b>	<b>7.2</b>

## PERFORMANCE COMMENTARY

On 13 December 2017, Sri Lanka acceded to the Anti-Personnel Mine Ban Convention (APMBC), becoming the 163<sup>rd</sup> country to join. It became a state party on 1 June 2018 meaning that it must formally report on any mined areas under its jurisdiction or control by 28 November 2018 and clear all mined areas containing anti-personnel mines as soon as possible but not later than 1 June 2028. In fact, it is expected to complete clearance by 2021 at the latest.

A district-by-district re-survey which began in 2015 was completed in February 2017, with cancellation of 42.4km<sup>2</sup> of suspected hazardous area (SHA), providing far greater clarity on the extent of confirmed contamination remaining.<sup>1</sup> In June 2017, Batticaloa was declared Sri Lanka's first mine-affected district to be free of the threat of mines, a significant step forward as clearance of the entirety of Eastern province nears to completion.<sup>2</sup>

While initially optimistic that Sri Lanka was on track to meet its 2016–20 National Mine Action Strategy goal of completion of mine and explosive remnants of war (ERW) clearance by 2020, at the end of 2017, The HALO Trust and Mines Advisory Group (MAG), the two international demining operators in Sri Lanka, reported that with existing capacity and funding levels, Sri Lanka could complete clearance by 2021, falling just short of its earlier 2020 goal. They forecast that an additional US\$8 million in funding per year is needed if Sri Lanka is to reach completion by the end of 2020; however, both operators were expecting cuts in funding in 2018 that could potentially affect operations.

## RECOMMENDATIONS FOR ACTION

- Sri Lanka should comply with the 28 November 2018 deadline for the submission of its initial Article 7 transparency report under the APMBC.
- Greater resources should be allocated to the National Mine Action Centre (NMAC) to enable it to increase its capacity and effectiveness, and to ensure sufficient resources for mine action activities.
- NMAC should provide regular and accurate progress updates on survey and clearance, contamination remaining, and any changes in capacity or funding requirements that will impede completion of mine clearance.
- Increased collaboration and more frequent operational and strategic planning meetings between NMAC and mine action operators would enhance the efficiency of the national mine action programme.
- Sri Lanka should implement its resource mobilisation plan and seek increased funding with a view to meeting its 2020 clearance target.

## CONTAMINATION

Sri Lanka is extensively contaminated by mines and ERW. Most 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. However, estimates of total contamination have fallen sharply: from 506km<sup>2</sup> at the end of 2010, to 98km<sup>2</sup> at the end of 2012, to nearly 68.4km<sup>2</sup> in 2015, and down to just under 25.8km<sup>2</sup> as at July 2018. The Northern province is by far the most affected, though limited contamination remains in Eastern province, and in North Central, North Western, and Western provinces, as set out in Table 1.<sup>3</sup>

As noted above, non-technical survey which began in June 2015 was completed in February 2017, with cancellation of 42km<sup>2</sup> of SHA, reducing total contamination from over 68km<sup>2</sup> to close to 26km<sup>2</sup>.<sup>4</sup> In another milestone achievement, Batticaloa district in Eastern province was declared free of the threat of mines in June 2017, the first of Sri Lanka's mine affected provinces to do so.<sup>5</sup> In December 2017, Sri Lanka informed states parties to the APMBC that 98% of its mine contamination had been cleared, with assistance from non-governmental organisations (NGOs) and the international donor community.<sup>6</sup>

**Table 1: Mine/ERW contamination (at July 2018)<sup>7</sup>**

Province	District	Area (m <sup>2</sup> )
Northern	Jaffna	2,150,624
	Kilinochchi	10,849,638
	Mullaitivu	8,475,610
	Vavuniya	1,968,607
	Mannar	1,940,326
<b>Subtotal</b>		<b>25,384,805</b>
Eastern	Trincomalee	111,311
	Ampara	12,686
<b>Subtotal</b>		<b>123,997</b>
North Western	Puttalam	17,613
North Central	Anuradhapura	216,524
Western	Colombo	52,730
<b>Subtotal</b>		<b>286,867</b>
<b>Total</b>		<b>25,795,669</b>

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 Sri Lanka Army (SLA), and long defensive lines with a mixture of mines and improvised explosive devices (IEDs) laid by the LTTE.<sup>8</sup> Indian Peacekeeping Forces also used mines during their presence from July 1987 to January 1990.<sup>9</sup>

The SLA used both anti-personnel and anti-vehicle mines, with all use said to have been recorded.<sup>10</sup> 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.<sup>11</sup>

Sri Lanka remains contaminated with a wide range of ERW, including unexploded air-dropped bombs, artillery shells and missiles, mortar bombs, handheld anti-tank projectiles, and rifle and hand grenades. Large caches of abandoned explosive ordnance (AXO) also exist, particularly in the north.<sup>12</sup> These are being cleared concurrently to the remaining minefields.<sup>13</sup>

Since early 2009, resettlement of internally displaced persons (IDPs) has been the focus of survey and clearance activities, including in Jaffna, Kilinochchi, Mannar, Mullaitivu, and Vavuniya districts in the north, and Ampara, Batticaloa, and Trincomalee districts in the east.<sup>14</sup> Clearance is focused on high-priority areas for

resettlement, agricultural land, irrigation tank areas, and other infrastructure and development initiatives, as well as of heavily mined areas such as around Kilinochchi and the Muhamalai Forward Defence Line.<sup>15</sup> In addition, in 2016, the Government of Sri Lanka granted increased access to areas of the Jaffna High Security Zone allowing The HALO Trust to conduct clearance and MAG to clear previously restricted areas in Eastern province, further expanding the reach of mine action in the country.<sup>16</sup>

In 2017, The HALO Trust reported that the impact of mine contamination in its areas of operations in northern Sri Lanka was primarily socio-economic, with large areas of agricultural land and forest blocked for use or the collection of natural resources. However, the highest priority for clearance is land designated for the resettlement and return of IDPs, mainly concentrated in areas around Muhamalai, Nagarkovil, and the Jaffna High Security Zone.<sup>17</sup> During the year, HALO Trust continued to focus clearance on areas of the Muhamalai minefield pegged for resettlement. In December 2017, the Government of Sri Lanka released two additional sectors of the Muhamalai minefield, following completion of clearance by HALO Trust, for a total of six out of twenty-one sectors completed by HALO. The areas were cleared and released for the purpose of resettlement at Intherapuram village, facilitating the resettlement of 24 displaced families, and opening land for agriculture, specifically for coconut cultivation.<sup>18</sup>

In 2017, The HALO Trust reported that across its area of operations in Kilinochchi, Jaffna, and Mullaitivu districts the extent of contamination remaining was well established, with most mined areas identified and confirmed. While 11 confirmed hazardous areas (CHAs) were identified in HALO's operations in 2017, these were for the most part extensions of neighbouring minefields and HALO did not anticipate the identification of many additional CHAs in the future, now that survey and re-survey have been completed.<sup>19</sup>

In 2017, MAG's main operational focus continued to be Mannar district, where it reported that more than 100,000 IDPs had been resettled since 2010. According to MAG, more than 70% of the population in Mannar district rely on agricultural activities for their livelihood. MAG remained the only clearance operator in Mannar district and continued to support its district development plans.<sup>20</sup>

As stated above, in June 2017, Batticaloa was declared Sri Lanka's first district free from the threat of mines, following re-survey by MAG and joint clearance efforts from MAG and the SLA.<sup>21</sup> MAG reported releasing a total of just over 246,000m<sup>2</sup>, with the destruction of 383 anti-personnel mines and 2 items of unexploded ordnance (UXO).<sup>22</sup> Sri Lanka has set out a district-by-district approach to completing clearance, under which, following completion of Batticaloa, clearance of Trincomalee and Jaffna districts are planned to be completed next.<sup>23</sup>

## PROGRAMME MANAGEMENT

The Ministry of Rehabilitation, Resettlement, and Hindu Religious Affairs became the lead agency for mine action in 2015 as chair of the interministerial National Steering Committee for Mine Action (NSCMA). This body sets policy and is mandated to “manage linkages within the government, mine action community and donors”.<sup>24</sup> Its policies and decisions are implemented by the NMAC, set up in 2010<sup>25</sup> to: liaise with government ministries and development partners to determine mine action priorities; prepare a strategic plan; and set annual workplans to put it into effect. NMAC is also responsible for accrediting mine action operators, setting national standards, and acting as the secretariat of NSCMA.<sup>26</sup>

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.<sup>27</sup>

Under its National Mine Action Strategy for 2016–20, the Government of Sri Lanka intends to convene steering committee meetings for mine action up to twice per year at national level and at three regional levels, one for Eastern province and two for Northern province.<sup>28</sup>

### Strategic Planning

At the request of NMAC, Sri Lanka’s National Mine Action Strategy for 2016–20 was reviewed in April 2018, in a multi-stakeholder workshop facilitated by the Geneva International Centre for Humanitarian Demining (GICHD), and in consultation with operators and the SLA. The strategy, which sets the goal of clearing all mines and ERW by 2020, contains the following strategic objectives:

- The scope of the mine/ERW problem is identified, confirmed, and addressed using appropriate methodologies and resources
- 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 accedes to the APMB and complies with relevant obligations
- Long-term residual contamination is effectively managed by appropriate and sustainable national capacities
- The Sri Lanka mine action sector can access quality information for its strategic and operational decision-making.<sup>29</sup>

The review of the strategy was necessitated by the completion of re-survey efforts which concluded in early 2017 and in order to revise the remaining estimate of contamination.<sup>30</sup> Notably, one of the main objectives of the plan, that Sri Lanka accedes to the APMB, was achieved in December 2017.

The initial strategy set a target of the release of 6.5km<sup>2</sup> of contamination by clearance and technical survey per year. According to The HALO Trust, the strategy is highly ambitious, but achievable, providing funding is in place.<sup>31</sup>

### Legislation and Standards

There is no national mine action legislation in Sri Lanka, based on available information. According to The HALO Trust and MAG, a review of Sri Lanka’s National Mine Action Standards (NMAS) was carried out in May 2017 with the input of all demining operators, and support from the GICHD.<sup>32</sup> As at August 2018, however, the revised standards had yet to be finalised and distributed to operators.<sup>33</sup>

### Quality Management

The HALO Trust and MAG confirmed that external quality assurance (QA) and quality control (QC) were conducted by NMAC in 2017 on clearance tasks and that completed areas were sampled during post-clearance inspections prior to handover to local communities.<sup>34</sup>

According to The HALO Trust, NMAC maintained an improved response time to QA activities in 2017, as in 2016. HALO Trust stated that NMAC carried out QA site visits, post-clearance inspection visits, monitoring of data submitted by HALO, and QA of minefield execution plans throughout the year. On average, it reported that NMAC carried out site visits to three to four task areas in one field visit per month throughout the year. Final QA checks of post-clearance inspection had been occurring within one month of HALO’s submission of completion reports, it said, and that approval of minefield execution plans often occurred within the same day of submission.<sup>35</sup>

MAG confirmed that all tasks allocated by NMAC via the IMSMA database required the submission of a task execution plan and a completion report, and upon task completion, NMAC conducted post-clearance inspection visits, prior to hand-over to local communities.<sup>36</sup>

### Information Management

Sri Lanka’s Information Management System for Mine Action (IMSMA) database has reportedly undergone substantial and continuing improvements since the installation of an updated version of the software in 2015 and the initiation of a process of data entry and ground verification. Since that time, operators have reported that significant efforts have been exerted by stakeholders to correct erroneous data entered into IMSMA and to update the database on the basis of re-survey results, leading to a complete overhaul of the database and a more accurate representation of remaining contamination.<sup>37</sup>

The HALO Trust reported that it continued to liaise with NMAC to improve erroneous data in Sri Lanka's IMSMA database in 2017, as in the previous year, with QA by NMAC of IMSMA data typically occurring on a quarterly basis. It stated that the quality of data was vastly improved and that it continued to conduct trainings with the Geographic Information System (GIS) department of NMAC to ensure data accuracy.<sup>38</sup> According to The HALO Trust, however, while steady improvements were made throughout the year, towards the end of 2017 IMSMA encountered a number of problems that affected accuracy. These were addressed, and the GICHD, with support of operators, was planning to review the IMSMA system in the country in early 2018.<sup>39</sup>

MAG likewise confirmed that the IMSMA database continued to be refined in 2017, in particular as new data from non-technical survey results continued to be inputted by operators.<sup>40</sup> NMAC stated that all records of CHAs and SHAs were verified against old data in IMSMA in 2017 and cross-checked with all demining agencies.<sup>41</sup>

However, despite the improvements to the quality of the database reported by MAG, The HALO Trust, and NMAC in recent years, in 2017 significant delays persisted in the provision of transparent and timely updates by NMAC in response to information requests from international mine action stakeholders and discrepancies continued to be reported between the information reported from the IMSMA database and operators' records.

## Operators

In 2017, demining was conducted by the SLA; a national NGO, DASH and its subcontractor national organisation SHARP; and the two international NGOs, The HALO Trust and MAG.

The HALO Trust reported that as at December 2017, its operations staff capacity had increased by 62% over the previous year to a total of 715 (65 manual clearance teams, 12 mechanical clearance teams, and two survey/explosive ordnance disposal teams) – the result of greater funding from existing and new donors. As at 31 December 2017, mechanical assets comprised six front-end loaders, one tracked Caterpillar, one excavator, one tiller, one sifter, and one stone crusher. It also shared a second excavator with MAG. Machines are proving especially valuable in clearing mine lines in the Muhamalai minefield.<sup>42</sup>

MAG's capacity in 2017 remained largely consistent with the previous year at 15 manual clearance teams, 8 mechanical teams, as well as 2 community liaison teams and 9 medical teams.<sup>43</sup>

According to NMAC, in 2017, the SLA's demining unit deployed a total of 418 persons in demining operations, while DASH employed 369 staff in its demining activities, and its subcontractor, SHARP, employed a further 115 persons. The SLA had a total of 33 mini-flail machines, of which 12 were serviceable in 2017, along with a total of 12 mine detection dogs, of which 11 were deployed. Additionally, DASH deployed a mechanical rake machine during the year.<sup>44</sup>

## LAND RELEASE

A total of just over 5.7km<sup>2</sup> of anti-personnel mine contamination was reported released in 2017: nearly 4.8km<sup>2</sup> by clearance and technical survey and close to 1km<sup>2</sup> cancelled by non-technical survey.<sup>45</sup> This was a significant decrease from the overall land release reported in 2016 of nearly 38.5km<sup>2</sup>, (6.5km<sup>2</sup> by clearance and technical survey and 32km<sup>2</sup> cancelled).<sup>46</sup> This sharp decline in land release output was primarily due to the large drop in cancellation reported in 2017, due to the completion of a massive district-by-district re-survey at the beginning of the year.

The non-technical survey that began in June 2015 was completed in February 2017 with the cancellation of 42.4km<sup>2</sup> of SHA, reducing total contamination from 68.4km<sup>2</sup> to close to 26km<sup>2</sup>.<sup>47</sup>

NMAC has reported that, cumulatively, a total of 137km<sup>2</sup> of mined area was reduced or cleared between 2002 and May 2018, and a total of 735,444 anti-personnel mines, 2,073 anti-vehicle mines, and 556,384 items of UXO destroyed during that timeframe.<sup>48</sup> A total of nearly 38.5km<sup>2</sup> was reported released in 2016, including 6.5km<sup>2</sup> through clearance and technical survey, and over 32km<sup>2</sup> by non-technical survey. Close to a further 22km<sup>2</sup> was confirmed.<sup>49</sup>

## Survey in 2017

A total of just under 0.96km<sup>2</sup> was reported cancelled by non-technical survey by MAG and The HALO Trust in their areas of operations in 2017, while close to 0.76km<sup>2</sup> was confirmed as mined.<sup>50</sup> A total of just over 1.5km<sup>2</sup> reduced through technical survey by all operators during the year.<sup>51</sup> This compares to MAG and The HALO Trust's survey output in 2016, when a total of 32km<sup>2</sup> was cancelled by non-technical survey and 22km<sup>2</sup> was confirmed as mined, along with a total of just under 4.2km<sup>2</sup> reportedly reduced by technical survey by all operators.<sup>52</sup>

As stated, the sharp decline in cancellation reported by MAG and The HALO Trust in 2017 was due to the completion of large-scale re-survey efforts early in the year, after which operations focused on clearing the defined CHAs.<sup>53</sup> Ultimately, according to MAG, re-survey from June 2015 to February 2017 led to cancellation of 42.4km<sup>2</sup> of land, reducing the total of confirmed contamination to nearly 26km<sup>2</sup>.<sup>54</sup>

**Table 2: Mined area survey in 2017<sup>55</sup>**

Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )	SHAs confirmed as mined	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
DASH	0	0	0	0	235,386
MAG	3	342,785	38	648,230	802,833
HALO	18	616,388	11	114,276	188,532
SHARP	0	0	0	0	0
SLA	0	0	0	0	315,014
<b>Totals</b>	<b>21</b>	<b>959,173</b>	<b>49</b>	<b>762,506</b>	<b>1,541,765</b>

## Clearance in 2017

More than 3.2km<sup>2</sup> of mined area was reportedly cleared in 2017, with a total of 31,012 anti-personnel mines, 157 anti-vehicle mines, and 6,243 items of UXO destroyed.<sup>56</sup> This is an increase in clearance output from 2016, when a total of 2.3km<sup>2</sup> of mined area was reportedly cleared, however, there was a significant decrease in the number of anti-personnel mines reportedly destroyed, down from a total of 59,304 anti-personnel mines in 2016.<sup>57</sup>

Of the total mine clearance reported in 2017, just over 1.9km<sup>2</sup> of mined area was cleared by MAG and The HALO Trust, with a total of 8,303 anti-personnel mines, 46 anti-vehicle mines, and 3,185 items of UXO destroyed.<sup>58</sup> This compared with 2016, when the two operators reported clearing a total of just under 1.26km<sup>2</sup>, and destroying a total of 26,472 anti-personnel mines, 46 anti-vehicle mines, and 1,644 items of UXO.<sup>59</sup>

**Table 3: Mine clearance in 2017<sup>60</sup>**

Operator	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
DASH	29	920,511	18,083	50	2,274
MAG	39	632,686	1,711	0	69
HALO	14	1,303,209	6,592	46	3,116
SHARP	3	183,517	481	61	690
SLA	11	205,908	4,145	0	94
<b>Totals</b>	<b>96</b>	<b>3,245,831</b>	<b>31,012</b>	<b>157</b>	<b>6,243</b>

AP = Anti-personnel AV = Anti-vehicle

The amount of land cleared by The HALO Trust increased substantially from close to 0.8km<sup>2</sup> in 2016 to more than 1.3km<sup>2</sup> in 2017, which HALO Trust said was due to an increase in the number of clearance teams deployed with increased funding from existing donors, along with additional funding from two new donors during the year.<sup>61</sup>

In 2017, MAG released a total of just under 1.44km<sup>2</sup> through clearance and technical survey, with the destruction of more than 1,700 anti-personnel mines and 64 items of UXO, compared with 2016, when MAG released in total over 1.12km<sup>2</sup> through clearance.<sup>62</sup> MAG reported no change in capacity in 2017 from the previous year, but said it was able to release more high-priority land in 2017. The total number of mines found and destroyed decreased, though, as a result of its tasks in Batticaloa and Trincomalee districts having a scattered, rather than a pattern-oriented mine placement. In Mannar district, MAG completed a large and densely contaminated barrier minefield running east-west in Madhu district, with teams spread across smaller sites in the same area.<sup>63</sup>

As reported above, MAG, with support from the SLA, completed clearance of Batticaloa district, Eastern province in June 2017. MAG reported that following completion of re-survey of the district, it began clearance in October 2016 and finished in May 2017, releasing a total of 246,266m<sup>2</sup>: 79,817m<sup>2</sup> through clearance and 146,567m<sup>2</sup> by technical survey, with the destruction of 383 anti-personnel mines and 2 items of UXO.<sup>64</sup>

## Deminer Safety

According to NMAC, four DASH deminers were injured in three demining accidents in Muhamalai, Kilinochchi district which occurred in April, June, and July 2017. In another incident in June 2017, in Trincomalee district, it reported that a SLA deminer was injured in another demining accident.<sup>65</sup>

The HALO Trust reported that while working in the Muhamalai minefield one deminer was involved in a demining accident in June 2017. He detonated a so-called “onion blast”, a local term for a small homemade device that is placed on the ground with the intention of killing or incapacitating animals, such as wild pigs. According

to HALO Trust, typically these items are used to hunt animals and not people. They are typically packed with commercially available low-grade explosives and ball bearings or other fragmentation, are wrapped in paper or plastic, and the devices are around 2cm in diameter. The deminer sustained only light injuries to a finger.<sup>66</sup>

## ARTICLE 5 COMPLIANCE

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. It should complete clearance fair in advance of this deadline, at latest by 2021.

MAG and The HALO Trust were optimistic that following Sri Lanka’s accession to the APMBC at the end of 2017, major international donors would re-engage in funding mine action to enable Sri Lanka to complete clearance by its target of end-2020, in accordance with its national strategic mine action plan.<sup>67</sup> Such an increase in funding has not yet materialised, but Sri Lanka should still complete clearance before the end of 2021. This date could itself be delayed, though, if funding is not sustained.<sup>68</sup> To meet its 2020 completion target, MAG and The HALO Trust estimate that an additional US\$8 million per year would be required.<sup>69</sup>

The Government of Sri Lanka created a national budget line for mine action in 2015.<sup>70</sup> According to NMAC, the Government’s funding for NMAC’s and the SLA demining units’ capital expenses was expected to increase significantly in 2019, to close to 260 million Rupees (approx. US\$1.5 million).<sup>71</sup>

However, both MAG and The HALO Trust feared that their operations would be hit by a possible decrease in funding for mine action by one of Sri Lanka’s largest donors, the United States (US), in 2018.<sup>72</sup>

In the last five years, Sri Lanka has reported clearing more than 19.3km<sup>2</sup> of mined area (see Table 4), though clearance dropped significantly in 2013 following a decline in capacity after closure of operations by the Swiss Foundation for Mine Action (FSD) in 2013 and two Indian demining NGOs (Horizon and Sarvatra), in 2012.

**Table 4: Mine clearance in 2013–17<sup>73</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	3.25
2016	2.35
2015	3.52
2014	3.75
2013	6.44
<b>Total</b>	<b>19.31</b>

NMAC reported that according to its revised National Mine Action Strategy, the national target for anti-personnel mine clearance in 2018 is 9km<sup>2</sup>.<sup>74</sup> MAG reported that it was continuing to focus its clearance capacity in Mannar, Northern province, and Trincomalee district, Eastern province. It aimed to complete clearance of all remaining tasks in Trincomalee by mid-2018, enabling the Government of Sri Lanka to declare Sri Lanka’s second mine-affected district after Batticaloa as free of mines. It then intended to move its Trincomalee capacity to Mullaitivu district, Northern province, and continue its operations in Mannar.<sup>75</sup>

In 2018, The HALO Trust reported that in coordination with NMAC and its RMAO, it had elaborated a workplan to declare Jaffna district “mine-free” which it expected could be completed by the end of 2019, a highly significant achievement given the extent of its contamination. At the same time, it would continue to focus its operations on the Muhamalai minefield, along with other tasks in southern Kilinochchi district and northern Mullaitivu district. It also expected greater discussion and coordination with the SLA based on their increasing clearance capacity.<sup>76</sup>

1	Email from Alistair Moir, Country Director, MAG, 27 September 2017.	31	Email from Bartholomew Digby, HALO Trust, 5 March 2018.
2	Email from Alistair Moir, MAG, 8 August 2018.	32	Ibid.
3	Emails from Mahinda Bandara Wickramasingha, Assistant Director Operations, Quality Management, and Planning, Chairman Accreditation Committee, NMAC, 8 and 9 October 2018.	33	Email from Alistair Moir, MAG, 8 August 2018.
4	Email from Alistair Moir, MAG, 27 September 2017.	34	Emails from Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018.
5	Email from Alistair Moir, MAG, 8 August 2018.	35	Email from Bartholomew Digby, HALO Trust, 5 March 2018.
6	Statement of Sri Lanka, 16th Meeting of States Parties, Vienna, 18-21 December 2017.	36	Email from Alistair Moir, MAG, 8 August 2018.
7	Emails from Mahinda Bandara Wickramasingha, NMAC, 8 and 9 October 2018.	37	Emails from Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018 and 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017.
8	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.	38	Email from Bartholomew Digby, HALO Trust, 5 March 2018.
9	Ministry of Prison Reforms, Rehabilitation, Resettlement, and Hindu Religious Affairs, "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6.	39	Ibid.
10	Ibid.; and interview with Rob Syfret, Operations Manager, HALO Trust, in Kilinochchi, 12 September 2016.	40	Email from Alistair Moir, MAG, 8 August 2018.
11	Email from Valon Kumnova, HALO Trust, 11 April 2014; and "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6.	41	Email from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018.
12	"Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6.	42	Emails from Bartholomew Digby, HALO Trust, 5 March 2018; and Matthew Hovell, 30 September 2018.
13	Email from Matthew Hovell, Regional Director, HALO Trust, 30 September 2018.	43	Email from Alistair Moir, MAG, 8 August 2018.
14	"Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 7.	44	Email from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018.
15	Emails from Bartholomew Digby, Regional Director, HALO Trust, 5 March 2018; and Mahinda Bandara Wickramasingha, NMAC, 7 October 2016.	45	Emails from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018 and 8 October 2018; Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018.
16	Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, Programme Support Officer, HALO Trust, 25 April and 28 September 2017.	46	Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017; and presentation by Mahinda Bandara Wickramasingha, NMAC, "1st Quarter Meeting 2017", undated.
17	Email from Bartholomew Digby, HALO Trust, 5 March 2018.	47	Email from Alistair Moir, MAG, 27 September 2017.
18	Ibid.	48	Presentation by Mahinda Bandara Wickramasingha, NMAC, "Key Achievements and Way Forward", Intersessional Meetings, Geneva, 7–8 June 2018.
19	Ibid.	49	Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017; presentation by Mahinda Bandara Wickramasingha, NMAC, "1st Quarter Meeting 2017", undated; and "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 13.
20	Email from Alistair Moir, MAG, 8 August 2018.	50	Emails from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018 and 8 October 2018; Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018.
21	Ibid.	51	Emails from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018 and 8 October; Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018.
22	Ibid.	52	Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017; and presentation by Mahinda Bandara Wickramasingha, NMAC, "1st Quarter Meeting 2017", undated.
23	Email from Alistair Moir, MAG, 8 August 2018; and presentation by Mahinda Bandara Wickramasingha, NMAC, "Key Achievements and Way Forward", Intersessional Meetings, Geneva, 7–8 June 2018.	53	Emails from Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018.
24	"The National Strategy for Mine Action in Sri Lanka", Ministry of Economic Development, September 2010, p. 9; email from Sri Mallikarachchi, Senior IMSMA Officer, NMAC, 13 October 2015. After Sri Lanka's January 2015 Presidential elections and change of government, the Ministry of Economic Development, which formerly housed NMAC, was dismantled. A March 2015 Cabinet memorandum then assigned development activity, implemented by the former Ministry of Economic Development, to other relevant ministries. This resulted in responsibility for the national mine action programme being assigned to the Ministry of Prison Reforms, Rehabilitation, Resettlement, and Hindu Religious Affairs. "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 10.	54	Emails from Alistair Moir, MAG, 21 August and 27 September 2017.
25	The cabinet formally approved the creation of NMAC on 10 July 2010.	55	Emails from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018; Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018. HALO Trust reported that this was cancellation of CHAs, not SHAs. It stated that the 11 areas confirmed were not SHAs, but rather newly identified as CHAs immediately during non-technical survey. NMAC, however, reported that MAG cancelled 4 areas with a size of 1,067,642m <sup>2</sup> and reduced a further 385,230m <sup>2</sup> of anti-personnel mine contamination by technical survey, while confirming 6 areas with a size of 1,179,834m <sup>2</sup> as mined. It reported that HALO Trust cancelled 18 SHAs with a size of 238,673m <sup>2</sup> and reduced a total of 16,596m <sup>2</sup> by technical survey, confirming an additional 4 areas with a size of 186,618m <sup>2</sup> . These figures do not match operators' records.
26	Email from Amanthi Wickramasinghe, Programme Officer – Peace and Recovery, UNDP, Colombo, 11 March 2011.	56	Emails from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018 and 8 October 2018; Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018.
27	"Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 9. It states that: "Steering committees used to play an important role in providing guidance to the mine action programme and in promoting transparency and accountability. At the national level the Steering Committee fulfilled the role of a National Mine Action Authority. It used to convene key national stakeholders including the SLA and relevant Ministries, mine action NGOs and main development partners. At regional and district levels, steering committees were tasked to ensure priority-setting of survey, clearance and MRE activities".	57	Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017; and presentation by Mahinda Bandara Wickramasingha, NMAC, "1st Quarter Meeting 2017", undated.
28	"Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 10.	58	Ibid.
29	Ibid., p. 11.	59	Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017.
30	Emails from Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018.		

- 60 Emails from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018 and 8 October 2018; Bartholomew Digby, HALO Trust, 5 March 2018; Camille Wallen, Head of Policy and Evaluation, HALO Trust, 9 October 2018; and Alistair Moir, MAG, 8 August 2018. NMAC reported that MAG cleared 584,278m<sup>2</sup> of anti-personnel mine contamination, destroying 1,723 anti-personnel mines, 2 anti-vehicle mines, and 128 UXO. It reported that HALO Trust cleared 531,588m<sup>2</sup> of anti-personnel mines contamination, destroying 8,788 anti-personnel mines, 8 anti-vehicle mines, and 1,554 UXO. These figures do not match operators' records. According to NMAC, the discrepancies in reporting could be due to NMAC's receiving and reporting on the basis of completion reports from operators. HALO Trust confirmed that delays in processing clearance figures for some CHAs until completion and handover could also account for discrepancies in operators' and NMAC's reported clearance figures.
- 61 Email from Bartholomew Digby, HALO Trust, 5 March 2018.
- 62 Emails from Alistair Moir, MAG, 8 August 2018 and 21 August 2017.
- 63 Email from Alistair Moir, MAG, 8 August 2018.
- 64 Ibid.
- 65 Email from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018.
- 66 Email from Bartholomew Digby, HALO Trust, 5 March 2018.
- 67 Ibid.; and email from Alistair Moir, MAG, 8 August 2018.
- 68 Chris Loughran and Camille Wallen, "State of Play: The Landmine Free 2025 Commitment", MAG and HALO Trust, December 2017, p. 12.
- 69 Ibid.
- 70 "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 22.
- 71 Email from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018. Exchange figures at 30 September 2018.
- 72 Emails from Bartholomew Digby, HALO Trust, 5 March 2018; and Alistair Moir, MAG, 8 August 2018.
- 73 In October 2018, NMAC informed Mine Action Review that a process to verify and re-enter all completion reports from 2002 to present into the IMSMA database had been completed, with the assistance of operators. NMAC stated that this had rectified a number of data entry errors and missing data which was not transferred during a migration from an older IMSMA legacy version of the database to the newer IMSMA NG software. As a result, however, NMAC reported that the total amount of anti-personnel mine clearance output per year had been adjusted from that previously reported (as contained in Table 4) to approx. 2.35km<sup>2</sup> in 2013; 2.66km<sup>2</sup> in 2014; 3.58km<sup>2</sup> in 2015; and 2.80km<sup>2</sup> in 2016. Emails from Mahinda Bandara Wickramasingha, NMAC, 8 and 9 October 2018.
- 74 Email from Mahinda Bandara Wickramasingha, NMAC, 27 September 2018.
- 75 Email from Alistair Moir, MAG, 8 August 2018.
- 76 Emails from Bartholomew Digby, HALO Trust, 5 March 2018; and Matthew Hovell, HALO Trust, 30 September 2018.

# SUDAN

**ARTICLE 5 DEADLINE: 1 APRIL 2019**  
 (FOUR-YEAR EXTENSION REQUESTED TO 1 APRIL 2023)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	6	5
Target date for completion of mine clearance	4	3
Targeted clearance	6	5
Efficient clearance	6	6
National funding of programme	7	7
Timely clearance	4	5
Land-release system in place	5	5
National mine action standards	5	5
Reporting on progress	8	7
Improving performance	5	4
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.6</b>	<b>5.2</b>

## PERFORMANCE COMMENTARY

Clearance of areas contaminated by anti-personnel mines fell, to nearly 0.7km<sup>2</sup> in 2017 from just over 1km<sup>2</sup> in 2016.<sup>1</sup> There was an increase in battle area released, however, from close to 1.52km<sup>2</sup> in 2016 to nearly 2.85km<sup>2</sup> in 2017, due to a shift in focus to clearing high-impact explosive remnants of war (ERW) contamination in Blue Nile state near to communities where accidents were being reported, whereas in 2016, the focus was on clearance of mines in Sudan's three eastern states.<sup>2</sup>

Sudan will not meet its extended Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline of April 2019. In March 2018, it submitted a request for four-year extension to 1 April 2023. The formulation of the request

is thorough, generally of good quality, contains annual targets and projections for survey and clearance, and outlines a resource-mobilisation strategy. However, since most contamination is in Blue Nile and South Kordofan states, both of which are still heavily affected by conflict, Sudan's ability to meet even its extended deadline will be highly dependent on security and access, as well as on resources.

On 4 April 2018, Kassala state was declared free of mines and ERW, making all three of Sudan's eastern states free of contamination, following the completion of clearance of Red Sea and Gadaref states. These achievements are the result of 12 years of clearance efforts.

## RECOMMENDATIONS FOR ACTION

- Sudan should regularly update states parties to the APMBC on access to, and progress in clearance in Blue Nile and South Kordofan states, and update its workplan and extension request targets accordingly.
- Sudan should clarify its plans for demining in Western Kordofan state, which lack detail and consistency in its March 2018 extension request, along with efforts to address remaining contamination in Abyei.
- Continued efforts should be made to ensure reporting and recording of mine action data according to International Mine Action Standards (IMAS) land-release terminology.
- Sudan should update states parties to the APMBC on progress in implementing the resource-mobilisation strategy set out in its latest extension request, including how it intends to fill the considerable funding gap it has identified.

## CONTAMINATION

At the end of 2017, Sudan had 94 areas believed or suspected to contain anti-personnel mines, covering a total of just over 18.7km<sup>2</sup>. According to the Sudanese National Mine Action Centre (NMAC), of this total, 2.4km<sup>2</sup> has confirmed contamination, while anti-personnel mines are suspected in a further 16.3km<sup>2</sup>.<sup>3</sup> An additional 27 areas covering nearly 5km<sup>2</sup> are suspected to contain only anti-vehicle mines, as set out in Table 1.<sup>4</sup>

Overall contamination is a decrease from the total at the end of 2016, when NMAC reported that 100 hazardous areas with a total of just over 19km<sup>2</sup> remained, of which 2.6km<sup>2</sup> was confirmed and 16.6km<sup>2</sup> suspected to contain anti-personnel mines.<sup>5</sup> Thirty areas were suspected to contain anti-vehicle mines, with a total size of nearly 5km<sup>2</sup>.<sup>6</sup>

According to the United Nations Mine Action Service (UNMAS), as at 31 May 2018, almost 109km<sup>2</sup> (80% of Sudan's total 136km<sup>2</sup> of hazardous areas) had been released, with the destruction of 10,303 anti-personnel mines, 3,239 anti-vehicle mines, and 91,642 items of unexploded ordnance (UXO).<sup>7</sup>

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.<sup>8</sup> In January 2005, the Comprehensive Peace Agreement (CPA) ostensibly ended the civil war, ultimately leading to the independence of the south in July 2011. However, since South Sudan's independence, conflicts have again broken out in Blue Nile and South Kordofan states as well as in the Abyei region, leading to new contamination from UXO.

**Table 1: Mined area (at end-2017)<sup>9</sup>**

Type of contamination	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Anti-personnel mines	52	2,402,260	42	16,331,635
Anti-vehicle mines	0	0	27	4,990,051
<b>Totals</b>	<b>52</b>	<b>2,402,260</b>	<b>69</b>	<b>21,321,686</b>

CHAs = Confirmed hazardous areas SHAs = Suspected hazardous areas

At the end of 2017, of Sudan's mine- and ERW-affected states, four contained anti-personnel mines: Blue Nile, Kassala, South Kordofan, and Western Kordofan. Blue Nile and South Kordofan were believed to be the most heavily contaminated, as set out in Table 2.<sup>10</sup> 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.<sup>11</sup> No mines have been reported in Darfur, where the main threat is from UXO.<sup>12</sup>

As noted above, Kassala state was declared free of mines on 4 April 2018, joining Red Sea state which declared completion in May 2017, and Gadaref state, which was declared free of mines and ERW in May 2016.<sup>13</sup> In Darfur, two localities in West Darfur have been declared free of ERW: Forobaranga in April 2017 and Kereinik in February 2018.<sup>14</sup>

**Table 2: Anti-personnel mine contamination by state (at end-2017)<sup>15</sup>**

State	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Blue Nile	4	219,663	4	835,400
Kassala	0	0	3	10,400
South Kordofan	48	2,182,597	32	15,463,844
Western Kordofan	0	0	3	21,991
<b>Totals</b>	<b>52</b>	<b>2,402,260</b>	<b>42</b>	<b>16,331,635</b>

A Landmine Impact Survey (LIS) was conducted in 2007–09 covering Blue Nile, Gadaref, Kassala, Red Sea, and South Kordofan states. Since then, "ad hoc" reports of additional mined and ERW-contaminated areas 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.<sup>16</sup> As at April 2018, a total of 3,315 hazardous areas had been registered in the Information Management System for Mine Action (IMSMA) database since 2002, of which 3,090 was reported to have been released through various clearance methods, leaving a total of 225 hazardous areas with a size of just over 26.5km<sup>2</sup> to be addressed.<sup>17</sup>

Mine Action Review is unaware of any confirmed reports of new use of anti-personnel mines in Blue Nile or South Kordofan states since conflict began in 2012. However, in 2013, non-state armed groups were alleged to have laid mines on the border between Sudan's White Nile state and South Sudan's Upper Nile region, with reports of resultant civilian casualties and loss of livestock.<sup>18</sup>

In 2002 through to April 2018, at least 2,106 mine and ERW casualties were recorded, of whom 606 were killed and the other 1,500 were injured. In 2017, a total of 43 victims were registered, a significant increase from 23 in 2016.<sup>19</sup>

Mines and ERW remain a daily threat to the lives of civilians in Sudan and have a significant detrimental impact on the socio-economic development of local communities, constraining humanitarian access and the delivery of aid, and posing a particular risk for internally displaced persons and refugees.<sup>20</sup> In 2017, mines and ERW continued to exacerbate the humanitarian crisis, where in parts of South Kordofan, chronic malnutrition surpassed emergency levels, and in Blue Nile state, more than 40% of households were severely nutritionally insecure.<sup>21</sup>

In 2018, the extent of mine and ERW contamination in the border area between Sudan and South Sudan remained unknown due to ongoing restrictions on access.<sup>22</sup> The UN has repeatedly expressed concern over the threat of mines and ERW and their impact in Abyei, including by obstructing the safe return of the displaced and preventing safe migration.<sup>23</sup>

While no mines have been found in Darfur, ERW continue to pose a serious threat to civilians, to peacekeepers from the UN Mission in Darfur (UNAMID), and to the delivery of humanitarian aid. ERW in Darfur includes unexploded air-delivered bombs, rockets, artillery and mortar shells, and grenades.<sup>24</sup>

## PROGRAMME MANAGEMENT

The Sudanese National Mine Action Authority (NMAA) and NMAC manage Sudan's mine action programme, with responsibility for coordinating all mine clearance, including accreditation and certification of demining agencies. In 2015, UNMAS, which had originally started an emergency programme in 2002, reassumed its lead role in UN mine action efforts in Sudan, taking over from the UN Development Programme (UNDP). UNMAS provided assistance and technical support to NMAC following an invitation from the Sudanese Government.<sup>25</sup>

In 2017, the UN Interim Security Force for Abyei (UNISFA) continued to monitor the activities of the Sudanese Armed Forces (SAF) and the Sudan People's Liberation Army (SPLA) in Abyei, which it has done since the 2011 outbreak of heavy conflict in the area.<sup>26</sup> As UNISFA does not have a mandate to conduct mine clearance, UNMAS continued its UN Security Council-mandated role in Abyei, which includes the identification and clearance of mines in the Safe Demilitarized Border Zone as well as Abyei, and facilitating access by assessing and clearing priority areas and routes.<sup>27</sup>

In Darfur, under the umbrella of UNAMID, UNMAS works under the name of the Ordnance Disposal Office (ODO) in direct support of UNAMID priorities.<sup>28</sup> In 2017, Dynasafe MineTech Limited (DML), a commercial company, was awarded a new UN contract for the Fiscal Year 2017–18 to conduct ERW rapid-response clearance and to provide mentoring support to national Multi-Task Teams (MTTs) in Darfur.<sup>29</sup> Mine action in Darfur is funded through assessed peacekeeping funds for UNAMID.<sup>30</sup>

### Strategic Planning

In April 2017, Sudan revised its multi-year National Mine Action Plan for 2016–19 with a view to meeting its clearance obligations under the APMBC. In 2018, NMAC reported that it was coordinating with the Geneva International Centre for Humanitarian Demining (GICHD) to review the plan, which is set to expire in 2019.<sup>31</sup>

Sudan's Article 5 extension request submitted in March 2018 contains a detailed workplan with annual survey and clearance projections on a state-by-state basis (see Article 5 Compliance section).

### Legislation and Standards

There is no national mine action legislation in Sudan, based on available information.

In 2015, NMAC stated that a review of the National Mine Action Standards (NMAS) was ongoing and that a new version would be published on its website after their approval.<sup>32</sup> In 2018, NMAC reported that the process of reviewing the NMAS was in its final stages but had not yet been completed.<sup>33</sup> According to NMAC, draft standards are shared with all partners and mine action operators during their accreditation process.<sup>34</sup>

### Quality Management

NMAC reported that its quality management section conducted routine quality assurance (QA) visits to the field in 2017, including quality control (QC) and sampling.<sup>35</sup>

### Information Management

In March 2018, NMAC informed Mine Action Review that a process of upgrading the software of its IMSMA database to a newer version, IMSMA-NG, remained in progress, with assistance from GICHD, after several years of embargo on Geographic Information System (GIS) software support. Significant efforts to correct errors in the database were also ongoing.<sup>36</sup>

### Operators

In 2017, no international non-governmental organisation (NGO) was demining in Sudan. Commercial operator DML, contracted to clear ERW in Darfur and to provide support for national MTTs, deployed two seven-strong rapid-response teams and a mentoring capacity of six persons, for a total staff of 29.<sup>37</sup>

Since 2015, NMAC has made repeated calls for other international NGO operators to undertake mine action in Sudan.<sup>38</sup> Previously, two international demining NGOs with programmes in Sudan closed down operations owing to government restrictions that impeded their operations.<sup>39</sup> DanChurchAid (DCA) ended its operations in 2012.<sup>40</sup> In June 2012, the Sudanese government's Humanitarian Aid Commission (HAC) ordered Mines Advisory Group (MAG) and six other NGOs that provided humanitarian aid to leave Gadaref, Kassala, and Red Sea states in eastern Sudan.<sup>41</sup> Following months of negotiations with HAC and donors, MAG ended its operations in Sudan, leaving in early 2013.<sup>42</sup>

National demining operators are JASMAR for Human Security, National Units for Mine Action and Development (NUMAD), and FPDO. In 2017, a total of eight manual clearance teams (MCTs), eleven MTTs, two mechanical teams, and two mine detection dog (MDD) teams were deployed for mine action operations.<sup>43</sup> This was a significant increase compared with 2016, when a total of five MCTs, nine MTTs, four mine action teams, one mechanical team, and two MDD teams were deployed. In the first quarter of 2017, NMAC reported that it received 10 MDDs from the Afghanistan Mine Action Programme and as at the end of March 2018, a total of 15 national dog handlers had been trained and accredited by an international expert and were ready to be deployed in Blue Nile and South Kordofan states.<sup>44</sup>

## LAND RELEASE

Overall land release reported fell in 2017 to a total of just under 3.9km<sup>2</sup> of mined and battle area released, compared to just over 6.4km<sup>2</sup> in 2016. Clearance of areas contaminated by anti-personnel mines fell to nearly 0.7km<sup>2</sup> in 2017 from just over 1km<sup>2</sup> the previous year.<sup>45</sup>

Close to 0.33km<sup>2</sup> was released by survey, including just over 0.07km<sup>2</sup> cancelled by non-technical survey and just under 0.26km<sup>2</sup> reduced by technical survey in 2017. This compares to release of 3.8km<sup>2</sup> in 2016, including more than 1.5km<sup>2</sup> cancelled by non-technical survey and over 2.3km<sup>2</sup> reduced by technical survey.<sup>46</sup>

Just under 2.85km<sup>2</sup> of battle area was released in 2017, an increase from close to 1.52km<sup>2</sup> in 2016.<sup>47</sup> NMAC reported that the increase in battle area clearance (BAC) in 2017 was due to a shift in focus to clearing high-

impact ERW contamination in Blue Nile state close to communities where accidents were being reported. This amounted to just over 2km<sup>2</sup> out of the total 2.85km<sup>2</sup> of battle area cleared, whereas the focus in 2016 was on clearance of mines from Sudan's three eastern states.<sup>48</sup>

### Survey in 2017

In 2017, a total of just over 0.07km<sup>2</sup> was cancelled by non-technical survey and a further 0.26km<sup>2</sup> reduced by technical survey, along with the confirmation as mined of six areas with a size of 157,000m<sup>2</sup>. This is a considerable decrease compared to 2016, when six areas with a size of just over 1.5km<sup>2</sup> were cancelled by non-technical survey and a further 2.3km<sup>2</sup> reduced by technical survey, along with confirmation as mined of 10 areas with a size of more than 0.28km<sup>2</sup>.<sup>49</sup>

**Table 3: Anti-personnel mine survey in 2017<sup>50</sup>**

Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )	SHAs confirmed as mined	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
NUMAD	0	0	6	157,006	242,951
FPDO	0	64,875	0	0	10,000
JASMAR	0	10,000	0	0	6,600
<b>Totals</b>	<b>0</b>	<b>74,875</b>	<b>6</b>	<b>157,006</b>	<b>259,551</b>

TS = Technical survey

### Clearance in 2017

According to NMAC, just over 707,330m<sup>2</sup> was released by clearance in 2017, almost all by NUMAD, as in the previous year. However, this was a significant decrease from 2016, when 1,044,104m<sup>2</sup> was released by clearance in 2016.

A total of 575,439m<sup>2</sup> was cleared manually, 67,754m<sup>2</sup> by mechanical demining assets, and a further 64,141m<sup>2</sup> by MDDs in 2017. Despite the decrease in clearance output in square metres, 144 anti-personnel mines, 59 anti-vehicle mines, and 12,587 items of UXO were destroyed in 2017. This compares to the 105 anti-personnel mines, 24 anti-vehicle mines, and 8,851 items of UXO destroyed the previous year, suggesting a possible improvement in the targeting of clearance.<sup>51</sup>

**Table 4: Mine clearance in 2017<sup>52</sup>**

Operator	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
DML	0	0	0	0	2,269
FPDO	0	1,000	0	0	7
NUMAD	9	696,914	144	58	10,069
JASMAR	0	9,420	0	1	242
<b>Totals</b>	<b>9</b>	<b>707,334</b>	<b>144</b>	<b>59</b>	<b>12,587</b>

AP = Anti-personnel AV = Anti-vehicle mine

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2013), 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 2019. It will not meet this extended deadline.

In March 2018, Sudan submitted a request for an extension of its Article 5 deadline for a period of four years to 1 April 2023. The extension request is notably thorough, generally of good quality, and includes an updated work plan with annual targets for completion and a revised number of areas in each state it plans to address, including:

- Three CHAS with a size of 4.2km<sup>2</sup> and eighty SHAs with a size of 3.8km<sup>2</sup> in 2017–18
- Three CHAs with a size of 13.2km<sup>2</sup> and fifty-four SHA with a size of 10.2km<sup>2</sup> in 2018–19
- Two CHAs with a size of 5.4km<sup>2</sup> and sixteen SHAs with a size of 5km<sup>2</sup> in 2019–20
- Sixteen CHAs with a size of 1.2km<sup>2</sup> and four SHAs with a size of 1km<sup>2</sup> in 2020–21
- Seven CHAs with a size of 1.2km<sup>2</sup> and thirteen SHAs with a size of 1km<sup>2</sup> in 2021–22
- Twenty-two CHAs with a size of 1.2km<sup>2</sup> and four SHAs with a size of 1km<sup>2</sup> in 2022–23.

This gives a total planned release of 53 CHAs with a size of 26.4km<sup>2</sup> and 171 SHAs with a size of 22km<sup>2</sup>.<sup>53</sup>

The request does, however, contain some discrepancies in the total amounts of survey and clearance output projections, which require additional clarification.<sup>54</sup>

According to the extension request, when full access is available, a detailed and updated workplan for clearance of South Kordofan and Blue Nile states for 2019–23 will be produced. NMAC expects that non-technical survey in both states can then be completed in six months.<sup>55</sup> The request contains detailed projections for Blue Nile state of eight areas with a total size of just over 1km<sup>2</sup> to be addressed in 2018–20 and 127 areas with a size of just over 23.3km<sup>2</sup> to be addressed in South Kordofan from 2017–23.<sup>56</sup> The request does not, though, provide any details on plans for clearance of Western Kordofan state, noting only that three SHAs with a total size of 21,991m<sup>2</sup> remain to be addressed, offering conflicting information as to when this will occur.<sup>57</sup> It also does not contain information on what activities and coordination with UNISFA are expected to take place to enable clearance of contamination in Abyei.<sup>58</sup>

The workplan foresees a considerable increase in land release output, from a total of 8km<sup>2</sup> in 2017–18 to 23.4km<sup>2</sup> in 2018–19. Sudan was asked by the APMBC's Article 5 Committee at the Intersessional Meetings in June 2018 to provide updates on the reason for the sharp increase and corresponding efforts to increase capacity to meet this increase in output.<sup>59</sup> Concerns were also raised that under the plan for 2019–2023, close to 90% of SHAs remaining will be released by survey, and that this percentage is higher than any survey outputs in 2012–16 (averaging close to 74%).<sup>60</sup>

The request lists the following capacity to be deployed during the extension period: two mechanical demining teams, seven MCTs of eight deminers each, six MTTs of four deminers each, and three MDD teams, each with three dogs.<sup>61</sup>

Overall, the primary concern with Sudan's ability to meet its Article 5 extension request milestones remains that it is heavily dependent upon improved security in the heavily affected states of Blue Nile and South Kordofan.<sup>62</sup> In the extension request, Sudan lists other potential risk factors including the political and economic situation of the country; the security situation in areas of operations; weather conditions such as heavy rainy seasons; and terrain, including thick vegetation and mountainous areas.<sup>63</sup> A further significant factor which continues to impede Sudan's progress is a lack of clearance capacity formerly provided by international demining operators. In its extension request, Sudan requests technical and logistical support and appeals for the return of international operators' support.

Table 5 summarises progress in land release over the past five years.

**Table 5: Mine clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )
2017	0.71
2016	1.04
2015	0.42
2014	2.47
2013	0.77
<b>Total</b>	<b>5.41</b>

The Government of Sudan contributed US\$2 million to mine action operations for a second year in 2017, doubling its funding for mine action from \$1 million in 2015, and up from almost \$0.5 million in 2014.<sup>64</sup> In its extension request, Sudan projects \$75.5 million is required to complete clearance by 2023, of which \$14 million is expected to be provided by the government. At the same time, it reports Sudan is facing a funding gap of \$58 million to complete clearance by 2023.<sup>65</sup> The request outlines a resource mobilisation strategy, which 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.<sup>66</sup>

In 2017, Sudan hosted a number of donor coordination events on mine action in-country, as well as internationally, most notably on the margins of the Intersessional Meetings of the Convention in June 2017. It convened a meeting together with the APMBC’s Committee on the Enhancement of Cooperation and Assistance as part of the Committee’s “individualised approach” initiative, which aims to create a platform to promote frank, informal, and detailed discussions on the needs and challenges for implementing Sudan’s Article 5 obligations with the donor community, partners for South-South and regional cooperation, mine action operators, and other relevant stakeholders.

Sudan’s increased transparency in reporting and communication, and its apparent desire to facilitate international cooperation and assistance, are encouraging. It is also positive that a number of international demining organisations have expressed interest in the possibility of conducting operations in Sudan. NMAC informed Mine Action Review that it expected to receive increased funding in 2018 compared to 2017, and would expand operations in Blue Nile and South Kordofan.<sup>67</sup> It stated that with increased accessibility to remaining areas of contamination in Blue Nile and South Kordofan and following new survey and re-survey activities, a clearer and accurate picture of its mine action needs and capacity could then be presented and invited international NGOs and commercial companies to consider their possible external contributions to the overall national clearance efforts.<sup>68</sup>

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<p>1 Sudan National Mine Action Centre (NMAC), “Information Management System for Mine Action (IMSMA) Monthly Report”, January 2018.</p> <p>2 NMAC, “IMSMA Monthly Report”, January 2018.</p> <p>3 Email from Hatim Khamis Rahama, Technical Advisor, NMAC, 13 May 2018.</p> <p>4 Ibid.</p> <p>5 Email from Ali Abd Allatif Ibrahim, Chief of Operations, NMAC, 4 June 2017. Sudan’s Article 7 Report (for 2016), Form C, reported that 55 confirmed areas with a total size of 2,604,237m<sup>2</sup> and 44 areas with a size of 16,533,048 m<sup>2</sup> remained as at end-2016; however, the figures provided in the report do not match these totals and the report did not include contamination figures for Blue Nile state.</p> <p>6 Email from Ahmed Elser Ahmed Ali, Chief of Operations, NMAC, 9 May 2016.</p> <p>7 UNMAS, “About UNMAS in Sudan”, updated May 2018, at: <a href="http://www.mineaction.org/programmes/sudan">http://www.mineaction.org/programmes/sudan</a>.</p> <p>8 Ibid.</p> <p>9 Email from Hatim Khamis Rahama, NMAC, 13 May 2018; and Article 7 report (for 2017), Form C. The minor discrepancies between the total number and size of remaining contaminated areas reported at the end of 2016, with that reported at the end of 2017, less land release during the year, are said to be due to an ongoing process of database clean-up. Email from Hatim Khamis Rahama, NMAC, 13 September 2018.</p> <p>10 Ibid.</p> <p>11 NMAC, “Updated Work Plan to Meet Anti-Personnel Mine Ban Convention Article Five Extended Deadline by April 2019”, 30 April 2017.</p> <p>12 Article 7 Report (for 2015), Forms C and F.</p> <p>13 UNMAS, “About UNMAS in Sudan”, updated May 2018, at: <a href="http://www.mineaction.org/programmes/sudan">http://www.mineaction.org/programmes/sudan</a>; email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016; and UNMAS, “About Sudan (Excluding Darfur)”, updated May 2017, at: <a href="http://www.mineaction.org/programmes/sudan">http://www.mineaction.org/programmes/sudan</a></p>	<p>14 E. Nwadike, Programme Officer, Ordnance Disposal Office, “UNAMID Ordnance Disposal Office Supports the Government of Sudan and UNAMID Stabilization Efforts in Kereinik Locality, West Darfur”, at: <a href="http://www.mineaction.org/sites/default/files/documents/Story%20on%20Kereinik%20locality.pdf">http://www.mineaction.org/sites/default/files/documents/Story%20on%20Kereinik%20locality.pdf</a>.</p> <p>15 Email from Hatim Khamis Rahama, NMAC, 13 May 2018.</p> <p>16 Article 5 deadline Extension Request Executive Summary, 25 November 2013, pp. 2–3.</p> <p>17 NMAC, “IMSMA Monthly Report”, April 2018.</p> <p>18 “Landmines kill and maim civilians on Sudan – South Sudan border”, <i>Radio Tamazuj</i>, 19 June 2013, at: <a href="https://radiotamazuj.org/en/article/landmines-kill-and-maim-civilians-sudan-south-sudan-border-source">https://radiotamazuj.org/en/article/landmines-kill-and-maim-civilians-sudan-south-sudan-border-source</a>.</p> <p>19 NMAC, “IMSMA Monthly Report”, April 2018.</p> <p>20 UNMAS, “2017 Portfolio of Mine Action Projects, Sudan”; and presentation of Sudan, “Mine Action Programme of Sudan, Status and Challenges in Implementation”, Intersessional Meetings, Geneva, 8 June 2017.</p> <p>21 “Sudan: First Convoy of Sudanese Refugees from Chad”, <i>AllAfrica</i>, 26 April 2018, at: <a href="http://allafrica.com/stories/201804270528.html">http://allafrica.com/stories/201804270528.html</a>.</p> <p>22 UNMAS, “2018 Portfolio of Mine Action Projects, Sudan”.</p> <p>23 UN Security Council Resolutions 2104 (2013), and 2205 (2015).</p> <p>24 UNMAS, “2018 Portfolio of Mine Action Projects, Sudan”, at: <a href="http://www.mineaction.org/sites/default/files/print/country_portfolio7506-951-77697.pdf">http://www.mineaction.org/sites/default/files/print/country_portfolio7506-951-77697.pdf</a></p> <p>25 UNMAS, “About UNMAS in Sudan (Excluding Darfur), March 2018; and email from Javed Habibulhaq, Programme Manager, UNMAS, 13 June 2016.</p> <p>26 UN Interim Security Force for Abyei, “UNISFA Mandate”, undated but accessed at: <a href="http://www.un.org/en/peacekeeping/missions/unisfa/mandate.shtml">http://www.un.org/en/peacekeeping/missions/unisfa/mandate.shtml</a>.</p>
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- 27 UNMAS, "About UNMAS in Abyei", updated May 2016, at: <http://www.mineaction.org/programmes/abyei>; UN Interim Security Force for Abyei, "UNISFA Mandate"; and UNMAS, "UNMAS Annual Report 2012", New York, August 2013, p. 10.
- 28 UNMAS, "2017 Portfolio of Mine Action Projects, Sudan".
- 29 Email from Dandan Xu, UNMAS, 12 July 2017.
- 30 UNMAS, "About UNMAS in Sudan", updated January 2016.
- 31 Email from Hatim Khamis Rahama, NMAC, 3 March 2018.
- 32 APMBC Article 7 Report (for 2014), Form A, p. 12.
- 33 Email from Hatim Khamis Rahama, NMAC, 3 March 2018.
- 34 Emails from Ahmed Elser Ahmed Ali, NMAC, 9 May and 8 June 2016.
- 35 Ibid.
- 36 Ibid.; and Third Article 5 deadline Extension Request, 28 March 2018, pp. 37–38.
- 37 Email from Jeffrey McMurdo, UNAMID, 14 June 2017.
- 38 Article 7 Report (for 2016), p. 22; NMAC, "Updated Work Plan to Meet Anti-Personnel Mine Ban Convention Article Five Extended Deadline by April 2019", 29 April 2016, at: <https://www.apminebanconvention.org/states-parties-to-the-convention/sudan/>; and Article 7 Report (for 2014), Form A, p. 16.
- 39 ICBL, "ICBL Comments on Sudan's Article 5 Extension Request", May 2013.
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- 41 "Sudan causes frustration among NGOs", News 24, 13 June 2012.
- 42 MAG, "MAG departs Sudan after six years of work to remove remnants of conflict", 7 March 2013.
- 43 Email from Hatim Khamis Rahama, NMAC, 3 March 2018.
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- 45 NMAC, "IMSMA Monthly Report", January 2018.
- 46 NMAC, "IMSMA Monthly Report", April 2018. Sudan's IMSMA database reports list land released through technical survey as "cancelled" and land released through non-technical survey as "cancelled GMAA (General Mine Action Assessment)".
- 47 NMAC, "IMSMA Monthly Report", January 2018.
- 48 Email from Hatim Khamis Rahama, NMAC, 14 June 2018.
- 49 Email from Ali Abd Allatif Ibrahim, NMAC, 4 June 2017.
- 50 Email from Hatim Khamis Rahama, NMAC, 13 May 2018.
- 51 NMAC, "IMSMA Monthly Report", April 2018.
- 52 Email from Hatim Khamis Rahama, NMAC, 13 May 2018.
- 53 Third Article 5 deadline Extension Request, 28 March 2018, Table 26, p. 53.
- 54 Sudan's Extension Request also states that a total of 53 CHA with a size of 22.2km<sup>2</sup> and 171 SHAs with a size of 24km<sup>2</sup> will be released, with a total land release projection of 26.4km<sup>2</sup> on p. 51 and then claims 53 CHAs with a size of 26.4km<sup>2</sup> and 171 SHAs with a size of 23.8km<sup>2</sup> will be addressed, again with a total land release projection of 26.4km<sup>2</sup> on p. 18.
- 55 Third Article 5 deadline Extension Request, 28 March 2018, pp. 51 and 53.
- 56 Ibid., pp. 56 and 58; and ICBL-CMC, "ICBL Comments on Sudan's Article 5 Extension Request", Intersessional Meetings, Geneva, 7 June 2018. According to Table 9, activities will take place fully in 2018; according to Annex 3 they will take place in 2019; according to Table 7 in 2019–21; or they "will wait" according to p. 58.
- 57 Third Article 5 deadline Extension Request, 28 March 2018, p. 59.
- 58 ICBL-CMC, "ICBL Comments on Sudan's Article 5 Extension Request", Intersessional Meetings, Geneva, 7 June 2018.
- 59 Article 5 Committee, "Preliminary Observations on the Implementation of Article 5 by Sudan", 1 June 2018.
- 60 ICBL-CMC, "ICBL Comments on Sudan's Article 5 Extension Request", Intersessional Meetings, Geneva, 7 June 2018.
- 61 Third Article 5 deadline Extension Request, 28 March 2018, p. 52.
- 62 ICBL-CMC, "ICBL Comments on Sudan's Article 5 Extension Request", May 2013; and Human Rights Watch, "Under Siege: Indiscriminate Bombing and Abuses in Sudan's Southern Kordofan and Blue Nile States", 6 December 2012; "Unexploded Ordnance Kill 13 People in South Kordofan", *AllAfrica*, 10 August 2013; and UNMAS, "UNMAS Annual Report 2012", New York, August 2013, p. 10.
- 63 Third Article 5 deadline Extension Request, 28 March 2018, p. 65.
- 64 Emails from Hatim Khamis Rahama, NMAC, 13 May 2018; and Ali Abd Allatif Ibrahim, NMAC, 4 June 2017; UNMAS, "2017 Portfolio of Mine Action Projects, Sudan"; Article 7 Reports (for 2015), Form F; and (for 2014), Form A.
- 65 Third Article 5 deadline Extension Request, 28 March 2018, p. 64.
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# TAJIKISTAN

ARTICLE 5 DEADLINE: 1 APRIL 2020  
(NOT ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE	2017	2016
Problem understood	5	5
Target date for completion of mine clearance	4	4
Targeted clearance	6	6
Efficient clearance	5	5
National funding of programme	4	4
Timely clearance	6	5
Land-release system in place	7	7
National mine action standards	6	6
Reporting on progress	6	5
Improving performance	6	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.5</b>	<b>5.2</b>

## PERFORMANCE COMMENTARY

Tajikistan's mine action programme performance improved in the latest reporting period. The granting of permission by Tajikistan border authorities in January 2017 for clearance operations to restart on the Afghan border after more than two years of security restrictions was a very positive development. It has already enabled release of some of Tajikistan's most densely contaminated mined areas. In addition, a normalisation of relations between Tajikistan and Uzbekistan resulted in high-level discussions regarding the potential survey and clearance of their common border.

Operationally, the efficiency of survey operations has improved following application and approval of the "non-technical survey with technical intervention" methodology. This involves a more integrated form of non-technical and technical survey in which technical interventions are used to identify the starting point of minefields and to locate direct evidence points. This in turn enables suspected mined areas to be classified as confirmed hazardous areas and their perimeters better delineated. Tajikistan also continued to progress in surveying the remaining, previously unsurveyed minefields using this new methodology. This will more accurately determine a national baseline of mine contamination. Finally, continuing efforts were made to improve task prioritisation and integrate a newly developed prioritisation system.

## RECOMMENDATIONS FOR ACTION

- Tajikistan should complete survey of the 45 unsurveyed mined areas/tasks (59 minefields), predominantly located along its border with Afghanistan, in order to more accurately determine the extent of remaining mine contamination.
- Tajikistan should update and make public its Anti-Personnel Mine Ban Convention (APMBC) Article 5 completion workplan, based on current survey and clearance capacity.
- Tajikistan should consider expanding the humanitarian demining capacity of the Tajik Armed Forces, to help it meet its Article 5 obligations.
- Tajikistan should report more accurately and consistently on land release data, in a manner consistent with the International Mine Action Standards (IMAS). Data on mined areas, or areas of mixed mine and explosive remnants of war (ERW) contamination, should be disaggregated from areas solely contaminated by cluster munition remnants (CMR) and other ERW.

## CONTAMINATION

Tajikistan is affected by mines and, to a much lesser extent, ERW, including CMR, as a result of past conflicts (also see Mine Action Review's *Clearing Cluster Munition Remnants* report on Tajikistan for further information).

At the end of 2017, Tajikistan had just under 7.46km<sup>2</sup> of mine contamination across 153 confirmed hazardous areas (CHAs), and almost 1.35km<sup>2</sup> of suspected hazardous area (SHA) across 59 unsurveyed minefields, as set out in Table 1.<sup>1</sup> The 59 SHAs equate to 45 remaining tasks to be surveyed, as some tasks contain multiple minefields, potentially laid at different times/during different conflicts and because minefields are counted separately if they are more than 500 metres apart.<sup>2</sup> The mined areas are located in three provinces and thirteen districts of Tajikistan.

The overall baseline contamination at the end of 2017 is a small reduction compared to the end of the previous year (7.76km<sup>2</sup> of confirmed contamination and 1.97km<sup>2</sup> of suspected mined area).<sup>3</sup> The differences in the figures, though, cannot be satisfactorily explained or reconciled by area released by clearance and survey during 2017.

**Table 1: Anti-personnel mine contamination by province (at end-2017)<sup>4</sup>**

Province	District	CHA		SHA	
		No.	Area (m <sup>2</sup> )	No.	Area (m <sup>2</sup> )*
Gorno-Badakhshan Autonomous Region	Darvoz	7	1,103,600	2	20,000
	Vanj	5	908,119	0	0
	Shugnan	3	56,000	0	0
	Ishkoshi	0	0	1	5,000
<b>Subtotals</b>		<b>15</b>	<b>2,067,719</b>	<b>3</b>	<b>25,000</b>
Khatlon	Farkhor	6	96,800	1	8,000
	Hamadoni	3	80,772	6	177,000
	Panj	24	1,600,585	13	204,000
	Jayhun	8	135,636	11	307,000
	Shamsiddin Shohin	93	3,317,134	18	439,000
	Kabodiyon	1	N/K	0	0
	Shahri	1	30,000	0	0
	Khovaling	1	80,000	5	135,000
<b>Subtotals</b>		<b>137</b>	<b>5,340,927</b>	<b>54</b>	<b>1,270,000</b>
Central Region	Sangvor	1	50,000	2	50,000
<b>Subtotals</b>		<b>1</b>	<b>50,000</b>	<b>2</b>	<b>50,000</b>
<b>Totals</b>		<b>153</b>	<b>7,458,646</b>	<b>59</b>	<b>1,345,000</b>

N/K = Not known

\* The size of the mined areas is estimated from desk analysis but is pending survey.

Mine contamination in Tajikistan is the consequence of different conflicts. Tajikistan's border with Afghanistan was mined by Russian forces in 1992–98; the border with Uzbekistan was mined by Uzbek forces in 2000–01; and the Central Region of Tajikistan was contaminated as a result of the 1992–97 civil war.<sup>5</sup>

A national survey in 2003–05 by the Swiss Foundation for Mine Action (FSD) estimated that mine and ERW contamination extended over 50km<sup>2</sup>.<sup>6</sup> Tajikistan subsequently alleged that lack of experience among the initial survey teams, the absence of minefield records and other important information, and inadequate equipment led to that first impact survey not generating robust results. As a result, the sizes of SHAs were miscalculated and their descriptions not clearly recorded.<sup>7</sup> While most minefield records are of good quality, some do not reflect the reality on the ground, and as such the records have to be verified and validated by non-technical survey and data analysis.<sup>8</sup>

Mine contamination remains in the provinces of Khatlon and the Gorno-Badakhshan Autonomous Region (GBAO) along the Afghan border (reported to contain 60,357 anti-personnel mines), as well as in the Central Region.<sup>9</sup> Shamsiddin Shohin district (formerly known as Shuroobod district) in Khatlon province is the most heavily mined district. 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.<sup>10</sup>

With regards to possible mined areas on the border with Uzbekistan, Tajikistan National Mine Action Centre (TNMAC) and various government entities concluded in 2015 that hazardous areas were on the border and could not be considered as hazardous area within Tajikistan until the border had been delimited. These areas were therefore not included in Tajikistan's clearance plan at that time.<sup>11</sup>

Moreover, information about mined areas on the Tajik-Uzbek border is limited and based on 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 non-technical survey did not cover the whole of the Tajik-Uzbek border, only Sughd province. The FSD survey was not comprehensive and was mainly based on incident forms, as the boundary line was not accessible to survey teams. Records lack detail on the exact location where mine incidents occurred and civilians living in the area simply reported the location of mine contamination and landmine incidents as occurring in the border area.<sup>12</sup> According to Tajikistan, communities living in dangerous areas near the Tajik-Uzbek border are mainly engaged in livestock, agriculture, fodder, and collection of firewood, and despite the risk, the local population is forced to operate in these areas.<sup>13</sup>

While Tajikistan and Uzbekistan settled most of their 1,283km-long border dispute following the collapse of the Soviet Union, there are still areas of the border that have not yet been delineated and where the exact location of the landmine contamination is not known. Most of the mined areas are thought to be in disputed sections of the Tajik-Uzbek border which have not been accessible, and for which evaluation and analysis of information is not yet complete.<sup>14</sup> The mine contamination is believed to be on Uzbek territory,<sup>15</sup> but there is a possibility that some mines may have been displaced downhill into Tajikistan due to landslides or flooding.<sup>16</sup> The first ever state visit of the President of Uzbekistan to Tajikistan took place in March 2018, and several agreements were signed between the two countries, including one on demarcation of the separate regions of the Tajik-Uzbek border. Tajikistan expected decisions to be taken in 2018 regarding clarification and identification of SHAs on the Uzbek border, and any demining operations will require agreement and cooperation between both nations.<sup>17</sup>

In September 2013, records of 110 previously unrecorded and unsurveyed minefields were made public for the first time, with security constraints said to have prevented survey activities in the past.<sup>18</sup> The number of minefields was subsequently confirmed as 107 (not 110).<sup>19</sup> All are located in the provinces of Khatlon and the GBAO along the border with Afghanistan.<sup>20</sup> Non-technical survey of the minefields began in 2014.<sup>21</sup> As at December 2015, 101 unsurveyed minefields were said to remain, covering an estimated 3.6km<sup>2</sup>,<sup>22</sup> while by May 2017 the number had come down to 58,<sup>23</sup> and as at December 2017, it stood at 45.<sup>24</sup> TNMAC plans to complete survey of the remaining unsurveyed minefields by the end of 2020.<sup>25</sup>

While none of the unsurveyed areas are considered completely inaccessible for the survey (or for subsequent clearance),<sup>26</sup> serious challenges have been reported during non-technical survey in accessing the mined

areas in mountainous terrain and with one mined area blocking access to a number of others.<sup>27</sup> According to records, these unsurveyed minefields contain 57,189 mines (50,948 blast mines, 4,430 fragmentation mines, and 1,811 “booby-trapped” mines), in addition to 17 munitions employed in booby traps, and 100kg of explosive charges (500 pieces of 200g of TNT).<sup>28</sup>

Mountains cover more than 90% of Tajikistan’s territory, and so productive land which can be used is extremely important to local communities. Mine contamination in Tajikistan is said to constrain development, limit access to grazing and agricultural land, and affect farming, wood and herb gathering, and grazing activities related to rural life, especially in the Central Region.<sup>29</sup> Most of the contamination is, though, located along the borders, with a less direct impact on local communities and development, as these are restricted military security zones. However, District Authorities and local communities do still use these areas for development projects, including collecting firewood and stones, piping for irrigation and drinking water, and fishing and livestock. National authorities have used cleared land for agriculture, fisheries, road construction, disaster mitigation activities, water piping, electricity line posts, gold extraction and mining, and maintenance of dams.<sup>30</sup> Furthermore, contamination in these regions affects cross-border trade and security, and has a negative political impact on peacebuilding initiatives with neighbouring countries.<sup>31</sup>

In 2017, there were three mine incidents, which left one dead and three injured. In April 2017, a man was injured while grazing livestock in Rasht district. In May 2017, two teenage boys were injured by a PFM-1 mine while collecting herbs in Shamsiddin Shohin district. In July 2017, a boy was killed by a POMZ-2 mine while grazing sheep in Darvoz district.<sup>32</sup>

## PROGRAMME MANAGEMENT

The Commission for the Implementation of International Humanitarian Law (CIHL) acts as Tajikistan’s national mine action authority, responsible for mainstreaming mine action in the government’s socio-economic development policies.<sup>33</sup>

In June 2003, the Government of Tajikistan and the United Nations Development Programme (UNDP) established the Tajikistan Mine Action Centre (TMAC) with a view to it becoming a nationally owned programme in the short term,<sup>34</sup> though this did not happen until more than ten years afterwards. TMAC was made responsible for coordinating and monitoring all mine action activities.<sup>35</sup> Since then, TMAC has acted as the secretariat for the CIHL to which it reports.<sup>36</sup>

On 3 January 2014, TNMAC was established by government decree to replace TMAC.<sup>37</sup> While transition to national ownership is considered to have been successful, UNDP’s Support to Tajikistan Mine Action

Programme (STMAP) project has continued to support the building of sustainable national structures and TNMAC’s technical capacity.<sup>38</sup> However, lack of funding might result in the project folding in 2018.<sup>39</sup>

The Ministry of Defence (MoD) plays a significant role in Tajikistan’s mine action sector. With its adoption in July 2013 of the Strategic Plan on Humanitarian Demining (2013–16), the Ministry has sought to focus on three main objectives: to further support demining; to enhance national capacities; and to create the conditions for an effective national mine action programme.<sup>40</sup> The Organization for Security and Co-operation in Europe Programme Office in Dushanbe (OCSE PoID) supported the MoD to develop an updated plan, entitled “Ministry of Defence of the Republic of Tajikistan Co-operation Plan for Humanitarian Demining 2018–23”. The draft plan was developed in August and September 2017 through a joint working group, and as at early October was with the Ministry of Defence for review.<sup>41</sup>

In conjunction with the Government of Tajikistan and the Tajik Border Forces, TNMAC prioritises land release activities using a district-by-district approach based on the following criteria: mined areas with economic and infrastructure impact; the number of unsurveyed minefield records in each district (those with a larger number of minefields records will be considered a priority for the deployment of non-technical survey teams); and the number of mined areas in each district (a smaller number of minefields will be considered a priority to deploy clearance teams to release the whole district).<sup>42</sup> Issues of accessibility due to mountainous terrain and adverse weather conditions during winter limit access to some designated priority tasks, as do security restrictions.<sup>43</sup>

The Geneva International Centre for Humanitarian Demining (GICHD) is working with TNMAC and UNDP to develop a prioritisation system and tool for Tajikistan, which will identify distinct criteria and indicators for the separate regions.<sup>44</sup> A pilot of PriSMA (the Priority Setting Tool for Mine Action) was conducted from July to September 2017.<sup>45</sup> As at May 2018, a second version of PriSMA had been developed and piloted and was in the process of being integrated with TNMAC's existing priority-setting workflow, including specific requests received from the government and field survey recommendations.<sup>46</sup>

An agreement on cooperation between the Governments of Tajikistan and Afghanistan was signed in 2014, and TNMAC has coordinated with the UN Mine Action Centre for Afghanistan (UNMACCA) and Afghanistan's Directorate of Mine Action Coordination (DMAC) on land release approaches, NMAS, exchange visits, cross-border projects, victim assistance, and risk education.<sup>47</sup> Since 2017, this also includes collaboration regarding quality management (QM).<sup>48</sup>

Depending on weather conditions, land release operations in the Khatlon region of the border usually start in February/March; the GBAO part of the border only becomes accessible from May until October; and the Central Region from June until September.<sup>49</sup>

## Strategic Planning

The previous national mine action strategic plan 2010–15 expired at the end of 2015.<sup>50</sup> A new National Strategy on Humanitarian Mine Action for 2017–20 was approved by government decree No. 91 on 25 February 2017.<sup>51</sup> The national strategy is, however, very general, and while it includes a "plan", which lists the various overarching activities to implement the strategy, it lacks detail on prioritisation of clearance tasks, timelines, or capacities for survey and clearance operations. This is disappointing as Tajikistan has, over several years, benefitted from support on strategic planning from the GICHD.<sup>52</sup>

In addition, operators were not consulted on the final version of the national strategy, but only in the draft "Anti-Personnel Mine Ban Convention Article 5 Completion Plan 2016–20", which focuses on mine contamination, and for which operators advised that the national strategy's planning concept needed more work.<sup>53</sup> This recommendation, however, is not reflected in the planning details of the National Strategy as approved by the government.

TNMAC is still in the process of finalising the draft Article 5 completion plan for 2016–20, which contains more detail on implementing the strategy, and which will be reviewed each year.<sup>54</sup> Based on the October 2016 draft, the completion plan focuses on the most heavily mined regions, which are along the Afghan border. From June to September, during favourable weather in the high-altitude areas, efforts will focus on the Central Region.<sup>55</sup> In conjunction with the Government of Tajikistan and the Tajik Border Forces, TNMAC will prioritise land release activities using a district-by-district approach based on the following criteria:

- Mined areas with economic and infrastructure impact
- The number of unsurveyed minefield records in each district (those with a larger number of minefields records will be considered a priority for the deployment of non-technical survey teams); and
- The number of mined areas in each district (a smaller number of minefields will be considered a priority to deploy clearance teams to release the whole district).<sup>56</sup>

In 2017, TNMAC further developed its new approach to survey, known as "non-technical survey with technical intervention". In addition to standard non-technical survey, survey teams are also using technical assets to confirm and locate actual evidence of mines and unexploded ordnance (UXO). This is intended to enhance the efficiency of operations by confirming areas as mined and by more accurately determining the location of minefields.<sup>57</sup>

## Legislation and Standards

In 2015, Tajikistan drafted a Law on Humanitarian Mine Action, which covers all aspects of mine action. However, relevant non-governmental organisations (NGOs) are not believed to have been consulted during its drafting.<sup>58</sup> The law (number 1338), which was ratified by Tajikistan's Parliament on 23 July 2016,<sup>59</sup> was presented to mine action stakeholders in September 2016, during a workshop hosted by TNMAC.<sup>60</sup>

Tajikistan's National Mine Action Standards (TNMAS) have been revised, and were approved by decree No. 162 on 1 April 2017. The new standards have been translated into Russian and English.<sup>61</sup>

## Quality Management

TNMAC coordinates and monitors the QM process in Tajikistan, and the TNMAS are said to cover all QM requirements, both from a process and from a final product (released land) perspective.<sup>62</sup>

In addition, in 2017, TNMAC officers began conducting quality assurance (QA) and quality control (QC) on demining operations on the Afghan side of the border, having been accredited by DMAC Afghanistan and according to Afghanistan National Mine Action Standards. This is based on a Memorandum of Understanding (MoU) between Tajikistan and Afghanistan, within the framework of a cross-border cooperation project, with financial support from the United States; this cooperation has continued into 2018.<sup>63</sup>

## Information Management

In 2016, Tajikistan updated its mine action information management system to Information Management System for Mine Action (IMSMA) version 6.0.<sup>64</sup> According to TNMAC, one of the challenges it faces in information management is retention of experienced staff.<sup>65</sup>

## Operators

In 2017, operational capacity included two manual clearance FSD teams; five multi-purpose manual Norwegian People's Aid (NPA) teams; five military multi-purpose manual teams (four from the Ministry of Defence Humanitarian Demining Company (HDC) and one from the Committee of Emergency and Civil Defence); and two Union of Sappers of Tajikistan (UST) non-technical survey teams.<sup>66</sup> Clearance capacity in 2018 is less than the previous year, with NPA deploying one less multi-purpose manual clearance team due to the cessation of NRK Telethon funding in Norway. Also, as at May 2018, no funding had been secured for FSD survey or clearance operations in Tajikistan in 2018 and both FSD's clearance teams had been disbanded.<sup>67</sup>

Following the signature of an MoU with the OSCE POiD in 2009, the MoD established the HDC.<sup>68</sup> Since TMAC's nationalisation, the HDC has acted as a contractor for TNMAC, and OSCE POiD funds the HDC through TNMAC.<sup>69</sup> The HDC increased its operational capacities in 2016, increasing from three-multi-purpose teams in 2015 to five in 2016.<sup>70</sup> In 2017, three of the five MoD teams were supported by OSCE POiD unified budget (from participating states) and two by the United States Department of State via the OSCE POiD.<sup>71</sup>

The MoD provides five teams to the HDC as part of its commitment to assist TNMAC meet Tajikistan's Article 5 obligations, but according to a representative from the MoD, more deminers could be trained and made available by the MoD if additional international funding was made available. Military deminers are reportedly less expensive than deminers of international NGOs, and have the additional advantage of having security access to survey and clear mined areas in the vicinity of military

bases and other areas which may be inaccessible to other implementing partners due to security restrictions. The MoD also has one demining machine, which is a tiller. Implementing partners can request use of the demining machine from the MoD, but the machine must be operated by MoD personnel.<sup>72</sup>

The OSCE POiD has been supporting mine action since 2003. The OSCE POiD's strategy in Tajikistan is twofold: to support the development of national demining capacity; and to foster regional cooperation in border management and security.<sup>73</sup> The OSCE POiD supported the HDC via the UST, which it contracted to provide project management and administrative support to the Ministry of Defence's HDC in 2010–13.<sup>74</sup> In addition, the OSCE POiD provided explosive ordnance disposal (EOD) courses to clearance operators and implementing partners in Tajikistan and participants from elsewhere in the region in 2017, at a regional explosive hazard training centre.<sup>75</sup>

Until 2015, limitations in Tajikistan's legislation had prevented UST, a national not-for-profit organisation, gaining accreditation for demining activities.<sup>76</sup> In 2015, UST obtained permission to conduct survey and received a grant from UNDP for technical and non-technical survey in the south of the country.<sup>77</sup> UST is accredited to conduct non-technical survey, risk education, and victim assistance. In 2017, UST received additional accreditation to conduct non-technical survey with technical survey intervention, but it is not accredited to conduct stand-alone technical survey or clearance.<sup>78</sup> In 2016, two UST teams (four surveyors per team) conducted non-technical survey in the Shamsiddin Shohin district of the Khatlon region, and as at May 2018 survey operations were ongoing.<sup>79</sup> While some staff positions at UST are permanent, such as the Operations Manager, deminers are recruited annually for the operations period from Spring until October, based on UST's annual survey plan.<sup>80</sup>

As at early October 2017, UST was conducting non-technical survey with technical survey intervention, in line with the new land release methodology in Tajikistan.<sup>81</sup> This methodology helps improve the efficiency of survey operations, as minefield records are sometimes incomplete or inconsistent due to incorrect coordinates and grid numbering or lack of landmarks/reference points, and there is often a lack of local people to ask about evidence of mines, accidents etc., as people have moved away because of the contamination. This can result in inflated polygons. In addition, mines are sometimes displaced due to landslides, rock falls, and flooding.<sup>82</sup> Of the 19 minefields UST surveyed in 2017, four were with the use of technical interventions and the remainder were solely using non-technical survey as they were surveyed before the new methodology was approved. The use of technical interventions by UST is expected to improve operational efficiency, but it will also slow down the rate of survey by UST of the remaining unsurveyed minefields.<sup>83</sup>

While in many instances the contaminated area is cancelled or reduced through survey by UST, there are also instances when survey reveals the size of the mined area as being larger than indicated on the minefield records. This can be due to a number of factors, such as windy conditions at the time when helicopter-dropped mines were deployed which leads to greater dispersal of the mines; the height of the helicopter above the ground at the time of deployment (in time of hostilities, the distance of the helicopter from the ground is significantly increased, resulting in wider dispersal of the mines); and mountainous terrain.<sup>84</sup>

Neither mine detection dogs (MDDs) nor machines were used operationally in 2017.<sup>85</sup> The MDD programme ended in early 2015 due to the very limited number of tasks suitable for dogs. Consequently, 18 MDDs were handed

over to the Ministry of Interior and to the Border Forces.<sup>86</sup> Similarly, economic use of mechanical assets reached its limit, and as at November 2016, all areas suitable for machine deployment had reportedly been completed,<sup>87</sup> and the remaining mined area is only suitable for manual demining operations.<sup>88</sup> However, this refers to accessible remaining mined area in districts in which security permission has been granted for clearance operations. Many of the western districts of the Tajik-Afghan border, which are currently not accessible because of security restrictions, contain mined areas on flat terrain, which is suitable for mechanical demining.<sup>89</sup> Furthermore, NPA believes there may be some potential for use of machinery in some of the current demining operations, which could potentially save significant time, especially in areas which are subject to full excavation because of high scrap metal contamination in the soil.<sup>90</sup>

## LAND RELEASE

Total mined area released by clearance in 2017 was nearly 0.62km<sup>2</sup>. In addition, nearly 0.16km<sup>2</sup> was released by technical survey and over 0.48km<sup>2</sup> was cancelled by non-technical survey.

This is an increase in clearance output on the 0.5km<sup>2</sup> of mined area cleared in 2016, with a five-fold increase in the number of anti-personnel mines destroyed, but a decrease on the 0.95km<sup>2</sup> reduced by technical survey the previous year.<sup>91</sup>

### Survey in 2017

In 2017, a total of 156,615m<sup>2</sup> was reduced through technical survey and a further 483,419m<sup>2</sup> was cancelled by non-technical survey in Lakhsh and Rasht districts in the Central Region, Darvoz and Vanj districts in GBAO region, and Shamsiddin Shohin district in Khatlon province.<sup>92</sup>

### Clearance in 2017

In 2017, FSD, NPA, and the MoD/HDC cleared nearly 0.62km<sup>2</sup> across 23 mined areas (some of which were suspended and not yet completed as at the end of 2017), destroying 6,647 anti-personnel mines and 22 items of UXO (see Table 2).<sup>93</sup> This is a slight increase on the 0.5km<sup>2</sup> cleared in 2016, but a substantial increase on the 1,248 anti-personnel mines destroyed in 2016,<sup>94</sup> due to the density of mines along the Afghan border.

**Table 2: Mine clearance by operator in 2017\*<sup>95</sup>**

Operator	Province	District	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	UXO destroyed
FSD	GBAO	Darvoz	2	27,297	352	2
		Khatlon	3	67,374	1,529	18
	DRD	Khatlon	1	5,700	0	0
		Rasht	1	12,296	0	7
NPA	GBAO	Darvoz	2	31,765	30	25
	Khatlon	Sh. Shohin	3	122,940	**2,652	33
	DRD	Lyakhsh	2	18,704	5	0
MoD	GBAO	Vanj	3	194,958	535	88
		Khatlon	5	118,139	1,540	32
	Khatlon	Panj	1	18,885	4	16
<b>Totals</b>			<b>23</b>	<b>618,058</b>	<b>6,647</b>	<b>221</b>

AP = Anti-personnel

\* Clearance includes suspended area not yet completed as at end-2017

\*\* Excludes 298 anti-personnel mines found in 2017, but not destroyed until 2018.

Anti-personnel mines were found in nearly all clearance tasks in 2017, with the exception of a minefield in Rasht district, DRD province, a minefield in Panj district, Khatlon province tasked to FSD for clearance, and a minefield tasked to NPA in Lyakhsh district in the Central Region. NPA, however, found strong evidence on its task of the past presence of mines, such as pieces of rubber plates, pieces of plastic fragments, and holes created as a result of the detonation of PMN mines.<sup>96</sup>

NPA also reported some challenges posed by the very high density of metal scrap in tasks in Sarichashma municipality, in Shamsiddin Shohin district, which on many occasions made work with the metal detectors impossible and full excavation had to be conducted.<sup>97</sup>

Due to a security incident on the Afghan border in the beginning of December 2017 (unrelated to mine action), NPA had to leave its area of operations in Shamsiddin Shohin district one week earlier than planned.<sup>98</sup> As a result, an additional 298 mines found in 2017 were not destroyed until 2018.<sup>99</sup>

In 2015 and 2016, due to increased security in northern parts of Afghanistan (along the Tajik border), the Border Forces denied permission for clearance operations in the Khatlon border region – an area that contains nearly three-quarters of all mine contamination in Tajikistan.<sup>100</sup> In 2016, the Border Forces only permitted non-technical survey operations in Shamsiddin Shohin district to survey some of the previously unrecorded minefields.<sup>101</sup> In January 2017, greater access for clearance and survey operations was granted along the Tajik-Afghan border, including Shamsiddin Shohin district.<sup>102</sup>

The current security condition on the Tajik-Afghan border remains generally stable. As at April 2018, clearance was being tasked to the eastern part of the Tajik-Afghan border and in Shamsiddin Shohin district, which is the most contaminated district along the border, containing 93 CHAs totalling an estimated 3.3km<sup>2</sup> (approximately 44% of all confirmed mine contamination).<sup>103</sup>

Furthermore, in November 2017, the Border Guards granted permission for demining operations in the Jaykhun, Panj, Farkhor and Hamadoni districts of Khatlon. However, due to the unstable situation on the border and in the interest of the safety of humanitarian deminers, no land release was carried out in these areas.<sup>104</sup> TNMAC is negotiating with Border Forces to provide a security convoy for demining teams in these western districts of the Tajik-Afghan border in the plain areas, which comprise around one quarter of the total contamination.<sup>105</sup> TNMAC is also continuing negotiations with government authorities regarding access for survey and clearance to the remaining districts of the Tajik-Afghan border that are closed at present.<sup>106</sup>

### Deminer Safety

In 2017, there was one demining accident, during mine clearance operations in Shamsiddin Shohin district in September. A female NPA deminer accidentally penetrated a PFM-1 anti-personal mine during excavation and came into contact with toxic liquid elements from inside the mine. The deminer received medical assistance and made a full recovery.<sup>107</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the ten-year extension granted by states parties in 2009), 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 1 April 2020. It is not on track to meet its deadline.

As at May 2018, TNMAC was considering submitting an interim Article 5 deadline extension request in 2018, to enable it to complete survey of the unsurveyed minefields, with a view to then submitting a third extension request containing workplans based on a clearer understanding of the extent of the challenge and the amount of time that will be required to complete Article 5 implementation.<sup>108</sup>

A reduction in demining capacity; insecurity along its border with Afghanistan and lack of permission to conduct demining in some of the Western districts; the inaccessibility and/or operational difficulty of some mined areas; and the very poor quality of some minefield records, mostly from the civil war in the Central Region, means that Tajikistan will not meet its 2020 Article 5 deadline and is not even likely to complete clearance by 2025.<sup>109</sup>

In total during the last five years, Tajikistan has cleared just over 4km<sup>2</sup> of mined area (see Table 3). Progress was hampered in 2015 and 2016 due to restricted access for clearance in the Afghanistan border region because of heightened security. This resulted in delay of clearance operations and a focus on the mountainous Central Region, where adverse weather means the demining window is much shorter, and where additional challenges result from the need to access remote locations and to ensure medical evacuation.<sup>110</sup> In a very positive development, clearance was permitted in parts of the Tajik-Afghan border in 2017 and continued in 2018, including Shamsiddin Shohin district, which is one of the most mined districts in Tajikistan.<sup>111</sup>

**Table 3: Mine clearance in 2013–17<sup>112</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	0.62
2016	0.50
2015	0.25
2014	0.65
2013	1.99
<b>Total</b>	<b>4.01</b>

In its Article 7 transparency report for 2016, Tajikistan estimated that it would clear 1.52km<sup>2</sup> across 22 mined areas in 2017.<sup>113</sup> Actual mine clearance output in 2017, of nearly 0.62km<sup>2</sup>, fell well short of this target.

In its most recent Article 7 report (for 2017), Tajikistan estimated release of 30 minefields (26 in Khatlon district, 3 in GBAO, and 1 in the Central Region) in 2018, totalling over 1.9km<sup>2</sup>. This would be followed by release of 30 minefields (20 in Khatlon district, 9 in GBAO, and 1 in the Central Region) in 2019, totalling over 2km<sup>2</sup>.<sup>114</sup> Taking into account the mountainous terrain, inaccessibility, and climatic conditions of the mined areas, along with the current demining capacity, Tajikistan reassessed that it would actually clear only 1.5km<sup>2</sup> across 20 minefields in 2018, in addition to conducting non-technical and technical survey on the unsurveyed minefield records.<sup>115</sup> However, based on recent annual clearance output, even this reduced estimate of 1.5km<sup>2</sup> of annual clearance is very high and well over double the 2017 clearance output.

TNMAC estimates that it will complete survey of the 45 unsurveyed minefield records by the end of 2020.<sup>116</sup> Many of these unsurveyed minefields are extremely hard to access, with UST's survey teams sometimes having to walk for more than three hours each way in mountainous terrain, to access the survey area, leaving only a few hours each day for survey activities.<sup>117</sup> Once survey of the unsurveyed minefields has been completed, Tajikistan will, though, have a more accurate understanding of its baseline mine contamination, which will in turn help TNMAC to develop a more accurate Article 5 completion plan.

Tajikistan has been developing an Article 5 workplan for 2016–20.<sup>118</sup> In June 2017, at the APMBC Intersessional Meetings, Tajikistan reported that it needs “advisory support and exchange experience on addressing inaccessible areas and non-executable tasks, as well as on all other challenges faced”.<sup>119</sup> However, with the introduction of an arrangement for medical evacuation by helicopter, in collaboration with the Armed Forces, there were no longer any mined areas deemed to be “inaccessible” as at May 2018. As part of the casevac arrangement, a military helicopter and pilot are on standby in Dushanbe, and are notified of the coordinates of helicopter landing pads in areas where survey and clearance operations are being undertaken in areas not accessible by road.<sup>120</sup> There are, however, mined areas on two islands in the Panj river on the Tajik-Afghan border, one of which is 538,500m<sup>2</sup> and the other is 30,000m<sup>2</sup>, which at present are non-executable. 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.<sup>121</sup>

Tajikistan has reported that it requires continued international assistance to increase demining capacity and fulfil its APMBC Article 5 obligations.<sup>122</sup> In 2017, a total of almost US\$3 million was spent on mine action, the majority through international funding.<sup>123</sup> Of this, the Government of Tajikistan supported TNMAC coordination activities with some 300,000 Tajik Somoni (approximately US\$33,000) in 2017. In addition, the Tajik government contributes five MoD demining teams (500,000 Tajik Somoni), and provides support for the joint projects of TNMAC and UNDP, and OSCE POiD.<sup>124</sup>

TNMAC expected the level of national and international funding to remain constant in 2018, but was seeking additional funding to speed up survey and clearance efforts, towards meeting its Article 5 obligations. Accessing hard-to-reach areas of mine contamination greatly increases the time and cost of clearance operations.<sup>125</sup>

- 1 Email from Muhabbat Ibrohimzoda, Director, Tajikistan National Mine Action Centre (TNMAC), 27 April 2018; and Article 7 Report (for 2016), Form D.
- 2 Statement of Tajikistan, APMBC 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017; and interview with Muhabbat Ibrohimzoda, TNMAC, and Murtazo Gurezov, QA Officer, TNMAC, Dushanbe, 25 May 2018.
- 3 Email from Muhabbat Ibrohimzoda, TNMAC, 22 May 2017; and Article 7 Report (for 2016).
- 4 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018; and Article 7 Report (for 2016), Form D and Annex II.
- 5 Article 5 deadline Extension Request, 31 March 2009, p. 1; and Tajikistan Mine Action Centre (TMAC), "Scope of the Problem", accessed 20 August 2018 at: <http://www.mineaction.tj/about/scope/>.
- 6 R. Roberts, "Evaluation of United Nations Development Programme Support to the Tajikistan Mine Action Programme", January 2012, p. 11, at: [http://www.mineaction.tj/docs/plans/Evaluation of UNDP STMAP - Jan 2011.pdf](http://www.mineaction.tj/docs/plans/Evaluation%20of%20UNDP%20STMAP%20-%20Jan%202011.pdf).
- 7 Article 5 deadline Extension Request, 31 March 2009, p. 1.
- 8 Statement of Tajikistan, Intersessional Meetings, Geneva, 8 June 2017.
- 9 TNMAC, Draft Article 5 Completion Plan 2016–20, 4 October 2016.
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# THAILAND

**ARTICLE 5 DEADLINE: 31 OCTOBER 2023**  
(UNCLEAR WHETHER ON TRACK TO MEET DEADLINE)

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	8	7
Target date for completion of mine clearance	6	4
Targeted clearance	7	7
Efficient clearance	6	6
National funding of programme	6	6
Timely clearance	6	6
Land-release system in place	7	7
National mine action standards	7	7
Reporting on progress	7	6
Improving performance	7	7
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.7</b>	<b>6.3</b>

## PERFORMANCE COMMENTARY

Thailand’s mine action community appears to be energised by a combination of proactive leadership in the national authority, progress in non-technical survey, the resulting cancellation of a high proportion of suspected hazardous areas (SHAs), and by the challenge of meeting its new and ambitious five-year deadline for eliminating mine contamination. Growing confidence in, and experience with, survey procedures have increased the pace of survey and the amount of land released.

### RECOMMENDATIONS FOR ACTION

- Thailand should conclude early agreements with Cambodia to, at the least, pilot cooperation in border demining.
- Thailand should publish its overall plan for tackling all hazardous areas on its borders.
- Thailand should mobilise more funding for mine action to ensure it achieves its latest land release milestones.

## CONTAMINATION

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. Re-survey in recent years has sharply reduced estimates of the extent of contamination.

A 2001 Landmine Impact Survey (LIS) estimated mine/ERW contamination totalled 2,557km<sup>2</sup>, affecting 27 of Thailand’s 76 provinces, and impacting on the lives of more than 500,000 people.<sup>1</sup> Thailand’s Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request, submitted in 2008, claimed it

had released 1,355km<sup>2</sup> of this area, leaving a total of 1,202km<sup>2</sup> of SHA. This included an estimated 528km<sup>2</sup> of “real minefield” that would require manual clearance.<sup>2</sup> Subsequent non-technical survey in partnership with Norwegian People’s Aid (NPA) has shown that only a small proportion of this area is contaminated.

By the end of 2017, Thailand reported suspected mined areas covering 391km<sup>2</sup>, of which 84% was located in seven eastern and north-eastern provinces bordering Cambodia (see Table 1). Most of the rest was in Chiang Mai, bordering Myanmar, and in Pitsanuloke, on the border with Lao PDR.<sup>3</sup>

**Table 1: Mine contamination by province (at end-2017)<sup>4</sup>**

Region	Province	SHAs	Area (km <sup>2</sup> )
North	Chiang Mai	4	25.62
	Pitsanulok	1	28.53
	Tak	1	0.37
	Uttaradit	1	3.35
North-east	Buriram	15	19.48
	Surin	27	29.17
	Sisaket	51	84.06
	Ubon Ratchathani	63	103.96
East	Sa Kaeo	23	9.21
	Chanthaburi	21	3.94
	Trat	68	80.23
South	Chumpon	1	3.17
	Yala	3	0.29
<b>Totals</b>		<b>279</b>	<b>391.38</b>

## 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, but after 2008 it never convened. The NMAC was reconstituted in May 2017, still with the prime minister as chairman. It was expected to meet for the first time before the Sixteenth Meeting of States Parties of the APMBBC and thereafter to meet annually.<sup>5</sup> 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.<sup>6</sup>

The Thailand Mine Action Centre (TMAC) was established in 1999 under the Armed Forces Supreme Command to coordinate, monitor, and conduct mine/ERW survey, mine clearance, mine/ERW risk education, and victim assistance throughout Thailand.

TMAC is also responsible for establishing a programme to meet Thailand's obligations as a state party to the APMBBC.<sup>7</sup> However, TMAC has had to contend with limited funding and, as a military organisation, with regular rotation of personnel at all levels.<sup>8</sup> Lieutenant-General Sittipol Nimnuan took over as TMAC's director in October 2017, the eleventh director since TMAC was created in 2000 and the seventh in the last seven years.

### Strategic Planning

Thailand's Second Article 5 Extension Request, submitted in August 2017, set out a two-phase programme for completing clearance, and seeking a deadline extension until 31 October 2023. Phase 1, spanning 2017 and 2018, projected release of 63.8km<sup>2</sup> of suspected contamination, leaving the remaining 358.8km<sup>2</sup> to be tackled in the requested five-year extension period.

**Table 2: Planned land release 2017–2023<sup>9</sup>**

Province	Area to be released in Phase 1 (m <sup>2</sup> )	Area to be released in Phase 2 (m <sup>2</sup> )
Sa Kaeo	366,850	9,192,948
Trat	19,199,151	67,454,225
Chanthaburi	754,820	3,936,224
Buriram	0	19,483,928
Surin	1,869,334	28,670,745
Sisaket	17,981,799	70,883,609
Ubon Ratchathani	22,478,947	89,945,265
Uttaradit	0	3,345,061
Pitsanulok	0	32,990,520
Tak	0	366,772
Chiang Mai	0	25,615,188
Chumphon	0	6,924,647
Yala	1,145,139	0
<b>Totals</b>	<b>63,796,040</b>	<b>358,809,132</b>

Potential obstacles to completion identified in the request included border demarcation disputes, difficult terrain, financial constraints, and unforeseen circumstances such as flooding and political upheavals. Border demarcation poses a particular concern. The request stated that Phase 1 is intended to release all SHAs outside border areas, leaving Phase 2 to tackle areas to be demarcated on its borders covering 358.8km<sup>2</sup>, or 85% of the outstanding suspected contamination.<sup>10</sup>

### Legislation and Standards

TMAC drafted its first national mine action standards with NPA's support in 2010, formally adopting them in June 2012. A revision of the standards was completed on 1 April 2015, mainly amending chapters on non-technical survey, technical survey and land release.<sup>11</sup> TMAC's Director reported in mid-2018 that it is again in the process of updating standards.<sup>12</sup>

## Information Management

TMAC manages a database using Excel and Geographic Information System (GIS) mapping. Its information management unit employs four people on three-year contracts avoiding rapid personnel rotation affecting other units.

## Operators

TMAC completed accreditation of operators for the first time in March 2015, accrediting its four Humanitarian Mine Action Units (HMAUs), one international non-governmental organisation (NGO), NPA, and two national NGOs: the Thai Civilian Deminer Association (TDA) and Peace Road Organization Foundation (PRO). Operators are now required to renew their accreditations annually.<sup>13</sup>

Thailand's second extension request said TMAC would employ 330 operations personnel in the five HMAUs and 172 headquarters staff.<sup>14</sup> TMAC has received a budget of about BHT 70 million a year (approx. US\$2.1 million) and expressed confidence that funding would continue at least at that level.<sup>15</sup>

NPA, the only international operator working in Thailand, has supported TMAC operations since 2011, conducting land release through non-technical and technical survey along the Thai-Cambodia border (in cooperation with HMAU 3) and in the north (with HMAU 4). In 2017, working with three teams and twelve field personnel, NPA had two teams working in Sisaket province in cooperation with HMAU 3, and a third team in Trat province, working with HMAU 2. NPA's two teams moved to Ubon Ratchathani province in March 2018 while the third team remained in Trat province.<sup>16</sup>

Thai Civilian Deminers Association, the only national NGO active in 2017, employed a total of 24 staff in 2017, including 17 field staff, conducting mainly non-technical and technical survey funded by the JAPAN-ASEAN Integration Fund (JAIF).<sup>17</sup> A second national NGO, PRO, suspended operations in 2015 pending receipt of further funding.<sup>18</sup>

## LAND RELEASE

Thailand released a total of 30.98km<sup>2</sup> in 2017, 10% more than the previous year. As in previous years, Thailand's main focus remained on survey, seeking to define a realistic estimate of contamination and avoiding wasteful use of clearance assets. Less than 2% of the land released in 2017 was released by clearance.<sup>19</sup>

The total fell a little short of the 34.74km<sup>2</sup> planned for release in 2017 under Phase 1 of Thailand's 2017 Article 5 deadline extension request, but land release accelerated in the first half of 2018 and TMAC was confident of easily surpassing the 63.8km<sup>2</sup> target it set for 2017 and 2018 combined under Phase 1 of the request.<sup>20</sup> TMAC projected releasing 71.15km<sup>2</sup> in 2018, expecting more than 70% to be cancelled by non-technical survey.<sup>21</sup>

TMAC also expected to declare three provinces (Tak, Uttaradit and Yala) as mine free in 2018 and progress in the first few months of year appeared to put it on track to achieve those goals. TMAC said that by the end of April it had released 30km<sup>2</sup>, almost as much as in the whole of 2017. TMAC reported it had completed Uttaradit in April and moved its teams from that province to Tak province bordering Myanmar. In Yala, contamination in the jungle bordering Malaysia consisted of decaying booby traps. After cancelling 0.56km<sup>2</sup> in Yala through non-technical survey in 2017 only around 5,000m<sup>2</sup> remained to be cleared in 2018, a task that TMAC expected to complete in the second half of the year.<sup>22</sup>

**Table 3: Land release in 2017<sup>23</sup>**

Province	Area cancelled by NTS (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )	Area cleared (m <sup>2</sup> )	Total area released (m <sup>2</sup> )	AP mines destroyed
Pitsanuloke	4,460,000	0	0	4,460,000	0
Ubon Ratchathani	6,034,332	2,355,662	78,913	8,468,907	856
Sisaket	4,809,399	0	0	4,809,399	0
Surin	46,469	1,102,649	246,036	1,395,154	3,789
Sakaeo	189,845	160,015	1,140	351,000	100
Trat	6,354,238	38,850	32,610	6,425,698	619
Chanthaburi	590,535	96,601	69,284	756,420	300
Chumphon	3,751,127	0	0	3,751,127	0
Yala	561,564	0	0	561,564	0
<b>Totals</b>	<b>26,797,509</b>	<b>3,753,777</b>	<b>427,983</b>	<b>30,979,269</b>	<b>5,664</b>

NTS = Non-technical survey TS = Technical survey AP = Anti-personnel mine

## Survey in 2017

Thailand cancelled marginally less land as a result of non-technical survey in 2017 than the previous year but the area reduced through technical survey increased sharply to 3.8km<sup>2</sup> resulting in a 10% rise in the total amount of land released as a result of survey in 2017.

NPA's results, as in the previous year, underscored the consistently small proportion of Thailand's SHAs actually affected by mines. By the end of 2016, areas confirmed as hazardous averaged about 13.5% of the area surveyed. By the end of 2017, the average area confirmed had dropped to just below 10% of the SHA.<sup>24</sup>

In 2017, NPA-HMAU teams surveyed a total of 11.44km<sup>2</sup>, cancelling 10.76km<sup>2</sup> and confirming 0.68km<sup>2</sup>. It had one survey team working alongside HMAU 2 in Trad province and two survey teams which started the year working in Ubon Ratchathani province before moving to Sisaket province in March 2017.

TDA conducted a process it describes as "Survey to Identify Mined Area", which combines non-technical survey, technical survey, and clearance, as well as undertaking spot tasks of explosive hazards posing an imminent threat. In 2017, it cancelled 100,000m<sup>2</sup> and confirmed 701,434m<sup>2</sup> in three districts of Surin province.<sup>25</sup>

The pace of survey appeared to increase in 2018. NPA cancelled almost 12.75km<sup>2</sup> through non-technical survey in the first half of the year, more than in the whole of 2017, a result it attributed in part to increasing efficiency and experience of its surveyors. This included 4.5km<sup>2</sup> released in Sisaket province and 8.3km<sup>2</sup> in Trat. In this period it also confirmed 0.3km<sup>2</sup> of hazard in Sisaket and 0.6km<sup>2</sup> in Trat.<sup>26</sup>

## Clearance in 2017

TMAC's data showed clearance continued to account for a small part of land release, amounting to only 427,983m<sup>2</sup> in 2017 as the focus continues on survey. Most of the clearance occurred in Surin province (246,036m<sup>2</sup>) with small areas cleared in four other provinces.

TDA reported releasing 744,077m<sup>2</sup> in Surin, some of it through technical survey but mostly as a result of full clearance. In the process it said it destroyed 4,846 anti-personnel mines, 67 anti-vehicle mines, and 33 other items of unexploded ordnance (UXO). Thailand's Article 7 Report for 2017 did not record any clearance by TDA and appears to have recorded all its operations as technical survey.<sup>27</sup>

**Table 4: Mine clearance in 2017**

Operator	Mined areas cleared	Mined area cleared (m <sup>2</sup> )	AP mines destroyed*	AV mines destroyed	UXO destroyed
TMAC	0	427,983	5,664	145	92
TDA	3	744,077	4,846	67	33
<b>Totals</b>	<b>3</b>	<b>1,172,060</b>	<b>10,510</b>	<b>212</b>	<b>125</b>

\* The number of mines destroyed includes those destroyed during technical survey. AV = Anti-vehicle

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC and in accordance with the five-year extension request granted in 2017, Thailand is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 October 2023.

Thailand's extension request targets look highly ambitious set against the record of the last five years in which land release averaged less than half the levels the

request has projected. Thus, in 2013–17, cancellation by non-technical survey totalled 120km<sup>2</sup> while reduction by technical survey released a further 33.8km<sup>2</sup>. During the same period, clearance released only 3.4km<sup>2</sup>. Land release annually therefore averaged less than 35km<sup>2</sup>. Results in 2018, when TMAC has targeted release of 71km<sup>2</sup>, will therefore severely test the ability of operators to accelerate land release to the levels set out in the extension request (see Table 5).

**Table 5: Extension request 2019–23: land release targets (km<sup>2</sup>)**

2019	2020	2021	2022	2023
72.12	72.06	73.23	74.54	66.86

The high proportion of remaining contamination located in border areas that are the subject of decades-old demarcation disputes or which are inaccessible due to insecurity (348km<sup>2</sup> at the end of 2017; close to 90% of outstanding contamination) also presented a major potential obstacle.<sup>28</sup> Cambodian soldiers requested TMAC deminers to cease operations in particular locations on two occasions in June and December 2017 and on one occasion in January 2018, underscoring the potential for setbacks in the progress of border clearance.<sup>29</sup>

Thailand’s extension request observed that earlier levels of cancellation through non-technical survey suggested the amount of land that would need technical survey and clearance in the extension period would amount to about 48.4km<sup>2</sup>. If this is true, TMAC and partners would still have to release an average of 9.6km<sup>2</sup> a year through technical survey and clearance, considerably higher than the 7.4km<sup>2</sup> averaged in the past five years.

Improved relations between Thailand and Cambodia have opened the way for increased contacts with Cambodia on border cooperation. TMAC has previously had contacts with Cambodian Mine Action Centre. TMAC director Lieutenant-General Sittipol Nimnuan reported that Thailand was working with Cambodia’s mine action authorities to explore possibilities for cooperation.<sup>31</sup>

The extension request also presumed a sharp increase in mine action expenditure, with funding averaging about THB 240 million (\$6.15 million) a year during the extension period, compared with TMAC’s annual budget averaging about THB70 million (US\$ 2.1 million) a year in recent years.<sup>32</sup>

**Table 6: Mine clearance in 2013–17**

Year	Area cleared (m <sup>2</sup> )
2017 <sup>30</sup>	427,983
2016	394,238
2015	2,047,662
2014	228,911
2013	312,053
<b>Total</b>	<b>3,410,847</b>

- 1 Survey Action Center (SAC) and NPA, “Landmine Impact Survey: Kingdom of Thailand”, 2001, pp. 7, 17.
- 2 Revised Article 5 deadline Extension Request, 7 August 2008, pp. 15, 19.
- 3 APMBC Article 7 Report (for 2017), Form D.
- 4 Ibid., Table D–1. The totals in the table are corrected as they are wrong in the Article 7 transparency report.
- 5 Second Article 5 deadline Extension Request, 8 August 2017, p. 7; and interview with Lt.-Gen. Prasopchai Kongburan, Director General, Thailand Mine Action Centre (TMAC), in Geneva, 8 June 2017.
- 6 Interview with Lt.-Gen. Prasopchai Kongburan, TMAC, in Geneva, 8 June 2017.
- 7 “About us: Thailand Mine Action Center”, TMAC website, accessed 14 October 2015, at: [http://www.globalhand.org/en/browse/global\\_issues/21/all/organisation/24341](http://www.globalhand.org/en/browse/global_issues/21/all/organisation/24341).
- 8 Interview with Col. Terdsak Trirattanagool, Assistant Director General, TMAC, Bangkok, 15 May 2017.
- 9 Second Article 5 deadline Extension Request, 8 August 2017, p. 21.
- 10 Ibid., pp. 3–5, 21–23.
- 11 Thai National Mine Action Standards, 1 April 2015.
- 12 Statement by Lt.-Gen. Sittipol Nimnuan, Director, TMAC, to APMBIC Intersessional Meeting, 7 June 2018.
- 13 Email from Aksel Steen-Nilsen, Country Director, NPA Thailand, 22 August 2018.
- 14 Revised Second Article 5 deadline Extension Request, 8 August 2017, p. 25.
- 15 Interview with Maj.-Gen Terdsak Trirattanagool, TMAC, Bangkok, 27 April 2018.
- 16 Email from Shushira Chonhenchob, Programme Manager, NPA, Bangkok, 23 July 2018.
- 17 Emails from Amornchai Sirisai, Director, TDA, 27 and 28 July 2018.
- 18 Embassy of Japan in Thailand, “The Government of Japan Provides Grant Assistance for the Project for the Clearance of Landmines/ UXOs along the Thai-Cambodia border through the Land Release Method”, accessed 11 June 2015, at: <http://www.th.emb-japan.go.jp/en/jis/2015/1507.htm>; Revised Second Article 5 deadline Extension Request, 8 August 2017, p. 25.
- 19 Article 7 Report (for 2017), Form D, Table D–3.
- 20 Interview with Maj.-Gen Terdsak Trirattanagool, TMAC, Bangkok, 27 April 2018.
- 21 Ibid.; and Article 7 Report (for 2017), Form D, Table D–4.
- 22 Statement of Thailand, Standing Committee meetings, Geneva, 7 June 2018; and interview with Maj.-Gen Terdsak Trirattanagool, TMAC, Bangkok, 27 April 2018.
- 23 Article 7 Report (for 2017), Form D, Table D–3. The totals for cancellation, reduction, and clearance outputs on Thailand’s Article 7 report do not correctly sum, based on the sub-totals. The correct totals have been used in Mine Action Review’s Table 3 on Land Release in 2017.
- 24 Email from Shushira Chonhenchob, NPA, 23 July 2018.
- 25 Emails from Amornchai Sirisai, TDA, 27 and 28 July 2018.
- 26 Email from Shushira Chonhenchob, NPA, 23 July 2018.
- 27 Emails from Amornchai Sirisai, TDA, 28 and 31 July 2018; Article 7 Report for 2017, Form D.
- 28 Border contamination at the start of 2016 included 215 areas affecting 256.3 km<sup>2</sup> on the Cambodian border, 7 areas affecting 32.9km<sup>2</sup> on the border with Myanmar, and 24 areas affecting 69.6km<sup>2</sup> on the border with Lao PDR.
- 29 Interview with Maj.-Gen Terdsak Trirattanagool, TMAC, Bangkok, 27 April 2018.
- 30 Thailand’s Article 7 Report includes only TMAC operating results.
- 31 Statement of Thailand, Standing Committee meetings, Geneva, 7 June 2018.
- 32 Second Article 5 deadline Extension Request, 8 August 2017, pp. 25–26; Interview with Maj.-Gen. Terdsak Trirattanagool, TMAC, Bangkok, 27 April 2018; exchange rate, US\$1 = THB 33.2699, at Oanda.com, 31 July 2018.



# TURKEY

**ARTICLE 5 DEADLINE: 1 MARCH 2022**  
(NOT ON TRACK TO MEET DEADLINE)

## PROGRAMME PERFORMANCE

	2017	2016
<b>Problem understood</b>	7	7
<b>Target date for completion of mine clearance</b>	3	3
<b>Targeted clearance</b>	6	5
<b>Efficient clearance</b>	6	5
<b>National funding of programme</b>	6	6
<b>Timely clearance</b>	4	3
<b>Land-release system in place</b>	6	6
<b>National mine action standards</b>	6	6
<b>Reporting on progress</b>	6	6
<b>Improving performance</b>	6	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.6</b>	<b>5.3</b>

## PERFORMANCE COMMENTARY

Turkey continued to make progress in its national mine action performance in 2017, releasing significantly more mined area than in previous years. This included completing Phase 1 of the European Union (EU) Eastern Border Mine Clearance project, managed by the United Nations Development Programme (UNDP) on its Eastern border with Iran, and survey and clearance by the armed forces demining personnel on the Syrian border, in support of the project to build a Border Security Surveillance System.

The Turkish Mine Action Centre (TURMAC) made efforts to strengthen its structure and capacity during the year, through recruitment and training of personnel, enhanced coordination with other state institutions, and implementation of the recommendations of a capacity needs assessment, conducted by UNDP and the Geneva International Centre for Humanitarian Demining (GICHD), both of which are providing support to TURMAC.

Military deminers received accreditation to conduct manual clearance in 2017, and TURMAC is in the process of significantly expanding its military demining capacity, with national funding.

Furthermore, an Information Management System for Mine Action (IMSMA) database was created during 2017, and was in the process of becoming operational during 2018.

## RECOMMENDATIONS FOR ACTION

- TURMAC should approve and publish its national strategic mine action plan for 2019–21 as soon as possible.
- Turkey should endorse the draft National Mine Action Standards, which include its land release policy, without further delay.
- Turkey should mobilise the necessary resources for survey and clearance operations beyond the EU Eastern Border Mine Clearance project.
- Turkey should move forward, without delay, to expand demining of its non-border areas; begin large-scale systematic survey and clearance on the Syria border beyond demining required for construction of the Border Security Surveillance System and customs area; and start demining its south-eastern/Iraqi border.
- TURMAC should provide additional details of ongoing survey of eastern border areas, as well as confirming how and when it will address the huge contamination in this region that is not specified in the workplan it included in its Article 7 transparency report submitted in 2015.
- Turkey should minimise the turnover of personnel at senior management level within TURMAC, in order to enhance the effective operationalisation of its national mine action programme.
- Turkey should report on plans for clearance of mined areas under its control in Northern Cyprus, in order to meet all of its Anti-Personnel Mine Ban Convention (APMBC) Article 5 obligations.
- Turkey and Cyprus should heed the UN Security Council's renewed call for access to all remaining mined areas inside and outside the buffer zone on the islands of Cyprus.<sup>1</sup>

## CONTAMINATION

Turkey is contaminated with anti-personnel and anti-vehicle mines, as well as improvised explosive devices (IEDs), with more than 164km<sup>2</sup> of confirmed mined area across 3,061 confirmed hazardous areas (CHAs), as summarised in Table 1. A further 701 areas are suspected to be mined, but the area they cover and the number of mines that may lie within them remain to be qualified,<sup>2</sup> therefore the total contaminated area is likely to be significantly larger.

This is a reduction in baseline contamination compared to the end of 2016, when 177km<sup>2</sup> of mine contamination

was reported across 3,080 CHAs.<sup>3</sup> The suspected mined area at the end of 2017 was unchanged from a year earlier.

The great majority of anti-personnel mines in Turkey are found along its borders. The mines were laid in 1955–59 all along the border with Syria, as well as on some sections of the border with Armenia, Iran, and Iraq in 1992–95,<sup>4</sup> and with Azerbaijan.<sup>5</sup> According to Turkey, its western borders with Bulgaria and Greece, as well as the border with Georgia, are mine-free.<sup>6</sup> Mines were also laid around military installations.<sup>7</sup>

**Table 1: Contamination by region (at end-2017)<sup>8</sup>**

Region	CHAs	Area (m <sup>2</sup> )	AP mines in CHAs	AV mines in CHAs	SHAs	Area (m <sup>2</sup> )
Syrian border	1,301	139,040,431	413,117	194,649	84	N/K
Iraqi border	596	2,862,835	79,017	0	373	N/K
Iranian border*	455	17,974,376	171,844	0	38	N/K
Armenian border	42	1,097,077	20,275	0	0	0
Non-border areas	667	3,107,849	34,410	0	206	N/K
<b>Totals</b>	<b>3,061</b>	<b>164,082,568</b>	<b>718,663</b>	<b>194,649</b>	<b>701</b>	<b>N/K</b>

SHA = Suspected hazardous area AP = Anti-personnel AV = Anti-vehicle N/K = Not known

\* A section of mined area also intersects with the Azerbaijan border.

Government forces emplaced landmines during the 1984–99 conflict with the Kurdistan Workers' Party (Partiya Karkerên Kurdistan, PKK) in the south-east of the country. According to the Ministry of Foreign Affairs, these mines have been progressively cleared since 1998.<sup>9</sup> In addition to mines laid by Turkish security forces, non-state armed groups have also emplaced mines and IEDs, rendering the clearance process more complex.<sup>10</sup>

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 terrorist 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.<sup>11</sup>

In its APMBC Article 5 deadline extension request, submitted in March 2013, Turkey estimated that a total of 3,520 confirmed and suspected mined areas covered almost 215km<sup>2</sup>. This estimate was provisional as the size of the (then) 346 suspected mined areas had not even been estimated.<sup>12</sup>

In March 2015, Turkey included in its Article 7 transparency report an updated workplan for its mine clearance activities, in which it reported a total of 3,080 CHAs containing mines and 701 SHAs, of which the CHAs covered almost 173km<sup>2</sup> and the area of the SHAs was not quantified.<sup>13</sup> In Annex II of the workplan, Turkey provided a comparison between contamination reported

at the time of its 2013 Article 5 extension request and the revised contamination data reported in the workplan, and offered a range of explanations for these discrepancies, mostly related to information management problems.<sup>14</sup>

Mine contamination in Turkey has both a humanitarian and economic impact. Up to 80% of mined areas along the Syrian border are on arable land, which cannot be used. The risk to livestock is widespread, especially where fencing is damaged. Mined areas have also prevented access for development activities.<sup>15</sup>

In 2017, Turkey reported that seven boys were injured and two killed, in mine incidents. The casualty numbers reported exclude "the number of security forces who are affected from IEDs in anti-terrorism operations".<sup>16</sup>

### 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<sup>17</sup> (see Mine Action Review's *Clearing the Mines* report on Cyprus for further information).

## PROGRAMME MANAGEMENT

Previously, Turkey had reported that efforts were underway to centralise coordination of clearance activities through efforts by the Ministry of National Defence to establish a national mine action authority (NMAA) and a national mine action centre (NMAC). In its 2013 Article 5 deadline extension request, Turkey reported that a draft law on the establishment of an NMAA and an NMAC had been completed and was awaiting input from other ministries before delivery to the Prime Minister to submit to parliament.<sup>18</sup>

In January 2015, Law No. 6586 on the “Establishment of a National Mine Action Centre and Amendment of Some Other Laws” was adopted by the Turkish Grand National Assembly; the law entered into force on 3 February 2015. The law aims to define the modalities and identify the functions, jurisdictions, and responsibilities of NMAC, which will carry out clearance of mines and/or unexploded ordnance (UXO) to humanitarian standards in Turkey.<sup>19</sup> The law entitles the Turkish mine action centre, now known as TURMAC, which was established under the Ministry of National Defence, to elaborate policies for this clearance; to plan and steer related activities and monitor their implementation; and to carry out the necessary coordination and cooperation with domestic and foreign institutions.<sup>20</sup>

TURMAC was established on 3 February 2015,<sup>21</sup> and a director of the centre was appointed in August of the same year.<sup>22</sup> By February 2016, core staff had been recruited and the centre was in the initial stages of becoming operational.<sup>23</sup> However, there has been a high level of turnaround in senior level positions at TURMAC, including the directorship, which has the potential to negatively affect the management of the national mine action programme. Under Law 694 of 15 August 2017, TURMAC reports directly to the Undersecretary of the Ministry of National Defence.<sup>24</sup>

TURMAC’s capacity-development efforts are being implemented in partnership with UNDP and the GICHD, as well as other national partners.<sup>25</sup> A capacity needs assessment conducted by UNDP and the GICHD in October 2016 highlighted several capacity gaps for TURMAC.<sup>26</sup> Responding to the findings of the assessment, Turkey subsequently reported significant progress in improving the structure of TURMAC, taking steps to better coordinate with other state institutions, and conducting recruitment of qualified personnel and intensive training to strengthen capacity.<sup>27</sup> Development of standing operating procedures (SOPs) and “other organisational arrangements” are still underway.<sup>28</sup>

### Strategic Planning

Turkey has still to develop a national mine action strategy. In March 2015, Turkey reported that following the official inauguration of TURMAC, a national mine action strategy for 2016–22 would be prepared in 2015 and submitted to the Council of Ministers.<sup>29</sup> However, the strategy was delayed until after the general elections in Turkey, which took place in November 2015.<sup>30</sup> The attempted coup in July 2016 further delayed the strategy.

As at June 2017, a national strategic mine action plan for 2017–19 had been drafted and Turkey reported that the necessary coordination with ministerial bodies was ongoing and it expected the strategy to be adopted by the end of 2017.<sup>31</sup> In December 2017, Turkey reported that the draft national strategic mine action plan for 2018–20 was expected to be adopted by the Council of Ministers before the end of 2018.<sup>32</sup> Subsequently Turkey declared in its latest Article 7 transparency report that the national strategic mine action plan for 2019–2021 was drafted and was expected to be approved and published in the Official Gazette in 2018.<sup>33</sup> The three-year plan reportedly covers national capacity development, survey and clearance of mined areas, provision of mine risk education, and assistance to mine victims.<sup>34</sup>

Prioritisation of clearance appears to be influenced more by where permission is granted for operations and where funding can be secured than by humanitarian impact. For example, areas currently being cleared as part of the EU Eastern Border Mine Clearance Project will remain as restricted areas (due to their location) even after completion of mine clearance. TURMAC reported that for the EU Eastern Border Project, survey and clearance is conducted geographically from north to south in order to improve cost, time, and labour efficiency; but that clearance of other areas was prioritised according to impact.<sup>35</sup>

Turkey’s workplan is divided into planned survey and clearance per region and will be finalised after TURMAC has adopted its national mine action strategic plan. Further revisions were probable due to ongoing investigation and survey of mined areas in the border regions.<sup>36</sup>

### Syrian border

In its 2013 Article 5 deadline extension request, Turkey accorded priority to clearing the Syrian border, which is estimated to account for two-thirds of the mines and close to 90% of the remaining mined area in the country. Officials observed it is also the easiest border to clear because the terrain is flat and there has been minimal displacement of mines as a result of factors such as land erosion.<sup>37</sup> Minefields in this region are clearly mapped, marked, fenced, and reported to be well known to the local population.<sup>38</sup> Turkey originally expected to complete clearance of mines along the Syria border by the end of 2019.<sup>39</sup>

A bidding process for clearance operations on the Syrian border, initiated in February 2012, was officially cancelled in June 2013 due to armed conflict in Syria.<sup>40</sup> However, construction of the Border Security Surveillance System began along Turkey’s border with Syria, began in 2015.<sup>41</sup> Once completed, the Border Security Surveillance System will reportedly allow for planned demining of the Syrian border to commence.<sup>42</sup> According to online media sources, the three-metre-high wall is being built behind minefields and deep ditches, and is reinforced with barbed wire and steel fences, and there are also watch towers and around the clock military patrols.<sup>43</sup>

To enable safe construction of the Border Security Surveillance System, which consists of a 730km-long modular concrete wall and impoundment (supported by a fence), roads, and surveillance system, military demining teams have been deployed along the Syria border.<sup>44</sup> Demining efforts in support of the construction of the surveillance system also include survey and clearance of areas suspected or confirmed to contain mines of an improvised nature and other explosive devices deployed by non-state armed groups.<sup>45</sup> As at December 2017, TURMAC expected that the Border Security Surveillance System would be completed in May 2018 and that humanitarian demining could start.<sup>46</sup>

### Eastern borders

Turkey's 2013 Article 5 extension request sets out plans for clearance of its eastern borders, beginning with the Armenian border and continuing southwards to the borders with Azerbaijan, Iran, and Iraq.<sup>47</sup> It was forecast that 13.5km<sup>2</sup> would be cleared in Phase 1 of the project and 2.4km<sup>2</sup> in Phase 2 (see below), as part of an EU project envisaged to start by the end of 2014.<sup>48</sup>

In 2015, Turkey confirmed that mine clearance along the eastern borders would be carried out as part of a two-phase EU Integrated Border Management Project, under the supervision of the Ministry of Interior in a joint project with UNDP.<sup>49</sup> The project, which is funded by the EU, Turkey, and the UN, was launched in May 2015 to address the humanitarian and border management challenges posed by mine contamination, aims to contribute to social and economic development through demining and more secure borders in Eastern Turkey.<sup>50</sup>

Phase 1, scheduled for 2015–17, was expected to result in the clearance of 223 mined areas over an area of just less than 11.67km<sup>2</sup> and the destruction of 189,863 anti-personnel mines.<sup>51</sup> Phase 2 of the project was scheduled for 2017–19, but the number of mined areas and total area to be cleared is yet to be determined, and is subject to continuing survey.<sup>52</sup> A budget of €26.4 million was allocated for the first phase and €13.4 million for the second.<sup>53</sup> With the establishment of TURMAC, the mine action centre became the main government partner to UNDP in the Eastern Border Mine Clearance Project. Under the project, UNDP is managing the demining operations and quality assurance along the eastern border and supporting capacity development of TURMAC.<sup>54</sup> It also reported encouraging TURMAC to apply efficient land release practice and make use of evidence-based survey (instead of full clearance) to confirm the presence or absence of mines in areas between marked minefields.<sup>55</sup>

The demining tender for the Eastern Border Mine Clearance Project was awarded to Denel MECHEM (MECHEM), as part of a consortium in which national operators would be sub-contracted by MECHEM.<sup>56</sup> Clearance operations for Phase 1 of the project began in June 2016, and were completed by the end of 2017.<sup>57</sup> A total of almost 3.3km<sup>2</sup> of mined area was released (637,685m<sup>2</sup> cleared, 75,445m<sup>2</sup> reduced, and 2,583,100m<sup>2</sup> cancelled) and more than 24,000 mines were destroyed in 2016 and 2017, indicating the adoption of an effective land release approach by Turkey, with efficient use of survey to confirm contaminated areas for clearance, and to cancel areas found not to be contaminated.

Nonetheless, the land release output from Phase 1 of the project, totalling just less than 11.67km<sup>2</sup>, was significantly less than the 223 mined areas, which Turkey envisaged in the workplan included in its Article 7 transparency report submitted in 2015.<sup>58</sup>

Phase 2 of the project, which was expected to start in May 2018, was planned to result in the release at least 1.2km<sup>2</sup>.<sup>59</sup>

### South-eastern/Iraqi border

As at June 2017, Turkey reportedly planned for survey of suspected mined area in Sirnak Province (in parts of the province bordering Iraq) in 2018 and of confirmed mined area in this province in 2019; and of suspected mined area in Hakkari Province in 2019.<sup>60</sup> Clearance along the south-eastern/Iraqi border was not scheduled to commence until 2019, after completion of Phase 2 of the Eastern Border Mine Clearance Project,<sup>61</sup> and because of the conflict in Syria.<sup>62</sup> Clearance of the 969 mined areas, totalling just over 2.86km<sup>2</sup>, was scheduled to take place in 2019–21, with the destruction of 79,017 anti-personnel mines. This represents all known mine contamination in this region. The resources for the clearance were to be determined by TURMAC.<sup>63</sup>

However, no mention of any survey or clearance having been conducted in this region, or future plans to do so, was made in Turkey's latest Article 7 transparency report (for 2017).<sup>64</sup>

### Non-border areas

In its 2013 Article 5 deadline extension request, Turkey reported that partial clearance in non-border areas would be conducted by the Turkish armed forces until the establishment of an operational NMAA and mine action centre and a subsequent tendering process. It was expected that clearance would be conducted in 2015–22. No dedicated budget was allocated for clearance in these interior regions, and as at 2013, mine clearance in non-border areas to-date had been conducted only on a very limited scale, for instance to clear paths in case of urgent need.<sup>65</sup> At the time of its updated workplan, submitted in 2015, Turkey estimated that all 873 mined areas in non-border areas would be cleared by 2021, amounting to total clearance of 3.1km<sup>2</sup>, with the destruction of 34,410 anti-personnel mines. This represents all known mine contamination in the region.<sup>66</sup>

Of the total interior contaminated area, the Turkish armed forces were forecast to clear 280 mined areas over 1.51km<sup>2</sup> with the destruction of 18,558 anti-personnel mines. Cleared areas were planned to be certified and opened for humanitarian use following the establishment of the NMAC,<sup>67</sup> which has now been established. The remaining 593 mined areas, over 1.59km<sup>2</sup>, including destruction of 15,852 anti-personnel mines, were forecast to be cleared in accordance with the mine action plan, once it has been finalised and adopted. A budget for clearance of Turkish Lira 84.3 million (approx. \$29 million) was due to be elaborated in detail by TURMAC.<sup>68</sup> In this region, Turkey prioritises mine clearance activities based on areas used for military operations; areas with low or no risk of terrorist threat; and areas where the local population may benefit from agriculture and livestock.<sup>69</sup>

No mine clearance took place in non-border areas in 2016<sup>70</sup> or 2017. This was reportedly due to ongoing capacity development efforts and prioritisation of clearance for the construction of the wall and customs area on the Syrian border.<sup>71</sup>

Turkey has reported that demining activities will soon commence in the non-border areas, which account for less than 2% of all contaminated areas in Turkey, and that non-technical survey is planned for 2018.<sup>72</sup>

## Legislation and Standards

As noted above, national mine action legislation was adopted in January 2015.

To date, demining has proceeded on the basis of provisional standards, using the International Mine Action Standards (IMAS) as a template.<sup>73</sup>

UNDP and the GICHD are assisting TURMAC to formulate new national mine action standards based upon IMAS and the provisional standards elaborated for the EU eastern border clearance projects.<sup>74</sup> Turkey reported that it had developed a land release policy relating to the Eastern Border Mine Clearance Project, which will allow for efficient land release.

In April 2017, a set of National Mine Action Standards, including a land release policy, were sent to the National Standards Institute of Turkey for approval; this was expected to occur in the course of 2018.<sup>75</sup> The first meeting of the National Standard Review Board was due to be held in the first half of 2018 and thereafter twice a year, attended by the relevant agencies.<sup>76</sup>

In its latest Article 7 transparency report, Turkey reported that development of SOPs was still underway.<sup>77</sup>

## Quality Management

As part of its mandate under the Eastern Border Mine Clearance Project in Turkey, UNDP is responsible for managing mine clearance services, quality assurance (QA)/quality control (QC) services and post-clearance certification to provide confidence that clearance and quality requirements defined in the standards have been met and that cleared land is safe for use.<sup>78</sup> UNDP has reported that, following an international competitive tender process, it awarded a contract for QA/QC services to RPS-Explosive Engineering Services in March 2016. In April 2016, UNDP and TURMAC completed the accreditation of RPS-Explosive Engineering Services, and the company began the accreditation process for the mine clearance contractor under the Eastern Border Mine Clearance Project.<sup>79</sup> In addition, TURMAC oversees on-site operations and regularly attends operational working group meetings in the field.<sup>80</sup>

In 2017, TURMAC personnel were given training in ISO 9001 quality management system (a total of 12 courses), as well as mine action quality management training by GICHD. The quality management of military demining troops will be conducted by TURMAC personnel.<sup>81</sup>

## Information Management

UNDP and the GICHD are supporting TURMAC for the establishment of a functioning information management (IM) system.<sup>82</sup> UNDP maintained a project database to record all operational data related to Phase 1 of the Eastern Border Mine Clearance Project, until a national mine action database could be established in TURMAC.<sup>83</sup>

In its Article 7 transparency report for 2016, Turkey reported that it planned to establish IMSMA and provide training to TURMAC personnel in 2017.<sup>84</sup> As at December 2017, the IMSMA system had been established<sup>85</sup> and was expected to become fully operational in 2018.<sup>86</sup> A significant number of personnel both from TURMAC and military demining troops have been trained on IMSMA. In addition to military demining troops, IMSMA will also be used in Phase 2 of the Eastern Border Mine Clearance Project.<sup>87</sup>

Due to national security concerns, much of the minefield data remains classified, presenting a challenge to mine action information management in Turkey.<sup>88</sup>

## Operators

In 2017, mine clearance operations in Turkey were conducted by MECHEM, under the Eastern Border Mine Clearance project, and by the Turkish Armed Forces along the Syria border, to support construction of the Border Security Surveillance System.<sup>89</sup>

MECHEM, a South African company, which is partnering with national sub-contractor Altay, was awarded the tender for mine clearance under Phase 1 of the EU Eastern Border Mine Clearance project by UNDP in December 2015.<sup>90</sup> MECHEM was subsequently accredited in Turkey, and as at June 2017, was employing 140 deminers, although it was planning to increase capacity to 200 in July of the same year. Accreditation for mine detection dogs (MDDs) was granted in 2017, and as at June 2017, 30 MDDs were being deployed by MECHEM, along with one MineWolf machine.<sup>91</sup> As noted above, RPS, a United Kingdom-based company, was contracted for QA and QC.<sup>92</sup>

Military demining troops were accredited for their manual demining capacity in 2017.<sup>93</sup> As at June 2017, demining units of the Turkish Armed Forces had a total operational capacity of 85 deminers, 6 MDDs, and 4 machines.<sup>94</sup> In December 2017, Turkey reported that it planned to triple the number of military demining units in 2018,<sup>95</sup> and in its latest Article 7 report, Turkey reported that the establishment of five new demining companies had been approved by the Ministry of National Defence. The procurement of equipment, including demining equipment, for the new demining companies was reported to be underway and was planned to be finalised before the end of 2018. Three of the five new teams were planned to be operational by the end of 2018 and the remaining two teams in 2019.<sup>96</sup>

## LAND RELEASE

In 2017, Turkey reported a total of more than 0.82km<sup>2</sup> of clearance, during which 26,381 anti-personnel mines and 29 anti-vehicle mines were destroyed.<sup>97</sup> In addition, Turkey released a further 0.07km<sup>2</sup> through technical survey and cancelled more than 7.5km<sup>2</sup> through non-technical survey.

However, survey and clearance data reported by Turkey in its Article 7 report for 2017 includes the amount of land (in square metres) released by Turkish armed forces for both 2016 and 2017, which was not formally reported previously. The survey output (in m<sup>2</sup>) reported for MECHEM for 2017, also includes 2016 output.<sup>98</sup>

### Survey in 2017

In 2016 and 2017, Turkey cancelled more than 7.5km<sup>2</sup> of mined area (2.58km<sup>2</sup> on the Iran border and 5km<sup>2</sup> on the Syria border) and reduced over 75,000m<sup>2</sup> through technical survey (see Table 2).<sup>99</sup> Results of a comprehensive desk assessment of minefield records of the Eastern and Syrian Borders conducted in 2016 were not reported in Turkey's transparency report for 2016,<sup>100</sup> and were instead included in the latest reporting for 2017.<sup>101</sup>

**Table 2: Anti-personnel mine survey in 2017<sup>102</sup>**

Province	Operator	Area cancelled by NTS (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
Iran border	MECHEM	2,583,110	75,445
Syria border	Turkish Army Demining Units	5,000,000	0
<b>Totals</b>		<b>7,583,110</b>	<b>75,445</b>

NTS = Non-technical survey TS = Technical survey

On the Syrian Border, non-technical survey was conducted in Hatay Region, where it was found that the areas registered as suspected had been used as agricultural land for many decades and the area has been mine free. Consequently, approximately 5km<sup>2</sup> of suspect area has been cancelled.<sup>103</sup>

In addition, with respect to non-border areas, Turkey reported that non-technical survey had been conducted at a previously used military range (2.5km<sup>2</sup>) in Eskişehir province, where the Trans-Anatolia Natural Gas Pipeline (TANAP) project will be built. The area "was determined

as safe and delivered to the relevant authorities".<sup>104</sup> This area was not included in Turkey's cancellation figures for 2017, and it is unclear whether or not this area was recorded as a suspected mined area in the first instance.

### Clearance in 2017

In its Article 7 transparency report for 2017, more than 0.82km<sup>2</sup> was reported as cleared: over 0.57km<sup>2</sup> on the eastern border with Iran and 0.25km<sup>2</sup> on the Syrian border (see Table 3). The area of land cleared on the Syrian border, however, relates to clearance in both 2016 and 2017.

**Table 3: Anti-personnel mine clearance in 2017<sup>105</sup>**

Province	Operator	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed
Iran border*	MECHEM	514,921	15,667	0
	Turkish Army Demining Units	59,195	10,679	0
Syria border	Turkish Army Demining Units	250,000	35	29
<b>Totals</b>		<b>824,116</b>	<b>26,381</b>	<b>29</b>

\* A section of mined area also intersects with the Azerbaijan border. Demining operations in this area were initiated in 2017. The work along the Azerbaijani border segment is planned to be completed in 2018.

On the eastern border with Iran, MECHEM, with sub-contracting partner Altay, cleared 514,921m<sup>2</sup> in 2017, under Phase 1 of the EU Eastern Border Mine Clearance Project. In addition, military Demining Troops cleared a further 59,195m<sup>2</sup> of land on the Iran border, which "accounts for approximately 1 million m<sup>2</sup> of suspected hazardous area in Iğdır province and Doğubeyazıt district of Agri province." Turkey also reported that "The land will be released in 2018 after verification. Additional minefields which accounts for 603,710m<sup>2</sup> of contaminated area will also be released." During these operations, "IMSMA has been used and quality control is assured".<sup>106</sup>

Turkey also reported clearance of 250,000m<sup>2</sup> by military demining units in Karkamış and Elbeyli regions on the Syrian border, with the destruction of 25 anti-personnel mines and 29 anti-vehicle mines.<sup>107</sup> However, this relates to land released through clearance for both 2016 and 2017.

Clearance on the Syrian border was conducted as part of demining efforts in support of the construction of the Border Security Surveillance System, with the released land delivered to the relevant authorities to be used as customs areas.<sup>108</sup> While Turkey did report destruction of 414 anti-personnel mines in its Article 7 report for 2016, as part of this Syria border project, it did not formally report the corresponding area cleared (in m<sup>2</sup>), as QA/QC procedures had not yet been completed, and the Turkish armed forces demining units were not yet

accredited operationally at that time.<sup>109</sup> It did, however, report to Mine Action Review that more than 3.3km<sup>2</sup> had been cleared along the Syria border in 2016.<sup>110</sup> Based on the 250,000m<sup>2</sup> clearance subsequently reported by Turkey in its most recent Article 7 report, it appears that the 3.3km<sup>2</sup> reported previously to Mine Action Review was inaccurate and included a significant proportion of cancelled area, not just clearance output.

No mine clearance was conducted in 2016 or 2017 along the South-eastern/Iraqi border or in non-border areas.<sup>111</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the eight-year extension granted by states parties in 2013), Turkey 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 2022. Turkey will not meet this deadline.

Turkey's original Article 5 deadline was 1 March 2014. In 2012, Turkey acknowledged to the Twelfth Meeting of States Parties that it would seek an extension to its deadline.<sup>112</sup> In March 2013, Turkey submitted a request for an eight-year extension to its deadline until 2022 to complete clearance of all mined areas. Turkey stated that the envisaged timeframe was subject to revision pending progress with tenders and clearance activities on the ground.<sup>113</sup>

In its 2013 extension request, Turkey cited a number of circumstances that had impeded it from carrying out mine clearance, including: delays in the establishment of an NMAA and NMAC which will supervise clearance activities; adverse weather conditions allowing clearance to be conducted for only five or six months a year; security problems posed by the continuation of the terrorist threat; mined territory contaminated with metal residue resulting from the fight against terrorism; uncertainties about the mine-free status of some areas due to the irregular completion of registration forms; and topographical challenges. According to Turkey, the eastern and south-eastern borders and non-border areas are the most complicated to address due to topographical difficulties.<sup>114</sup>

The 2013 extension request provided more detail on Turkey's mine contamination and its plans to tackle them than had previously been the case, but shed no light on some key issues, creating uncertainty over the prospects of it fulfilling its clearance obligations. No budget had at that time been allocated for clearance of mined areas in the interior of the country, which have caused most of Turkey's mine casualties. A budget was subsequently allocated in Turkey's updated workplan, submitted in March 2015.<sup>115</sup>

Turkey revealed in its 2013 extension request that since 1998 it had only cleared a total of 1.15km<sup>2</sup> of mined area, close to three-quarters of which took place in one year (2011), with destruction of 760 anti-personnel mines and 974 anti-vehicle mines. In addition, military teams had cleared 24,287 mines, but only to allow safe movement of troops, not to release a contaminated area.<sup>116</sup>

Turkey's total mine clearance to date only amounts to a tiny fraction of its overall mine contamination, and more than 14 years after becoming a state party to the APMBC, Turkey has only made marginal progress in addressing mine contamination. While mine clearance has subsequently also taken place in 2014, 2016, and 2017, little more than 1.1km<sup>2</sup> of mined area has been cleared in total over the last five years (see Table 4).

Commencement of clearance operations in June 2016, for Phase 1 of the EU Eastern Borders Project (in the provinces of Ardahan, Kars, Igdir, and Agri), was a welcome development. Phase 1 of the project was completed by the end of 2017 and Phase 2 began in 2018. Funding for first two Phases of this project is provided by the EU (75% of funding), Turkey (24%), and the UN (1%).<sup>117</sup> As at June 2017, Turkey was in the process of determining how to fund Phase 3 of the project.<sup>118</sup> Implementation of the project in the provinces of Van and Hakkari risked facing significant security challenges if fighting continues between Turkey and the PKK.

**Table 4: Mine clearance in 2013–17<sup>119</sup>**

Year	Area cleared (m <sup>2</sup> )
2017	824,116
2016	122,764
2015	0
2014	157,251
2013	N/K
<b>Total</b>	<b>1,104,131</b>

N/K = Not known

The adoption in January 2015 of a mine action law, and the subsequent establishment of TURMAC was also a very positive development and is central to Turkey's national ownership of its mine action programme. With capacity development support from UNDP and the GICHD, TURMAC has made steady process towards becoming operational and assuming management and coordination of mine action in Turkey.

However, Turkey's updated workplan for Article 5 implementation, submitted in March 2015 only included plans to address a small portion (10%) of overall mine contamination, and it is unclear how and when the remaining contamination will be addressed.

TURMAC's draft national strategic mine action plan for 2019–2021, which has yet to be formally approved or published, also reportedly includes plans for survey of SHA and CHA in the south-eastern/Iraqi border, the Syrian border, and non-border areas.<sup>120</sup>

Based on the current rate of clearance, Turkey will not complete implementation of Article 5 by its deadline in 2022. While TURMAC is planning to meet its Article 5 deadline it also recognises potential obstacles, including: the possibility that the demining contractor for the EU Eastern Border Mine Clearance Project will not meet its deadline for Phase 1; potential delays to the EU Eastern Border Mine Clearance Project for Phase 2; the fact that political uncertainties in Syria and Iraq may hinder survey and clearance activities on these borders, in addition to non-state armed groups hindering demining operations in other areas; and weather conditions limiting clearance to no more than seven months a year.<sup>121</sup>

TURMAC is entirely funded by national funding,<sup>122</sup> as are Turkish Armed Forces demining units.<sup>123</sup> In its latest Article 7 report, Turkey reported that it invests approximately US\$13 million for the procurement of new equipment to establish new demining companies, but it did not specify over what period.<sup>124</sup>

In addition, Turkey reported that it provided approximately €10 million (approx. 11.6 million US\$) to the Eastern Borders mine clearance project, which is implemented by UNDP and funded by the EU and the UN.<sup>125</sup>

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| <p>1 UN Security Council Resolution 2430 (2018), para. 15.</p> <p>2 Article 7 Report (for 2017), Form D.</p> <p>3 Ibid.; and email from Lt. Col Halil Şen, TURMAC, 21 June 2017.</p> <p>4 Article 5 deadline Extension Request, 29 March 2013, pp. A-1 and A-5.</p> <p>5 Article 7 Report (for 2017), Form D.</p> <p>6 Statement of Turkey, Standing Committee on Mine Action, Geneva, 23 May 2012; and Article 5 deadline Extension Request, 29 March 2013, p. A-1.</p> <p>7 Article 5 deadline Extension Request, 29 March 2013, pp. A-1 and A-5.</p> <p>8 Article 7 Report (for 2017), Form D.</p> <p>9 Response to Landmine Monitor questionnaire by Elif Comoglu Ulgen, Head, Disarmament and Arms Control Department, Ministry of Foreign Affairs, 14 July 2008.</p> <p>10 Article 5 deadline Extension Request, 29 March 2013, p. A-5.</p> <p>11 Article 7 Report (for 2015), Form C.</p> <p>12 Article 5 deadline Extension Request, 29 March 2013, pp. A-2, and A-5.</p> <p>13 Article 7 Report (for 2014), "Workplan for mine clearance activities".</p> <p>14 Article 7 Report (for 2014), Form F, and Annex II.</p> <p>15 Article 5 deadline Extension Request, 29 March 2013, pp. A-4 and A-7.</p> <p>16 Article 7 Report (for 2017), Form H.</p> <p>17 Turkey's Article 5 deadline Extension Request, 29 March 2013.</p> <p>18 Article 5 deadline Extension Request, 29 March 2013, p. 3.</p> <p>19 Article 7 Report (for 2014), "Workplan for mine clearance activities", Annex 1; and Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report, Form A, 2015.</p> <p>20 Ibid.</p> <p>21 Article 7 Report (for 2014), Form F.</p> <p>22 Interview with Gen. Celalettin Coban, Director, TURMAC, and Col. Ali Güngör, Mine Action Officer, Strategic Planning Branch, TURMAC, in Geneva, 18 February 2016.</p> <p>23 Ibid.</p> <p>24 Article 7 Report (for 2017), Form A.</p> <p>25 Article 7 Report (for 2016), Form H; Statement of Turkey, Standing Committee on Enhancement of Cooperation and Assistance, Geneva, 8 June 2017; and Statement of Turkey on International Cooperation and Assistance, 16<sup>th</sup> Meeting of States Parties, Vienna, 21 December 2017.</p> <p>26 Article 7 Report (for 2016), Form A; and Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 8 June 2017.</p> | <p>27 Article 7 Report (for 2017), Form A; and Statement of Turkey, 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017.</p> <p>28 Article 7 Report (for 2017), Form A.</p> <p>29 Article 7 Report (for 2014), "Workplan for mine clearance activities"; and CCW Amended Protocol II Article 13 Report, Form A, 2015.</p> <p>30 Interview with Gönenç Ağâ cıkoğlu, Head of Section, Deputy Directorate General for the OSCE, Arms Control and Disarmament, Ministry of Foreign Affairs, in Dubrovnik, 11 September 2015.</p> <p>31 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.</p> <p>32 Statement of Turkey, 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017.</p> <p>33 Article 7 Report (for 2017), Form A.</p> <p>34 Ibid.</p> <p>35 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.</p> <p>36 Article 7 Report (for 2015), Form F; and email from Lt. Col Halil Şen, TURMAC, 21 June 2017.</p> <p>37 ICBL interview with Ömer Burhan Tüzel, Serhan Yiğit, and Ramazan Ercan, Ministry of Foreign Affairs and Abdullah Özbek, Ministry of Interior, Ankara, 5 May 2011.</p> <p>38 Statement of Turkey, 15<sup>th</sup> Meeting of States Parties, Santiago, 29 November 2016.</p> <p>39 5 deadline Extension Request, 29 March 2013, pp. A-2, A-13, and A-14.</p> <p>40 Article 7 Report (for 2014), "Workplan for mine clearance activities", pp. 3 and 8; and statement of Turkey, 15<sup>th</sup> Meeting of States Parties, Santiago, 29 November 2016.</p> <p>41 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.</p> <p>42 Interview with Col. Zaki Eren, Director of Operations Department and Acting Director of TURMAC, and Maj. Can Ceylan, head of QM Section, 20 December 2018, Vienna.</p> <p>43 "Walls, drones and mines: Turkey tightens border as Syria incursion deepens", <i>Reuters</i>, 3 March 2017; and "Amid terror threats, Turkey extends its 'Great Wall' on Syrian border", <i>Daily Sabah Turkey</i>, 3 January 2017.</p> <p>44 Article 7 Reports (for 2016 and 2017), Form A.</p> <p>45 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.</p> <p>46 Interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, in Vienna, 20 December 2017.</p> <p>47 Article 5 deadline Extension Request, 29 March 2013, p. A-14.</p> <p>48 Ibid., pp. A-3, A-14, and A-15.</p> |
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- 49 Article 7 Report (for 2014), "Workplan for mine clearance activities", p. 6.
- 50 UNDP, "Mine Action Programming: Turkey", February 2016, at: <http://www.mineaction.org/sites/default/files/documents/UNDP%20Turkey%20One-Pager%20revised%20FEB2016.pdf>.
- 51 Article 7 Report (for 2014), "Workplan for mine clearance activities", p. 7; UNDP subsequently announced slightly revised figures for Phase 1, reporting a plan to clear 551 minefields covering more than 15km<sup>2</sup>, and to destroy a total of 222,000 landmines along the border with Armenia, Azerbaijan, and Iran. UNDP, "Turkey, UNDP begin clearing landmines along eastern borders", 4 April 2016.
- 52 Article 7 Report (for 2014), "Workplan for mine clearance activities", p. 7.
- 53 Ibid.
- 54 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016.
- 55 Interview with Hans Risser, UNDP Istanbul Regional Hub, Geneva, 7 September 2016.
- 56 Interview with Gen. Celalettin Coban and Col. Ali Güngör, TURMAC, in Geneva, 18 February 2016.
- 57 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; Interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, 20 December 2018, Vienna; and Article 7 Report (for 2017), Form A.
- 58 Article 7 Report (for 2014), "Workplan for mine clearance activities".
- 59 Article 7 Report (for 2017), Form A.
- 60 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 61 Article 7 Report (for 2014), "Workplan for mine clearance activities", p. 7.
- 62 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 63 Article 7 Report (for 2014), "Workplan for mine clearance activities", pp. 7 and 8.
- 64 Article 7 Report (for 2017), Form A.
- 65 Article 5 deadline Extension Request, 29 March 2013, p. A-4.
- 66 Article 7 Report (for 2014), "Workplan for mine clearance activities", pp. 5 and 6.
- 67 Ibid., pp. 4 and 5.
- 68 Ibid., p. 6.
- 69 Ibid., p. 4.
- 70 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 71 Article 7 Report (for 2017), Form A.
- 72 Statement of Turkey, 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017; and Article 7 Report (for 2017), Form A.
- 73 Article 7 Report (for 2014), "Workplan for mine clearance activities".
- 74 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016; and Article 7 Report (for 2015), Form F.
- 75 Article 7 Report (for 2017), Form A; and Statement of Turkey, 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017.
- 76 Article 7 Report (for 2017), Form A.
- 77 Article 7 Report (for 2017), Form A.
- 78 UNDP, "Mine Action Programming: Turkey", February 2016.
- 79 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016; and UNDP, "Preparatory work for demining", undated, accessed 26 July 2016, at: [http://www.tr.undp.org/content/turkey/en/home/operations/projects/democratic\\_governance/preparatory-work-for-demining.html](http://www.tr.undp.org/content/turkey/en/home/operations/projects/democratic_governance/preparatory-work-for-demining.html).
- 80 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 81 Article 7 Report (for 2017), Form A.
- 82 Interview with Col. Ali Güngör, TURMAC, Geneva, 18 February 2016.
- 83 Interview with Hans Risser, UNDP Istanbul Regional Hub, Geneva, 7 September 2016.
- 84 Article 7 Report (for 2016), Form A; and Statement of Turkey, Standing Committee on Victim Assistance, Geneva, 8 June 2017.
- 85 Statement of Turkey, 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017.
- 86 Article 7 Report (for 2017), Form A.
- 87 Ibid.
- 88 Interview with Hans Risser, UNDP Istanbul Regional Hub, Geneva, 7 September 2016.
- 89 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; and interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, 20 December 2018, Vienna; and Article 7 Report (for 2017), Form A.
- 90 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.
- 91 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 92 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.
- 93 Article 7 Report (for 2017), Form A; and Statement of Turkey, 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017.
- 94 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 95 Statement of Turkey, 16<sup>th</sup> Meeting of States Parties, Vienna, 20 December 2017.
- 96 Article 7 Report (for 2017), Form A.
- 97 Ibid., Form D.
- 98 Article 7 Report (for 2016), Forms A and D; Article 7 Report (for 2017), Form D; and email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 99 Article 7 Report (for 2017), Form A.
- 100 Ibid.; and Statement of Turkey, Standing Committee on Victim Assistance, Geneva, 8 June 2017.
- 101 Article 7 Report (for 2017), Form A.
- 102 Ibid.
- 103 Ibid.
- 104 Ibid.
- 105 Ibid., Form D.
- 106 Ibid., Form A.
- 107 Ibid., Form D.
- 108 Ibid., Forms A and D.
- 109 Interview with Col. Aydın İmren and Lt.-Col. Halil Şen, TURMAC, in Geneva, 7 February 2017.
- 110 Emails from Lt.-Col. Halil Şen, TURMAC, 21 June 2017, and Cpt. Ahmet Gun, TURMAC, 16 November 2017.
- 111 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; and Article 7 Report (for 2017), Form D.
- 112 Statements of Turkey, 11th Meeting of States Parties, Phnom Penh, 1 December 2011; and 12th Meeting of States Parties, Geneva, 5 December 2012.
- 113 Article 5 deadline Extension Request, 29 March 2013, p. A-13.
- 114 Ibid., pp. A-11, A-12.
- 115 Article 7 Report (for 2014), "Workplan for mine clearance activities".
- 116 Article 5 deadline Extension Request, 29 March 2013, pp. A-8 and A-9.
- 117 Emails from Lt.-Col. Halil Şen, TURMAC, 21 June 2017, and Cpt. Ahmet Gun, TURMAC, 16 November 2017.
- 118 Ibid.
- 119 See Landmine Monitor and Mine Action Review reports on clearance in Turkey covering 2012–16; and Article 5 deadline Extension Request, 29 March 2013, p. A-9.
- 120 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 121 Ibid.
- 122 Ibid.
- 123 Ibid.
- 124 Article 7 Report (for 2017), Form H.
- 125 Ibid.

# UKRAINE

**ARTICLE 5 DEADLINE: 1 JUNE 2016**  
(FIVE-AND-A-HALF-YEAR EXTENSION REQUESTED TO 1 DECEMBER 2021)

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	4	4
Target date for completion of mine clearance	2	2
Targeted clearance	5	5
Efficient clearance	5	5
National funding of programme	6	6
Timely clearance	4	4
Land-release system in place	5	5
National mine action standards	5	5
Reporting on progress	4	4
Improving performance	4	4
<b>PERFORMANCE SCORE: POOR</b>	<b>4.4</b>	<b>4.4</b>

## PERFORMANCE COMMENTARY

In a much welcome development, as this report was going to print in early November 2018, Ukraine finally submitted an extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline, seeking a five-and-a-half-year period (although the request says five years) until 1 December 2021. Prior to submission of the extension request, Ukraine had continued to refuse to seek a deadline extension as a result of new use of anti-personnel mines since conflict erupted in 2014, putting it in serious violation of the APMBC. Assuming its extension request is granted by states parties at the Seventeenth Meeting of States Parties, Ukraine will return to compliance with Article 5. There are, however, unconfirmed reports that all parties to the conflict, including the national government forces, continue to emplace mines in populated areas and near civilian

infrastructure. While some survey and clearance of areas contaminated with anti-personnel mines did take place in 2017, the full extent of demining operations is not known due to the absence of sufficiently detailed information from the Ukrainian authorities. Furthermore, the overall effectiveness and efficiency of mine action in Ukraine is being impeded by a continued delay in the adoption of a mine action law. This is necessary to clarify and strengthen the coordination of work among the different ministries and agencies, and to facilitate progress in strategic planning, information management, and national mine action standards. It also impedes the introduction of a formal handover process for land release.

## RECOMMENDATIONS FOR ACTION

- Ukraine should cease all use of landmines.
- Ukraine should enact mine action legislation as soon as possible and formally establish a national mine action authority and a functioning national mine action centre to support clearance of mines, cluster munition remnants (CMR), and other explosive remnants of war (ERW).
- Ukraine should systematically collect disaggregated data on contamination from mines, CMR, and other ERW, as well as on progress in survey and clearance, and establish a centralised database for planning purposes.
- Ukraine should take all necessary measures to protect civilians from mines, CMR, and other ERW.
- Ukraine should continue to undertake non-technical survey to identify the extent and impact of anti-personnel mines (in particular in Donetsk and Luhansk), and should also undertake technical survey when possible, to confirm or reject the presence of mines, and help inform decisions on land release. Clearance should take place as soon as possible of areas confirmed as mined.
- Ukraine should consider allowing humanitarian demining organisations to use explosives to destroy anti-personnel mines and other ERW as the current situation is severely hampering operational efficiency within the sector.

## CONTAMINATION

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). Firm evidence exists that mines have been used in the resultant armed conflicts,<sup>1</sup> including by Ukrainian armed forces, though the full nature and extent of contamination is likely to remain unclear until an effective cessation of hostilities. 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 and anti-personnel mines in populated areas and near objects of civilian infrastructure."<sup>2</sup> They have also made this statement in previous reports.<sup>3</sup>

Ukraine cannot reliably estimate the overall extent of mine contamination until surveys have been completed.<sup>4</sup> The heaviest mine and ERW contamination is believed to be inside the 15km buffer zone between the warring parties, but access to this area for survey and clearance operations is severely limited.<sup>5</sup>

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 World War II, but also from combat in the First World War. Ministry of Defence 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.

In its latest Article 7 transparency report (for 2017) Ukraine reported that exact information on the number and types of mines was not available, but noted that non-technical survey by non-governmental organisations (NGOs) identified mined areas in Lemans, Slavyansk, and Volnovansky districts in the Donetsk region, and Popasnyansky district, in Lugansk region.<sup>6</sup> In June 2017, Ukraine had estimated, highly improbably, that total contamination by mines and ERW (including CMR) could extend over 7,000km<sup>2</sup>.<sup>7</sup> The Ukrainian Ministry of Defence (MoD) accepts that this is a “rough” estimate.<sup>8</sup> It is further suggested that 15–20% of the contamination is from mines while the rest is from ERW.<sup>9</sup>

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.<sup>10</sup>

In February 2015, the Organization for Security and Co-operation in Europe (OSCE) reported contamination in Ukraine with OZM-72 bounding fragmentation mines, MON (50, 90, 100, and 200) directional anti-personnel mines, and TM-62 anti-vehicle mines.<sup>11</sup> In an April 2015 Technical Briefing Note, Human Rights Watch reported the presence of at least two types of blast anti-personnel mines, three types of MON-series directional fragmentation mines, and OZM-72 bounding fragmentation mines that can function as anti-personnel mines depending on the type of fuze used, as well as PDM-1M anti-landing mines equipped with fuzes capable of being activated by the unintentional act of a person.<sup>12</sup>

Over the last few years, the OSCE’s Special Monitoring Mission (SMM) in Ukraine has frequently reported observations on the use of anti-personnel mines, recent examples of which are detailed below. On 21 January 2017, “DPR” members refused to remove anti-vehicle and anti-personnel mines observed by OSCE SMM to allow SMM to proceed through a checkpoint to T0519 road in Pikuzy.<sup>13</sup> On 5 February 2017, in “LPR”-controlled Sokilnyky (38km north-west of Luhansk) the OSCE SMM saw two directional anti-personnel mines (one MON-50 and one MON-100 or 200) along the H-20 road west of Kruta Balka.<sup>14</sup> On 8 February 2017, the OSCE SMM noted two anti-personnel mines still present near the Donetsk Water Filtration Station. One (POM-2) was about 10 metres from the main gate, north of the entry-exit road, and marked with a mine hazard sign. The other (MON-50/90) was west of the H20 highway and about 100m from a Ukrainian Armed Forces bunker.<sup>15</sup> In addition, on 17 February 2017, the OSCE SMM saw a directional type of anti-personnel mine (assessed as MON-100) located across the road outside the above-mentioned filtration station.<sup>16</sup> On 23 April 2017, a vehicle of an OSCE SMM patrol was destroyed in an explosion, most likely caused by a landmine, on a regularly used road in Pryshyb village (controlled by armed groups) of Luhansk region, killing one and injuring two patrol members. The event claimed the first fatality since the Mission’s establishment.<sup>17</sup> On 19 July 2017, OSCE SMM observed Ukrainian Armed Forces soldiers placing anti-vehicle mines into position on the road south-east of Svitlodarsk.<sup>18</sup>

In 2018, on 22 June 2018, the OSCE SMM was forced to drive on a mined road by an armed member of the armed formations in Petrivske.<sup>19</sup> On 29 August, the OSCE SMM spotted 16 anti-vehicle mines (type TM-62) laid in three rows on the road between Holmivskyi and Travneve (a government-controlled area), and, about 1km further north, an additional 13 TM-62 anti-vehicle mines laid across the same road.<sup>20</sup>

In June 2015, at the APMBC Intersessional Meetings, Ukraine claimed that it had not used anti-personnel mines since signing the APMBC in 1999, but accused Russia of having used anti-personnel mines in the current conflict.<sup>21</sup> At the Intersessional Meetings, Ukraine also asserted that approx. 8% of the territory in eastern Ukraine is contaminated with anti-personnel mines and improvised explosive devices (IEDs).<sup>22</sup> It appeared that reports of minefields being emplaced to demarcate border areas after the annexation of the Crimea may actually have been either ‘phony minefields’ or areas containing trip-flares.<sup>23</sup> However, in May 2016, Ukraine reported that it was possible that mines have been laid in occupied territories of the Autonomous Republic of Crimea, Kherson Province, and Donetsk.<sup>24</sup> In December 2017, Ukraine stated that all anti-personnel mines emplaced in eastern Ukraine were produced in Russia and are only in the service of Russian armed forces.<sup>25</sup>

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 PMN1, PMN2, PMN-4, POM-2R, OZM-72, MES type mines, and MON-50 mines with tripwire.<sup>26</sup>

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.<sup>27</sup>

On 20 April 2018, the Resident and Humanitarian Coordinator in Ukraine reported that explosive hazard contamination in eastern Ukraine is impacting 1.9 million people, including around 200,000 children.<sup>28</sup> Danish Demining Group (DDG), which collects casualty data from open media sources, recorded a total of 1,564 casualties from mines, submunitions, and other ERW between June 2014 and August 2018.<sup>29</sup> The HALO Trust recorded 1,858 casualties due to mines and ERW between May 2014 and April 2018 (1,206 injured and 652 killed).<sup>30</sup> In 2017 alone, more than 235 civilians were killed or injured by mines and ERW.<sup>31</sup>

In December 2017, Ukraine reported that there have been 29 casualties from landmines since the beginning of the year, including 11 civilians, 5 of whom were children. Since 2014, it reported a total of 1,796 landmine casualties in eastern Ukraine, including 238 civilians that were killed and another 491 that were injured.<sup>32</sup>

The presence or suspicion of mines and ERW inhibits freedom of movement, posing a serious threat to people crossing the contact line at the five checkpoints where one million crossings occur each month.<sup>33</sup> Access to some villages near the contact line is also restricted as roads are contaminated by mines and ERW, cutting people off from essential services.<sup>34</sup> Civilians living along the contact line are unable to engage in agricultural activities, severely affecting their access to food and livelihoods.<sup>35</sup> At the same time, they are ineligible for social assistance and still have to pay land tax, because they are deemed to own land plots with which they

should be able to feed themselves.<sup>36</sup> Access to basic utilities such as water, electricity, and gas is frequently interrupted, and maintenance and repair of these utilities is impeded or made impossible by the presence of mines and ERW.<sup>37</sup> To heat homes in the winter, people go into the forest, facing significant risk from explosive ordnance as a result. This is said to have resulted in many fatalities and injuries.<sup>38</sup> In addition, explosive ordnance poses a humanitarian risk to internally displaced and returning refugees, especially in areas fought over previously and which are now away from the front line.<sup>39</sup>

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## PROGRAMME MANAGEMENT

An interministerial working group was set up by the Cabinet of Ministers in February 2006. On 25 December 2009, the Cabinet of Ministers of Ukraine issued an order that tasked the MoD, the Ministry of Emergency Situations, and Ukroboronservice (a state-owned commercial company), to put forward proposals for a national body to oversee demining.<sup>40</sup>

On 2 September 2013, Presidential Decree No. 423 on the "Mine Action National Authority" was signed, authorising the authority's establishment.<sup>41</sup> Following the decree, the MoD's "Department of Environmental Safety and Mine Action" was tasked with coordinating demining nationally and serving as the secretariat to the national mine action authority in Ukraine.<sup>42</sup>

The Geneva International Centre for Humanitarian Demining (GICHD) has been working with the OSCE Project Co-ordinator (OSCE PCU) in Ukraine to help foster mine action institutions, including legislation.<sup>43</sup> A timeline for the establishment of a national mine action centre under the national mine action authority will be addressed once the mine action legislation has been adopted.<sup>44</sup>

While all areas of mine action in the Donetsk and Luhansk region, including humanitarian demining operations, are planned, coordinated, and controlled by the MoD,<sup>45</sup> several other ministries are also involved in the sector, including the Ministry of Internal Affairs (under which sits the State Emergency Services of Ukraine (SESU), formerly known as the Ministry of Emergency Situations); the Security Services; the Ministry of Temporarily Occupied Territories and Internally Displaced Persons; the State Special Transport Services of the Ministry of Defence; the National Police; and the State Border Service.<sup>46</sup>

The demining centre of the Ukrainian Armed Forces, in Kamyanets-Podilsky, focuses on building the military's capacity for explosive ordnance disposal (EOD), including training and testing of methods and equipment, quality assurance (QA), and provision of EOD, counter-IED [improvised explosive devices], and demining specialists.<sup>47</sup> Experts from the North Atlantic Treaty Organization (NATO) provide training and advice at the centre.<sup>48</sup> The Canadian government is helping to build Ukraine's humanitarian demining capacity in eastern Ukraine, as part of a two-year project to

support the development of policies, practices, and institutions; the provision of training; the creation of a digital map showing hazards and cleared areas; and the procurement of modern equipment.<sup>49</sup>

All Ukrainian Armed Forces engineering units are involved in demining in eastern Ukraine and not solely EOD spot tasks. The units are also responsible for destroying all ERW and mines detected by SESU and clearance NGOs.<sup>50</sup>

The MoD has organisational control of humanitarian demining while SESU is generally responsible for clearance. It established a "Special Humanitarian Demining Centre" in 2015 in Kiev. The centre's remit includes coordination of SESU pyrotechnical teams (akin to rapid-response EOD teams) involved in technical and non-technical survey, demining, internal QC of SESU units, information management, and handover of land cleared by SESU to local authorities, as well as risk education.<sup>51</sup>

In addition, SESU has a training centre near Merefa, in the Kharkiv region, and the Special Transport Service has a centre in Chernihiv, both of which are focused largely on EOD and battle area clearance (BAC).<sup>52</sup> SESU has begun to build a Regional Centre for Humanitarian Demining, based in Lysychansk in Luhansk region. The new centre will deploy trained SESU deminers to affected areas in Donetsk and Luhansk that are under Ukrainian control.<sup>53</sup>

The Ministry of Temporarily Occupied Territories and Internally Displaced Persons was established by the Cabinet of Ministers of Ukraine in its Resolution 376, adopted on 8 June 2016. The Ministry's tasks include implementation of a set of measures aimed at reducing the social, economic, and environmental impact of explosive devices; and coordination of the implementation of mine action activities aimed at reducing harm to civilians from the use of explosive objects (including CMR and mines).<sup>54</sup> In December 2017, Decree 1071 issued by the Cabinet of Ministers designated the Ministry of Temporarily Occupied Territories and Internally Displaced Persons as responsible for coordinating certain mine action measures in Donetsk and Luhansk oblasts. In the main, these are related to increasing demining operators' technical capacity, risk education/awareness, and promoting the protection of the rights of persons affected by mines and ERW.<sup>55</sup>

The OSCE has a strong presence in Ukraine, with two separate missions each having its own mandate: the SMM and the OSCE PCU. The SMM is mandated to help reduce tensions in the country and to support peace, stability, and security. As part of this role, it gathers information and reports on alleged violations of fundamental OSCE principles.<sup>56</sup> The OSCE PCU is mandated to plan, implement, and monitor projects that help Ukraine enhance its security, and develop its legislation, institutions, and practices in line with democratic standards.<sup>57</sup>

In 2016–18, the OSCE PCU, with GICHD assistance, was planning to provide policy and legal support to Ukraine, including for the establishment of a national mine action programme overseen by a national mine action authority and centre and underpinned by national standards.<sup>58</sup> The OSCE PCU has also been supporting, again with GICHD assistance, Ukraine's use of the Information Management System for Mine Action (IMSMA). The OSCE PCU, with the support of the donors (Canada, the European Union, United Kingdom, and United States), was planning to implement two projects to enhance the training capacities of mine action training centres by revising the training curriculum, training national instructors, and supporting the procurement of new demining equipment.<sup>59</sup> However, project activities that were contingent on the adoption of mine action legislation, such as the revision of the training curriculum, have been put on hold.<sup>60</sup> Instead the OSCE PCU has focused on training activities, such as training of IMSMA operators and national instructors, and equipment procurement.<sup>61</sup> The donors have agreed to an extension of the project until the end of 2018 due to the delays in the adoption of the mine action law.<sup>62</sup>

At the request of the Government of Ukraine, the United Nations conducted a mine action needs assessment mission on 23 January–5 February 2016. The mission's key findings were that:

- The humanitarian impact of ERW is high, with two to five accidents each week and contamination covers a huge area<sup>63</sup>
- ERW clearance capacities exist in Ukraine, but they need to be re-oriented away from their current activities of responding to call-outs for World War II bombs towards survey and information management
- The understanding of mine action needs to be addressed at all levels of government. At present, the focus is only on military mine clearance; it needs to be extended to risk education, survey, victim assistance, and information management
- A civilian oversight and policy-making body for national mine action activities needs to be created.<sup>64</sup>

## Strategic Planning

The Cabinet of Ministers Decree No. 131 of 18 February 2009 adopted the State Programme for Demining by the Ministry of Emergency Situations for 2009–14.<sup>65</sup> The programme planned clearance of 15km<sup>2</sup> over five years with the destruction of 500,000 items of ERW, but this was not achieved.<sup>66</sup>

Following an order from the Prime Minister of Ukraine on 30 November 2015, the Department of Environmental Protection and Mine Action developed a draft order for the Cabinet of Ministers to approve the State Programme for Mine Action in Ukraine for 2017–2021. Announced by the MoD in February 2016,<sup>67</sup> as at May 2018 the programme was on hold pending progress with the mine action law.<sup>68</sup>

In October 2016, the GICHD organised the first workshop on strategic planning, in partnership with the OSCE Project Co-ordinator and the Geneva Centre for the Democratic Control of Armed Forces (DCAF).<sup>69</sup> As at September 2018, next steps in strategic planning were under consideration, but were dependent on progress in the draft mine action law. Annually, the MoD produces an operational plan that is based on information provided by national agencies and international operators working in Ukraine.<sup>70</sup>

Ukraine has developed a plan for humanitarian demining in the Donetsk and Luhansk regions, in areas it can access safely. The main goals for 2015 were demining of populated areas; security during rehabilitation of infrastructure; and clearance of UXO from agricultural areas.<sup>71</sup> These remained Ukraine's goals for 2016 and 2017, while, in addition, local government authorities have been helping to prioritise clearance tasks based on humanitarian criteria.<sup>72</sup>

Ukraine reported that as at November 2016, its main efforts were aimed at demining essential support systems of the population in the territory of Donetsk and Lugansk regions, namely power lines, gas and water pipelines, heating plants, as well as highways and railways. These tasks are carried out by the Armed Forces of Ukraine, the SESU, and the State Special Transport Service.<sup>73</sup> According to Ukraine, due to regular violations of the Minsk Agreements by illegal armed groups, and the continuation of firing on their part, it is only possible to plan the clearance of the liberated territories for short periods of time.<sup>74</sup>

## Legislation and Standards

As at September 2018, Ukraine was still in the process of developing mine action legislation that would identify the executive bodies involved in mine action in Ukraine, “regulate” the national mine action authority, and mandate the development of a priority action plan.<sup>75</sup> The lack of a legal framework for mine action has the potential to deter donors from funding activities, and also has a bearing on the legal status of demining organisations in the country in terms of registration as well as application for end-user certificates for demining equipment and explosives.<sup>76</sup> Furthermore, without a mine action law in place no formal process for land release exists.<sup>77</sup>

Two draft bills were submitted to the parliament’s Committee on National Security and Defence (CNSD). One of the drafts (no. 5189), dated 28 September 2016, was put forward by a Member of Parliament. The Committee recommended its rejection in April 2017.<sup>78</sup> The other draft (no. 5189-1), dated 12 October 2016, from the Cabinet of Ministers of Ukraine, was originally sent to the Cabinet in late 2015, endorsed in February 2016, and then submitted by the Cabinet for parliamentary approval.<sup>79</sup> A Cabinet reshuffle in April 2016 resulted in the Bill needing re-endorsement, after which it would be re-submitted for parliamentary approval.<sup>80</sup> In 2016, the draft law faced opposition in the committee stage in parliament.<sup>81</sup> It was sent back for improvements in April 2017.<sup>82</sup> Both draft bills were rejected by the CNSD on 7 June 2017.<sup>83</sup>

Later in 2017, the CNSD established a working group to prepare a third draft bill as the two draft bills submitted previously were not deemed satisfactory as they were too costly, the first draft bill was too bureaucratic, and both were incompatible with existing Ukrainian legislation.<sup>84</sup> On 13 September 2018, draft bill no. 9080 was registered by the NGO Ukrainian Institute for Human Rights, with a group of four MPs. After registration at parliament of the first bill there is then a deadline of two weeks to register alternatives. On 19 September 2018, an alternative version of the bill was registered. This bill was initiated by a larger group of MPs and includes members of the CNSD working group. The MoD has also developed an alternative bill and it was expected that this will be registered by the deadline of 27 September 2018 as a draft from the Cabinet of Ministers. Pending full analysis, the main difference between these bills seems to be in how the national authority is defined and how responsibilities are distributed among different ministries.<sup>85</sup>

Some of the demining operators in Ukraine have been consulted as part of the legislative process towards the establishment of mine action institutions in Ukraine.<sup>86</sup> The HALO Trust and DDG reported that they have actively participated in roundtables and public hearings on mine action legislation, organised by the MoD, the OSCE Project Co-coordinator, and the VR’s Defence and Security Committee. During these meetings, HALO Trust and DDG supported the adoption of national legislation, and shared best practices and lessons learned from other countries.<sup>87</sup>

A special instruction for the identification, render-safe, and disposal of explosive items, based on the International Mine Action Standards (IMAS), was approved by the General Staff of the Ukrainian Armed Forces on 1 August 2014.<sup>88</sup> Development of national standards in Ukraine has taken place with support from GICHD, the OSCE PCU and DCAF.<sup>89</sup> On 27 January 2016, during the UN needs assessment mission, the Ukrainian MoD expressed its support for IMAS to serve as national mine action standards (NMAS).<sup>90</sup> In Ukraine, all national standards must be approved by the Ukrainian Scientific and Research Training Center of Standardization, Certification and Quality, which is the National Standardisation Authority in Ukraine.<sup>91</sup> Ukraine subsequently adopted IMAS as “trial national regulatory acts” on 1 September 2016, under National Standardization Authority Order 230 of 8 August 2016.<sup>92</sup> As at November 2016, Ukraine reported that it had adopted 42 international standards as national standards, with the support of GICHD, the OSCE, and UNICEF.<sup>93</sup>

A plan for the adoption of NMAS was formulated at a workshop organised by GICHD and OSCE PCU at the end of October 2017.<sup>94</sup> In April 2018, the MoD sent a first draft of the national standards to GICHD and OSCE PCU for review.<sup>95</sup> A workshop organised by GICHD and OSCE PCU was held in June 2018 to discuss the draft NMAS and provide recommendations. In July and August 2018, the draft was reviewed by the MoD and then finalised in early September 2018. The standards must also be approved by the National Standardisation Authority and the MoD expects that they will be adopted by the end of October 2018.<sup>96</sup> The full implementation of the NMAS does, however, depend on the successful passing of the mine action law.<sup>97</sup>

## Quality Management

The draft mine action law envisages the operation of a national mine action centre with a QA function.<sup>98</sup> In the meantime, quality management (QM) of government clearance operations is overseen by the demining centre of the Ukrainian Armed Forces.<sup>99</sup> Both DDG and The HALO Trust conduct internal QM. For DDG, team leaders and senior mine action personnel conduct all QM, while in the case of The HALO Trust, team leaders and supervisors conduct QC during clearance while a roving officer conducts QA.<sup>100</sup> HALO Trust planned to appoint an internal QA manager in 2018 who will be responsible for all internal QM.<sup>101</sup>

The HALO Trust is planning to deliver QM training to the future national mine action authority.<sup>102</sup> Janus Global Operations (JGO) carried out a two-month project for The HALO Trust in 2017, during which it trained 12 members of the demining centre of the Ukrainian Armed Forces in Kamianets-Podilsky on QM techniques, including QA of manual and mechanical demining and the use of mine detection dogs; battle area clearance; and EOD. The dozen Ukrainian military members and employees trained by JGO will now be able to perform QA for the national mine action authority/centre.<sup>103</sup> The HALO Trust also hosted a visit from the MoD’s Demining Centre who were undergoing an accreditation process in 2018 to become the body responsible for accrediting other demining organisations and, if successful, will also conduct external QA.<sup>104</sup>

## Information Management

In cooperation with the OSCE PCU and the GICHD, SESU has begun using IMSMA.<sup>105</sup> In 2015, IMSMA was piloted by the GICHD and SESU in four regions of Ukraine.<sup>106</sup> In November and December 2015, IMSMA training was conducted for 10 regional operators, and SESU plans to expand use to 24 regional operators, grouped into eight regional centres (Carpathian, Central, Dniprovskiy, Eastern Poliskyi, Podolsky, Tauric, Volyn, and the Operational Centre in Kiev).<sup>107</sup> The GICHD reported providing IMSMA training to staff from the various government ministries and agencies and international NGOs.<sup>108</sup> The HALO Trust has also been supporting the OSCE PCU to set up IMSMA, and in 2017 it supported the OSCE in developing technical and structural recommendations for an IMSMA system. The HALO Trust continues to work with the MoD and other mine action stakeholders to develop standardised IMSMA-compatible reporting templates.<sup>109</sup> In May 2018, the OSCE PCU organised training for 88 staff from the MoD, SESU, SSTS, The HALO Trust, DDG and the Swiss Foundation for Mine Action (FSD). In cooperation with the GICHD, the OSCE PCU also sent four staff members from the MoD and SESU to Spiez, Switzerland, to be trained as Level 2 administrators.<sup>110</sup>

As at October 2016, three government departments in Ukraine were using IMSMA: SESU, the MoD, and the State Special Transport Services. There are two functioning IMSMA databases, one managed by SESU and the other by the MoD, which collects and analyses contamination and land release data from national operators and NGOs.<sup>111</sup> As at July 2018, data on mine accidents, risk education, and victim assistance had not yet been collected.<sup>112</sup> The databases are reportedly complementary, as they are separated based on region, thematic area, and operational purpose.<sup>113</sup> Consolidation of the SESU and MoD databases will only be possible once Ukraine has adopted mine action legislation, which will serve as the basis for the national mine action authority and mine action centre. It will be the task of the national mine action centre to consolidate the two existing databases and to create a central national IMSMA database.<sup>114</sup>

In June 2017, the GICHD reported it had conducted an Information Management assessment that will serve as basis to develop a roadmap for future collaboration with the SESU and MoD.<sup>115</sup> As at July 2018, the plan was for the IMSMA server to be installed by the end of the year.<sup>116</sup>

## Operators

Following a presidential decree in September 2013, the MoD is the central coordinating body for demining in Ukraine. However, a number of other ministries continue to deploy units that undertake clearance and destruction of mines and ERW, including the Ministry of Internal Affairs (through SESU), the Security Service, the State Special Transport Service, and the State Border Service.<sup>117</sup>

A Commission on Humanitarian Demining within SESU coordinates the activities of SESU pyrotechnic teams and determines SESU's priorities.<sup>118</sup> In December 2015, Ukraine reported that during the ongoing conflict SESU had suffered severe losses to its buildings and vehicles.<sup>119</sup> Since then, DDG has secured equipment for four SESU pyrotechnic teams, which includes vehicles, detectors, and personal protective equipment (PPE). DDG trained the four teams in key aspects of demining, in addition to providing training to SESU medics.<sup>120</sup> Support was also being provided by the OSCE PCU<sup>121</sup> and by NATO.<sup>122</sup>

In addition to overall coordination of humanitarian demining in the Donetsk and Luhansk region, the MoD is also responsible for all areas where the military are permanently stationed as well as for the Joint Forces Operation in Donbass. The Ministry's Engineering Division conducts UXO spot clearance. The State Border Service conducts demining in areas under its control on land and in the sea. The Ministry of Defence's Special Transportation Service is responsible for demining national infrastructure (e.g. railways and roads). The Ministry of Internal Affairs has an engineering department that conducts EOD, in particular of IEDs.<sup>123</sup>

As at June 2018, the Ukrainian authorities were deploying 55 demining teams (totalling 259 personnel), of which 37 teams were deployed by the Ministry of Defence.<sup>124</sup> Ukroboronservice, a state enterprise whose activities include arms manufacture, also has a "humanitarian demining" section.<sup>125</sup> As at June 2018, Ukroboronservice was conducting commercial clearance outside Ukraine.<sup>126</sup>

Three international demining organisations — DDG, FSD, and The HALO Trust — are operating in Ukraine.<sup>127</sup> DDG began risk education in late 2014 in Donbass and in February 2016 it began to conduct non-technical survey in government-controlled areas of the Donetsk and Luhansk regions. It received formal approval from the authorities to conduct survey at the beginning of April 2017.<sup>128</sup> DDG Ukraine currently runs its operations out of offices in Severodonetsk and an operation base in Lysychank, with its head office in Kiev.<sup>129</sup> As at May 2018, DDG was deploying two manual demining teams which are also able to conduct BAC with a plan to increase its capacity to three demining teams during the year.<sup>130</sup> DDG completed limited non-technical survey of conflict-affected communities in Luhansk and Donetsk oblasts during 2017.<sup>131</sup> Information gathered by the teams will be used to plan where clearance is most urgently needed.<sup>132</sup> In April 2017, DDG provided EOD training to two staff from SESU and two from the Special Transport Service.<sup>133</sup> As at mid-2018, DDG signed a deed of commitment with SESU after securing funding for an integrated project involving the provision of equipment, targeted training and ongoing support in the field for SESU's humanitarian demining efforts.<sup>134</sup>

The HALO Trust launched its programme in November 2015 and began with a rapid assessment of mine and UXO contamination in Donetsk and Luhansk regions (oblasts).<sup>135</sup> In early 2016, The HALO Trust began conducting non-technical survey, mine clearance, and BAC in government-controlled areas of Luhansk and Donetsk regions, more than 15km from the contact line.<sup>136</sup> As at June 2018, The HALO Trust had 244 staff of whom 218 were engaged in survey, mine clearance, or BAC operations. A new training course for a further 40 staff began in June 2018 and as at September 2018 HALO Trust was employing a total of 360 staff.<sup>137</sup> All HALO Trust teams are trained and equipped for both mine clearance and BAC, and for all expected threats in the conflict zone, as non-technical survey has yet to determine the proportion of different types of hazard.<sup>138</sup> Since the first quarter of 2017, The HALO Trust has recruited women who have subsequently begun working as the first female deminers in Ukraine.<sup>139</sup>

In July 2018, The HALO Trust deployed its first mechanical clearance asset, an unarmoured front-loader, which was armoured in-country. As at September 2018, a second armoured loader was undergoing customs clearance in Kyiv. The HALO Trust also plans to import three lightly armoured remote-controlled vegetation-cutting machines. Trials of these machines, scheduled for mid-2018, were postponed until spring 2019 due to the requirement for additional protection work.<sup>140</sup>

The HALO Trust has been conducting survey in Volnovaskyi, Marinskyi, Yasynuvatskyi, Slovianskyi, Nikolskyi, Pokrovskyi, Bakhmutskyi, Kostantynivskyi, Dobropilskyi, Oleksandrivskyi, and Lymanskyi districts in the Donetsk region, and Stanychno-Luhanskyi, Novoaidarskyi, and Milovskiyi districts in the Luhansk region. HALO Trust's survey operations may take place less than 1km from the Line of Contact. As at June 2018, HALO Trust's nearest clearance task was situated 3km from the Line of Contact.<sup>141</sup>

As at July 2018, humanitarian demining organisations in Ukraine did not have access to explosives to destroy ordnance and, as such, cannot conduct demolitions. This is severely hampering progress within the sector.<sup>142</sup> The HALO Trust EOD callouts involve handing over ammunition to state authorities. In 2017, The HALO Trust handed over five landmines as a result of EOD callouts (two tripwire-initiated F1 fragmentation grenades, one MON-50, one MON-90, and one POMZ-2).<sup>143</sup> FSD is investigating the use of non-explosive methods to destroy ordnance while The HALO Trust continues to explore avenues for the granting of a licence to use explosives.<sup>144</sup> The lack of a fully functioning mine action authority means that there is no clear route for humanitarian organisations to receive such a licence.<sup>145</sup>

FSD started operations in Ukraine in early 2015 with a small grant for risk education in conflict-affected areas in the east. FSD subsequently gained accreditation for survey and clearance operations, and has had survey teams operating in eastern Ukraine since early 2017, including mine clearance and EOD. FSD works closely with regional security forces to clear explosive ordnance from conflict-affected areas.<sup>146</sup> In 2017, FSD increased its capacity to include a clearance team. The training was conducted at the Ukrainian Armed Forces Demining Centre at Kamianets-Podilskyi in April 2017 and clearance operations began in May 2017. A further training course was conducted from March to April 2018 for additional clearance personnel and a non-technical survey team. FSD now employs female clearance personnel and they have appointed a female team leader to the non-technical survey team. It is expected that FSD will relocate a mechanical clearance machine to Ukraine from another FSD programme later in 2018.<sup>147</sup>

In addition, a Ukrainian organisation, "Demining Team of Ukraine" is active in demining in eastern Ukraine.<sup>148</sup>

It has been claimed that Emercom, Russia's state agency for emergencies, has planned to begin clearance in areas under the control of separatists in the Donetsk and Luhansk regions.<sup>149</sup>

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## LAND RELEASE

Since the outbreak of fighting in eastern Ukraine, clearance of mines and ERW has been undertaken by both Ukrainian government authorities and separatist groups,<sup>150</sup> and international clearance operators have subsequently begun clearance in government-controlled areas. Clearance of ordnance in the Donetsk and Luhansk regions is typically reactive, taking place soon after attacks or when a report of contamination is received from the local community.<sup>151</sup> Once identified, munitions are marked on the ground, and their position fixed and reported to the local authorities.<sup>152</sup> Devices are either destroyed in situ or removed to storage areas or compounds.<sup>153</sup>

In February 2016, SESU claimed that, since the beginning of fighting in 2014, it had "cleared" around 140km<sup>2</sup> across the whole country, and disposed of more than 202,000 explosive objects.<sup>154</sup> Non-technical survey is helping to identify contaminated land, especially in liberated areas.<sup>155</sup> The Ukrainian Armed Forces are responsible for clearing ordnance in areas close to the front lines and former military positions.<sup>156</sup>

In areas controlled by pro-Russian rebel groups, separatists are said to be also clearing mines and ERW. In Donetsk, former SESU personnel, now organised under the separatist Donetsk People's Republic, are undertaking the bulk of clearance around Donetsk city. Personnel are organised into regular shifts, with clearance said to be conducted both day and night.<sup>157</sup>

The Ukrainian authorities and the pro-Russian rebels are, to varying degrees, recording written logs of emergency call-outs and clearance operations,<sup>158</sup> but data is not always disaggregated into weapon type.<sup>159</sup> Clearance data is not available from pro-Russian separatist groups, and an accurate picture is not available of the scale of clearance being undertaken in eastern Ukraine or of remaining contamination.

In 2017, The HALO Trust and DDG confirmed 41 SHAs as contaminated with anti-personnel mines covering a total of 3.37km<sup>2</sup>. The HALO Trust and FSD reduced a total of 16,090m<sup>2</sup> by technical survey. HALO Trust also conducted clearance of 18 mined areas covering 0.22km<sup>2</sup>.

## Survey in 2017

In 2017, The HALO Trust conducted survey in Andriivka village, Slovianskyi district; Harasymivka, Kolesnykivka, Krasna Talivka and Shyrokyi villages, Stanychno-Luhanskyi district; Hnutove village, Mariupolska district; Lebedynske, Sopyne and Volnovakha villages, Volnovaskyi district; Novoluhanske village, Bakhmutskyi district; Yampil village, Lymanskyi district; and Niznebarannikivka village, Bilovodskyi district. HALO

Trust confirmed 34 SHAs as contaminated with anti-personnel mines covering a total of 1,915,295m<sup>2</sup>. In Niznebarannikivka village, Bilovodskyi district HALO Trust reduced 7,039m<sup>2</sup> through technical survey.<sup>160</sup>

In 2017, DDG conducted survey in Myrna Dolyna village, Popasnianskyi district, confirming seven SHAs as contaminated with anti-vehicle mines and anti-personnel fragmentation mines covering a total of 1.45km<sup>2</sup>.<sup>161</sup>

As at May 2018, DDG was conducting limited non-technical survey in Luhansk and Donetsk Oblasts the most recent of which was conducted at the beginning of 2018. Non-technical survey is usually carried out by DDG both outside and inside the 15km zone from the front line and access is requested via CIMIC.<sup>162</sup>

In 2017, FSD reduced 9,051m<sup>2</sup> through technical survey in Kotoviski district although no anti-personnel mines were found.<sup>163</sup>

## Clearance in 2017

In 2017, The HALO Trust cleared 18 mined areas covering a total of 220,887m<sup>2</sup> and destroyed a total of 5 anti-personnel mines, 38 anti-vehicle mines and 49 UXO.<sup>164</sup>

**Table 1: HALO Trust mine clearance in 2017<sup>165</sup>**

District/village	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed
Slovianskyi / Andriivka	2	51,318	0	0
Stanychno-Luhanskyi / Krasna Talivka	4	78,899	2	32
Bilovodskyi / Niznebarannikivka	1	5,291	0	0
Bakhmutskyi / Novoluhanske	2	4,835	0	6
Lymanskyi / Ozerne	4	45,493	1	0
Slovianskyi / Rai-Oleksandrivka	1	175	0	0
Stanychno-Luhanskyi / Shyrokyi	2	24,961	0	0
Volnovaskyi / Volnovakha	1	7,752	1	0
Lymanskyi / Yampil	1	2,163	1	0
<b>Totals</b>	<b>18</b>	<b>220,887</b>	<b>5</b>	<b>38</b>

AP = Anti-personnel AV = Anti-vehicle

The HALO Trust began mine clearance and BAC in March 2016. HALO Trust's prioritisation of clearance is based primarily on casualty reduction. Anti-personnel minefields are prioritised according to their proximity to a population centre, mine accident history, intensity of land use (i.e. how often land is used or will be used following clearance) and density of mine contamination. The HALO Trust endeavours to react quickly to high-impact areas. However, due to improved access in 2017 to areas near the line of contact, high-impact areas are arising much more frequently. As HALO's capacity to respond is limited, priority is given to finishing clearance at high-impact tasks over responding to new ones.<sup>166</sup>

In 2017, DDG did not conduct any clearance of anti-personnel mines, only anti-vehicle mines and UXO. DDG has its own prioritisation matrix, which takes the type of contamination, the density, and the proximity to inhabited areas into account. DDG's current clearance capacity is small (two teams) and so they are limited in their ability to respond quickly as both teams are currently engaged in clearance activities.<sup>167</sup>

In 2017, FSD did not conduct any clearance of mined areas. As at July 2018, FSD was operating in the Donetsk oblast approximately 35km from the contact line. FSD receives tasks from the Ministry of Defence who have their own system of prioritisation. If an area is classified as high priority, then it is dealt with urgently by FSD.<sup>168</sup>

The HALO Trust has received additional access to areas within the buffer zone during 2017 and as at July 2018 is conducting survey operations up to 1km from the line of contact. The HALO Trust's nearest current clearance task is situated 3km from the line of contact.<sup>169</sup> Items discovered by HALO Trust are destroyed by the Ministry of Defence, as only the Ukrainian Armed Forces have access to explosives.<sup>170</sup> In 2017, HALO handed over five anti-personnel mines as a result of EOD callouts (two tripwire-initiated F1 fragmentation grenades, one MON-50, one MON-90, and one POMZ-2).<sup>171</sup> HALO Trust's demining in Ukraine is conducted in coordination with the Ukrainian authorities and international organisations.<sup>172</sup>

As at July 2018, HALO Trust, DDG and FSD had collectively identified as contamination in Ukraine the following: anti-vehicle mines (TM-57 and TM-62 (both plastic and metal series) and PTM series); anti-personnel mines (OZM-72 fragmentation mines, and MON, PMN, and POM series); improvised fragmentation mines, and booby-trapped ERW (mainly tripwire-initiated systems connected to conventional munitions); cluster munitions (9N series) and remnants; rockets from multiple launch rocket systems (PG series); and unexploded mortar shells and grenades.<sup>173</sup>

## Progress in 2018

The Ministry of Defence planned to focus on demining civilian territories and water pipe and gas pipe infrastructure in 2018, along with continued non-technical and technical survey, risk education, and victim assistance.<sup>174</sup>

The HALO Trust was expecting to expand its operational capacity to approximately 300 staff by the end of 2018. HALO Trust's priority for 2018 was to expand clearance capacity in the buffer zone, where 84% of mine and ERW incidents take place. The deployment of mechanical clearance assets, combined with the increase in capacity of manual deminers, will allow HALO Trust to finish current clearance tasks in areas further from the line of contact. This increased capacity will then focus on a number of high priority tasks that HALO Trust has identified in Bakhmutskiyi, Mariupolskiyi, and Stanychno-Luhanskiyi regions. The HALO Trust also intends to support capacity development in 2018, with QM training of the MoD's Demining Centre in Kamenets Podylskiy and non-technical survey training of SESU.<sup>175</sup>

FSD was planning to increase its clearance capacity in 2018 with the creation of dedicated "large loop" crews to assist with BAC tasks.<sup>176</sup>

DDG secured further funding in 2018 that allowed the deployment of an additional manual demining team, bringing total capacity to two manual demining teams and one technical survey/spot task team. A key area of DDG's focus is working with SESU to equip, train and support their humanitarian demining capacity as the mine action sector evolves and national standards come into force.<sup>177</sup>

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## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBBC, Ukraine 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 June 2016. In a much welcome development, as this report was going to print in early November 2018, Ukraine finally submitted an extension to its Article 5 deadline, seeking a five-and-a-half-year period (although the request says five years) until 1 December 2021. Prior to submission of its Article 5 extension request, Ukraine had continued to refuse to seek a deadline extension as a result of new use of anti-personnel mines since conflict erupted in 2014, putting it in serious violation of the APMBBC. Assuming its extension request is granted by states parties at the Seventeenth Meeting of States Parties, Ukraine will return to compliance with Article 5.

At the Fourteenth Meeting of States Parties in 2015, Ukraine reported that it did not have access to some mined areas. According to the final report of the meeting, "Ukraine emphasized that it was fully aware of the need for strict compliance with the obligations under the Convention and notified its intention to seek an extension of the period of Ukraine's implementation of Article 5. The official, duly compiled, request would be soon submitted to the States Parties for their consideration".<sup>178</sup>

On 30 March 2016, though, Ukraine deposited an official communication to the other APMBBC states parties via the UN Secretary-General, noting that it did not have full control over parts of its territory – namely the Autonomous Republic of Crimea, the city of Sevastopol, and certain districts of the Donetsk and Luhansk oblasts of Ukraine.<sup>179</sup> However, Article 5 specifies that a state party is responsible for clearing mined areas under its jurisdiction or control. Therefore, suspected or confirmed mined areas that are under Ukraine's control or under Ukraine's jurisdiction (even if it does not have control or physical access to those areas), should all be covered in an extension request. Furthermore, Ukraine's obligations under the APMBBC still fully apply, including with regard to Article 5, irrespective of the fact that Ukraine continues to be engaged in an armed conflict.

At the Fifteenth Meeting of States Parties in 2016, Ukraine reiterated its commitment to implement its obligations under the Convention, including Article 5. It stated, "We are looking forward to closely engaging with the Article 5 Committee and the ISU in the beginning of 2017 in order to elaborate a way forward and find an appropriate solution to the unique situation and security challenges that Ukraine has been facing since February 2014."<sup>180</sup>

At the APMBBC Intersessional Meetings (on 8–9 June 2017), Ukraine expressed that it believed it to be unfair that other states had a 10-year deadline under Article 5, but Ukraine only had a two-year deadline (i.e. from the date of the new contamination in February 2014 until June 2016). Ukraine reiterated that it was demining areas under its control, but could not identify all areas where mines are known to be emplaced. Ukraine stated that it could submit [an Article 5 extension request], but any such decision should acknowledge that February 2014 was the date when mine contamination appeared; that Russian aggression is indicated as the reason; and that Ukraine will start implementing Article 5 once the integrity of the whole territory is restored.<sup>181</sup> Ukraine also reported that to fill the gap in the convention, it had prepared a draft rational response for states where contamination appears after entry into forces but before the Article 5 clearance deadline.<sup>182</sup>

At the Sixteenth Meeting of States Parties in December 2017, Ukraine stated that it remained open to discussions with partners about submitting its extension request and reiterated the need to acknowledge the points it made at the Intersessional Meetings in June 2017.<sup>183</sup> On 1 June 2018, Ukraine sent a letter to the Secretary-General of the United Nations stating that until Ukraine has complete control over its territory the obligations under Article 5 as applied to the occupied territories are “limited and not guaranteed”.<sup>184</sup> In its statement at the June 2018 Intersessional Meetings Ukraine stated that they were ready for consultation on a draft paper that they had prepared on the “rational response to the discovery of previously unknown or newly appointed

mined areas”.<sup>185</sup> As previously mentioned, in November 2018 Ukraine finally submitted an extension to its Article 5 deadline, seeking a five-and-a-half-year period (although the request says five years) until 1 December 2021. This extension will be considered by states parties at the Seventeenth Meeting of States Parties, and if granted, Ukraine will return to compliance with Article 5.

National funding is provided for clearance of mines and ERW, and the Department of Environmental Safety and Mine Action is a division of the Ministry of Defence, from which it is funded.<sup>186</sup> Ukraine also receives assistance from foreign partners (OSCE and NATO) for demining equipment.<sup>187</sup>

With regards to international funding of humanitarian operators in 2018, The HALO Trust was expecting to receive more funding in 2018 than the previous year as funding from its two largest donors was likely to increase.<sup>188</sup> FSD expected to receive the same amount of funding in 2018.<sup>189</sup> DDG was expecting to receive increased funding in 2018 after a slight reduction in 2017.<sup>190</sup>

Russia is not a state party or signatory to the APMBBC. Nonetheless, Russia has obligations under international human rights law to clear mines as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction, in any areas of Ukraine over which it exercises effective control.

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# UNITED KINGDOM (FALKLAND ISLANDS)

**ARTICLE 5 DEADLINE: 1 MARCH 2019**  
(FIVE-YEAR EXTENSION REQUESTED TO MARCH 2024)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	8	7
Target date for completion of mine clearance	6	4
Targeted clearance	6	6
Efficient clearance	6	6
National funding of programme	8	7
Timely clearance	6	5
Land-release system in place	8	8
National mine action standards	9	8
Reporting on progress	7	6
Improving performance	8	7
<b>PERFORMANCE SCORE: GOOD</b>	<b>7.2</b>	<b>6.4</b>

## PERFORMANCE COMMENTARY

The United Kingdom again made good progress in 2017 in releasing mined area on the Falkland Islands,<sup>1</sup> clearing just over 1km<sup>2</sup> of mined area. The government has increased funding and accelerated demining in the current phase of operations, and has a fully funded programme in place until March 2020, at which point only eight mined areas covering less than 0.2km<sup>2</sup> of land are expected to remain. The inaccessibility of the Falkland Islands means they have limited capacity to support an

expanded workforce that would permit an increased rate of work. The United Kingdom has been working at what it assesses to be the maximum capacity that can be safely deployed on the Islands. In 2018, the United Kingdom was preparing to submit a five-year Article 5 deadline extension request until 1 March 2024. This extended deadline would provide the additional time needed to complete the United Kingdom's Anti-Personnel Mine Ban Convention (APMBC) Article 5 obligations.

## RECOMMENDATION FOR ACTION

- In both its reporting and planning, the United Kingdom should disaggregate data on the extent of mined area released (or planned for future release) by survey (both cancelled by non-technical survey and reduced through technical survey) and clearance.

## CONTAMINATION

The only mined areas under the jurisdiction or control of the United Kingdom are on the Falkland Islands in the South Atlantic, the result of armed conflict with Argentina in 1982.<sup>2</sup> As at March 2018, only 35 mined areas

remained to be cleared, totalling 6.4km<sup>2</sup> (see Table 1)<sup>3</sup> and the United Kingdom has a fully funded programme in place to further reduce contamination to eight mined areas by 31 March 2020.<sup>4</sup>

**Table 1: Contamination by province (as at end of Phase 5(a), end March 2018)<sup>5</sup>**

Area	Mined areas	Area (m <sup>2</sup> )
Fox Bay	12	236,950
Port Howard	5	128,280
Darwin and Goose Green	0	0
Murrell Peninsula	6	6,046,800
Stanley Area 1	8	0
Stanley Area 2	2	2,570
Stanley Area 3	2	25,450
Stanley Area 4	0	0
<b>Totals</b>	<b>35</b>	<b>6,440,050</b>

Some clearance was undertaken in the early 1980s immediately following the Falklands conflict, during which 1,855 mines were removed and destroyed from mined area.<sup>6</sup> 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.<sup>7</sup>

In 2001, the United Kingdom and Argentina agreed to carry out a feasibility study on the clearance of mines in the Islands. The study, which was undertaken by Cranfield University in the United Kingdom, was concluded in October 2007. The resultant report "highlighted the environmental and remediation challenges, the climatic constraints and the limitations of the existing local infrastructure and recommended a two-year trial. It concluded that the clearance of mines from all mined areas would be challenging, but

technically possible and estimated that the task would take a minimum of 10 years subject to the outcome of the trial."<sup>8</sup>

In its 2008 Article 5 extension request, the United Kingdom reported that 117 mined areas remained over an estimated total area of 13km<sup>2</sup>, and containing some 20,000 anti-personnel and anti-vehicle mines.<sup>9</sup> On the basis of additional information obtained during demining operations, the estimate for the total contaminated area was increased to 13.5km<sup>2</sup>.<sup>10</sup> The total number of mined areas was subsequently revised upwards, from 117 to 122, as the earlier feasibility study had combined a small number of separately numbered mined areas, which were then separated out with a view to maintaining accurate accounts of progress.<sup>11</sup>

During the first four phases of clearance (from October 2009 to March 2016), 35 mined areas were released, totalling just over 2km<sup>2</sup>, with the destruction of 4,083 anti-personnel mines, 927 anti-vehicle mines, and 74 items of unexploded ordnance (UXO), including 21 submunitions. A further 52 mined areas, totalling over 2km<sup>2</sup> were cleared during Phase 5(a) clearance (from November 2016 to March 2018, with operations stood down for the Austral winter), during which a further 4,223 anti-personnel mines, 245 anti-vehicle mines, and 43 items of UXO were cleared.<sup>12</sup>

In addition, battle area clearance (BAC) operations during this period (conducted during Phases 2, 3, 4(b), and 5(a)), resulted in nearly 7.86km<sup>2</sup> of suspected hazardous area (SHA) being cleared, with the destruction of 87 items of UXO.<sup>13</sup>

The United Kingdom has reported that no civilian has ever been killed or injured by mines on the islands.<sup>14</sup>

Over the years, however, civilians have deliberately or inadvertently entered a minefield in a number of cases. For example, the Ministry of Defence reported “infringement” of minefields by a total of six locals and 15 foreign fishermen or tourists between March 2000 and December 2008.<sup>15</sup> It is a criminal offence on the Falkland Islands to enter a minefield.<sup>16</sup>

The socio-economic impact of contamination on the islands is said to be minimal. All mined areas and SHAs have been “perimeter-marked and are regularly monitored and protected by quality stock proof fencing, to ensure the effective exclusion of civilians.”<sup>17</sup> According to the United Kingdom, mined areas represent “only 0.1% of land used for farming. The mined areas cover a wide range of terrain including sandy beaches and dunes, mountains, rock screes, dry peat, wet swampy peat, and pasture land.”<sup>18</sup> A number of instances of cattle, sheep, or horses entering the minefields have been recorded since 2000, some of which resulted in the animals’ deaths.<sup>19</sup>

## 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 is chaired by the UK Foreign and Commonwealth Office (FCO) and comprises representatives from the Ministry of Defence, the Falkland Islands government, and a strategic advisor. It meets “as required” (at least once every six months), with the Land Release Contractor (currently Battle Area Clearance, Training, Equipment and Consultancy International (BACTEC) now known as Dynasafe BACTEC Ltd) and the Demining Project Office (currently Fenix Insight), invited to attend “where appropriate”.<sup>20</sup>

In addition, there is a Suspect Hazardous Area Land Release Committee (SHALARC), which is a body based on the Falkland Islands, composed of a wide range of local officials and a representative of the United Kingdom military. The SHALARC provides a forum for the contractors to discuss or provide detail on issues of concern or interest to the committee, such as the land release process, including when land has been released for public use.<sup>21</sup>

### Strategic Planning

The United Kingdom is currently undertaking the fifth phase of its demining operations on the Falkland Islands. The government has committed to spend more than £27 million on Phase 5(a) and (b) (covering 2016–20), which covers the clearance of 79 mined areas totalling some 10.86km<sup>2</sup>. This total includes 2.86km<sup>2</sup> of BAC.<sup>22</sup>

Phase 5(a) commenced in November 2016 and concluded in March 2018.<sup>23</sup> During this phase operators cleared more mined areas for which there were no minefield records than previously. The prior technical survey included cutting lanes into suspected minefields in order to establish the position of any remaining mines.<sup>24</sup> Following the conclusion of Phase 5(a), the United Kingdom believes it has a more accurate picture of the remaining mine clearance challenge, which has helped

inform its strategic planning and the drafting of its second Article 5 deadline extension request, which was submitted on 29 March 2018 for consideration by states parties to the APMB.<sup>25</sup>

The current stage of demining, Phase 5(b), which began in April 2018, is due to conclude by the end of March 2020.<sup>26</sup> At the end of this Phase, it is expected that only eight mined areas will remain, covering an estimated 163,460m<sup>2</sup>, and located in the environmentally sensitive beach and sand dune area known as Yorke Bay.<sup>27</sup> Technical survey of Yorke Bay, which will be carried out during Phase 5(b), will inform the planning and costing for the release of the remaining eight mined areas.<sup>28</sup>

To date, the United Kingdom has prioritised clearance of areas closest to settlements and civilian infrastructure, resulting in release of areas closest to Port Stanley and the roads leading in and out of the Islands’ capital. 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 2016 study applied Multi Criteria Decision Analysis to rank all remaining minefields according to a range of factors including size/density of minefield; terrestrial factors (remoteness of location, topography, and difficulty of mine removal); human factors (proximity to life, benefits to local population of clearance, and political priorities of the United Kingdom/Falkland Islands Governments); and environmental factors (conservation of wildlife and adherence to local legislation). The resultant priority list formed the basis of the UK Government’s invitation to tender for the contract for Phase 5 demining.<sup>29</sup> The United Kingdom has noted that the “small” humanitarian and socio-economic impact of the remaining mined areas in the Falkland Islands decreases as the mined areas closest to population centres are cleared.<sup>30</sup>

## Legislation and Standards

The United Kingdom does not have its own national mine action standards, but survey and clearance operations on the Falkland Islands are reported to meet or exceed the International Mine Action Standards (IMAS), by adapting IMAS to meet the specifics of the situation on the Falkland Islands.<sup>31</sup> Each project's Statement of Requirement contains the standards specific to the tasks being addressed.<sup>32</sup> Applicable environmental standards are agreed on in coordination with the Falkland Islands Government Environmental Planning Department to minimise damage to the fragile environment and to aid remediation.<sup>33</sup>

## Quality Management

The Land Release Contractor in the Falklands (Dynasafe BACTEC Ltd, at present) undertakes its own internal Quality Assurance (QA) and Quality Control (QC). The Demining Project Office (Fenix Insight, at present) monitors this quality management and can also conduct its external QA and QC.<sup>34</sup> The size of the sampled areas at each task is decided by the quality contractor based on the guidance set out in IMAS 09.20.<sup>35</sup>

## Information Management

The information management system is managed at two levels. The Strategic Advisor maintains the public statement of progress through a "Cumulative Totals" spreadsheet (as demonstrated in the attached annex to the United Kingdom's 2018 extension request). This forms the basis of the declarations to the APMBC's meetings of states parties. Also, the Demining Project Office and the Land Release Contractor use an operational-level planning and information management tool which guides the work and ultimately leads to the Handover Certificate at the conclusion of each task.<sup>36</sup>

The United Kingdom has not historically collated data on area cancelled and on area reduced.<sup>37</sup>

## Operators

The Land Release Contractor in the Falkland Islands is selected by international competitive tender prior to each phase, as required by the European Union. Based on a balance of merit and value for money, the same organisation, BACTEC, was awarded the land release contract for the current fifth phase of demining operations in the Falkland Islands, as for the previous four phases.<sup>38</sup> Capacity for Phase 5 operations was increased from previous phases, with a total of 108 personnel: 84 demining staff (7 teams of 12 (eight deminers, one supervisor, one team leader, a medic, and a driver per team); 7 technical staff (surveyors, mechanics, and excavator operators); 13 support staff; and 4 management staff. Mechanical equipment includes one anti-vehicle mine machine, three anti-personnel mine machines, and two armoured excavators, in addition to the required transportation equipment.<sup>39</sup>

The position of Demining Project Office, which implements the policies of the NMAA and monitors the land release operations on the Falkland Islands, is also awarded through competitive tender. Based on merit, Fenix Insight has been awarded responsibility for the Demining Project Office for all five stages of demining so far.<sup>40</sup>

The United Kingdom has noted that the Falkland Islands has limited capacity in terms of accommodation and medical/casevac (evacuation of casualties by air) facilities. Current staffing levels have reached the maximum that can be safely deployed on the Islands, but work was claimed to be progressing "very well" with the current capacity.<sup>41</sup>

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## LAND RELEASE

During 2017, anti-personnel mine survey and clearance operations took place in the Falkland Islands as part of Phase 5(a) of demining (November 2016 to March 2018, with operations stood down for the Austral winter).

Between January and December 2017, just over 1km<sup>2</sup> was released by clearance, as part of Phase 5(a) clearance operations.<sup>42</sup>

While non-technical and technical survey have formed a key part of the United Kingdom's operations in the Falkland Islands for many years, the United Kingdom does not provide data on the amount of land cancelled by non-technical survey or reduced by technical survey.

## Survey in 2017

During Phase 5a (November 2016 to March 2018), technical survey was reported to have been completed in minefields in Port Howard, Fox Bay, and Stanley Area 3, but no data was reported on the amount of mined area reduced through survey.<sup>43</sup>

## Clearance in Phase 5(a) (November 2016 to March 2018)

Phase 5(a) survey and clearance operations are tackling some of the most complex, remote, and environmentally sensitive minefields. Phase 5(a) commenced in November 2016 and ran until March 2018, with a three-month stand down over the Austral winter beginning in June 2017.<sup>44</sup> In total, during Phase 5(a) of clearance, 52 mined areas were released, totalling just over 2km<sup>2</sup>, with the destruction of 4,223 anti-personnel mines, 245 anti-vehicle mines, and

44 items of UXO (see Table 2).<sup>45</sup> A further 2.86km<sup>2</sup> of BAC was conducted during this Phase.<sup>46</sup>

Of this, just over 1km<sup>2</sup> of mined area was reported as cleared in 2017, with the destruction of 2,557 anti-personnel mines, 207 anti-vehicle mines, and 17 items of UXO during the course of the year.

**Table 2: Mine clearance Phase 5(a) (November 2016 to March 2018)<sup>47</sup>**

Time period	Geographic area	Areas released	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
November to December 2016	Stanley Area 2 and 3	7	426,346	1,314	19	1
January to December 2017 (including three month stand down during Austral winter)	Darwin and Goose Green, Stanley Area 2, 3, and 4	34	1,050,080	2,557	207	17
January to March 2018		11	577,474	352	19	26
<b>Totals</b>		<b>52</b>	<b>2,053,900</b>	<b>4,223</b>	<b>245</b>	<b>44</b>

AP = Anti-personnel AV = Anti-vehicle

Phase 5(b) of clearance operations, for the period April 2018 to March 2020, commenced on schedule in April, and is covering more than 5.95km<sup>2</sup> of confirmed or suspected mined area.<sup>48</sup>

In some SHAs, machines (with a flail or tiller) are used to prepare the land for clearance, which improves productivity. All mechanically prepared ground is subsequently processed by deminers using visual search, detector search, raking, or full manual excavation drills. Furthermore, aerial drones, which were first introduced during Phase 4 clearance operations, are again being deployed during Phase 5. Use of drones to overfly SHAs helps to identify mine 'dump' locations, row markers, and other evidence that might have otherwise taken a manual team several days to locate. The United Kingdom

deems the use of drones to be an excellent addition to the demining toolbox. As it progresses towards clearing sand-duned areas, heavy sand-sifting machinery will be introduced.<sup>49</sup>

## Previous clearance Phases 1 – 4 (October 2009 to March 2016)

The first formal clearance operations since the United Kingdom became a State Party to the Mine Ban Treaty in 1999 took place at the end of 2009. In total, during the first four phases of clearance from October 2009 to March 2016, 35 mined areas were released, totalling just over 2km<sup>2</sup>, with the destruction of 4,083 anti-personnel mines, 927 anti-vehicle mines, and 74 items of UXO, including 21 submunitions (see Table 3).

**Table 3: Mine clearance by project phase and area in October 2009 to 30 March 2016<sup>50</sup>**

Project Phase	Geographic area	Areas released	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
1 (Oct 2009 to June 2010)	Fox Bay, Darwin and Goose Green, Stanley Area 1 and 3	4	89,540	678	568	12
2 (Jan 2012 to March 2012)		0	0	0	0	0
3 (Jan 2013 to March 2013)	Stanley Area 1, 2 and 3	6	841,241	233	32	6
4(a) (Jan 2015 to May 2015)	Stanley Area 3	10	264,921	723	24	37
4(b) (Sept 2015 to March 2016)	Stanley Area 2 and 3	15	832,594	2,449	303	19
<b>Totals</b>		<b>35</b>	<b>2,028,296</b>	<b>4,083</b>	<b>927</b>	<b>74</b>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB (and in accordance with the ten-year extension granted by states parties in 2008), the United Kingdom is required to destroy all anti-personnel mines in areas under its jurisdiction or control as soon as possible, but not later than 1 March 2019. In July 2017, the United Kingdom reported that meeting the 2019 deadline would be “challenging”, and that its current priority was successful implementation of the first stages of the Phase 5, and agreeing on plans for demining beyond 2018.<sup>51</sup> In March 2018, the United Kingdom submitted a second extension request, seeking a further five-year extension to its Article 5 deadline, through to 1 March 2024. This will be the final deadline extension the United Kingdom expects to seek.

Phase 5(a) of survey and clearance operations finished as scheduled at the end of March 2018. Upon conclusion of Phase 5(a), just over 4.08km<sup>2</sup> of mined land had been cleared since the United Kingdom joined the APMB, releasing a total of 87 mined areas. In addition, almost 7.86km<sup>2</sup> of BAC has been released during this same period.<sup>52</sup> Phase 5(b) commenced immediately in succession in April 2018 and was expected to conclude by 31 March 2020.

As outlined by the United Kingdom in its Article 5 extension request, submitted for consideration by States Parties in March 2018, the United Kingdom expects that eight remaining mined areas, covering an estimated 163,460m<sup>2</sup>, will remain upon completion of Phase 5(b) in March 2020. The mined areas in question are all located in Yorke Bay, an environmentally sensitive beach and sand dune area, which is also the most challenging of mined areas.<sup>53</sup> According to the United Kingdom, “It is possible that the work can be completed in a single further year, but that cannot be certain at this stage... Rather than request a three year extension which may prove insufficient, thus necessitating a further extension request, the UK requests a five year extension until 1 March 2024”.<sup>54</sup>

There are two further areas, Don Carlos Bay and Beatrice Cove, which have never been considered as mined, and which were not involved in the 122 mined areas established in the feasibility study in 2007, but which are located behind the long Murrell Peninsula fence. This area has been out of bounds to all persons on the Islands since 1982, so it has not been possible to check whether these two areas were mined. If these two areas are found to require clearance, they will be added to the list of mined areas, and the United Kingdom expects they could be cleared within the five-year extension period.<sup>55</sup>

The United Kingdom “retains the strong intention that the clearance of Yorke Bay will be possible within the 5-year extension request”.<sup>56</sup> It does, however, cite two risk factors to the realisation of the plan. The first is a risk that at Yorke Bay, some mines may have been moved by sand movement and that technical survey cannot identify the bounds of that movement, which may lead to lengthier and more expensive clearance. Second, there could be a delay in securing further funding, which “will be weighed against competing priorities and subject to approval at senior levels”. This in turn could lead to a situation requiring demobilisation, and remobilisation of demining capacity, or retendering, after Phase 5, which

would be timely and costly: hence the request to an extended deadline to 2024.<sup>57</sup>

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 will be addressed in such a way as to ensure impact to the existing environment is limited to the minimum practically possible.<sup>58</sup>

Most of the remaining mined areas are said to be in extremely remote locations, exposed to adverse weather conditions that enforce an annual three-month stand in the winter months.<sup>59</sup> The United Kingdom has also reported the following additional challenges to clearance in the Islands: 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.<sup>60</sup> The United Kingdom reports that these factors are becoming increasingly significant as it tackles the more technically challenging and environmentally sensitive minefields in Phase 5 of demining. To address these considerations the United Kingdom has increased its funding commitment for Phase 5.<sup>61</sup>

The United Kingdom government funds all mine-clearance operations in the Islands.<sup>62</sup> The first four stages of demining (2009 to March 2016) cost £11 million (approx. US\$14.5 million).<sup>63</sup> The United Kingdom government has committed to spend more than £27 million (approx. US\$35.5 million at current exchange rates) on Phase 5 through to March 2020). This will leave eight mined areas as at end of March 2020. According to the United Kingdom, “further funding will be sought once the cost of covering Yorke Bay is known based upon the results of technical survey conducted during the extension request period in Phase 5.”<sup>64</sup>

Demining on the Falkland Islands is conducted in phases, which cut across calendar years, though, based on the year in which demining tasks were completed, a total of 3.42km<sup>2</sup> of mined area has been cleared in the last five years.

**Table 4: Mine clearance in 2013–17<sup>65</sup>**

Year	Area cleared [km <sup>2</sup> ]*
2017	1.05
2016	0.94
2015	0.59
2014	0
2013	0.84
<b>Total</b>	<b>3.42</b>

\* Based on the year in which clearance was completed

The United Kingdom has committed to providing updated information on progress and next steps at subsequent future meetings of States Parties to the Convention.<sup>66</sup>

- 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 2020.
- 2 First Article 5 deadline Extension Request, 2008 (hereafter, 2008 Extension Request).
- 3 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 21 August 2018.
- 4 Second Article 5 deadline Extension Request, 29 March 2018, p. 3 (hereafter, 2018 Extension Request).
- 5 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 21 August 2018.
- 6 2018 Extension Request, p. 6.
- 7 Analysis of 2008 Extension Request, 18 November 2008.
- 8 2008 Extension Request, p. 16.
- 9 2008 Extension Request, p. 2.
- 10 2008 Extension Request, p. 2; and "Preliminary observations of the committee on Article 5 implementation – observations on the implementation of Article 5 by the United Kingdom", 23 June 2015.
- 11 2018 Extension Request, p. 5.
- 12 Email from an official in the Arms Export Policy Department, FCO, 26 June 2018.
- 13 Ibid.
- 14 Statement of the United Kingdom, Standing Committee meetings, Geneva, 8 June 2017; and 2018 Extension Request, p. 4.
- 15 Letter from Permanent Joint Headquarters of the UK Ministry of Defence to Landmine Action, 16 February 2009.
- 16 2018 Extension Request, p. 10.
- 17 2008 Extension Request, p. 2.
- 18 Ibid.
- 19 Letter from Permanent Joint Headquarters of the UK Ministry of Defence to Landmine Action, 16 February 2009.
- 20 2018 Extension Request, p. 8.
- 21 Ibid., p. 9.
- 22 Ibid., pp. 7 and 14; and email from an official in the Arms Export Policy Department, FCO, 26 June 2018.
- 23 2018 Extension Request, p. 3.
- 24 Emails from an official in the Arms Export Policy Department, FCO, 28 July and 11 October 2017; Statement of the United Kingdom, Standing Committee meetings, Geneva, 8 June 2017; and "Falklands: 46 minefields to be cleared in two years pledges Foreign Office", *MercoPress*, 13 January 2017, at: <http://en.mercoPress.com/2017/01/13/falklands-46-minefields-to-be-cleared-in-two-years-pledges-foreign-office>.
- 25 Email from an official in the Arms Export Policy Department, FCO, 11 October 2017.
- 26 2018 Extension Request, p. 7.
- 27 Ibid., pp. 7 and 14.
- 28 Ibid., p. 14.
- 29 Emails from an official in the Arms Export Policy Department, FCO, 21 September 2016 and 28 July 2017.
- 30 Statement of the United Kingdom, Standing Committee meetings, Geneva, 8 June 2017.
- 31 Email from an official in the Arms Export Policy Department, FCO, 26 June 2018; and 2018 Extension Request, pp. 3 and 7.
- 32 Email from an official in the Arms Export Policy Department, FCO, 15 July 2016.
- 33 APMBC Article 7 Report (for 2016), Form F.
- 34 Email from an official in the Arms Export Policy Department, FCO, 26 June 2018; and 2018 Extension Request, p. 9.
- 35 Email from an official in the Arms Export Policy Department, FCO, 1 July 2016.
- 36 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 21 August 2018.
- 37 2018 Extension Request, Annex A.
- 38 Ibid., p. 9.
- 39 Email from an official in the Arms Export Policy Department, FCO, 28 July 2017.
- 40 2018 Extension Request, p. 9.
- 41 Email from an official in the Arms Export Policy Department, FCO, 28 July 2017; and 2018 Extension Request, p. 3.
- 42 2018 Extension Request, Annex A.
- 43 Email from an official in the Arms Export Policy Department, FCO, 26 June 2018.
- 44 Statement of the United Kingdom, 15th Meeting of States Parties, Santiago, 29 November 2017; and emails from an official in the Arms Export Policy Department, FCO, 2 June, 28 July, and 11 October 2017, and 26 June 2018.
- 45 Email from an official in the Arms Export Policy Department, FCO, 26 June 2018.
- 46 2018 Extension Request, Annex A.
- 47 Ibid. There is a small discrepancy between the mined area cleared and the number of mines destroyed, as reported previously for 2016 (6 areas released, 423,210m<sup>2</sup> cleared and 1,807 AP mines, 19 AV mines and 1 other UXO destroyed) and the data reported most recently for 2016 (7 areas released, 426,346m<sup>2</sup> cleared and 1,314 AP mines, 19 AV mines, and 1 UXO destroyed), as contained in Table 2 of this report. The FCO has confirmed to Mine Action Review that the data in Table 2 of this report is correct.
- 48 Email from an official in the Arms Export Policy Department, FCO, 26 June 2018.
- 49 Emails from an official in the Arms Export Policy Department, FCO, 15 July 2016 and 28 July 2018; and 2018 Extension Request, p. 8.
- 50 Email from an official in the Arms Export Policy Department, FCO, 24 August 2016. There is a small discrepancy between the mined area cleared and the number of mines destroyed, as reported previously for Phase 3 (826,000m<sup>2</sup> cleared and 296 anti-personnel mines destroyed) and Phase 4(b) (2,674 anti-personnel mines and 360 anti-vehicle mines destroyed) and the data reported most recently in the United Kingdom's 2018 Article 5 Extension Request (Phase 3: 841,241m<sup>2</sup> cleared and 233 anti-personnel mines destroyed and Phase 4(b) 2,499 anti-personnel mines and 303 anti-vehicle mines destroyed), as contained in Table 3 of this report. The FCO has confirmed to Mine Action Review that the data in its 2018 Article 5 Extension Request and Table 3 of this report is now correct.
- 51 Email from an official in the Arms Export Policy Department, FCO, 28 July 2017.
- 52 Email from an official in the Arms Export Policy Department, FCO, 26 June 2018.
- 53 2018 Extension Request, pp. 7 and 14.
- 54 Ibid., p. 15.
- 55 Ibid., p. 13.
- 56 Ibid., p. 14.
- 57 Ibid., p. 15.
- 58 Email from an official in the Arms Export Policy Department, FCO, 28 July 2017; and 2018 Extension Request, pp. 3 and 11.
- 59 2018 Extension Request, p. 4.
- 60 Statement of the United Kingdom, Intersessional Meetings, Geneva, 8 June 2017; and 2018 Extension Request, p. 3.
- 61 Ibid.
- 62 Email from an official in the Arms Export Policy Department, FCO, 3 June 2015.
- 63 2018 Extension Request, pp. 3 and 10.
- 64 Ibid., p. 10.
- 65 See Cluster Munition Monitor and Mine Action Review reports on clearance in the United Kingdom covering 2013–17.
- 66 2018 Extension Request, pp. 12 and 14.

# YEMEN

**ARTICLE 5 DEADLINE: 1 MARCH 2020**  
(NOT ON TRACK TO MEET DEADLINE)

## PROGRAMME PERFORMANCE

	2017	2016
<b>Problem understood</b>	4	3
<b>Target date for completion of mine clearance</b>	3	3
<b>Targeted clearance</b>	5	4
<b>Efficient clearance</b>	5	4
<b>National funding of programme</b>	2	2
<b>Timely clearance</b>	5	4
<b>Land-release system in place</b>	5	5
<b>National mine action standards</b>	6	6
<b>Reporting on progress</b>	5	5
<b>Improving performance</b>	5	4
<b>PERFORMANCE SCORE: POOR</b>	<b>4.5</b>	<b>4.0</b>

## PERFORMANCE COMMENTARY

Despite adverse conditions arising from Yemen's continuing armed conflicts, the Yemen Executive Mine Action Centre (YEMAC) expanded operations and improved productivity in 2017. In addition to problems of insecurity, however, teams are constrained by lack of training and equipment for the increasingly diverse range of hazards confronting them.

## RECOMMENDATIONS FOR ACTION

- Authorities in Sanaa and Aden should give access to international demining operators to increase technical expertise and capacity and accelerate clearance.
- Authorities in Aden and Sanaa should expedite access of YEMAC staff to training outside Yemen.
- Gulf coalition engineer/demining units should coordinate with YEMAC to report details of clearance activity.
- YEMAC should fulfil its obligations to report on the progress of demining by issuing comprehensive reports disaggregating data on mine and unexploded ordnance (UXO) clearance.

## CONTAMINATION

Yemen is contaminated with mines from conflicts in 1962–69 and 1970–83, mines that were laid in border areas between North and South Yemen before they unified in 1990, and mines from successive conflicts that erupted since 1994. These and the ongoing conflicts that flared in March 2015 have “changed the extent and complexity of contamination dramatically”, though its full extent is unknown.<sup>1</sup>

A Landmine Impact Survey (LIS) completed in 2000 identified suspected hazardous areas (SHAs) containing mines and explosive remnants of war (ERW) covering an estimated 922km<sup>2</sup> and affecting 592 mine villages across 18 of Yemen’s 21 governorates. Yemen’s first Article 5 deadline extension request in 2008 stated that 710km<sup>2</sup> had been released and 457 areas covering 213km<sup>2</sup> remained to be “addressed”.<sup>2</sup> A second extension request submitted in December 2013 identified 107 confirmed minefields covering 8.1km<sup>2</sup> and 438 SHAs covering 338.4km<sup>2</sup>. It noted that three governorates had yet to be surveyed.<sup>3</sup>

Yemen did not submit an Article 7 transparency report in 2018. As of writing, the last report, submitted in 2017, stated that 569 suspected or known mined areas covering 323km<sup>2</sup> remained and that survey was expected to identify additional contamination.<sup>4</sup> A 2017 progress report by the United Nations Development Programme (UNDP) observed that “currently, there are very few tangible indicators measuring contamination or impact and what is available is outdated, ad hoc and often anecdotal.”<sup>5</sup>

Some of the heaviest mine and ERW contamination is reported in northern governorates bordering Saudi Arabia (al-Jawf and Saada), southern coastal governorates (Abyan, Aden, Lahej, and Taiz) and centre-west governorates (Hodeida, Marib, and Sanaa).<sup>6</sup> The United Nations has noted that mine types laid in recent years were never found in government stocks, suggesting the new supply of weapons by external actors.<sup>7</sup>

Successive conflicts in the past decade have generated multiple reports of mine use. This includes the 2010 insurgency in northern Saada governorate led by Abdul Malik al-Houthi<sup>8</sup> and the 2011 insurgency around southern Abyan launched by militants belonging to Ansar al-Sharia, linked to al-Qaeda in the Arabian Peninsula, as well as the war that erupted after March 2015 between Houthi rebels controlling the north of Yemen and the Saudi-led coalition backing President Abdu Rabbu Mansour Hadi, based in the south.<sup>9</sup>

A national non-governmental organisation (NGO), Mwatana for Human Rights, documented mine use by Houthi forces and forces loyal to former president Ali Abdullah Saleh that killed at least 57 civilians in 6 governorates between July 2015 and October 2016. It reported fighters placed mines in residential areas, main streets, homes, farms, and paths frequented by civilians.<sup>10</sup> The Office of the UN High Commissioner for Human Rights has reported mine use by Houthis and associated forces since March 2015 and in 2017 Human Rights Watch said Houthi-laid mines had killed and maimed hundreds of civilians in six governorates.<sup>11</sup>

### Mines of an improvised nature

The current conflicts have also resulted in increased contamination from mines of an improvised nature, such as devices initiated by a pressure plate or crushed necklace, as well as improvised devices activated remotely or by photo-electric cells. Mines of an improvised nature as well as other improvised devices are being laid along roads, inside buildings, and built into house walls, posing a serious hazard to displaced families returning to their property.<sup>12</sup>

YEMAC reported Houthi forces emplaced mines of an improvised nature in northern Saada governorate during the 2006–09 insurgency, and frequently clears “cold” or abandoned devices.<sup>13</sup> Human Rights Watch said YEMAC had cleared mines of an improvised nature in areas from which Houthi forces withdrew near the Red Sea port city of Mokha in February 2017.<sup>14</sup>

Independent investigators have documented three types of mine of an improvised nature used by Houthi forces on Yemen's west coast that are identical to, or closely resemble, conventional mines. They include a Claymore-type mine almost identical to a Chinese-made directional mine (Type 150-A GLD), a larger directional mine similar to an Iranian-made mine (M18A2) and an anti-vehicle

mine similar to Russian-made TM46 mines. Some of the mines of an improvised nature have serial numbers indicating mass production.<sup>15</sup> The United Nations reported the appearance of improvised sea mines in the Red Sea since 2017. These were probably deployed by Houthi forces posing a threat to shipping.<sup>16</sup>

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## PROGRAMME MANAGEMENT

Yemen established a National Mine Action Committee (NMAC) in June 1998 by prime ministerial decree to formulate policy, allocate resources, and develop a national mine action strategy.<sup>17</sup> NMAC, chaired by the Minister of State (a member of the cabinet), brought together representatives of seven concerned ministries. It is unclear if, or to what extent, the NMAC remains functional.

YEMAC was established in Sana'a in January 1999 as NMAC's implementing body with responsibility for coordinating mine action in the country.<sup>18</sup> Amid the upsurge of violence since 2015, YEMAC has become, de facto, two organisations, split between Sanaa, under the control of the Houthis, and the southern city of Aden controlled by the Saudi-led coalition and Yemen's internationally recognised but exiled government. The Sana'a office coordinates operations in the north and centre of the country while the Aden office oversees operations in southern provinces.<sup>19</sup>

YEMAC is supported by a Regional Executive Mine Action Branch (REMAB) in Aden, also set up in 1999, as well as REMABs in al-Mukalla (Hadramout governorate), opened in March 2004 and Saada (April 2016).<sup>20</sup>

### Strategic Planning

YEMAC does not currently have a strategic plan for mine clearance. Since 2015, mine action has operated on an emergency basis and YEMAC has worked with UNDP to address emergency threats to communities posed by all explosive hazards, including mines, improvised explosive devices, cluster munition remnants, and unexploded aircraft and ground-launched ordnance. The lack of training and equipment limits YEMAC teams' ability to tackle many of the items encountered.

UNDP identified three main goals for emergency operations: preventing the situation from getting any worse; mitigating the impact of existing contamination; and, over the longer term, addressing Yemen's Anti-Personnel Mine Ban Convention (APMBC) obligations.<sup>21</sup>

In July 2017, UNDP started implementing Phase V (2017–20) of its programme in Yemen, which includes support for YEMAC in preparing the request for an extension to its Mine Ban Treaty Article 5 deadline, due for submission by March 2019. It has identified four desired outputs:

- Mine and UXO contamination is mapped and the impact assessed nationwide
- Mines and UXO are efficiently cleared in priority areas
- Risk education is increased in affected communities
- Survivors are screened, rehabilitated, and supported.

UNDP estimated total funding required for Phase V at \$39.9 million. As of June 2017, funding pledged amounted to \$9.8 million.<sup>22</sup> It sought to increase funding from around \$6 million available in 2017 to around \$15 million a year.<sup>23</sup>

### Legislation and Standards

It is not known whether Yemen has national mine action legislation or national standards in place.

### Quality Management

It is not known whether Yemen has any national quality management system in place.

### Information Management

YEMAC is responsible for information management and maintains an Information Management System for Mine Action (IMSMA) database. UNDP observed that although not updated, the system was providing more reliable data. Most database staff in Sanaa had left by the beginning of 2017. YEMAC recruited new staff for its offices in Sanaa and Aden, who underwent IMSMA training in Jordan in May 2017.<sup>24</sup>

UNDP also recruited a mapping expert in 2017 working in the Aden office to boost preparing and distributing contamination maps.

## Operators

YEMAC was Yemen's only humanitarian clearance operator in 2017. By the start of 2016, it had some 850 staff split between offices in Sana'a and Aden, of whom between 350 and 400 were said to be active. These included three UXO clearance teams set up at the end of 2015 to focus on contamination in cities.<sup>25</sup> YEMAC subsequently recruited additional staff and reported reaching around 700 field staff in 2017.<sup>26</sup> YEMAC also had 19 mine detection dogs (MDD) in 2017, of which six were active supporting survey and clearance.<sup>27</sup>

A Dynasafe MineTech subsidiary, Dynasafe Middle East Project Management, signed an agreement with Saudi Arabia's King Salman Fund in March 2018 for a \$40 million demining operation funded by the Saudi government. The project was due to run for a year initially, with the possibility of extension subject to review. It became operational in May 2018 with headquarters in Marib and sub-offices in Sanaa and Aden. The project expected to build up a staff of more than 400, including 20 international experts and advisers, and to operate with a little over 300 YEMAC staff, including 32 demining teams.<sup>28</sup>

Danish Demining Group (DDG) had offices in both Sana'a and Aden in 2016 but in 2017 worked only in the south. It is accredited to provide risk education, and in 2017 it delivered training for close to 10,000 people. In 2018, it planned to increase risk education capacity and start non-technical survey.<sup>29</sup>

Norwegian People's Aid (NPA) conducted an assessment mission to Sanaa in October 2017 to explore the possibilities for establishing a programme to support YEMAC's MDD capacity. UNDP agreed to provide \$500,000 to help launch a two-year project to restore the MDD programme.<sup>30</sup>

The HALO Trust agreed in 2017 to provide training on survey and use of thermite torches for YEMAC personnel in Jordan. Ten YEMAC personnel attempting to leave through Aden to attend a HALO course were detained by the authorities in Aden at the end of July 2018.<sup>31</sup>

The Saudi-led coalition has two mine action teams, from the United Arab Emirates (UAE) and Sudan, deployed in the south. Little is known about their capacity or assets, or any activities. The UAE has reportedly agreed to "clear" Dhubab city in south-western Taiz governorate.<sup>32</sup>

## LAND RELEASE

Despite Yemen's continuing war and a humanitarian crisis described by the UN as the worst in the world, YEMAC expanded capacity and the scope of operations in 2017. YEMAC field staff reached 700 operating in 55 districts of 14 governorates in 2017. This compares favourably with the previous year when it worked in 47 districts across 9 governorates. UNDP reported expenditure of \$5.8 million in 2017, up from \$4.5 million the previous year. In 2018, it was due to reach about \$8.7 million.<sup>33</sup>

### Survey in 2017

YEMAC conducted technical survey on a total of 3km<sup>2</sup> in 2017. More than half of that amount was accounted for by operations to rehabilitate the Amran cement factory, a key economic facility, which had been hit by air strikes in 2015 and 2016, but did not involve mine clearance.

### Clearance in 2017

YEMAC cleared 8,556,883m<sup>2</sup> of ERW-contaminated land in 2017, according to UNDP, more than double the area recorded as cleared in 2016. Available data, however, did not disaggregate the extent of mine clearance although it involved the destruction of at least 1,729 anti-personnel mines (see Table 1). Mine Action Review has estimated that mine clearance covered 1km<sup>2</sup> in 2017.

YEMAC conducted mainly spot clearance of high-threat, high-impact tasks prioritising civilian infrastructure rather than undertaking large area clearance that would tie down assets for extended periods of time.<sup>34</sup> YEMAC also reportedly cleared 632 items of improvised ordnance in 2017, but available data did not identify how many devices were victim-activated and meet the definition of an anti-personnel landmine under the APMBC.

Some clearance of mines and other explosive ordnance was reportedly conducted by UAE military engineers but the objectives and extent of such activities was unknown.<sup>35</sup>

Table 1: Clearance in 2016 and 2017<sup>36</sup>

Year	Area (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	Improvised munitions destroyed	ERW destroyed
2017	8,556,883	1,729	3,763	632	341,175
2016 <sup>37</sup>	3,072,181	16,440	16,750	1,048	228,572

AP = Anti-personnel AV = Anti-vehicle

The improvements in productivity appeared to continue in 2018 with clearance of 5,123,548m<sup>2</sup> recorded in the first five months of the year. Operations resulted in clearance of 448 anti-personnel mines, 4,122 anti-vehicle mines, 600 improvised munitions, and 1,846 items of UXO. Most clearance was in Dhamar (1.1km<sup>2</sup>) and Sana'a (1.01km<sup>2</sup>) governorates, with substantial areas also cleared in Hajjah, Saada, and Taiz governorates. Most of the items destroyed were in Aden and Sanaa.<sup>38</sup>

## Developments in 2018

Dynasafe MineTech became operational in Yemen in May 2018 and reported clearing 800 mines in June 2018. Project goals include clearance of all high-threat areas, clearing roads to allow safe passage of humanitarian goods, and making schools safe. In August 2018, it reported operating in west coast areas and in the provinces of Lahej, Marib, Sanaa, and Shabwah.<sup>39</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB (and in accordance with the five-year extension granted in 2014), 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 2020. It will not meet this deadline and will need to request a third extension.

Yemen was previously granted five-year Article 5 deadline extensions by states parties to the APMB in 2008 and 2014. For the second extension, Yemen requested the additional time to clear 107 confirmed mined areas covering 8.1km<sup>2</sup> but it is not on track to achieve this target.<sup>40</sup> The subsequent escalation in conflict disrupted clearance activity and shifted operational priorities from legacy minefields to emergency clearance of ERW. Yemen should submit its third extension request by March 2019.

YEMAC decided in consultation with UNDP in June 2018 that it would request a three-year extension to its Article 5 deadline from April 2020 until April 2023 on the basis that in the prevailing environment of conflict it was not feasible to plan further ahead (and in the hope the conflicts would come to an end). YEMAC would treat the three years as an interim emergency response, and aim to conduct a national contamination survey to provide a realistic basis for a subsequent ten-year extension request. In the three-year interim period, clearance of legacy minefields, often well-known to communities, would take a lower priority than high-threat ERW.<sup>41</sup>

**Table 2: Mine clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )
2017	*1.00
2016	3.07
2015	0
2014	0.34
2013	1.16
<b>Total</b>	<b>5.57</b>

\* Estimated clearance output, as mine clearance not disaggregated from ERW clearance

- 1 United Nations Development Programme (UNDP), "Emergency Mine Action Project, Annual Progress Report 2017", January 2018, p. 6; Yemen Article 5 deadline Extension Request Update, 10 March 2016, p. 4.
- 2 Article 5 deadline Extension Request, 31 March 2008, p. 2.
- 3 Second Article 5 deadline Extension Request, submitted 17 December 2013, pp. 11–13.
- 4 Anti-Personnel Mine Ban Convention (APMBC) Article 7 Report (for 1 April 2016 to 31 March 2017), Forms D and L.
- 5 UNDP, "Mid-Year Report, 2017", 20 July 2017, p. 4.
- 6 UNDP, Phase V, "Emergency Mine Action Project", Project Document, p. 1.
- 7 UNDP, "Emergency Mine Action Project, Annual Progress Report 2017", January 2018, p. 6.
- 8 Article 7 Report (for 1 April 2009 to 31 March 2010), Form I.
- 9 "Yemen: Landmines stall IDP returns in the south", *IRIN*, 28 June 2012, at: <http://www.irinnews.org/Report/95752/YEMEN-Landmines-stall-IDP-returns-in-south>.
- 10 Mwatana for Human Rights, "Concealed Killer", Sana'a, undated but 2017, p. 21.
- 11 "Situation of human rights in Yemen", Report of the UN High Commissioner for Human Rights, UN doc. A/HRC/33/38, 4 August 2016, p. 10; Human Rights Watch, "Yemen: Houthi-Saleh forces using landmines", 20 April 2017.
- 12 Minutes of Yemen Mine Action Technical Working Group meeting, Amman, 24 July 2018.
- 13 Article 5 Extension Request Update, 10 March 2016, p. 5; UNDP, "Mid-Year Report, 2017", 20 July 2017, p. 4.
- 14 Human Rights Watch, "Yemen: Houthi-Saleh Forces Using Landmines", 10 April 2017.
- 15 Conflict Armament Research, "Mines and IEDs Employed by Houthis on Yemen's West Coast", September 2018, pp. 5–6, 11.
- 16 United Nations Security Council, final report of the panel of experts, S/2018/68, Annexes 40 & 41, pp. 166–171, 26 January 2018.
- 17 Article 7 Report, Form I, 31 March 2009.
- 18 Article 5 deadline Extension Request, 31 March 2008, p. 2.
- 19 Interviews with Ahmed Alawi, YEMAC, and Stephen Bryant, Chief Technical Adviser, UNDP, in Geneva, 17 February 2016; UNDP, "Support to eliminate the impact from mines and ERW – Phase IV, Annual Progress Report 2014", undated but 2015.
- 20 Email from Stephen Bryant, UNDP, 22 July 2018.
- 21 UNDP, "Emergency Mine Action Project, Annual Progress Report 2017", January 2018, p. 6.
- 22 UNDP, Phase V, "Emergency Mine Action Project", Project Document, p. 1; donors were the United States (\$7 million), the United Kingdom (\$1.1 million), the Netherlands (\$1.1 million), and Germany (\$0.5 million).
- 23 UNDP, Phase V, "Emergency Mine Action Project", Project Document, p.7.
- 24 UNDP, "Emergency Mine Action Project, Annual Progress Report 2017", January 2018, p. 10.
- 25 Interview with Ahmed Alawi, YEMAC, and Stephen Bryant, UNDP, in Geneva, 17 February 2016.
- 26 UNDP, "Emergency Mine Action Project, Annual Progress Report 2017", January 2018, p. 12.
- 27 Colin Bent and Alma Dukic, "Yemen Assessment Report", NPA, undated but November 2017, pp. 16–18.
- 28 Email from Chris Clark, Global Operations Director, Dynasafe MineTech, 6 August 2018.
- 29 Email from Maria Ersvaer, Programme and Operations Coordinator, DDG, 30 April 2018.
- 30 Colin Bent and Alma Dukic, "Yemen Assessment Report", NPA, undated but November 2017; Minutes of Yemen Mine Action Technical Working Group meeting, Amman, 24 July 2018; email from Stephen Bryant, UNDP, 27 July 2018.
- 31 Email from Stephen Bryant, UNDP, 31 July 2018.
- 32 UNDP, Minutes of Mine Action Technical Working Group Meeting, Amman, Jordan, 24 July 2018.
- 33 UNDP, "Emergency Mine Action Project, Annual Progress Report 2017", January 2018, p. 9.
- 34 *Ibid.*, p. 12.
- 35 See, e.g., "UAE armed forces continues clearing landmines in Yemen's west coast", *Emirates News Agency*, 30 January 2018.
- 36 UNDP, "YEMAC clearance activities 2016–17, productivity January–December 2017" received by email from Stephen Bryant, UNDP, 3 April 2018.
- 37 Clearance data showed 16,198 anti-personnel mines were cleared in Aden and 15,947 anti-vehicle mines were cleared in Aden (9,476), Hadramout (4,779), and Lahej (1,692). No explanation for the exceptionally high number of items cleared in these locations was immediately available.
- 38 UNDP, "YEMAC productivity, January to May 2018", received by email from Stephen Bryant, UNDP, 15 July 2018; Minutes of Yemen Mine Action Technical Working Group meeting, Amman, 24 July 2018.
- 39 Emails from Chris Clark, Dynasafe MineTech, 6 August 2018.
- 40 Article 5 deadline Extension Request, 31 March 2008, p. 13.
- 41 Minutes of Yemen Mine Action Technical Working Group meeting, Amman, 24 July 2018.

# ZIMBABWE

**ARTICLE 5 DEADLINE: 31 DECEMBER 2025**  
(ON TRACK TO MEET DEADLINE)

<b>PROGRAMME PERFORMANCE</b>	2017	2016
Problem understood	9	9
Target date for completion of mine clearance	6	6
Targeted clearance	8	8
Efficient clearance	8	7
National funding of programme	5	5
Timely clearance	5	5
Land-release system in place	7	7
National mine action standards	8	8
Reporting on progress	7	6
Improving performance	9	9
<b>PERFORMANCE SCORE: GOOD</b>	<b>7.2</b>	<b>7.0</b>

## PERFORMANCE COMMENTARY

Zimbabwe's mine action programme continued to improve in 2017, in particular by moving towards a comprehensive tool-box approach to operations, as a result of the launch of pilot projects on the use of mechanical assets and mine detection dogs (MDDs) during the year. Mine action capacity in the country increased with the arrival of Mines Advisory Group (MAG), which became operational in December 2017, and APOPO, which opened a programme in 2017 (though not yet operational as at September 2018), along with increased capacity in the National Mine Clearance Squadrons (NMCS).

Information management and reporting also continued to improve, with visible results. With support from the Geneva International Centre for Humanitarian Demining (GICHD), the Zimbabwe Mine Action Centre

(ZIMAC) developed Zimbabwe's first ever national mine action strategy in 2016–17, in consultation with and with support from international mine action organisations. The strategy was officially launched by the Government of Zimbabwe in March 2018. The strategic plan complements Zimbabwe's revised Article 5 extension request, approved at the Sixteenth Meeting of States Parties to the Anti-Personnel Mine Ban Convention (APMBC) in December 2017, for a period of eight years, until the end of 2025. The plan and the revised request present a realistic estimate of remaining contamination, contain clear annual milestones for land release, and describe the resources, time, and funding needed for efficient completion of clearance. The annual workplan projections, which were subsequently revised on the basis of 2017 survey and clearance results, were made available in April 2018.

## RECOMMENDATIONS FOR ACTION

- Zimbabwe should meet the revised annual mine clearance targets announced in April 2018 and implement the provisions of its National Mine Action Strategy for 2018–25.
- Zimbabwe should expand the application of integrated demining methodologies introduced in 2017, including mechanical assets and MDDs, and officially approve their use and incorporation into land release methodologies.
- ZIMAC should complete the revision of its national mine action standards.
- Increased resources and staffing capacity should be allocated to ZIMAC to enable it to effectively manage a fast growing national mine action programme.
- ZIMAC should implement the resource mobilisation plan set out in its Article 5 extension request and increase efforts to secure additional national and international funding in order to meet its 2025 clearance completion deadline.

## CONTAMINATION

At the end of 2017, Zimbabwe had a total of less than 62km<sup>2</sup> of confirmed mined area remaining (see Table 1).<sup>1</sup> This is a decrease from the 66km<sup>2</sup> remaining at the end of 2016.<sup>2</sup>

In June 2018, ZIMAC informed APMBC states parties that with continued progress in the first half of 2018, a total of just over 60.3km<sup>2</sup> remained to be addressed.<sup>3</sup>

Table 1: Mined areas (at end-2017)<sup>4</sup>

Location	Confirmed mined area (m <sup>2</sup> )
Musengezi to Mazowe (formerly one area, Musengezi to Rwenya)	11,784,543
Mazowe to Rwenya (formerly one area, Musengezi to Rwenya)	11,802,059
Mwenezi to Sango Border Post Sector 3 (formerly one area, Sango Border Post to Crooks Corner)	16,508,588
Mwenezi to Sango Border Post Sector 4 (formerly one area, Sango Border Post to Crooks Corner)	7,196,038
Rusitu to Muzite Mission	8,550,808
Leacon Hill to Sheba Forest	5,895,954
Lusulu	56,000
<b>Total</b>	<b>61,793,990</b>

Zimbabwe's contamination, the overwhelming majority of which is of anti-personnel mines, originates from the laying of minefields in the late 1970s during a conflict of decolonisation. 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.<sup>5</sup> Initially, anti-personnel mines were laid in very dense belts (reportedly 5,500 mines per kilometre of frontage) to form a "cordon sanitaire". 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 "inland" of the cordon sanitaire.<sup>6</sup> Anti-vehicle mines were used extensively by armed groups but most were detonated by vehicles or have since been cleared.<sup>7</sup>

At the end of 2017, remaining contamination comprised five primary minefields, of which two were further divided into four areas for the purpose of tasking, identification, and reporting, making a total of seven minefields referred to by ZIMAC as set out in Table 1 above. All areas are confirmed hazardous areas and no suspected hazardous areas remain to be addressed in Zimbabwe following the completion of significant re-survey in 2016.<sup>8</sup>

The HALO Trust and Norwegian People's Aid (NPA), the two non-governmental organisations (NGOs) that have conducted mine action in Zimbabwe since 2013, have reported that remaining mined areas are located close to populated areas and have considerable humanitarian, social, and economic impacts on local communities.<sup>9</sup> The HALO Trust says that in areas where it operates in

the north-east of Zimbabwe, mines continue to block access to residential land, inhibit cross-border trading, deny small-scale farmers access to agricultural land, and separate communities from primary water sources, adversely affecting sanitation and livestock production. The threat to livestock is particularly severe and results in a heavy socio-economic impact as livestock is a major investment commodity in rural Zimbabwe.<sup>10</sup> NPA says that mines have continued to block agricultural production, infrastructure development, access to clean water, and safe movement to and from neighbouring Mozambique, along Zimbabwe's longest border.<sup>11</sup>

ZIMAC likewise states that anti-personnel mines continue to have a humanitarian as well as a socio-economic impact in 2017, most severely affecting poor, rural populations living along heavily mined border areas.<sup>12</sup> Mines continued to separate relatives living on both sides of minefields, deny use of agricultural land, kill and injure livestock and impede access for grazing, halt the productivity of areas of commercial farming, and impel some poor communities to take unacceptable risks to use contaminated land.<sup>13</sup> Accordingly, clearance of mined areas will generate opportunities for local farmers, commercial agriculture, business, and tourism, allow for the construction of schools and clinics, and enable the safe return of those displaced as a result of the mine threat.<sup>14</sup>

According to ZIMAC, efforts to change high-risk behaviour resulted in no new victims being recorded in the country in 2017. However, a total of seven cattle in the Nyampanda area of Mashonaland East province were killed during the year.<sup>15</sup>

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## PROGRAMME MANAGEMENT

The National Mine Action Authority of Zimbabwe (NMAAZ) 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 NMAAZ.<sup>16</sup>

Since 2012, the International Committee of the Red Cross (ICRC) has provided assistance under a joint cooperation agreement with the Government to the national programme, training ZIMAC personnel, and supplying metal detectors, protective equipment, and trauma kits.<sup>17</sup> This concluded in 2016, but the ICRC reported that in 2017 it provided support for the mine action authorities to enhance national ownership, delivered training on clearance, quality assurance and control, and information management, and made a financial contribution towards the launch of Zimbabwe's new National Mine Action Strategy for 2018–2025. It stated that, as planned, the ICRC ended its support for mine action in the country at the end of 2017.<sup>18</sup>

In its fifth Article 5 deadline extension request, submitted in 2017, Zimbabwe again pledged to relocate ZIMAC outside of military installations once the Ministry of Defence has secured the necessary funds.<sup>19</sup> As at April 2018, ZIMAC was still housed within military premises, reportedly owing to budgetary constraints.<sup>20</sup>

## Strategic Planning

Zimbabwe submitted a revised version of its fifth Article 5 extension request in August 2017, seeking an eight-year extension to 31 December 2025. This request marks a significant achievement for Zimbabwe's mine action programme, setting for the first time an end date for completion of clearance. It also establishes a realistic estimate of remaining contamination, and sets attainable annual clearance targets, provided sufficient funding is secured.<sup>21</sup> Operators commended the cooperative and inclusive process behind the preparation of the extension request and the national mine action strategic plan, as well as efforts to accurately define the amount of contamination remaining, enabled by the application of solid survey methodology in earlier years.<sup>22</sup>

At the end of 2016, ZIMAC and the GICHD organised the first strategy stakeholder workshop in Harare, bringing all relevant national and international partners together, ensuring a consultative and participatory process to develop Zimbabwe's first-ever national mine action strategy.<sup>23</sup> The National Mine Action Strategy 2018–2025 was formally approved by the Government in October 2017, presented at the Sixteenth Meeting of States Parties to the APMB in December 2017, and officially launched on 9 March 2018 by the Vice President and Minister of Defence and War Veterans Affairs in a

public event.<sup>24</sup> The strategy's timeline corresponds to Zimbabwe's revised fifth Article 5 deadline extension request with the overall goal of completing clearance in 2025.<sup>25</sup> In June 2018, ZIMAC reported that, together with NAMAAS, efforts were ongoing to ensure that the plan was widely disseminated.<sup>26</sup> Gender and diversity considerations are also addressed in the strategy.<sup>27</sup>

## Legislation and Standards

There is no national legislation specific to mine action in Zimbabwe. In June 2018, ZIMAC informed Mine Action Review that it had identified areas of Zimbabwe's national mine action standards which required revision, including, but not limited to, standards for MDDs, mechanical assets, clearance depth, technical survey, and the cancellation of land already in use. It stated that standards for these areas would be considered during 2018, having previously reported that revisions would be made at the end of 2017.<sup>28</sup>

## Quality Management

ZIMAC quality assurance (QA) monitors were present on site at operations on a daily basis during 2017. An independent quality control (QC) team was regularly dispatched to conduct QC by sampling a minimum of 10% of completed tasks.<sup>29</sup> In 2018, ZIMAC reported that positive steps were being taken to ensure that its QC system was better aligned to International Mine Action Standards (IMAS), with an increased reliance of independent QC teams on reports from daily monitors in the field.<sup>30</sup> Operators reported that the allocation of more resources to ZIMAC would bolster these ongoing improvements, including by increasing the frequency of ZIMAC QC visits and reducing delays between the completion of tasks and final ZIMAC QC.<sup>31</sup>

## Information Management

According to ZIMAC, there were significant improvements in information management capacity in 2017, although it relied more on an Excel worksheet than the national Information Management System for Mine Action (IMSMA) database for national reporting/statistics.<sup>32</sup> ZIMAC informed Mine Action Review that a GICHD information management advisor held a workshop in the start of 2018 to ensure that the IMSMA database was accurate and that ZIMAC personnel were able to retrieve all the information from it, with positive results. It 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.<sup>33</sup>

NPA additionally reported providing technical support to ZIMAC on information management during the year and assistance in data reconciliation.<sup>34</sup> HALO likewise confirmed that the regularity and accuracy of data input increased in 2017 and regular data checks were carried out between operators and ZIMAC. It noted that it would be beneficial to receive read-only copies of the entire national database in due course.<sup>35</sup>

## Operators

The Zimbabwean Armed Forces' NMCS and, since 2013, The HALO Trust and NPA, all conduct land release in Zimbabwe. MAG became operational in December 2017, and APOPO, while accredited, was yet to commence operations as at September 2018.<sup>36</sup>

In 2017–18, The HALO Trust was assigned operations on the Musengezi to Mazowe minefield in Mashonaland Central, while MAG was assigned to the Mazowe to Rwenya minefield in Mashonaland East province (formerly one area, the Musengezi to Rwenya minebelt). Mwenezi to Sango Border Post Sector 3 was assigned to the NMCS and Mwenezi to Sango Border Post Sector 4 was assigned to APOPO (both in Masvingo province and formerly one area, Sango Border Post to Crooks Corner). Rusitu to Muzite Mission and Leacon Hill to Sheba Forest in Manicaland province remained assigned to NPA, and Lusulu, in Matabeleland North province to the NMCS.<sup>37</sup>

In 2017, HALO Trust deployed a total of 291 operations staff for clearance, with a further 83 support staff. Its capacity increased slightly in 2017 with the introduction of the programme's first mechanical demining team, while the number of its manual demining teams remained consistent at 28 as at the end of 2016.<sup>38</sup>

NPA reported that as a result of increased funding, at the start of 2017 its capacity increased from five manual clearance teams to seven, as well as one MDD team. This increased national demining personnel from a total of 56 in 2016 to 98.<sup>39</sup> It lost capacity, however, due to subsequent funding cuts during the year, and was down to three manual demining teams and one MDD team by January 2018.<sup>40</sup>

ZIMAC reported that the capacity of the NMCS increased from 120 deminers to 150, across 15 teams, thanks to equipment supplied by the ICRC in 2016. The NMCS also recruited two additional teams of ten deminers each in March 2018 to deploy to the Lusulu minefield.<sup>41</sup>

In 2016, ZIMAC began accrediting two further international demining operators, MAG and APOPO, both of which were scheduled to begin operations in 2017.<sup>42</sup> In September 2017, MAG had signed a Memorandum of Understanding (MoU) with ZIMAC and established an office in Harare ready to support the start of clearance operations later in the year.<sup>43</sup> As noted above, MAG became operational in December 2017 and deployed one manual clearance team with twelve staff and one non-technical survey team with two staff.<sup>44</sup>

APOPO reported it had signed a MoU with ZIMAC and that the Ministry of Defence had granted permission for the organisation to begin operating in Zimbabwe in 2017. It was tasked, in cooperation with the NMCS, to survey and clear a 37km-long stretch of minefield along the border with Mozambique, running south-west from the Sango Border Post to the Mwenezi river. It stated that, as at May 2017, a task assessment had been carried out and that it expected to recruit and train approximately 25 national operations and support staff in the second

half of 2018 to deploy in two manual demining sections.<sup>45</sup> However, despite its accreditation in 2017, APOPO failed to import its equipment from Mozambique in time to be operational. As at September 2018, APOPO was still waiting for both the equipment and sufficient funding to begin operations.<sup>46</sup>

While the majority of clearance in Zimbabwe continued to be manual in 2017, mechanical assets and the use of MDDs were in the process of being integrated into the national mine action programme. As at mid-2018, however, the use of MDDs was limited to technical survey and clearance of soil with a high metallic content and the use of mechanical assets limited to clearance of areas with deeply buried mines and also areas with a high metallic content.<sup>47</sup>

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## LAND RELEASE

A total of just over 6.2km<sup>2</sup> of land was reportedly released in 2017, with close to 4.5km<sup>2</sup> of mined area released by clearance and technical survey and just under 1.8km<sup>2</sup> cancelled by non-technical survey.<sup>48</sup> A further 1.8km<sup>2</sup> was confirmed as mined. Results in 2017 compare to total release in 2016 of nearly 9.5km<sup>2</sup>.<sup>49</sup>

While clearance of anti-personnel mines remained steady in 2017, with just under 1.7km<sup>2</sup> released through clearance, there was a major drop in cancellation output in 2017 of nearly 1.8km<sup>2</sup> compared to close to 7.8km<sup>2</sup> in 2016, due to the fact that comprehensive survey was finalised at the end of 2016. By 2017, Zimbabwe had a significantly more robust and realistic picture of verified contaminated area remaining and so little survey or cancellation was carried out that year.<sup>50</sup>

NPA reported that key improvements to the national mine action programme in 2017 included improved prioritisation of high-impact areas for clearance through the use of impact assessment survey and technical survey reports, the introduction of the use of MDDs for technical survey, and a reduction, agreed by ZIMAC, in required clearance fade-out distances along minebelts from 10 metres to 5.<sup>51</sup> MAG reported that another positive development was the convening of quarterly meetings with NAMAAS and ZIMAC, which began at the start of 2018.<sup>52</sup>

### Survey in 2017

Just over 4.5km<sup>2</sup> of land was released by survey in 2017: 1,768,118m<sup>2</sup> was cancelled through non-technical survey while 2,794,713m<sup>2</sup> was reduced through technical survey. A further 1,782,579m<sup>2</sup> was confirmed as mined.<sup>53</sup> In 2016, close to 7.8km<sup>2</sup> of land was released (just under 6.3km<sup>2</sup> cancelled, 1.5km<sup>2</sup> reduced) with a further 9.8km<sup>2</sup> confirmed as mined.<sup>54</sup>

As noted above, according to ZIMAC in 2017 no major survey was done; instead only low-scale, pre-clearance re-surveys were carried out to confirm previous data of surveyed areas. In 2014–16, a large amount of survey was undertaken, resulting in huge cancellation of land, and no new significant survey has been undertaken or required since and there ceased to be any cancellation of that magnitude. According to ZIMAC, the few areas of cancellation recorded in 2017 were a limited number of areas along the Mozambique border which had been previously erroneously identified as cleared by the Mozambican mine action programme or had since been put to use by locals.<sup>55</sup>

According to ZIMAC, the additional areas reported as confirmed to contain anti-personnel mines in 2017, particularly in the NMCS's areas of operations (*see Table 2 below*), were the result of the confirmation of a number of polygons that had been overlooked during previous survey and the subsequent enlargement of the recording of the size of these areas. These had not been accounted for in the results of the primary survey ending in 2016.<sup>56</sup>

HALO reported that its survey cancellation in 2018 was the result of non-technical resurvey of several tasks. It stated that the tasks themselves were not cancelled, but re-survey was done to better able to identify the contaminated area, generally through reducing the estimates of the depth of lower-density ploughshare minefields by engaging with more members of the community and by tracking the location of mine rows on adjacent tasks.<sup>57</sup>

Table 2: Mined area survey in 2017<sup>58</sup>

Operator	Area	Area cancelled (m <sup>2</sup> )	Areas confirmed	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
HALO	Musengezi to Mazowe	568,118	0	219,233	839,330
NPA	Muzite to Rusitu	0	0	0	83,190
NPA	Leacon Hill to Sheba Forest	0	0	0	802,308
NMCS	Mwenezi to Sango Border Post Sector 3	1,200,000	0	1,548,946	1,069,885
APOPO*	Mwenezi to Sango Border Post Sector 4	0	0	14,400	0
MAG		0	0	0	0
<b>Totals</b>		<b>1,768,118</b>	<b>0</b>	<b>1,782,579</b>	<b>2,794,713</b>

TS = Technical survey

\* While APOPO was not operational in 2017, the areas reported as confirmed in its assigned areas of operations occurred as a result of remapping and correction of grid points by ZIMAC.

## Clearance in 2017

Clearance of anti-personnel mined area remained steady in 2017 compared to the previous year, with only a 15,454m<sup>2</sup> decrease from 2016 in the 1.66km<sup>2</sup> cleared in 2017. Clearance by The HALO Trust, MAG, NPA, and the NMCS in 2017 involved the destruction of 30,533 anti-personnel mines and 1 item of unexploded ordnance (UXO).<sup>59</sup> This represented an increase of 7,340 anti-personnel mines destroyed in 2017 over the year before, potentially the result of improvements in the targeting of clearance.

NPA reported that its increase in clearance output of more than 140,000m<sup>2</sup> in 2017 compared with 2016 was due to funding which enabled an increase in the number of its manual demining teams from five to seven, and the introduction of a MDD team during the year. Productivity also improved from the agreement with ZIMAC to reduce clearance fade-out distances by five metres along the minebelts; to deploy MDDs as the main technical survey

assets in the field; and an enhanced technical survey approach, under which the size of a standard technical survey search box doubled from 32 metres to 64, while processing requirements were reduced from 10% to 5%, enabling an increase in survey output.<sup>60</sup>

HALO reported a slight decrease in the total area cleared by its operations in 2018, though the number of mines destroyed was largely the same. More areas were processed in 2017 where, due to heavy soil disposition, many anti-personnel mines had sunk deep into the ground and were below metal-detector detection depth, necessitating a large increase in the number of slow “missing mine drills” that had to be conducted during clearance. These involved gaps in the minefield pattern being reinvestigated by excavating a top layer of soil and re-sweeping with a metal detector. The HALO Trust reported that the introduction of a mechanical demining team in 2017 was highly effective and that in areas of deeply buried mines, it was working six times as quickly as a manual demining section.<sup>61</sup>

Table 3: Mine clearance in 2017<sup>62</sup>

Operator	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	UXO destroyed
HALO (all areas of operations)	21	941,576	16,652	1
NPA (Leacon Hill to Sheba Forest)	5	583,650	13,446	0
NPA (Rusitu)	1	68,025	0	0
NMCS (Sango)	1	62,571	435	0
APOPO	0	0	0	0
MAG	0	39	0	0
<b>Totals</b>	<b>28</b>	<b>1,655,861</b>	<b>30,533</b>	<b>1</b>

AP = Anti-personnel AV = Anti-vehicle

## Deminer Safety

ZIMAC reported that one member of the NMCS was injured by a R2M2 anti-personnel mine in the Limpopo to Sango Border minefield in 2017.<sup>63</sup>

## ARTICLE 5 COMPLIANCE

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

In June 2014, Zimbabwe was granted a (fourth) Article 5 clearance deadline extension of three years until 1 January 2018. Prior to that, since its initial Article 5 deadline expired on 1 March 2009, it had submitted three previous extension requests, the last of which expired on 1 January 2015. The extension until 1 January 2018 was to enable further survey and clearance, but did not commit Zimbabwe to complete its clearance obligations within the requested period.<sup>64</sup>

Zimbabwe's fifth extension request initially submitted in April 2017 and then revised in August, sought a final period of eight years through to 31 December 2025, setting a deadline for the completion of all clearance for the first time. The request was approved by APMBC states parties at the Sixteenth Meeting of States Parties in Vienna in December 2017.

In its latest extension request, Zimbabwe lists three primary factors which have prevented it from completing its Article 5 obligations thus far: the extent of the contamination, inadequate national funding for demining, and a lack of demining equipment. Positively, however, Zimbabwe reported that the impact of these factors was ameliorated by the completion of re-survey, allowing efforts to focus on clearance; by increasing partnerships between international operators and the government to build capacity; and by assistance from the ICRC for better demining equipment.<sup>65</sup> In the request, Zimbabwe also enumerated risks and assumptions that could impede it from completing clearance in due time, including heavy rain, difficult terrain, significant metal contamination in ploughshare minefields, and lack of funding.<sup>66</sup>

In June 2018, Zimbabwe informed states parties to the APMBC that it had reassessed and revised its annual land release output figures in its extension request and National Mine Action Strategy on the basis of 2017 results and progress to date, versus expected future results. It stated that the adjustment was also in part the result of changes to surveyed polygons, particularly in the area of Rushinga, and the unexpected discovery of an extension of the Sango Border Post to Crooks Corner minefield which occupied much of the NMCS's capacity in 2017.<sup>67</sup> The revised figures were also reported in its Article 7 transparency report submitted in April 2018, and were not expected to affect its overall completion deadline projection of 2025.<sup>68</sup> The revised annual milestones to be achieved project that a total of 7.16km<sup>2</sup> will be addressed in 2018; 8km<sup>2</sup> in 2019; 8.3km<sup>2</sup> in 2020; 8.99km<sup>2</sup> in 2021; 8.87km<sup>2</sup> in 2022; 7.97km<sup>2</sup> in 2023; 6.73km<sup>2</sup> in 2024; and finally, 5.83km<sup>2</sup> in 2025.<sup>69</sup>

In mid-2018, ZIMAC confirmed that Zimbabwe was on track to meet its targets under its Article 5 extension and affirmed that the revised workplan is highly achievable, provided that funding is secured from both the Government and international donors.<sup>70</sup> ZIMAC informed Mine Action Review that key priorities were securing funding for independent offices to house ZIMAC outside of its current location in a military cantonment, in order to enable freer interaction with all mine action stakeholders; purchase of additional demining equipment to better equip the NMCS, which it reported had significant human resources available but lacked equipment which could enable it to double its capacity; funding to conduct a comprehensive national victim survey; and information management and communication equipment, such as laptops, shared drives, and for the construction of a website.<sup>71</sup>

According to ZIMAC's projections, a total of US\$130.34 million is required to meet its Article 5 extension request clearance deadline by 2025, with on average close to US\$16.3 million per year.<sup>72</sup> ZIMAC confirmed that in 2017, the NMCS and ZIMAC's operational costs were fully funded by the Government and that US\$500,000 was made available for the repair of equipment and logistical requirements of the two entities.<sup>73</sup> According to ZIMAC, the Government of Zimbabwe had committed US\$500,000 to the NMCS and for the operational costs of ZIMAC per year since 2010.<sup>74</sup>

In 2018, both NPA and The HALO Trust confirmed that the 2025 completion date was feasible, provided that a significant ramping up of funding, along with an increase in capacity, is secured.<sup>75</sup> ZIMAC informed Mine Action Review that a total of 7,160,645m<sup>2</sup> was set to be released across the country during 2018 and that remaining contamination was expected to drop to a total of 54.6km<sup>2</sup>. It expected positive developments during the year with an increase in national capacity, as it expected MAG to double its capacity by mid-2018, along with the two additional NMCS teams deployed to carry out demining on the Lusulu minefield, and with APOPO operational by the end of the year. It also expected an increase in funding in 2018, due to greater engagement with international donors by operators and the national authorities, and through engagement with the APMBC's Committee on the Enhancement of Cooperation and Assistance.<sup>76</sup>

HALO Trust reported it was expanding its mechanical demining operations in 2018, even if additional funding is not secured.<sup>77</sup> As at September 2018, MAG was deploying two additional teams and an expanded existing team, for a total of three teams in the field.<sup>78</sup> It reported it would like to use mechanical assets and MDDs in its operations in the future, funding permitting.<sup>79</sup>

NPA planned to deploy three manual demining teams in 2018, with two teams working in the Muzite to Rusitu minefield and one team in the Leacon Hill to Sheba Forest minefield, each supported by the MDD team for technical survey. This is a decrease however from seven manual demining teams deployed in 2017, due to a significant cut in funding from the United States, which forced it to stop the work of four demining teams.<sup>80</sup>

In December 2017, during the Sixteenth Meeting of APMBC States Parties, Zimbabwe and the Committee on the Enhancement of Cooperation and Assistance convened an “Individualised Approach Platform” meeting, which ZIMAC reported enabled Zimbabwe to present its needs and challenges to international mine action stakeholders and donors. It hoped that on the basis of this meeting, additional assistance could be secured to fund its eight-year workplan.<sup>81</sup> Both ZIMAC and operators commended the increasingly collaborative relationship in-country, the product of which was evident in the organisation of the event.<sup>82</sup>

While HALO noted that at the national level, the NAMAAC and ZIMAC were making more frequent and effective approaches to the international donor community, including at the Sixteenth Meeting of States Parties in December 2017, it remained concerned that mine contamination in Zimbabwe continues to be seen as a “legacy” problem, which is less visible and less of a priority for donors. It emphasised the continued importance of funding mine action in Zimbabwe.<sup>83</sup>

**Table 4: Mine clearance in 2013–17**

Year	Area cleared (km <sup>2</sup> )
2017	1.66
2016	1.67
2015	0.71
2014	0.49
2013	0.80
<b>Total</b>	<b>5.33</b>

- 1 Email from Capt. Cainos Tamanikwa, Operations Coordinator, ZIMAC, 12 June 2018.
- 2 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017.
- 3 Statement of Zimbabwe, Intersessional Meetings, Geneva, 8 June 2018.
- 4 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018; and Article 7 Report (for 2017), Form D.
- 5 Fourth Article 5 deadline Extension Request, Executive Summary (received 31 December 2013), p. 1; and email from Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017.
- 6 HALO Trust, “Zimbabwe, History of Minelaying”, accessed 10 February 2014; Fourth Article 5 deadline Extension Request, Executive Summary; and Analysis of Zimbabwe’s Fourth 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.
- 7 HALO Trust, “Zimbabwe, History of Minelaying”, undated but accessed 10 February 2014.
- 8 Article 7 report (for 2017), Form D.
- 9 Emails from Tom Dobb, Programme Manager, HALO Trust, 22 February 2018; and Chimwemwe Tembo, Programme Manager, NPA, 13 February 2018.
- 10 Email from Tom Dobb, HALO Trust, 24 April 2017; and HALO Trust, “HALO clears over 5,000 mines in Zimbabwe”, Press release, undated but March 2015.
- 11 Email from Chimwemwe Tembo, NPA, 13 February 2018.
- 12 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 13 Ibid.
- 14 Analysis of Zimbabwe’s Fourth Article 5 deadline Extension Request, 18 June 2014, pp. 2–4.
- 15 Article 7 Report (for 2017), Form D. According to ZIMAC, the last human victims were reported in 2016. According to HALO Trust, it is undoubtedly likely that more cattle were killed or injured during 2017; however, mechanisms for capturing this data are still lacking. Emails from Capt. Cainos Tamanikwa, ZIMAC, 4 September 2018; and Tom Dobb, HALO Trust, 10 September 2018.
- 16 Fourth Article 5 deadline Extension Request, 31 December 2013, p. 7.
- 17 ICRC, “Zimbabwe: Living with the dread of an invisible enemy”, 29 November 2013.
- 18 ICRC, ICRC Annual Report 2017, p. 229.
- 19 Revised Fifth Article 5 Extension Request, received 9 August 2017, p. 39.
- 20 Article 7 Report (for 2017), Form I.
- 21 Email from Claus Nielsen, NPA, 21 September 2017.
- 22 Emails from Tom Dobb, HALO Trust, 24 April 2017; and Claus Nielsen, NPA, 31 March 2017.
- 23 Statement of Zimbabwe, 15th Meeting of States Parties, Santiago, 29 November 2016; and email from Åsa Massleberg, Advisor, Strategic Management, GICHD, 27 September 2017.
- 24 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 25 Emails from Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017; and Åsa Massleberg, GICHD, 27 September 2017.
- 26 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 27 Email from Tom Dobb, HALO Trust, 22 February 2018.
- 28 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018 and 4 July 2017.
- 29 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 30 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 September 2018.
- 31 Emails from Tom Dobb, HALO Trust, 22 February and 10 September 2018.
- 32 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018; and Anne-Li Nauclér, Information Management Advisor, GICHD, 14 September 2018.
- 33 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 34 Email from Chimwemwe Tembo, NPA, 13 February 2018.
- 35 Email from Tom Dobb, HALO Trust, 22 February 2018.
- 36 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 September 2018.
- 37 Article 7 Report (for 2017), Form D.
- 38 Email from Tom Dobb, HALO Trust, 22 February 2018.
- 39 Emails from Chimwemwe Tembo, NPA, 13 February 2018; and Claus Nielsen, NPA, 31 March 2017.
- 40 Email from Chimwemwe Tembo, NPA, 13 February 2018.

- 41 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017.
- 42 Article 7 Report (for 2015), p. 7; and interviews with Tom Dobb, HALO Trust, Harare, 30 June 2016; and Claus Nielsen, NPA, Mutare, 2 July 2016.
- 43 Email from Adam Komorowski, MAG, 29 September 2017.
- 44 Email from Adam Komorowski, MAG, 13 April 2018.
- 45 Email from Ashley Fitzpatrick, then Grant and Regional Manager, APOPO, 29 May 2017.
- 46 Statement of Zimbabwe, Intersessional Meetings, Geneva, 8 June 2018; and emails from Capt. Cainos Tamanikwa, ZIMAC, 4 September 2018; and Ashley Fitzpatrick, Director of Grants and Contracts, APOPO, 12 September 2018.
- 47 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 48 Ibid.; and emails from Chimwemwe Tembo, NPA, 13 February and 27 August 2018; Tom Dobb, HALO Trust, 22 February 2018; and Adam Komorowski, MAG, 13 April 2018.
- 49 Emails from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017; Tom Dobb, HALO Trust, 24 April 2017; and Claus Nielsen, NPA, 31 March 2017.
- 50 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 51 Email from Chimwemwe Tembo, NPA, 13 February 2018.
- 52 Email from Adam Komorowski, MAG, 13 April 2018.
- 53 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018; Chimwemwe Tembo, NPA, 13 February and 27 August 2018; Tom Dobb, HALO Trust, 22 February 2018; and Adam Komorowski, MAG, 13 April 2018.
- 54 Emails from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017; Tom Dobb, HALO Trust, 24 April 2017; and Claus Nielsen, NPA, 31 March 2017.
- 55 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 56 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June and 4 September 2018.
- 57 Email from Tom Dobb, HALO Trust, 22 February 2018.
- 58 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June and 4 September 2018; Chimwemwe Tembo, NPA, 13 February and 27 August 2018; Tom Dobb, HALO Trust, 22 February 2018; and Adam Komorowski, MAG, 13 April 2018.
- 59 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018 and 4 July 2017; Chimwemwe Tembo, NPA, 13 February and 27 August 2018; Tom Dobb, HALO Trust, 22 February 2018; and Adam Komorowski, MAG, 13 April 2018.
- 60 Emails from Chimwemwe Tembo, NPA, 13 February and 30 August 2018.
- 61 Email from Tom Dobb, HALO Trust, 22 February 2018.
- 62 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018; Chimwemwe Tembo, NPA, 13 February and 27 August 2018; Tom Dobb, HALO Trust, 22 February 2018; and Adam Komorowski, MAG, 13 April 2018. HALO reported a total of 16,673 anti-personnel mines destroyed and stated that the item of UXO was not destroyed during mine clearance but as a spot task. According to Zimbabwe's Article 7 report, four anti-vehicle mines were destroyed in Leacon Hill to Sheba Forest and two items of UXO in Musengezi to Mazowe minefield in 2017. NPA reported destroying four anti-vehicle mines in Leacon Hill to Sheba Forest in 2016. Email from Claus Nielsen, NPA, March 2017.
- 63 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 64 Under its three-year extension until January 2018, Zimbabwe undertook "to clarify the remaining challenge, understand what progress will be possible once partners operate at full capacity and once additional support has been identified, produce a detailed plan, and submit a subsequent request for fulfilment of its Article 5 obligations". Decision on Zimbabwe's Article 5 deadline Extension Request, Third Review Conference, Maputo, 26 June 2014; and Article 5 deadline Extension Request, 31 December 2013, pp. 5–6.
- 65 Revised Fifth Article 5 Extension Request, received 9 August 2017, pp. 8–9.
- 66 Ibid., p. 41.
- 67 Statement of Zimbabwe, Intersessional Meetings, Geneva, 8 June 2018.
- 68 Ibid.; and Article 7 Report (for 2017), Annex A: Revised Workplan for 2018–25.
- 69 Statement of Zimbabwe, Intersessional Meetings, Geneva, 8 June 2018; and Article 7 Report (for 2017), Annex A: Revised Workplan for 2018–25.
- 70 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 71 Ibid.
- 72 Statement of Zimbabwe, Intersessional Meetings, Geneva, 8 June 2018.
- 73 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 74 Article 7 Report (for 2017), Form D.
- 75 Ibid.; and email from Claus Nielsen, NPA, 31 March 2017.
- 76 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 77 Email from Tom Dobb, HALO Trust, 22 February 2018.
- 78 Emails from Adam Komorowski, MAG, 13 April 2018; and Capt. Cainos Tamanikwa, ZIMAC, 4 September 2018.
- 79 Email from Adam Komorowski, MAG, 13 April 2018.
- 80 Email from Chimwemwe Tembo, NPA, 13 February 2018.
- 81 Article 7 Report (for 2017), Form I.
- 82 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018; Chimwemwe Tembo, NPA, 13 February 2018; and Tom Dobb, HALO Trust, 22 February 2018.
- 83 Email from Tom Dobb, HALO Trust, 22 February 2018.

**STATES NOT PARTY**

The background consists of several overlapping, semi-transparent geometric shapes in various shades of purple and dark purple. The shapes are angular and layered, creating a complex, abstract pattern. The text 'STATES NOT PARTY' is positioned in the upper left quadrant, rendered in a bold, white, sans-serif font.

# ARMENIA

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	5	5
Target date for completion of mine clearance	5	5
Targeted clearance	6	6
Efficient clearance	5	5
National funding of programme	4	5
Timely clearance	3	4
Land-release system in place	6	6
National mine action standards	7	7
Reporting on progress	6	6
Improving performance	5	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.2</b>	<b>5.5</b>

## PERFORMANCE COMMENTARY

Armenia is now solely dependent on national survey and clearance capacity to address mine and explosive remnants of war (ERW) contamination, after The HALO Trust ceased demining operations in 2015 (though it continues to provide capacity development support). No clearance was conducted in 2017 and the mine detection dogs (MDDs), which had been in training since 2016, failed their accreditation and were sent back for further training. This meant that planned technical survey and clearance operations using the dogs did not take place in 2017.

## RECOMMENDATIONS FOR ACTION

- Armenia should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Armenia should clarify the extent of remaining mine contamination, including in military restricted zones.
- Armenia should develop a national mine action strategy, mobilise the necessary resources to finish mine clearance, and set a deadline for the completion of operations.

## CONTAMINATION

As at the end of 2017, Armenia had more than 5.7km<sup>2</sup> of confirmed mined area and a further 3.8km<sup>2</sup> of suspected mined area, as set out in Table 1. The mined areas contained anti-personnel mines, anti-vehicle mines, or a combination of both, as well as unexploded ordnance

(UXO).<sup>1</sup> Of 97 confirmed hazardous areas (CHAs), 56 contain anti-personnel mines, totalling just over 2.9km<sup>2</sup>. Three of the six suspected hazardous areas (SHAs), totalling just over 0.1km<sup>2</sup>, may also be contaminated by anti-personnel mines.<sup>2</sup>

**Table 1: Mine contamination (at end-2017)<sup>3</sup>**

Type of contamination	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
AP mines	42	2,201,286	3	105,500
AV mines	41	2,810,916	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
<b>Totals</b>	<b>97</b>	<b>5,735,859</b>	<b>6</b>	<b>3,833,942</b>

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.<sup>4</sup>

**Table 2: Mine contamination by province (at end-2017)<sup>5</sup>**

Province	Type of contamination	CHAs	Area (m <sup>2</sup> )	SHAs	Area (m <sup>2</sup> )
Gegharqunik	AP mines	3	584,022	2	105,123
	AV mines	5	2,428,128	3	3,728,442
Syunik	AP mines	33	1,449,713	1	377
	AV mines	23	299,733	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
<b>Totals</b>		<b>97</b>	<b>5,735,859</b>	<b>6</b>	<b>3,833,942</b>

Mine contamination in Armenia impacts a range of development activities, including agriculture and tourism.<sup>6</sup> Mine contamination blocks access to pasture or arable land and hinders the implementation of community development projects and the development of infrastructure. Mine-affected communities are more socially and economically isolated and less likely to benefit from the flow of tourism to the area.<sup>7</sup>

Priority for clearance is based on CHDE criteria. The first priority is given to contaminated areas that are up to 1km away from a populated area; the second to those near agricultural land; and the third priority is given to contaminated areas that have a negative impact on the environment. These are mostly located in high mountainous zones.<sup>8</sup>

Mine and 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 is along the borders and confrontation lines with Azerbaijan, including the area in and around Nagorno-Karabakh and other territories controlled by the Nagorno-Karabakh Defence Forces. Armenia's border with Georgia has been cleared of mines, whereas the border with Turkey, also mined during the Soviet era, is still contaminated.<sup>9</sup> While non-technical survey in 2012–13 by the Swiss Foundation for Mine Action (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.<sup>10</sup>

The 2005 Landmine Impact Survey (LIS) identified 102 SHAs in five districts bordering Azerbaijan. The LIS estimated that contamination covered more than 321km<sup>2</sup>, affecting 60 communities.<sup>11</sup> In August 2012, The HALO Trust conducted partial survey of 17 sites, cancelling 80% of the area identified by the LIS in those sites. However, HALO Trust activities were suspended following a grant awarded by the US Department of State to FSD to re-survey Armenia.<sup>12</sup>

FSD conducted non-technical survey from November 2012 to May 2013.<sup>13</sup> The survey found 131 "dangerous areas" totalling 47km<sup>2</sup> in four districts bordering Azerbaijan. Thirteen of these areas, totalling 1.8km<sup>2</sup>, were found to contain only UXO and not mines.<sup>14</sup> Of the 131 "dangerous areas", 17 were SHAs estimated to cover 26km<sup>2</sup> and the other 114 were CHAs that covered 21km<sup>2</sup>.<sup>15</sup> FSD was mandated by the Government of Armenia to survey impacted communities outside the military restricted zone. Therefore, 50 SHAs that fall inside the military perimeter were not included in the survey, which was conducted only within the internationally recognised boundaries of Armenia.<sup>16</sup>

During the 2012–13 survey, FSD teams collected data on 271 non-recent mine victims. These records were submitted to the International Committee of the Red Cross (ICRC), which maintains a mine victim database in Armenia.<sup>17</sup>

Territory seized from Azerbaijan during the conflict is believed to be significantly contaminated by mines and ERW, including unexploded submunitions.<sup>18</sup> However, the precise extent of contamination in those districts is unknown.

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## PROGRAMME MANAGEMENT

In 2002, the Armenian Humanitarian Demining Centre was established and the mine action programme was developed under the Armenian Armed Forces. However, this process stalled in 2006 and the Armenian Humanitarian Demining Centre suspended its activities mainly due to a lack of funding. At the beginning of 2011, the Government of Armenia established the Center for Humanitarian Demining and Expertise (CHDE) as a civilian, non-commercial state body responsible for conducting survey and clearance, and identifying contaminated areas. The CHDE can negotiate with international demining organisations, accept international funding, sign contracts, and receive international assistance.<sup>19</sup> The CHDE has an advisory board, composed of representatives from the Ministries of Defence, Emergency Situations, Territorial Administration, Education, and Science and Justice.<sup>20</sup> In 2013, a government decree made the CHDE Armenia's National Mine Action Centre (see below section, legislation and standards).<sup>21</sup> The CHDE is said to offer equal employment opportunities for both men and women. The roles are nearly equally divided between men and women, and most women occupy senior or leadership positions.<sup>22</sup>

### Strategic Planning

Armenia does not yet have a formally constituted national mine action programme or strategy.<sup>23</sup> In March 2013, a discussion was held at the Ministry of Defence on the 2012–13 survey.<sup>24</sup> The chair of the CHDE's council, Ara Nazaryan, stated that "the drafting of a national mine action programme, its approval and subsequent implementation are priority tasks for comprehensive demining activities in the territory of the Republic of Armenia."<sup>25</sup>

Based on the survey findings, the CHDE was to develop a national mine action plan that it would implement following government approval.<sup>26</sup> Alongside development of the draft mine action law (see below), and with the support of the Organization for Security and Co-operation in Europe (OSCE)'s office in Yerevan, the CHDE has been seeking to establish a national mine action programme. The programme should receive national funding, and be guided by a national mine action strategy and plan.<sup>27</sup> As at August 2018, in close cooperation with the United Nations Development Programme (UNDP), a final draft of the National Strategic Plan on Mine Action had been developed, which was due to be presented to the

Government of Armenia for approval before the end of the year. The main elements of the draft Plan are to address, as a priority, anti-personnel mine contamination with a humanitarian impact as well as to work on demining in support of the achievement of the 2030 Sustainable Development Goals.<sup>28</sup>

In 2014, the CHDE launched an initiative to improve operational efficiencies.<sup>29</sup> Criteria used to prioritise clearance tasks include the distance of hazardous areas from local communities, the intended use of land post-clearance, and the potential for development projects on cleared land. To optimise efficient deployment of resources, clearance plans are typically drawn up on a community-by-community basis.<sup>30</sup>

## Legislation and Standards

In 2013, in conformity with a government decree, the CHDE began developing national mine action legislation. According to the decree, the CHDE would draft the law and a mine action strategy for discussion among the government in the first half of 2016, in addition to proposing possible amendments to national mine action standards covering explosive ordnance disposal (EOD) and the use of MDDs.<sup>31</sup> The CHDE began drafting the law in 2015<sup>32</sup> with the support of the OSCE office in Yerevan.<sup>33</sup> As at August 2018, the draft mine action law had been submitted to the National Assembly for review.<sup>34</sup>

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.<sup>35</sup>

The CHDE will further develop its standing operating procedures (SOPs) once the draft law on mine action has been adopted.<sup>36</sup> SOPs on manual mine clearance and battle area clearance (BAC) have already been elaborated.<sup>37</sup>

## Quality Management

In 2014, with technical support from FSD, a quality management (QM) system was developed to be implemented in accordance with IMAS and the NMAS. Quality assurance (QA) is conducted by dedicated officers who make regular field visits to inspect cleared land.<sup>38</sup>

In 2017, internal QA activities were implemented through systematic field inspections, sampling and continuing monitoring of all operations. Only internal quality assurance was carried out as BAC operations were conducted by CHDE deminers. The internal quality assurance was led by the CHDE's Chief Inspector. Quality control (QC) is conducted once clearance of the land has been completed, but prior to handover.<sup>39</sup>

The quality of demining activities is assured through:

- Accreditation of deminers and demining operators by the CHDE
- Internal QA procedures
- External QA by the CHDE QA/QC team
- External QC sampling inspections by the CHDE QA/QC team.<sup>40</sup>

## Information Management

With FSD's support, the CHDE set up and manages the national Information Management System for Mine Action (IMSMA) database.<sup>41</sup>

## Operators

Since The HALO Trust's departure from Armenia in October 2015, only a national capacity for technical survey and clearance has remained, the Armenian Peacekeeping Engineering Brigade (PKEB). In 2017, the PKEB was unable to deploy any teams for clearance or technical survey as it had other missions to accomplish, whereas it deployed two six-strong manual clearance teams the previous year.<sup>42</sup> While the CHDE deployed one team of five for non-technical survey, technical survey, and battle area clearance.<sup>43</sup> This represented a considerable decrease in capacity compared to 2015, as no international clearance organisation undertook demining operations in Armenia in 2016 or 2017.<sup>44</sup>

Six MDDs were also introduced in Armenia for the first time in 2016, for use in PKEB's technical survey. The MDD project is funded by the United States (US) Department of State and private donations from US citizens with support from ITF Enhancing Human Security and the Marshall Legacy Institute.<sup>45</sup> As part of the project, Bosnian Mine Detection Dog Center (MDDC) trainers were leading a dog-handler integration course with PKEB dog handlers.<sup>46</sup> In 2017, however, all six MDDs failed their accreditation and were returned so could not be involved in demining operations as planned. As at September 2018, there were no plans to bring back MDDs to Armenia although the CHDE is open to discuss the possibility of involving adequately trained MDDs in its operations in the future.<sup>47</sup>

FSD had been present in Armenia since 2012,<sup>48</sup> but withdrew at the end of January 2015 due to lack of funding.<sup>49</sup> From August 2013 to January 2015, FSD implemented a capacity development programme, covering: basic EOD training; mentoring the CHDE in tasking, planning, QA/QC, IMSMA, reporting systems and mechanisms; data collection, and support for the elaboration of SOPs and policy.<sup>50</sup>

The HALO Trust was operational in Armenia from mid-2012 to late 2015, initially undertaking mainly non-technical survey, and later technical survey and clearance, deploying both its own clearance teams and HALO Trust-led teams from the PKEB.<sup>51</sup> Although The HALO Trust no longer conducts mine clearance operations in Armenia, it continues to provide advice and training to the CHDE, as and when required.<sup>52</sup> An agreement in 2017 concerns HALO support for safe QA clearance of tasks that straddle the border. These operations were ongoing in 2018 and were expected to continue beyond the end of the year. In addition, HALO Trust conducted first aid training for the CHDE in April 2017 and provided training on BAC in October 2017. The HALO Trust will continue to seek to help the CHDE to complete minefield clearance in future years.<sup>53</sup>

In December 2013, the Foundation for Demining and Demolition (FDD) was established as a national, civilian, and non-commercial demining organisation in Armenia with support from the CHDE, Geowulf LLC, FSD, and the Government of Armenia.<sup>54</sup> Its main tasks are to conduct

demining and destroy expired or obsolete arms and ammunition in Armenia; it also undertakes research, dog breeding and supplies machinery.<sup>55</sup> As at August 2018, FDD had not conducted any demining operations since its creation nor are there any current plans for it to do so.<sup>56</sup>

## LAND RELEASE

No survey or clearance of mined area was conducted in 2017. This compares to 0.02km<sup>2</sup> which was released by clearance and cancellation by non-technical survey of 14.4km<sup>2</sup> in 2016.<sup>57</sup>

### Survey in 2017

No mined area was surveyed in 2017, but a small amount of ERW survey did take place. Upon receiving information of an incident involving cluster munition remnants (CMR) in the Kornidzor area of the Tegh community in the Syunik province, the CHDE conducted a “double” non-technical survey (meaning survey of an area that has already been surveyed) and confirmed a hazardous area covering 500,004m<sup>2</sup> as contaminated with CMR and other ERW.<sup>58</sup> The CHDE also implemented “double” non-technical survey in the Khnatsakh community of Syunik province in an area contaminated with anti-vehicle mines. As a result, a CHA of 438m<sup>2</sup> was cancelled.<sup>59</sup>

### Clearance in 2017

No mined areas were cleared in 2017. BAC was conducted following non-technical survey in the Kornidzor area of the Tegh community in Syunik province confirming an area of 500,004m<sup>2</sup>. Partial clearance of 64,191m<sup>2</sup> was conducted and two cluster munition remnants and two items of other ERW were found.<sup>60</sup>

### Progress in 2018

In 2018, the CHDE planned to implement the following activities:

- Manual clearance of 25,200m<sup>2</sup> of area containing anti-personnel mines by two teams from the PKEB in Davit Bek in Syunik province
- Continuation of BAC activities in Kornidzor in Syunik province
- “Double” non-technical survey in Gegharqunik province.<sup>61</sup>

## ARTICLE 5 COMPLIANCE

Armenia is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in any area under its jurisdiction or control as soon as possible.

No target date has been set for the completion of mine clearance in Armenia, due to the uncertainty of future capacity and funding.<sup>62</sup> Moreover, over the past five years, demining in Armenia has been slow and productivity rates paltry, as Table 3 illustrates. In 2017, no demining took place.

**Table 3: Mine clearance in 2013–17<sup>63</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	0
2016	0.02
2015	0.07
2014	0.04
2013	0
<b>Total</b>	<b>0.13</b>

One of the objectives of the Armenian Mine Action Strategy 2007–11 was to release, through technical survey and clearance, 2.2% (7km<sup>2</sup>) of the SHAs identified by the LIS and 6.8% of the SHAs outside the restricted military zone.<sup>64</sup> However, scant progress was made towards these targets.<sup>65</sup> Armenia claims that challenges in its mine and ERW clearance include the low level of contamination and the random distribution of mines.<sup>66</sup>

Operational capacity was significantly reduced in 2017 from previous years with no international operators or the PKEB conducting clearance. BAC was conducted using teams from the CHDE. The MDDs did not gain accreditation and planned technical survey and clearance activities did not take place in 2017.

National funding supports the budget expenses and capacity building of the CHDE, but Armenia does not fund clearance operations.<sup>67</sup> The CHDE’s budget for 2017 remained the same as 2016, and as at August 2018, no donor support had been secured.<sup>68</sup> The CHDE has submitted an application to the government of Armenia for AMD 130 million (approx. US\$270,000) to cover planned clearance activities in 2019.<sup>69</sup>

- 1 Email from Margaret Lazyan, Head of Mine Risk Education and Victim Assistance, Center for Humanitarian Demining and Expertise, CHDE, 8 August 2018.
- 2 Email from Margaret Lazyan, CHDE, 8 August 2018.
- 3 Ibid.
- 4 Email from Margaret Lazyan, CHDE, 1 October 2018.
- 5 Ibid.
- 6 Email from Ruben Arakelyan, CHDE, 28 April 2017.
- 7 Ibid.
- 8 Email from Margaret Lazyan, CHDE, 8 August 2018.
- 9 Emails from Ruben Arakelyan, CHDE, 19 March 2014 and 28 April 2017, and interview in Geneva, 1 April 2014.
- 10 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.
- 11 UNDP Armenia Humanitarian Demining Project, "Landmine Impact Survey in Armenia 2005", Yerevan, August 2005.
- 12 Emails from Andrew Moore, Caucasus and Balkans Desk Officer, HALO Trust, 17 February 2014; and Valeria Fabbroni, Head of Operations, FSD, 26 February 2014.
- 13 CHDE, "FSD non-technical mine action survey", Yerevan, 2013, p. 12.
- 14 Ibid.
- 15 Email from Ruben Arakelyan, CHDE, 21 February 2014.
- 16 CHDE, "FSD non-technical mine action survey", Yerevan, 2013, p. 7.
- 17 Email from Ruben Arakelyan, CHDE, 19 March 2014.
- 18 Azerbaijan National Agency for Mine Action (ANAMA), "ANAMA 2017".
- 19 Armenian Ministry of Defence, "The New Legal Status of the Humanitarian De-Mining Center", 13 February 2014; and email from Margaret Lazyan, CHDE, 26 September 2018.
- 20 Email from Margaret Lazyan, CHDE, 27 September 2018.
- 21 Email from Ruben Arakelyan, CHDE, 8 June 2015.
- 22 Email from Margaret Lazyan, CHDE, 8 August 2018.
- 23 Email from Ruben Arakelyan, CHDE, 30 March 2015.
- 24 CHDE, "Systematic Approach to Humanitarian Demining in the Territory of Armenia", 10 February 2014.
- 25 Ibid.
- 26 Ibid.
- 27 Email from Varsine Miskaryan, CHDE, 8 August 2016.
- 28 Emails from Margaret Lazyan, CHDE, 8 August 2018 and 27 September 2018.
- 29 Email from Ruben Arakelyan, CHDE, 30 March 2015.
- 30 Email from Ruben Arakelyan, CHDE, 28 April 2017.
- 31 Emails from Ruben Arakelyan, CHDE, 30 March 2015; and Varsine Miskaryan, CHDE, 3 September 2015.
- 32 Email from Varsine Miskaryan, CHDE, 8 August 2016.
- 33 Email from Ruben Arakelyan, CHDE, 28 April 2017.
- 34 Email from Margaret Lazyan, CHDE, 8 August 2018.
- 35 Emails from Ruben Arakelyan, CHDE, 19 March 2014 and 30 March 2015.
- 36 Email from Varsine Miskaryan, CHDE, 8 August 2016.
- 37 Email from Margaret Lazyan, CHDE, 8 August 2018.
- 38 Email from Ruben Arakelyan, CHDE, 8 June 2015.
- 39 Email from Margaret Lazyan, CHDE, 8 August 2018.
- 40 Ibid.
- 41 Email from Ruben Arakelyan, CHDE, 19 March 2014.
- 42 Emails from Ruben Arakelyan, CHDE, 28 April 2017; and Margaret Lazyan, CHDE, 27 September 2018.
- 43 Email from Margaret Lazyan, CHDE, 27 September 2018.
- 44 Ibid; and email from Margaret Lazyan, CHDE, 8 August 2018.
- 45 Email from Varsine Miskaryan, CHDE, 8 August 2016.
- 46 Ibid.
- 47 Email from Margaret Lazyan, CHDE, 27 September 2018.
- 48 Email from Valeria Fabbroni, FSD, 26 February 2014.
- 49 Email from Matthew Wilson, Deputy Head of Operations, FSD, 11 May 2015.
- 50 Ibid.
- 51 Email from Andrew Moore, HALO Trust, 17 February 2014.
- 52 Emails from Ruben Arakelyan, CHDE, 28 April 2017; and Ash Boddy, Regional Director, HALO Trust, 31 March 2017.
- 53 Emails from Ash Boddy, HALO Trust, 13 July 2018 and Margaret Lazyan, CHDE, 8 August 2018.
- 54 Email from Ruben Arakelyan, CHDE, 20 March 2014.
- 55 Emails from Ruben Arakelyan, CHDE, 19 March 2014 and Margaret Lazyan, CHDE, 27 September 2018.
- 56 Email from Margaret Lazyan, CHDE, 8 August 2018.
- 57 Email from Ruben Arakelyan, CHDE, 28 April 2017.
- 58 Email from Margaret Lazyan, CHDE, 8 August 2018.
- 59 Ibid.
- 60 Ibid.
- 61 Ibid.
- 62 Ibid.
- 63 See Landmine Monitor and Mine Action Review reports on Armenia in 2011–14; and CHDE, "FSD non-technical mine action survey", Yerevan, 2013, p. 21.
- 64 Armenia, "Armenia Mine Action Strategy 2007–11", Yerevan, 2006, p. 36.
- 65 See V. Bohle and N. Weigel, EC-Funded Mine Actions in the Caucasus and Central Asia, Geneva International Centre for Humanitarian Demining (GICHD), 2009, pp. 25–31.
- 66 Ibid.; and email from Ruben Arakelyan, CHDE, 28 April 2017.
- 67 Email from Ruben Arakelyan, CHDE, 28 April 2017.
- 68 Ibid; and email from Margaret Lazyan, CHDE, 8 August 2018.
- 69 Email from Margaret Lazyan, CHDE, 8 August 2018.

# AZERBAIJAN

PROGRAMME PERFORMANCE	2017	2016
Problem understood	7	7
Target date for completion of mine clearance	5	5
Targeted clearance	5	6
Efficient clearance	5	4
National funding of programme	8	8
Timely clearance	7	5
Land-release system in place	4	4
National mine action standards	5	5
Reporting on progress	7	7
Improving performance	6	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.8</b>	<b>5.6</b>

## PERFORMANCE COMMENTARY

There was a dramatic increase in the amount of land released by clearance and survey in 2017 compared to previous years. This was due to the fact that clearance of the Jojuq Marjanli village was prioritised in order to facilitate the return of internally displaced people (IDPs) following the regaining of this land in 2016 from Armenian occupation. However, more than 3.6km<sup>2</sup> of land

in Jojuq Marjanli was cleared by two national demining non-governmental organisations without any mines being found. As this also occurred in 2016 it suggests an urgent need for enhanced use of evidence-based technical survey to confirm areas as mined, before undertaking full clearance.

## RECOMMENDATIONS FOR ACTION

- Azerbaijan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Azerbaijan should report on its plans and timelines for clearance of all known or suspected mined areas under its effective control.
- Azerbaijan should ensure that clearance is only conducted in areas where there is firm evidence of contamination.

## CONTAMINATION

The precise extent of contamination from anti-personnel mines in Azerbaijan is unknown, as Armenian forces currently occupy a significant area of the country where considerable contamination exists. The area suspected to contain anti-personnel mines in Azerbaijan as at the end of 2017 has not been publicly reported. At the end of 2015, 69.9km<sup>2</sup> of area was suspected to contain anti-personnel mines.<sup>1</sup>

The Azerbaijan National Agency for Mine Action (ANAMA) has reported that additional contamination has been found, mainly in former soviet army firing ranges and training polygons. However, they are unable to give a precise figure for the extent of the contamination saying this will only be known after a country-wide resurvey, which will be carried out once resources are available.<sup>2</sup>

The extent of contamination in areas occupied by Armenia is unknown, although the ANAMA has suggested that contamination may cover between 350km<sup>2</sup> and 830km<sup>2</sup>, and contain between 50,000 and 100,000 mines.<sup>3</sup>

Since 2001, survey and clearance have been reducing and better defining the extent of contamination within areas under the control of Azerbaijan. In 2003, the Landmine Impact Survey (LIS) identified 970 suspected hazardous areas (SHAs) covering 736km<sup>2</sup>.<sup>4</sup> In 2006, re-survey reduced the estimate of contamination to 306km<sup>2</sup>.<sup>5</sup> Further re-survey by ANAMA in 2008–09 combined with clearance operations reduced total SHA to 184km<sup>2</sup> across 280 areas, of which 89 were believed to contain mines and 191 only UXO.<sup>6</sup>

Mine and explosive remnants of war (ERW) contamination in Azerbaijan is the consequence of the 1988–94 armed conflict with Armenia – which saw landmines laid by both sides – and ammunition abandoned by the Soviet army in 1991. The most heavily contaminated areas are along the borders and confrontation lines between Armenia and Azerbaijan, including the area in and around Nagorno-Karabakh (see Mine Action Review's *Clearing the Mines* report on Nagorno-Karabakh for further information). The adjoining districts of Gubadly, Jabrayil, Kelbajar, Lachin, and Zangilan, as well as parts of Aghdam, Fizuli, and Tartar, are under the control of Armenian forces, and are suspected to contain mines and unexploded ordnance (UXO).<sup>7</sup>

According to ANAMA all clearance operations are carried out in line with an annual plan approved by the Government of Azerbaijan and based on the requests from land owners such as local executive authorities, farmers, and different state organizations involved in reconstruction and rehabilitation activities in ERW affected regions.<sup>8</sup>

In 2017, ANAMA recorded seven mine incidents that killed two people and injured eight others.<sup>9</sup>

## PROGRAMME MANAGEMENT

A 1998 presidential decree established ANAMA, which reports to the Deputy Prime Minister as head of the State Commission for Reconstruction and Rehabilitation.<sup>10</sup> In April 1999, ANAMA established the Azerbaijan Mine Action Programme, a joint project of the Government of Azerbaijan and the United Nations Development Programme (UNDP).<sup>11</sup> A joint working group, established in December 1999 and consisting of representatives from various ministries, provides regular guidance to ANAMA.<sup>12</sup>

ANAMA is tasked with planning, coordinating, managing, and monitoring mine action in the country. It also conducts demining operations, along with two national operators it contracts: Dayag-Relief Azerbaijan (RA) and the International Eurasia Press Fund (IEPF).<sup>13</sup> No commercial company is active in mine action in Azerbaijan.

ANAMA manages the mine action programme via its headquarters based in Baku, a regional office in Fizuli, a regional training centre in Goygol, and three operational centres, located in Aghjabedi, Agstafa, and Terter.<sup>14</sup>

UNDP provides support to ANAMA, and will continue to do so until 2019, as part of a project to support the institutional capacity of ANAMA for mine/UXO clearance, risk education, victim assistance, international networking, and support to other mine-affected countries.<sup>15</sup>

### Strategic Planning

ANAMA is integrated into the State Social and Economic Development programme. The current mine action strategy is for 2013–18.<sup>16</sup> A new strategic plan is currently in development. Its main aims are said to be to continue ERW clearance in support of government development projects, and to provide safe conditions for the local population in affected regions.<sup>17</sup>

ANAMA's long-term strategy is to clear the occupied territories as and when it is possible to do so.<sup>18</sup>

## Legislation and Standards

As at May 2018, Azerbaijan was still in the process of adopting a national mine action law, with draft legislation under review by the Cabinet of Ministers.<sup>19</sup> Once adopted, it will regulate mine action in Azerbaijan, governing issues such as licensing, accreditation, quality assurance (QA), and tender procedures.<sup>20</sup>

Azerbaijan also has its own National Mine Action Standards (NMAS), which were adopted in 2001 and subsequently revised in 2003, 2004, and 2010.<sup>21</sup>

## Quality Management

ANAMA established a National Training Quality Assurance Team in 2004. In 2011, this transitioned into ANAMA's training, survey, and QA division (TSQAD), which is responsible for training and QA. The TSQAD also conducts quality control (QC).<sup>22</sup>

In 2017, 95 QA monitoring visits were undertaken.<sup>23</sup> In addition, external QC inspections were conducted at 38 sites in 2017, with more than 2.9km<sup>2</sup> of land physically checked.<sup>24</sup>

## Information Management

ANAMA uses an old version of the Information Management System for Mine Action (IMSMA) database.<sup>25</sup>

## Operators

At the end of 2017, ANAMA employed 632 operational and administrative staff and had 49 mine detection dogs (MDDs) and 6 demining machines.<sup>26</sup> Included in this capacity are the two national demining NGOs, IEPF and Dayag, which are contracted for mine clearance. Together, the two organisations employ 156 operational and administrative staff.<sup>27</sup> ANAMA also has an MDD breeding and training centre, which was built in 2011.<sup>28</sup>

## LAND RELEASE

The total mined area released by clearance and survey in 2017 was 9.06km<sup>2</sup>, a huge increase from the 2.3km<sup>2</sup> released the previous year.<sup>29</sup>

### Survey in 2017

In 2017, 0.25km<sup>2</sup> of land was cancelled by non-technical survey and 1.12km<sup>2</sup> of land was reduced by technical survey, of which 0.25km<sup>2</sup> was reduced by MDDs.<sup>30</sup>

Machines were used for ground preparation before technical survey, in total 2.5km<sup>2</sup> of land was prepared by machines in 2017.<sup>31</sup>

### Clearance in 2017

Azerbaijan reported clearing 7.69km<sup>2</sup> of land in 2017<sup>32</sup>, a significant increase from the 0.83km<sup>2</sup> cleared in 2016.<sup>33</sup> Of the 2017 total, however, 3.6km<sup>2</sup> contained no mines and is not included in Mine Action Review's calculation of the global clearance total for the year. This clearance was conducted by IEPF and RA in the village of Jojuq Marjanli, which had been liberated following the April 2016 conflict and to which IDPs had begun to return. In order to facilitate their safe return, the two demining organisations were rapidly deployed for clearance. Although ANAMA has suggested that this rapid deployment explains the low amount of contamination in the areas that have been cleared it does not explain why significant areas of land were fully cleared without confirming whether contamination was present. Clearance of Jojuq Marjanli continued into 2018 to support infrastructure building works.<sup>34</sup>

**Table 1: Mine clearance in 2017<sup>35</sup>**

Operator	Mined areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed*	AV mines destroyed*	UXO destroyed*
ANAMA CT	22	4,027,245	28	140	52
IEPF	11	1,943,268	0	0	33
Dayag-RA	13	1,723,383	0	0	2
<b>Totals</b>	<b>46</b>	<b>7,693,896</b>	<b>28</b>	<b>140</b>	<b>87</b>

AP = Anti-Personnel AV = Anti-Vehicle

\* Table 1 includes the items destroyed only during mine clearance and not technical survey.

In addition, ANAMA tasks its Special Mobile Emergency Response Team or the national NGOs – depending on the location of the call-out – to respond to explosive ordnance disposal (EOD) requests from the local community, government bodies, and international humanitarian organisations.<sup>36</sup> ANAMA, IEPF, and RA responded to a total of 157 requests in 2017, during which they found 7,528 explosive items, 7 of which were anti-personnel mines, in 31 regions of Azerbaijan.<sup>37</sup>

Furthermore, in January 2017 ANAMA began the final phase of the three phase Azerbaijan National Action Plan (NAP)/NATO Partnership for Peace Trust fund project, at the former artillery shooting range in Jeyranchel, in the Agstafa region, on the Azerbaijan Georgian border. The third phase was projected to finish in June 2018 and will result in the clearance of nearly 22km<sup>2</sup> of land contaminated with UXO.<sup>38</sup>

ANAMA also continued implementation of the Ganja and Kirdagh UXO clearance projects of former military testing ranges. During ERW clearance in 2017, ANAMA cleared 62 sites, totalling 33.3km<sup>2</sup>, during which it destroyed 25,102 items of ERW as well as 5 anti-personnel mines and 60 anti-vehicle mines; IEPF cleared 15 sites, totalling 27.4km<sup>2</sup>, during which it destroyed 2,616 items of ERW; and RA cleared 20 sites, totalling 24.5km<sup>2</sup> during which it destroyed 7,332 items of ERW as well as 2 anti-personnel mines and 4 anti-vehicle mines.<sup>39</sup>

### Progress in 2018

In 2018, most of ANAMA's clearance assets were being deployed for emergency clearance after an explosion at the Khizi ammunition storage area, continuing clearance of the former shooting range in Jeyranchel in Agstafa as well as continuing clearance of the Jojuq Marjanli village to support infrastructure construction.<sup>40</sup>

## ARTICLE 5 COMPLIANCE

Azerbaijan is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

Azerbaijan submitted voluntary APMBC Article 7 transparency reports in 2008 and 2009 but has not submitted an Article 7 report in the last eight years.

Over the last five years, 15.75km<sup>2</sup> of mined area has been cleared in Azerbaijan. Mine clearance output increased dramatically in 2017 (see Table 2).

**Table 2: Mine clearance in 2013-2017<sup>41</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	*4.00
2016	0.83
2015	1.49
2014	4.80
2013	4.63
<b>Total</b>	<b>15.75</b>

\* A further 3.7km<sup>2</sup> was cleared but was found not to contain mines.

Currently, 90% of mine action in Azerbaijan is state funded.<sup>42</sup> ANAMA's long-term strategy is to be ready to start clearance of the occupied territories as and when this is possible.<sup>43</sup>

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- 1 Email from Tural Mammadov, Operations Officer, Azerbaijan National Agency for Mine Action (ANAMA), 19 October 2016.
- 2 Email from Sabina Sarkarova, Public Relations Officer, ANAMA, 21 May 2018.
- 3 ANAMA "Azerbaijan National Agency for Mine Action 2018" p. 5.
- 4 Ibid.
- 5 Ibid; and Geneva International Centre for Humanitarian Demining (GICHD), "Transitioning Mine Action Programmes to National Ownership: Azerbaijan", March 2012, p. 13.
- 6 GICHD, "Transitioning Mine Action Programmes to National Ownership: Azerbaijan", March 2012, p. 13.
- 7 ANAMA "Azerbaijan National Agency for Mine Action 2018" p. 5.
- 8 Email from Sabina Sarkarova, ANAMA, 2 May 2018.
- 9 ANAMA "Azerbaijan National Agency for Mine Action 2018" p. 5.
- 10 GICHD, "Transitioning Mine Action Programmes to National Ownership: Azerbaijan", March 2012, Executive Summary.
- 11 ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 12.
- 12 Ibid.
- 13 Ibid.
- 14 ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 12.
- 15 UNDP, "UNDP Mine Action Programme: Azerbaijan", April 2016.
- 16 Email from Parviz Gidayev, Planning & Development Manager, ANAMA, 20 May 2015; and ANAMA, "Azerbaijan National Agency for Mine Action 2017", p. 10.
- 17 Email from Sabina Sarkarova, ANAMA, 2 May 2018.
- 18 ANAMA, "Azerbaijan National Agency for Mine Action 2014", p. 5; and GICHD, "Transitioning Mine Action Programmes to National Ownership: Azerbaijan", March 2012, Executive Summary.
- 19 Email from Sabina Sarkarova, ANAMA, 2 May 2018.
- 20 Email from Parviz Gidayev, ANAMA, 20 May 2015; and ANAMA, "Azerbaijan National Agency for Mine Action 2014".
- 21 Email from Tural Mammadov, ANAMA, 19 October 2016.
- 22 ANAMA, "Azerbaijan National Agency for Mine Action 2016", pp. 28 and 30.
- 23 ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 24.
- 24 Ibid., p. 25.
- 25 Ibid., p. 32.
- 26 Ibid., p. 12.
- 27 Ibid., p. 13.
- 28 Ibid., p. 14.
- 29 ANAMA, "Azerbaijan National Agency for Mine Action 2017", pp. 13, 14, and 16.
- 30 Email from Sabina Sarkarova, ANAMA, 2 May 2018; and ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 15.
- 31 ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 16.
- 32 Email from Sabina Sarkarova, ANAMA, 2 May 2018.
- 33 ANAMA, "Azerbaijan National Agency for Mine Action 2017", p. 13; and ANAMA, "ANAMA Monthly Report for January 2017".
- 34 Email from Sabina Sarkarova, ANAMA, 2 May 2018.
- 35 ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 14.
- 36 Ibid., pp. 9 and 16.
- 37 Ibid., p. 19; and email from Sabina Sarkarova, ANAMA, 2 May 2018.
- 38 ANAMA, "Azerbaijan National Agency for Mine Action 2018", p. 20.
- 39 Ibid., p. 9.
- 40 Email from Sabina Sarkarova, ANAMA, 2 May 2018.
- 41 See Landmine Monitor and Mine Action Review reports on clearance in Azerbaijan covering clearance in 2013–16.
- 42 G. Ahmadov, "Advocating Mine Action to Government of Azerbaijan", Geneva, 19 February 2016, at: <http://www.mineaction.org/sites/default/files/documents/Gazanfar%20Ahmadov%20Azerbaijan.pdf>; and email from Tural Mammadov, ANAMA, 19 October 2016.
- 43 ANAMA, "Azerbaijan National Agency for Mine Action 2014"; and GICHD, "Transitioning Mine Action Programmes to National Ownership: Azerbaijan", March 2012, Executive Summary.



# CHINA

## RECOMMENDATION FOR ACTION

- China should accede to the Anti-Personnel Mine Ban Convention (APMBC) and clear all mined areas as a matter of priority.

## CONTAMINATION

The extent of mine contamination remaining in China is not known.

In the 1990s, the United States reported that China had emplaced mines along its borders with India, the Russian Federation, and Vietnam.<sup>1</sup> China's military estimated that around two million mines of a wide variety of types were emplaced on the Vietnam border alone.<sup>2</sup> China conducted clearance operations along its border with Vietnam between 1992 and 1999,<sup>3</sup> and between 2005 and 2009.<sup>4</sup>

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."<sup>5</sup> However, casualties from landmines continued to be reported in parts of Yunnan bordering Vietnam where some areas were still marked as mine-affected and press reports said one or two people were injured in this region every year.<sup>6</sup>

Moreover, in 2011, a Foreign Ministry official reported that China maintains a small number of minefields "for national defence".<sup>7</sup> 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".<sup>8</sup> At the Maputo Review Conference in 2014, China said it had "basically eradicated landmines on its own territory".<sup>9</sup> China has not reported on mine contamination along its borders with Russia and India or on operations to clear them.

## PROGRAMME MANAGEMENT

There is no formal mine action programme in China. Any mine clearance is conducted by the People's Liberation Army (PLA) as a military activity.

## LAND RELEASE

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. Press reports cited claims by the Chinese military that this second clearance operation was the largest in world military history.<sup>10</sup>

However, these two campaigns did not deal with minefields located in disputed areas of the border, where 500,000 mines covered an estimated 40km<sup>2</sup>. 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<sup>2</sup>.<sup>11</sup>

In early November 2015, however, China embarked on a further demining operation along the border with Vietnam.<sup>12</sup> According to media accounts, this phase of clearance on the border was set to be completed by the end of 2017, with the clearance of more than 50 minefields covering an area of more than 50km<sup>2</sup> in six counties along the border, in areas home to over 50,000 people. It was claimed that more than 470,000 mines remained to be cleared, despite the two other clearance operations in 1992–94 and 1997–99.<sup>13</sup>

In August 2016, China reported that it had made "positive progress" in the ongoing phase of the Government's demining operations, saying it was due to finish in 2017.<sup>14</sup> According to a media report in December 2016,

demining in the Red River autonomous prefecture in Yunnan province had been completed after eight months of operations, with soldiers having cleared 18 minefields with a size of more than 4.4km<sup>2</sup> in the Red River section along the Vietnamese border.<sup>15</sup>

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<sup>2</sup> of minefields on the Yunnan border.<sup>16</sup> Its latest Article 13 report submitted in March 2018 recorded no change under Form B "landmine clearance",<sup>17</sup> though media accounts reported that, after an 11-month hiatus, mine clearance had resumed in November 2017 in the Yunnan border area.<sup>18</sup> In May 2018, 0.06km<sup>2</sup> of cleared land was handed over to the local government after the destruction of 8,200 mines and explosive remnants of war. In total 23km<sup>2</sup> has been cleared since November 2015 with another 15km<sup>2</sup> expected to be cleared by the end of 2018.<sup>19</sup>

## ARTICLE 5 COMPLIANCE

China is not a state party to the APMBBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

- 1 US Department of State, "Hidden Killers 1994", Washington, DC, September 1998, p. 18, and Table A-1.
- 2 L. Huizi and L. Yun, "Chinese soldiers nearly done with landmine sweeping on the Sino-Vietnam border", *Xinhua*, 31 December 2008.
- 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<sup>2</sup>.
- 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 Statement of China, Second Review Conference, Cartagena, 4 December 2009.
- 6 "Landmines continue to kill in Yunnan province", *Global Times*, 16 May 2011; Z. Jiawei, "Landmines haunt Chinese village", *China Daily*, 13 January 2011.
- 7 Email from Lai Haiyang, Attaché, Department of Arms Control & Disarmament, Ministry of Foreign Affairs, 7 September 2011.
- 8 Statement of China, 11th Meeting of States Parties, Phnom Penh, 29 November 2011.
- 9 Statement of China, Third Review Conference, Maputo, 26 June 2014.
- 10 Huizi and Yun, "Chinese soldiers nearly done with landmine sweeping on the Sino-Vietnam border", *Xinhua*, 31 December 2008.
- 11 Statement of China, Second Review Conference, Cartagena, 4 December 2009.
- 12 P. Scally, "Huge land mine clearance underway in Wenshan, Honghe", Blog post, *Gokunming*, 5 November 2015, at: [http://www.gokunming.com/en/blog/item/3620/huge\\_land\\_mine\\_clearance\\_underway\\_in\\_wenshan\\_honghe](http://www.gokunming.com/en/blog/item/3620/huge_land_mine_clearance_underway_in_wenshan_honghe).
- 13 X. Wei, "Mine clearance mission on China-Vietnam border", *China Daily*, 3 November 2015, at: [http://usa.chinadaily.com.cn/2015-11/03/content\\_22359369.htm](http://usa.chinadaily.com.cn/2015-11/03/content_22359369.htm); and Z. Tao, "China launches 3rd mine clearance mission along China-Vietnam border", China Military Online, 2 December 2015, at: [http://eng.mod.gov.cn/TopNews/2015-12/02/content\\_4631304.htm](http://eng.mod.gov.cn/TopNews/2015-12/02/content_4631304.htm).
- 14 Statement of China, "Summary record of 18th Annual Conference of High Contracting Parties to CCW Amended Protocol II", Geneva, 30 August 2016, CCW/AP.II/CONF.18/SR.1.
- 15 "China finished mine-clearance at Red River along Sino-Vietnamese borders", CCTV+, 11 December 2016, at: <http://www.cctvplus.com/news/20161211/8038337.shtml#!language=1>.
- 16 CCW Amended Protocol II Article 13 Report (for 2016), Form B. Unofficial translation.
- 17 CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 18 "Land mine removal resumes on border", *China Daily*, 29 November 2017, at: [http://www.chinadaily.com.cn/china/2017-11/29/content\\_35118834.htm](http://www.chinadaily.com.cn/china/2017-11/29/content_35118834.htm).
- 19 "Land mine clearing effort pays off", *China Daily*, 10 May 2018, at: <https://www.chinadailyhk.com/articles/118/151/147/1525925289774.html>.

# CUBA

## RECOMMENDATION FOR ACTION

- Cuba should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.

### CONTAMINATION

Cuba's mine contamination remains unchanged from previous years. Cuban authorities maintain minefields around the United States (US) naval base at Guantánamo in the south-east of Cuba. 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."<sup>1</sup> 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.<sup>2</sup> According to a book published in 2008, mines laid around the naval base detonate "at least once a month";<sup>3</sup> 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.<sup>4</sup>

### 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.

### ARTICLE 5 COMPLIANCE

Cuba is not a state party to the APMBC, but nonetheless has obligations under customary international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

1 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.

2 Statement of the Directorate of Multilateral Affairs, Ministry of Foreign Affairs, 19 June 2000.

3 "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.

4 "U.S. and Cuban forces unite to fight a common foe: wildfire at Guantanamo" *USA Today*, 1 March 2018, at: <https://www.usatoday.com/story/news/politics/2018/03/01/u-s-and-cuban-forces-unite-fight-common-foe-wildfire-guantanamo/386221002/>.



# EGYPT

## RECOMMENDATIONS FOR ACTION

- Egypt should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Egypt should report meaningfully on the clearance that is being undertaken and seek to undertake a comprehensive baseline survey of anti-personnel mine contamination.

## CONTAMINATION

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 recent mine incidents in Sinai may have been caused by mines emplaced by anti-government jihadist groups.<sup>1</sup> It was reported in August 2016 that Islamic State had been digging up Second World War-era landmines and re-using them.<sup>2</sup> The precise extent of contamination across the country remains unknown and past estimates have been unreliable.

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.<sup>3</sup> 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. 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 UK reiterated that maps of minefield locations had been provided to the Egyptian authorities and that, since 2006, through multilateral funding along with other donors (including Germany, Japan, New Zealand, and the United States), the United Kingdom had funded clearance of 130,446 acres of land around El Alamein.<sup>4</sup>

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.<sup>5</sup> 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.<sup>6</sup> In this regard, in October 2017, it was reported by the European Union (EU)'s ambassador to Egypt that 2,680km<sup>2</sup> of land in the North West Coast was estimated to still be contaminated.<sup>7</sup>

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<sup>2</sup> in five areas, leaving “more than 16 million mines” covering an estimated area of 248km<sup>2</sup>.<sup>8</sup> Details of items cleared are not consistent with other available information.

In 2013, the army handed over to the Ministries of Housing and of Planning and International Cooperation an area of some 105km<sup>2</sup> 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.<sup>9</sup>

In August 2016, it was reported that Islamic State had been harvesting the explosives from World War II 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.”<sup>10</sup> 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”.<sup>11</sup> 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.<sup>12</sup> This should serve as a wake-up call to Egypt to pursue mine clearance with far greater vigour than it has so far done so.

In March 2017, the Landmines in Africa blog reported that three people were killed and two injured when their car hit a landmine in central Sinai; that one person was killed and four injured by an anti-personnel mine in Suez; and that two people were killed by a landmine in a village near the border with Israel in northern Sinai.<sup>13</sup> In contrast, it was reported in October 2017, by General Fathy Mansour, Deputy Commander of the Egyptian Military Engineering Corps, that there had been just one casualty from a landmine in El Alamein in 2017.<sup>14</sup>

## PROGRAMME MANAGEMENT

In 2017 as in previous years, the mine action programme in Egypt was not functioning effectively.

In November 2006, the Egyptian government and the UN Development Programme (UNDP) agreed a project: “Support the North West Coast Development Plan and Mine Action Programme: Mine Action”. The project provided for creation of an Executive Secretariat for Mine Clearance and the Development of the North West Coast within the Ministry of Planning to coordinate implementation of the North West Coast Development Plan through a partnership consisting of the Ministry of Planning, the Ministry of Defence, and UNDP. The project foresaw demining based on humanitarian and development needs, mine risk education, and assistance to mine victims.<sup>15</sup>

The project was to be conducted in two phases lasting about 18 months each. The first phase concluded in 2014. In October 2014, the EU agreed to support the second phase of the project, targeting clearance of 332km<sup>2</sup>.<sup>16</sup> In May 2015, the Director of the Executive Secretariat acknowledged that past results had been “disappointing”. That month, however, UNDP and the United States Agency for International Development (USAID) provided EGP13.8 million (approx. US\$1.77 million) while the EU provided €4.7 million to support a second phase of the national demining and development programme in the North-West Coast area which ended in 2017.<sup>17</sup> It was reported that a total area of 1,096 km<sup>2</sup> has been “cleared” since the beginning of the project in 2009 and that there are plans to establish an eco-oriented city, the “New City of Alamein”.<sup>18</sup> 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.

Clearance was conducted using both manual and mechanical demining techniques. The Executive Secretariat is said to have procured 461 mine detectors, 355 demining suits and protective helmets, one Casspir armoured vehicle with the “Mine Lab” detecting device, and five Armtrac vehicles.<sup>19</sup> 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.<sup>20</sup>

In January 2017, Egypt’s Minister of International Cooperation Sahar Nasr announced the establishment of the National Centre for Landmine Action and Sustainable Development. Minister Nasr said that the centre would begin clearing 600km<sup>2</sup> in the northern coast and would also establish infrastructure after clearance was completed.<sup>21</sup>

In May 2017, Kuwait granted Egypt an aid package of almost US\$1 million for mine clearance in the North-West Coast area.<sup>22</sup>

## Operators

Mine clearance in Egypt is conducted by the Egyptian Army Corps of Engineers, part of the Egyptian armed forces.

The Geneva International Centre for Humanitarian Demining (GICHD) provides support to the Executive Secretariat and the Army Corps of Engineers in information management and operations. This support includes revision and introduction of national standard operating procedures for mine action in 2014, advice on land release methodology and techniques, and assistance to UNDP in improving mechanical mine action.<sup>23</sup>

As noted above, UNDP is a partner in Egypt’s national demining and development programme.

## LAND RELEASE

Egypt has not reported with any credibility on its release of mined areas in recent years.

## ARTICLE 5 COMPLIANCE

Egypt is not a state party to the APMB, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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# GEORGIA

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	5	5
Target date for completion of mine clearance	4	5
Targeted clearance	4	4
Efficient clearance	4	4
National funding of programme	4	4
Timely clearance	3	4
Land-release system in place	5	5
National mine action standards	5	5
Reporting on progress	5	5
Improving performance	6	6
<b>PERFORMANCE SCORE: POOR</b>	<b>4.5</b>	<b>4.7</b>

## PERFORMANCE COMMENTARY

In 2017, The HALO Trust completed clearance of the Chognari minefield – part of a former Soviet military base in the Imereti region. Unfortunately, HALO Trust has not been granted access to continue survey or begin clearance of the Red Bridge minefield. HALO Trust plans to begin survey in Kadoeti and Khojali during 2018 but will consider winding down its operations in 2019 if it cannot get access to clear any of the remaining minefields.

## RECOMMENDATIONS FOR ACTION

- Georgia should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- 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.

## CONTAMINATION

Georgia has more than 2.3km<sup>2</sup> of mined areas across nine minefields, as set out in Table 1. Contamination comprises both anti-personnel and anti-vehicle mines. The problem includes Osiauri village, in Kashuri municipality, and Vaziani village, in Gardabani municipality, both of which are in military zones. Khojali

mountain, in Mestia municipality, is on the Administrative Boundary Line (ABL) with Abkhazia, where the size of mined areas is not known. Georgia is also contaminated by cluster munition remnants (CMR) and other explosive remnants of war (ERW).<sup>1</sup>

Table 1: Mine contamination (at end-2017)<sup>2</sup>

Region	District/ Municipality	Village	Contamination	Mined areas	Area (m <sup>2</sup> )
Kvemo Kartli	Marneuli	Kachagani (Red Bridge)	AP and AV mines	1	2,282,852
Kvemo Kartli	Gardabani	Vaziani (Military zone)	AP mines	1	N/K
Mtskheta-Mtianeti	Dusheti	Barisakho 1, Barisakho 2	AP mines	2	4,275
Mtskheta-Mtianeti	Dusheti	Kadoeti	AP mines	1	23,783
Shida Kartli	Kashuri	Osiauri (Military zone)	AP mines	1	N/K
Shida Kartli	Gori	Zemo Nikozi	AP mines and UXO	1	3,233
Samegrelo Zemo Svaneti	Mestia	Khojali	AP mines	1	N/K
<b>Totals</b>				<b>8</b>	<b>2,314,143</b>

AP = Anti-personnel AV = Anti-vehicle UXO = Unexploded ordnance N/K = Not known

Georgia has mined areas around former Soviet military bases, along its international borders, and as a result of conflict with the breakaway region of South Ossetia. Historically, the bulk of the mine problem in Georgia resulted from mines placed around former Russian military bases. The precise extent of the threat has not been reported publicly. According to the Georgian Ministry of Defence, in 2009 mined areas were suspected at Akhalqalaqi, Gonio Firing Range, Kopitnari, Mtskheta, Osiauri, Sagarejo, Telavi, and Vaziani.<sup>3</sup>

Norwegian People's Aid (NPA) conducted a General Mine Action Assessment (GMAA) for Georgia from October 2009 to January 2010, which identified eight suspected hazardous areas (SHAs) and seven confirmed hazardous areas (CHAs) in 13 districts, the latter of which totalled more than 4.5km<sup>2</sup> in estimated area.<sup>4</sup> Of the 15 SHAs and CHAs in total, ten contained mines and five were contaminated with UXO.<sup>5</sup> Between 2009 and the end of 2012, HALO Trust cleared five of the minefields that had a humanitarian impact.<sup>6</sup> There are two minefields in Georgia which are located within active military bases. The HALO Trust does not have access to these bases and does not know the size of the minefields.<sup>7</sup>

The Red Bridge minefield is an unfenced 7km-long minefield 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. In 1993–2013, there were 17 reported incidents at the Red Bridge border, resulting in 13 fatalities.<sup>8</sup>

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 the Georgian authorities and international non-governmental organisation (NGO) demining operators.

Anti-personnel mines have a social, economic, and humanitarian impact in Georgia. At the Red Bridge minefield, for example, the land is used for grazing cattle.<sup>9</sup> The main income of the local population is animal husbandry and therefore safe use of the grazing land is very important. Other remaining minefields are located in remote locations and as they are not guarded, fenced or marked locals who use the land for hunting and foraging are vulnerable to accidents.<sup>10</sup>

## PROGRAMME MANAGEMENT

In 2008, a Memorandum of Understanding was signed between the Georgian Ministry of Defence and international NGO Information Management and Mine Action Programs (iMMAP) to establish the Explosive Remnants of War Coordination Center (ERWCC).<sup>11</sup> On 30 December 2010, the Ministry of Defence issued a decree instructing that mine action be included as part of the State Military Scientific Technical Center – known as “DELTA” – an entity within the ministry. The agreement with iMMAP ended on 31 March 2012 and the ERWCC took ownership of the mine action programme.<sup>12</sup> In 2013, the ERWCC became the Humanitarian Demining Division (HDD) under DELTA.<sup>13</sup> As at April 2018, there were seven personnel working in the HDD, including a GIS and IMSMA specialist.<sup>14</sup>

The primary task of the ERWCC/HDD is to coordinate mine action in Georgia, including QA/QC, and to facilitate the creation and implementation of Georgian National Mine Action Standards, in accordance with the International Mine Action Standards (IMAS).<sup>15</sup>

### Strategic Planning

Georgia has identified clearance of the Red Bridge minefield as one of its key strategic mine action priorities.<sup>16</sup> Georgia previously reported plans to start clearance of the Red Bridge minefield in 2015.<sup>17</sup> Georgian and Azerbaijani representatives met in 2015 to discuss demining the minefield,<sup>18</sup> but only survey was permitted. 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.<sup>19</sup> As at May 2018, all of HALO Trust’s requests to restart clearance in Red Bridge have been refused.<sup>20</sup> According to DELTA, there have been no changes in the accessibility of the Red Bridge minefield and it had no additional information about the current situation.<sup>21</sup>

### Legislation and Standards

Georgian National Mine Action Standards and National Technical Standards and Guidelines (NTSGs) have been drafted in accordance with IMAS. Georgia does not currently have a timeframe for the establishment of these standards.<sup>22</sup> Once finalised, the NTSGs will be translated and sent to Parliament for approval.<sup>23</sup>

### Quality Management

Under the control of DELTA, the HDD now conducts quality assurance (QA) and quality control (QC). iMMAP has also conducted training on QA/QC for the Quality Management section of the ERWCC, the Joint Staff of the Georgian Armed Forces, and DELTA. In addition, The HALO Trust conducts its own internal quality control.<sup>24</sup>

### Information Management

Georgia using the Information Management System for Mine Action (IMSMA) database.

### Operators

The HALO Trust conducts clearance in Georgia, but NGOs are not permitted to clear land belonging to the military and, as at May 2018, HALO Trust has not been granted access to any of Georgia’s remaining mined areas.<sup>25</sup> In 2017, HALO Trust had 12 operational staff working at the Chognari minefield.<sup>26</sup>

At the request of the Government of Georgia, the NATO Partnership for Peace (PfP) Trust Fund has supported Georgia in addressing its ERW problem from the August 2008 conflict. In 2010, a NATO Trust Fund project planned to provide support to establish long-term local capacity for the ERWCC in clearance and victim assistance.<sup>27</sup> As part of the project, 66 members of the Georgian Army Engineers Brigade were trained in demining, battle area clearance, and explosive ordnance disposal (EOD).<sup>28</sup> Since March 2015, these engineers have been conducting EOD of abandoned explosive ordnance (AXO) and UXO at the former ammunition storage facility at Skra.<sup>29</sup>

## LAND RELEASE

In 2017, The HALO Trust cleared 9,256m<sup>2</sup> of mined area, destroying five anti-personnel mines in the process, and reduced a further 39,568m<sup>2</sup> by technical survey. In 2016, The HALO Trust cleared 7,288m<sup>2</sup> of mined area, and reduced 70,052m<sup>2</sup> by technical survey.<sup>30</sup>

### Survey in 2017

In 2017, The HALO Trust confirmed 48,824m<sup>2</sup> as contaminated with mines at the Chognari minefield and reduced 39,568m<sup>2</sup> of this through technical survey.<sup>31</sup>

The Chognari minefield is part of a former Soviet military base in the Imereti region. It was previously under military restriction but has since been handed over by the government for clearance.<sup>32</sup> Chognari was also the site of an uncontrolled explosion in the 1990s; in addition to the minefield around the perimeter of the base, the site is also contaminated by UXO.<sup>33</sup>

The base threatens the lives and livelihoods of more than 4,500 villagers who live nearby and use the area for grazing their livestock. Once cleared, the Georgian government also plans to build a waste processing facility on the site, which is expected to employ more than 130 people.<sup>34</sup> In addition, certain areas at Chognari will be used to build a water reservoir to supply drinking water to the city of Kutaisi, which has a population of 300,000.<sup>35</sup>

### Clearance in 2017

In 2017, The HALO Trust only had access to one mine contaminated area, Chognari village in the Imereti region. The HALO Trust cleared 9,256m<sup>2</sup> of mined area and destroyed five anti-personnel mines at the Chognari minefield. Clearance was completed in September 2017.<sup>36</sup>

In addition, one anti-personnel mine was destroyed during EOD spot tasks in 2017. The mine was found by HALO Trust deminers during technical survey in Shida Kartli region, the mine was not armed and was considered to be abandoned.<sup>37</sup>

## Progress in 2018

In 2018, HALO Trust planned to conduct non-technical survey in Kadoeti and Khojali, as these areas may be accessible for non-technical survey only.<sup>38</sup> As at April 2018, DELTA was working with the Georgian Ministries, State Security Service and The HALO Trust to plan the surveys of these areas.<sup>39</sup>

## ARTICLE 5 COMPLIANCE

Georgia is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

HDD/ERWCC operates under DELTA within the Ministry of Defence and is financed from the state budget.<sup>40</sup> The HALO Trust does not receive national funding from Georgia for its survey and clearance operations.<sup>41</sup> The HALO Trust is operating on approximately the same amount funding in 2018 as it received in 2017. If access is granted HALO Trust expects to mobilise up to US\$1 million for clearance of the remaining minefields in Georgia.<sup>42</sup>

Between 2009 and the end of 2012, using international funding HALO Trust cleared five minefields with humanitarian impact and identified a sixth.<sup>43</sup> In 2013 and 2014, HALO Trust focused on clearing former firing ranges. In 2015, The HALO Trust briefly focused on technical survey of the Red Bridge minefield before the survey was forced to halt, and did not undertake any mine clearance. In 2016, in a positive development, The HALO Trust began survey and clearance of the Chognari minefield, which it finished clearing in September 2017. There are a total of six mined areas still remaining in Georgia. Four of these minefields have a humanitarian impact and two are active military bases which are believed to be mined. Currently, HALO Trust does not have access to any of these mined areas due to political and security reasons. If access is not granted to HALO Trust to clear remaining minefields it will consider winding down all operations in Georgia in mid-2019. It is not known if any of the restricted military areas has been cleared of mines.<sup>44</sup>

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# INDIA

## RECOMMENDATION FOR ACTION

- India should accede to the Anti-Personnel Mine Ban Convention (APMBC) and clear all mined areas as a matter of priority.

## CONTAMINATION

India is contaminated with mines, mainly as a result of large-scale mine-laying 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.

Despite occasional 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<sup>2</sup> of irrigated land was still mined in the Akhnoor sector of the LoC alone.<sup>1</sup> 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.<sup>2</sup>

In 2017–18, a number of landmine incidents continued to be reported, primarily involving Indian army personnel, but also civilians. From April to June 2018, a man and a woman were injured and one man killed when they accidentally triggered landmines while tending to their animals near the LoC in the Poonch district.<sup>3</sup> In September 2017, three soldiers were injured, and in August 2018, a soldier was killed in landmine explosions near the LoC in north Kashmir's Kupwara district while on routine patrols.<sup>4</sup> In August 2017, it was reported that an Indian soldier was injured in a mine blast near the LoC in Keran sector of Jammu and Kashmir.<sup>5</sup>

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.<sup>6</sup> However, mine types are usually not specified and may include command-detonated explosive devices as well as mines (i.e. victim-activated explosive devices).<sup>7</sup>

## 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 2017. The Army Corps of Engineers is responsible for clearing mines placed by non-state armed groups.<sup>8</sup> 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.<sup>9</sup> 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.<sup>10</sup>

India has not reported that any mine clearance has occurred in its Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency reports since 2006.<sup>11</sup> In August 2016, India stated that “mines used for military operations were laid within fenced and marked perimeters and were cleared after operations”.<sup>12</sup>

## ARTICLE 5 COMPLIANCE

India is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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# IRAN

## RECOMMENDATIONS FOR ACTION

- Iran should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Iran should seek international assistance to develop a humanitarian mine action programme.

## CONTAMINATION

Iran is contaminated by anti-personnel and anti-vehicle mines, mainly as a result of the 1980–88 war with Iraq. Mine contamination is concentrated in five western provinces bordering Iraq, although the extent of the remaining threat is unknown.

Minister of Defence Hossein Dehghan said in 2014 that the 4,500km<sup>2</sup> of mine and explosive remnants of war (ERW) contamination left by the Iran-Iraq war in the five western provinces had been reduced to 280km<sup>2</sup>.<sup>1</sup> In February 2014, the Iran Mine Action Center (IRMAC) reported that the five Western provinces had remaining contamination totalling 250km<sup>2</sup>.<sup>2</sup>

However, two anti-vehicle mine incidents occurred in early 2014 in the Lut desert spanning central and eastern Iran where police reportedly placed mines as a measure against drug traffickers, pointing to contamination outside the five most affected provinces.<sup>3</sup> 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. A further complication for contamination estimates are reports of continuing casualties in areas that were supposed to have been cleared.

An Iranian non-governmental organisation (NGO), Iran Without Landmines, documented 79 casualties from landmines and other ERW in 2017, (17 killed and 62 seriously injured). It said Ilam province, where four people were reported killed in 2017, had the highest number of casualties.<sup>4</sup> Iranian media have reported additional mine/ERW casualties in 2018.

## 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. It is responsible for planning, data, managing survey, procurement, and the accreditation of demining operators. IRMAC's director is General Mohammad Hussein Amir Ahmadi and many staff are believed to be serving or former military personnel.

IRMAC issues clearance contracts to private companies, army engineers, and the Iranian Revolutionary Guard Corps. It also 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.<sup>5</sup>

### Quality Management

There is no available information on quality management procedures. In the past, very high levels of casualties were recorded during demining in Iran.

### Information Management

IRMAC maintains a mine action database but it is not known if it is comprehensive, actively maintained, and up to date.

The National Iranian Oil Company (NIOC) also maintains a mine action database recording the results of its own clearance contracts.<sup>6</sup>

### Operators

Mine clearance in Iran is mainly conducted by the Iranian Army and Iranian Revolutionary Guard Corps.

IRMAC combines the roles of regulator and operator, with demining teams and support staff employing around 250 personnel deployed in five affected provinces.<sup>7</sup>

Commercial operators include AOM Co., Immen Sazan Omran Pars International Co., Immen Zamin Espadana, and Solh Afarinan-e Bedoun-e Marz (SABMco). Two other companies, Moshaver Omran Iran and ZPP International Co., undertake QA/QC.<sup>8</sup>

Petroleum Engineering and Development Company (PEDEC), the development arm of the NIOC, contracts and supervises commercial operators conducting clearance of Iran's oil and gas producing areas which are concentrated in mine-affected areas of south western Iran bordering Iraq.<sup>9</sup>

International operators are not believed to have been active in Iran since 2008.

## LAND RELEASE

Iran has not published details of mine survey or clearance in recent years. In 2017, President Hassan Rouhani observed that countries which had supplied Iraq with mines during the Iran-Iraq war had not provided Iran with the technology to clear them.<sup>10</sup>

## ARTICLE 5 COMPLIANCE

Iran is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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- 1 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.
  - 2 IRMAC PowerPoint presentation at IRMAC headquarters, Tehran, 9 February 2014.
  - 3 "Mine Explosion Killed a Desert Explorer in Birjand", *Islamic Republic News Agency*, 4 January 2014; and "Four tourists hit a landmine in Lut: one was killed", *Iranian Students' News Agency*, 25 March 2014.
  - 4 Leila Alikarami, "Iran-Iraq War continues to claim lives", *Al-Monitor*, 4 April 2018.
  - 5 IRMAC PowerPoint Presentation, Tehran, 9 February 2014; and IRMAC, "Presentation of IRMAC".
  - 6 Email from Reza Amaninasab, Ambassadors for Development without Borders, Tehran, 9 July 2018.
  - 7 Information provided by mine action expert on condition of anonymity.
  - 8 Email from Reza Amaninasab, Ambassadors for Development without Borders, Tehran, 9 July 2018.
  - 9 PEDEC website, [www.pedec.ir/en](http://www.pedec.ir/en); and email from Reza Amaninasab, Ambassadors for Development without Borders, Tehran, 9 July 2018.
  - 10 "President: Those provided Saddam with mines denied Iran demining technology", *Iran Daily*, 2 May 2017, at: <http://www.iran-daily.com/News/191982.html>.

## ISRAEL

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	5	5
Target date for completion of mine clearance	4	4
Targeted clearance	6	6
Efficient clearance	6	6
National funding of programme	6	6
Timely clearance	5	5
Land-release system in place	8	8
National mine action standards	8	8
Reporting on progress	8	7
Improving performance	7	7
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.3</b>	<b>6.2</b>

## PERFORMANCE COMMENTARY

In 2017, Israel's mine action programme continued to make progress in landmine clearance and also cancelled suspected mined area in the Arava region of the Jordan Valley, through non-technical survey.

## RECOMMENDATIONS FOR ACTION

- Israel should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Israel should report the extent of mine contamination nationwide, not merely the areas considered not essential for Israel's security.

## CONTAMINATION

The exact extent of mine contamination in Israel is not known. Israel has reported 41.58km<sup>2</sup> of confirmed mined area and a further 48.51km<sup>2</sup> of suspected mined area, as at the end of 2017.<sup>1</sup> The combined 90km<sup>2</sup> 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. It includes 18.38km<sup>2</sup> of mined area in the Jordan Valley (11.84km<sup>2</sup> of anti-personnel mined area, 6.19km<sup>2</sup> of anti-vehicle mined area, and 0.35km<sup>2</sup> of mixed anti-personnel and anti-vehicle mined area) and the West Bank<sup>2</sup> (see Mine Action Review's *Clearing the Mines* report on Palestine for further information).

**Table 1: Mine contamination (at end-2017)<sup>3</sup>**

Type of contamination	CHAs	Area (km <sup>2</sup> )	SHAs	Area (km <sup>2</sup> )
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	7.8
<b>Totals</b>	<b>232</b>	<b>41.58</b>	<b>22</b>	<b>48.51</b>

AP = Anti-personnel AV = Anti-vehicle CHA = Confirmed hazardous area SHA = Suspected hazardous area

Israel's mine problem dates back to World War II. 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.<sup>4</sup>

The 2017 estimate of 90km<sup>2</sup> for mined areas that are not considered essential for Israel's security is a small reduction on the 2016 estimate of 91km<sup>2</sup>.<sup>5</sup> The 0.66km<sup>2</sup> of mine clearance in Israel and over 0.52km<sup>2</sup> of cancellation through survey in Israel in 2017, was offset by the discovery of more than 1.17km<sup>2</sup> of new, previously unrecorded, mine contamination.<sup>6</sup>

Mine contamination in Israel impacts progress in regional development, and poses a risk to local communities.<sup>7</sup> In the Golan Heights the mines laid by Syrian forces remain largely unknown and 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.<sup>8</sup>

## PROGRAMME MANAGEMENT

A March 2011 law on minefield clearance established the Israeli National Mine Action Authority (INMAA) to undertake a "comprehensive programme of mine clearing projects inside Israel."<sup>9</sup> 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."<sup>10</sup>

The INMAA, which has 10 staff, was established in the Ministry of Defence, with ministry staff responsible for planning mine action.<sup>11</sup> The INMAA manages a "minefield information bank" that is open for public queries concerning demining plans and programmes.<sup>12</sup>

### Strategic Planning

The INMAA has a multi-year clearance plan for 2017–20 that plans to focus on technical survey and clearance in northern Israel (the Golan Heights) in the spring/summer/autumn, and in southern Israel (the Jordan Valley and Arava Plain) in the winter.<sup>13</sup>

In addition, the INMAA continues to oversee HALO Trust clearance projects in Area C of the West Bank, funded by the Netherlands, the United Kingdom, and the United States (via ITF Enhancing Human Security).<sup>14</sup> Furthermore, at the start of 2017, the INMAA began survey of the Jordan Valley minefields in the West Bank, using national budget and operating through Israeli companies. The INMAA sees significant potential for

cancellation and reduction of land in the Jordan Valley, and is using various technologies and scientific tools to measure mine drift possibilities. The INMAA has planned to invest around NIS 900,000 (approximately US\$250,000) in this project in 2017–19<sup>15</sup> (see Mine Action Review's *Clearing the Mines* report on Palestine for further information). A number of development projects funded by local electricity, water, and infrastructure companies and authorities also pay for mine clearance.<sup>16</sup>

The INMAA, “defines clearance policies, sets the national priorities and implements them in coordination with other relevant governmental ministries, the IDF, and local authorities.”<sup>17</sup> Clearance tasks are assigned according to a classification formula laid down by the INMAA, and prioritisation is set nationally every three years. The criteria used for the formula are largely based on the risk level and development potential of the affected areas.<sup>18</sup> The INMAA has been conducting a study of the social and economic impacts of land released over the last four years, as well as on the potential impact for future clearance sites.<sup>19</sup>

## Legislation and Standards

The 2011 law on minefield clearance noted above is the main legislation governing mine action. The INMAA sets national standards “taking into consideration the procedures of the Israel Defense Forces that will be as compatible as possible with the International Mine Action Standards.”<sup>20</sup>

## Quality Management

Every mine clearance project in Israel has an INMAA supervisor, a quality assurance/quality control (QA/QC) contractor, and a clearance operator. Four QA/QC contractors were formally registered as at May 2018, namely: 4CI, Dexagon, Gaman, and Zeev Levanon. Of these four, 4CI and Gaman were contracted to conduct QA and QC of clearance operations in 2017.<sup>21</sup>

## Information Management

The information management system for demining operations in Israel is not known.

## Operators

Commercial companies are contracted to conduct clearance as well as QA and QC. In 2017, clearance was contracted to four national companies: 4M, the Israeli Mine Action Group (IMAG), Maavarim, and Safeland. In addition, Ecolog conducted geomorphological and hydrological surveys in 2017, together with the INMAA, to assist with cancellation of previously flooded SHAs that could potentially contain mines.<sup>22</sup>

Israel uses several kinds 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. Some of these operations are conducted by Israel directly, while others are performed by contractors.<sup>23</sup>

Throughout 2016 and 2017, the INMAA was supported by the Geneva International Centre for Humanitarian Demining (GICHD) in developing its animal detection system capacity.<sup>24</sup> A pilot project using mine detection dogs (MDDs) was conducted in 2017,<sup>25</sup> but was not successful.<sup>26</sup> However, after investigating and conducting further research into animal detection and behaviour, the INMAA plans to conduct another trial in 2019.<sup>27</sup>

In 2017, 106 demining personnel and 36 machines were deployed for clearance operations.<sup>28</sup> This is a decrease on the 130 explosive ordnance disposal (EOD) personnel and 50 machines deployed in 2016.<sup>29</sup>

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.<sup>30</sup> During wintertime, 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.<sup>31</sup>

In addition, the INMAA reported that it had secured the continuation of HALO Trust's clearance programme in Area C of the West Bank until the end of 2019.<sup>32</sup> The HALO Trust works under the auspices of both the INMAA and the Palestine Mine Action Centre (PMAC), primarily with funding from international donors<sup>33</sup> (see Mine Action Review's *Clearing the Mines* report on Palestine for further information).

## LAND RELEASE

In 2017, more than 0.66km<sup>2</sup> was released through clearance (excluding the West Bank),<sup>34</sup> compared to 0.92km<sup>2</sup> of cleared in 2016.<sup>35</sup>

In addition, 0.52km<sup>2</sup> was cancelled by Ecolog through non-technical survey in Zofar, in the Middle Arava area in 2017. No mined area was released by survey in 2016.<sup>36</sup>

For further information on survey and clearance in the West Bank, see Mine Action Review's *Clearing the Mines* report on Palestine.

## Survey in 2017

In 2017, 0.52km<sup>2</sup> was reported to have been cancelled through secondary non-technical survey by Ecolog, in collaboration with the INMAA, in Zofar in the middle Arava area of Israel.<sup>37</sup>

A further 0.85km<sup>2</sup> was also cancelled through non-technical survey by Ecolog in 2017, in collaboration with the INMAA, in the Jordan Valley in the West Bank<sup>38</sup> (see Mine Action Review's *Clearing the Mines* report on Palestine for further information).

## Clearance in 2017

More than 0.66km<sup>2</sup> of land was released by clearance in 2017 (excluding the West Bank), with the destruction of 737 anti-personnel mines, 133 anti-vehicle mines, and 38 items of unexploded ordnance (UXO).<sup>39</sup>

**Table 2: Mine clearance in 2017 (excluding the West Bank)<sup>40</sup>**

Operator	Region	Location	Type of contamination	Areas released	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Maavarim	Eilat	Eilat	AP mines	4	201,709	49	0	1
		Timna	AP mines	3	154,210	51	0	1
Safeland	Middle Arava	Ein Yahav	AP mines	2	65,338	16	0	0
4M	Valley of Springs	Newn Ur	AP mines	1	20,377	9		5
IMAG	Golan Heights	Kela	AP/AV mines	3	222,053	612	133	31
<b>Totals</b>				<b>13</b>	<b>663,687</b>	<b>737</b>	<b>133</b>	<b>38</b>

The INMAA typically plans for mine clearance at a targeted rate of 1.5km<sup>2</sup> per year (including in the West Bank), based on its current budget.<sup>41</sup>

IDF demining is implemented independently of the INMAA, using military methods and techniques.<sup>42</sup> The area cleared or otherwise released by the IDF is unknown. According to Israel's Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency report for 2017, the IDF has made significant progress in "re-surveying mine

affected areas, and in examining the possibility of area cancellation, following a completion of a fully detailed non-technical survey."<sup>43</sup>

In addition, The HALO Trust continued its clearance of minefields in Area C of the West Bank in 2017, working under the auspices of both the INMAA and PMAC, primarily with international funding (see Mine Action Review's *Clearing the Mines* report on Palestine for further information).

## ARTICLE 5 COMPLIANCE

Israel is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

In 2017, the annual mine action budget for Israel was NIS 41.7 million (approx. US\$11.5 million), of which NIS 27 million was from the INMAA's budget and NIS 14.7 million from additional external funding by various infrastructure development companies and state authorities.<sup>44</sup> This represents roughly the same funding compared to 2016,<sup>45</sup> with slightly less external funding, but with the state budget remaining the same.

Based on the clearance rates of the last few years and the INMAA's forecasted clearance rate of 1.5km<sup>2</sup> per year, it will take many years to clear remaining contamination. The INMAA is seeking additional funding and assistance to speed up operations.<sup>46</sup>

**Table 3: Mine clearance in 2013–17 (excluding the West Bank)<sup>47</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	0.7
2016	0.9
2015	0.7
2014	1.2
2013	2.2
<b>Total</b>	<b>5.7</b>

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- 1 Email from Michael Heiman, formerly Director of Technology and Knowledge Management, Israeli National Mine Action Authority (INMAA), 26 May 2018.
- 2 Ibid.
- 3 Ibid.
- 4 "Israel army plants new mines along Syria border", Associated Press, 13 August 2011, at: <http://news.yahoo.com/israel-army-plants-mines-along-syria-border-085636592.html>.
- 5 Email from Michael Heiman, then INMAA, 23 July 2017.
- 6 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 7 Email from Michael Heiman, then INMAA, 19 September 2016.
- 8 "New Golan mine-clearing project to begin this summer", The Jerusalem Post, 16 March 2017, at: <https://www.jpost.com/Israel-News/New-Golan-mine-clearing-project-to-begin-this-summer-484407>.
- 9 Minefield Clearance Law 5771-2011 of March 2011, unofficial translation at: <http://www.scribd.com/doc/133780125/Israel-s-Minefield-Clearance-Act-of-2011-English-Translation-byDhyan-Or>. See Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (for 2010), Form A. Form A refers to details provided in Form D, but information in Form D has been deleted.
- 10 Minefield Clearance Law 2011 (MCL 5771-2011).
- 11 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 12 Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (for 2017), Form A.
- 13 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 14 Interview with Tim Porter, Regional Director, HALO Trust, Geneva, 15 February 2018.
- 15 Emails from Michael Heiman, then INMAA, 23 July and 10 August 2017.
- 16 Email from Michael Heiman, then INMAA, 19 September 2016.
- 17 CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 18 Email from Michael Heiman, then INMAA, 23 July 2017.
- 19 Email from Michael Heiman, then INMAA, 19 September 2016.
- 20 Emails from Michael Heiman, then INMAA; and Eran Yuwan, Ministry of Foreign Affairs, 6 May 2012.
- 21 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 22 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 23 Email from Michael Heiman, then INMAA, 23 July 2017; and CCW Amended Protocol II Article 13 Report (for 2017), Form C.
- 24 CCW Amended Protocol II Article 13 Reports (for 2016 and 2017), Form E.
- 25 Email from Michael Heiman, then INMAA, 23 July 2017.
- 26 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 27 Ibid.
- 28 Ibid.
- 29 Email from Michael Heiman, then INMAA, 23 July 2017.
- 30 Email from Eran Yuwan, Ministry of Foreign Affairs, 29 April 2014; and CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 31 CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 32 Email from Michael Heiman, then INMAA, 23 July 2017.
- 33 HALO Trust, "West Bank", accessed 17 July 2018.
- 34 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 35 Email from Michael Heiman, then INMAA, 23 July 2017.
- 36 Emails from Michael Heiman, then INMAA, 19 September 2016 and 23 July 2017.
- 37 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 38 Ibid.
- 39 Ibid.
- 40 Ibid.
- 41 Ibid.
- 42 Ibid; and email from Eran Yuwan, Ministry of Foreign Affairs, 29 April 2014.
- 43 CCW Amended Protocol II Article 13 Report (for 2017), Form B.
- 44 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 45 Email from Michael Heiman, INMAA, 23 July 2017.
- 46 Ibid.
- 47 See Landmine Monitor and Mine Action Review reports on clearance in Israel covering 2013–16.



# KYRGYZSTAN

## RECOMMENDATIONS FOR ACTION

- Kyrgyzstan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- 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 its remaining mined areas and clearance operations.

## 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.<sup>1</sup> It was reported, however, that rainfall and landslides had caused some mines to shift.<sup>2</sup>

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.<sup>3</sup> 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.<sup>4</sup>

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.<sup>5</sup> In June 2011, a government official confirmed: "We do not have any minefields on the territory of Kyrgyzstan."<sup>6</sup>

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 25 July 2013, when the ITF signed a Protocol on Cooperation with the Ministry of Defense of the Kyrgyz Republic.<sup>7</sup> The ITF has reported that in 2014 it continued to implement activities agreed on in the Protocol on Cooperation. This includes technical checks on anti-personnel mines and other ammunition in three storage warehouses, procurement of explosive ordnance disposal (EOD) equipment, and support for disposal of ammunition surpluses.<sup>8</sup>

## PROGRAMME MANAGEMENT

Kyrgyzstan has no functioning mine action programme.

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## LAND RELEASE

There are no reports of any survey or clearance of mined areas occurring in 2017.

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## ARTICLE 5 COMPLIANCE

Kyrgyzstan is not a party or signatory to the APMB, but nonetheless Kyrgyzstan has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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- 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: [www.uzbekistan.wordpress.com](http://www.uzbekistan.wordpress.com).
  - 4 "Tug-Of-War: Uzbekistan, Kyrgyzstan Look To Finally Settle Decades-Old Border Dispute", *Radio Free Europe*, 14 December 2017, at: <https://www.rferl.org/a/uzbekistan-kyrgyzstan-resolving-decades-old-border-dispute/28918059.html>.
  - 5 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.
  - 6 Letter from Amb. G. Isakova, Permanent Mission of Kyrgyzstan to the UN in Geneva, 29 June 2011.
  - 7 ITF, "Kyrgyz Republic", accessed 10 October 2015, at: <http://www.itf-fund.si/activities/central-asia/kyrgyz-republic>.
  - 8 Ibid.



# LAO PDR

## RECOMMENDATIONS FOR ACTION

- Lao PDR should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.

## CONTAMINATION

While by far the greatest contamination in Lao PDR is from explosive remnants of war (ERW), including 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, but the extent 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.<sup>1</sup> A Handicap International survey in 1997 found mines in all 15 provinces it surveyed, contaminating 214 villages.<sup>2</sup> In the past clearance operators have estimated Lao PDR may have 1,000 mined areas.<sup>3</sup>

The remote location of many of these areas means that mines have little impact and are not a clearance priority. Of 115,554 items of UXO destroyed by operators in 2017, only 38 (0.03%) were mines.<sup>4</sup> The National Regulatory Authority (NRA), however, has stated that anti-personnel and anti-vehicle mines were “used in abundance” and observed that “with a steady expansion of land use “mined areas” will become areas for growing concern.”<sup>5</sup>

The NRA reports that “gravel mines” had all degraded but remaining mine types included United States-manufactured 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.<sup>6</sup>

According to Norwegian People’s Aid (NPA), 12 of Lao PDR’s 17 provinces are believed to contain landmines, but the details and nature of the contamination are unknown, and international non-governmental organisations (NGOs) do not have access to mined areas.<sup>7</sup>

## 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.<sup>8</sup> Until 2011, the NRA came under the supervision of the Ministry of Labour and Social Welfare. A decree issued in June 2011 appointed a minister in the Prime Minister's Office responsible for rural development and poverty reduction as Vice-Chair of the Board, together with the Vice-Minister of Foreign Affairs.<sup>9</sup> A February 2015 decree expanded the NRA board to 22 members, which was chaired by the Minister in the Prime Minister's Office responsible for rural development, Bounheuang Douangphachanh, and with ministers of Defence, Foreign Affairs and Labour and Social Welfare as vice-chairmen.<sup>10</sup>

A parliamentary election in March 2016 led to leadership changes, including the retirement of Bounheuang Douangphachanh. In September 2016, the government transferred the NRA and the mine action sector back under the control of the Ministry of Labour and Social Welfare. This move was reportedly aimed at helping improve efficiency by distributing responsibility for committees across ministries, rather than too many committees falling under the responsibility of the Prime Minister's office.<sup>11</sup> It is said, however, to have resulted in confusion at provincial and district level about responsibilities. In 2018, there were moves to make the Director of UXO Lao a deputy director of the NRA, alongside two existing deputy directors, and with a responsibility for overseeing UXO Lao (the national operator).<sup>12</sup>

According to Lao PDR's national standards, "The Lao PDR National Regulatory Authority (NRA) is the authority responsible for the overall management of UXO/mine action within Lao PDR. This responsibility includes establishing requirements for mine clearance operations and ensuring that these requirements are met."<sup>13</sup> According to the NRA itself, responsibility for clearance of mined areas in Lao PDR predominantly falls under the remit of the Lao armed forces, and if landmines are discovered the army is called to destroy them.<sup>14</sup>

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.<sup>15</sup> Further capacity development in information management, quality management, and operations support, is provided primarily to UXO Lao, and to a lesser extent the NRA, through a United States-funded grant manager, Sterling International. As part of its work, Sterling International has also provided training in both survey and data analysis and correction to UXO Lao and international clearance operators.<sup>16</sup> In May 2018, it was announced that Tetra Tech had won the new tender for this role.

## Legislation and Standards

Lao PDR's national standards make a clear distinction between UXO clearance 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."<sup>17</sup> As such, the National Standard on UXO clearance, only relates to UXO clearance operations and not to mine clearance operations.<sup>18</sup>

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."<sup>19</sup>

According to Lao PDR's national standard on Mine Clearance Operations, "Mine clearance operations; 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."<sup>20</sup> 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."<sup>21</sup>

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."<sup>22</sup>

## LAND RELEASE

No planned or systematic mine clearance was conducted during 2017, though 38 mines, along with 90,160 CMR, 124 bombs, and 25,232 other UXO items, were reported to have been destroyed by operators in 2017, according to Lao PDR's transparency reporting under the Convention on Cluster Munitions and the Convention on Conventional Weapons.<sup>23</sup>

In reporting to Mine Action Review, the NRA reported a slightly lower figure of 23 mines destroyed during clearance, technical survey, and roving/spot tasks in 2017 (three mines destroyed by the Lao armed forces; one by The HALO Trust; one by Mines Advisory Group (MAG); two by NPA; and sixteen by UXO Lao).<sup>24</sup>

The mine destroyed by MAG was an unfuzed M16 anti-personnel mine that was reported as having been found in a forest in Nonghet, Xiangkhouang province.<sup>25</sup>

NPA confirmed that it did not destroy any anti-personnel mines in 2017 in Lao PDR, and it believes that the two mines reported to Mine Action Review by the NRA as having been destroyed by NPA in 2017 were in fact due to an NPA reporting error during database entry.<sup>26</sup>

According to UXO Lao's own data, 34 anti-personnel mines were destroyed during its operations in 2017, of which 17 were destroyed during roving tasks/spot tasks, and the remainder during ERW survey and clearance.<sup>27</sup>

## ARTICLE 5 COMPLIANCE

Lao PDR is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

- 1 NRA website, "UXO types: Mines", accessed 9 September 2018 at: <http://www.nra.gov.la/mines.html>.
- 2 Handicap International, "Living with UXO, National Survey on the Socio-Economic Impact of UXO in Lao PDR", Vientiane/Brussels, 1997, p. 7.
- 3 Interview with Michael Hayes, Programme Manager, Mines Advisory Group (MAG), Vientiane, 5 February 2004.
- 4 Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 2017), Form A; and Convention on Cluster Munitions (CCM) Article 7 Report (for 2017), Form F.
- 5 NRA website, "UXO types: Mines", 9 September 2018.
- 6 Ibid.
- 7 Email from Ulric Eriksson, Operations Manager, NPA, 1 May 2018.
- 8 NRA, "UXO Sector Annual Report 2009", Vientiane, May 2009, p. 14.
- 9 Prime Minister's Decree No. 164, 9 June 2011; NRA, "National Regulatory Authority for UXO/Mine Action Sector in Lao PDR Switches Ministries", October 2011.
- 10 "Announcement 93: UXO clearance for socio-economic development projects in the Lao PDR", NRA Board, 19 November 2012.
- 11 Email from Olivier Bauduin, UNDP, 10 July 2018.
- 12 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018.
- 13 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 12: Mine Clearance Operations", accessed on NRA website on 14 September 2018, p. 5.
- 14 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018.
- 15 Interview with Olivier Bauduin, UNDP, Vientiane, 2 May 2018; and email, 10 July 2018.
- 16 Interview with Hugh Hosman and Marco Heuscher, Sterling International, Vientiane, 2 May 2018.
- 17 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 0: Introduction and Glossary", accessed on NRA website on 14 September 2018, p. xi.
- 18 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 7: UXO Clearance Operations", accessed on NRA website on 14 September 2018, p. 5.
- 19 Ibid., p. 13.
- 20 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 12: Mine Clearance Operations", accessed on NRA website on 14 September 2018, p. 5.
- 21 Ibid., p. 5, note 1.
- 22 Ibid., p. 5.
- 23 CCW Protocol V Article 10 Report (for 2017), Form A; and CCM Article 7 Report (for 2017), Form F.
- 24 Email from Bouala Thongsavanh on behalf of Phoukhieo Chanthasomboune, NRA, 30 April 2018.
- 25 Email from Neil Arnold, Technical Operations Manager, MAG, 10 September 2018.
- 26 Email from Ulric Eriksson, NPA, 27 September 2018.
- 27 Email from Nigel Orr, Sterling International, 3 October 2018.



# LEBANON

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	6	6
Target date for completion of mine clearance	6	6
Targeted clearance	5	5
Efficient clearance	6	5
National funding of programme	7	7
Timely clearance	6	6
Land-release system in place	5	4
National mine action standards	7	5
Reporting on progress	7	7
Improving performance	6	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.1</b>	<b>5.7</b>

## PERFORMANCE COMMENTARY

The performance of Lebanon's national mine action programme strengthened during 2017, with greater collaboration and consultation between the national authorities and non-governmental clearance operators regarding the revision of Lebanon's national mine action standards (NMAS) and the potential for improving operational efficiencies.

These developments were actively supported and overseen by stronger management and national ownership from the new director of the Lebanon Mine Action Centre (LMAC), who took up his post in early 2017. In collaboration with clearance operators, the United Nations Development Programme (UNDP), and other stakeholders, LMAC discussed making improvements to its accepted methodology for survey and clearance of mined areas, in line with the International Mine Action Standards (IMAS) and other best practice. These included, among others, reduction of the required clearance depth from 20cm to 15cm, and adjustments to the fade-out specifications in pattern minefields. These enhancements were incorporated into the revised NMAS, which was finalised and released in March 2018.

Also in 2017, as part of effort to enhance operational efficiencies, LMAC made greater use of non-technical survey to more accurately define confirmed hazardous area (CHA), and cancel land found not to be contaminated. Lastly, in August 2017, area in Lebanon along its north-east border with Syria, which is believed to contain mines, was liberated from Islamic State by the Lebanese Armed Forces (LAF). Non-technical and technical survey is being conducted to determine the size and nature of the contamination in this area, and will be immediately followed by clearance.

## RECOMMENDATIONS FOR ACTION

- Lebanon should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- LMAC should ensure that all demining organisations update their standing operating procedures (SOPs) to incorporate the enhancements made to the revised NMAS and that these revised survey and clearance methodologies are implemented throughout the mine action programme. Technical working groups under LMAC auspices could provide a useful forum for review of this process.
- Wherever possible, non-technical survey and technical survey should be used to more accurately define areas of actual mine contamination, factoring in the required fade-out distance. This would also help to more accurately establish a national baseline of mine contamination.
- LMAC should review empirical data from clearance operations to date on the Blue line, and in consultation with clearance operators and partner organisations, assess whether the required fadeout distance on the Blue Line can be further reduced to enhance efficiency.
- Where appropriate, LMAC should consider using demining machinery and mine detection dogs (MDDs) as primary as well as secondary clearance assets.
- LMAC should update its workplan for the remaining period of its National Mine Action Strategy 2011–20, to reflect current capacity and the expected impact of the enhancements to land release methodology in the revised NMAS.
- The planned integration and consolidation of the LMAC and Regional Mine Action Centre (RMAC) databases and servers should be carried out as soon as possible, with a view to ensuring mine contamination and land release data are being assessed, recorded, analysed, and extracted accurately and in a timely manner.

## CONTAMINATION

At the end of 2017, Lebanon had a little over 20km<sup>2</sup> of confirmed mined area, including the Blue Line, across 1,415 CHAs (see Table 1).<sup>1</sup> There are also new mined areas along Lebanon's north-east border, resulting from overspill from the conflict in neighbouring Syria.<sup>2</sup> As part of military operation "fajr-al-jouroud", the LAF recaptured Lebanese territory from Islamic State in the outskirts of Ras Baalbek and al-Qaa [towns] on the Syrian border in August 2017. Responsibility for mine action operations in this area were handed over to LMAC in the last quarter of 2017, whereupon LMAC and clearance operators visited the sites.<sup>3</sup> Non-technical and technical survey of the mined area is being conducted to estimate the size of contamination and the type of explosive devices present (believed to include mines of an improvised nature and booby-traps).<sup>4</sup> Survey by Mines Advisory Group (MAG) and Norwegian People's Aid (NPA) began in July 2018, funded by the United States, and follow-on clearance is planned on completion of the survey.<sup>5</sup>

Lebanon is also contaminated with cluster munition remnants (CMR) and other explosive remnants of war (ERW) (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Lebanon for further information).

A further 323 "dangerous areas" totalling more than 15km<sup>2</sup> are suspected to contain mines, booby-traps, CMR, or other unexploded ordnance (UXO) contamination.<sup>6</sup> The "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,<sup>7</sup> for which further investigation/survey is required in order to confirm the type and extent of suspected contamination.<sup>8</sup> LMAC dispatches LAF engineering troops, partner non-governmental organisations (NGOs), and community liaison officers to rapid response call-outs, depending on the situation, the availability of response teams, and proximity to the suspected area.<sup>9</sup>

**Table 1: Mine contamination by province (at end-2017)<sup>10</sup>**

Province	CHAs	Area (m <sup>2</sup> )
Al Beqaa	38	1,107,643
Al Janoub (south Lebanon)	211	1,493,996
Al Nabatiyeh (south Lebanon)	788	6,625,595
Jabal Loubnan (Mount Lebanon)	323	10,562,802
Al Shimal (north Lebanon)	55	278,315
<b>Totals</b>	<b>1,415</b>	<b>20,068,351</b>

The 20km<sup>2</sup> of mine contamination as the end of 2017 is the same as that reported for the end of the previous year,<sup>11</sup> despite clearance having taken place and the fact that no new areas of confirmed mine contamination were recorded in 2017.<sup>12</sup> LMAC clarified that the baseline of anti-personnel mine contamination at end of 2016, including the Blue Line, was nearly 27.8km<sup>2</sup> (the 20.1km<sup>2</sup> of contamination reported in last year's *Clearing the Mines* report excluded the Blue Line). Baseline contamination of 20.1km<sup>2</sup>, at the end of 2017 included deduction of 0.51km<sup>2</sup> of mined area cleared in 2017, and an additional 7.19km<sup>2</sup> of clearance by the armed forces covering several years, but reported in 2017.<sup>13</sup>

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. Mines affect the north and south of the country, though the majority are in the south. The minefields in north Lebanon and Mount Lebanon are typically "militia" 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. The minefields in the south are typically conventional minefields, laid in a pattern and where the location of the mines is identified on minefield maps.<sup>14</sup>

Mines hinder socio-economic development, restricting access to land and productive resources, and preventing construction of schools, parks, and infrastructure of benefit to the local community.<sup>15</sup> Most contamination is on valuable agriculture land and is in rural areas where the use of the land is crucial for livelihood activities.<sup>16</sup> According to LMAC, mine contamination along the Blue Line negatively affects more than 200,000 people.<sup>17</sup> It has been reported that people cross the Blue Line to harvest olive groves and graze livestock.<sup>18</sup>

There was a considerable increase in the number of mine and ERW victims in 2017, with 22 injured and 6 killed.<sup>19</sup> Of this total, LMAC reported that two people were killed by anti-personnel mines, both adult males, and a further eleven injured (one girl, one woman, two boys, and seven men).<sup>20</sup>

## PROGRAMME MANAGEMENT

Established in 1998 by the Council of Ministers, the Lebanon Mine Action Authority (LMAA) is the responsibility of the Ministry of Defence and is chaired by the Minister of Defence himself. The LMAA has overall responsibility for Lebanon's mine action programme. 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.<sup>21</sup>

LMAC, part of the LAF,<sup>22</sup> is based in Beirut. Since 2009, the RMAC, based in Nabatiye, which is a part of LMAC, has overseen operations in south Lebanon and western Beqaa, under LMAC supervision.<sup>23</sup> The Director of LMAC is typically rotated every couple of years, and in recent years there has been a high turnover of the colonels who have run the RMAC. Both factors have the potential to negatively affect the management of the two mine action centres. A new director of LMAC started in early 2017, while a new director of RMAC started in May of that year.<sup>24</sup>

There is good coordination and collaboration between LMAC/RMAC and clearance operators. In south Lebanon, coordination meetings between RMAC and operators take place at least monthly, during which clearance operations, quality assurance (QA), and other operational issues are openly discussed.<sup>25</sup> LMAC also manages risk education and victim assistance.<sup>26</sup>

UNDP personnel, funded by the European Union (EU), are also seconded to LMAC and RMAC, providing support towards capacity building, including for transparency reporting, strategic reviews, information management system for mine action (IMSMA) database entry, community liaison, and QA.<sup>27</sup> A donor support group meeting is convened annually, which brings together donors, operators, and the national authorities.<sup>28</sup>

In 2015, the Lebanese Ministry of Defence, represented by LMAC, signed a Memorandum of Understanding with the Geneva International Centre for Humanitarian Demining (GICHD) to manage and coordinate the Arab Regional Cooperation Programme.<sup>29</sup> The role of the Programme includes support to the national authorities in mine action in the MENA region; technical assistance and training; the coordination and hosting of exchange visits; promotion of best practices and documentation of lessons learned; and the mobilisation of funding.<sup>30</sup> Planning, management, and coordination of the programme were handed over to LMAC at the beginning of 2017.<sup>31</sup>

In addition, a Regional School for Humanitarian Demining in Lebanon has been built in partnership between Lebanon and France, with technical mine action support provided by a French military officer dispatched to LMAC, to support the development of the curriculum on EOD disposal (levels 1, 2, and 3) in compliance with IMAS.<sup>32</sup> In the second half of 2017, the Regional School became operational, enabling civilian and military personnel from Arab and other countries to benefit from a wide array of courses and workshops related to demining.<sup>33</sup> Training in 2017 addressed non-technical survey, EOD level 1, and gender and diversity in mine action in 2017.<sup>34</sup> Multiple further courses were planned for 2018.<sup>35</sup>

In November 2016, a Lebanon-focused workshop on implementation of Convention on Cluster Munitions (CCM) Article 4, convened by Norway and the Netherlands, opened a direct line of dialogue between LMAC, donors, and clearance operators on best practices in land-release methodology and risk management, including the potential for enhanced operational efficiencies through better use of non-technical and technical survey, as well as to offer peer-to-peer advice for the ongoing revision of Lebanon's NMAS.<sup>36</sup> LMAC subsequently demonstrated a willingness to discuss changes to NMAS and ways in which to maximise operational efficiencies in the field. These included more appropriate clearance depths and adjustments to fade-out specifications for both mines and CMR, and the potential for enhanced use of evidence-based survey as part of the land release process. This approach of enhanced cooperation has been actively embraced by the new director of LMAC, who assumed his new post in early 2017.<sup>37</sup>

On 17 January 2018, a follow-up workshop on survey and clearance was organised in Beirut by the Norwegian Embassy, again facilitated by the GICHD, and with active participation from national and international operators, donors, and representatives from UNDP and Mine Action Review.<sup>38</sup> During the workshop, Norway expressed its desire to establish a regular forum for LMAC to continue dialogue and collaboration with donors, clearance operators, and partner organisations, to discuss priorities and needs in cluster munition and landmine survey and clearance at the national level. This concept received wide-ranging support from the stakeholders who participated at the workshop, and it was agreed that an informal "Mine Action Forum" is established in Lebanon, which will meet twice a year. The Mine Action Forum concept underscores the importance of national ownership as the key to successful collaboration.<sup>39</sup> It is an example of what a "Country Coalition" under the 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.

### Strategic Planning

In September 2011, LMAC adopted a strategic mine action plan for 2011–20.<sup>40</sup> The plan called for clearance of all CMR by 2016, and for completion of mine clearance outside the Blue Line by 2020. Both goals are dependent on capacity, but progress has fallen well short of planning targets,<sup>41</sup> which will not be met.

A first mid-term review to the strategy was conducted in January–March 2014 to assess progress towards the 2013 milestone, and to adjust the 2016 and 2020 milestones accordingly. The review revealed that in 2011–13 mine clearance was slow, suffering from underfunding (with consequently few operating teams), while previously unrecorded contaminated areas were also identified.<sup>42</sup>

A second, mid-term assessment of the period 2014–16, undertaken in 2016, but only released in March 2018, came to similar conclusions. It highlighted the huge gap between actual mine clearance output and planned output (according to the original strategy). The second milestone assessment also reflected on the achievements, challenges, and lessons learned, offering recommendations that reflected available resources (financial and human), as well as a qualitative roadmap to target 2020.<sup>43</sup>

Prior to 2016, demining along the border with Israel had been said to depend on “political developments”,<sup>44</sup> but the Lebanese government subsequently took the decision to initiate larger-scale, planned clearance on the Blue Line,<sup>45</sup> and clearance by humanitarian demining operators began in November 2016.<sup>46</sup>

Lebanon has set four levels of priority regarding mine action. The first is to address infrastructure (housing, roads, hospitals, schools etc.); the second is to address facilities such as water, electricity, sewage, and landlines; the third is to release agricultural land, including livestock etc.; and the fourth is to release land for activities other than agriculture (e.g. nature reserves or areas used by wildlife).<sup>47</sup> Areas in which mine-related incidents occur are immediately designated high priority.<sup>48</sup>

LMAC selects and assigns tasks for clearance based on the priorities set according to the initial survey, while updated information may lead to a change in priority for some areas. LMAC planned to survey all designated high-priority sites, to obtain accurate information, before tasking them for clearance.<sup>49</sup> Analysis during the 2016 second milestone review of the national strategic plan highlighted the importance of evidence-based decisions in prioritising and tasking clearance operations, bearing in mind the linkages between mine action and the sustainable development goals.<sup>50</sup>

In 2017, LMAC organised a workshop on gender mainstreaming in mine action.<sup>51</sup>

## Legislation and Standards

There is no national mine action law in Lebanon.<sup>52</sup>

Lebanon developed its first NMAS in 2010.<sup>53</sup> Over the last couple of years, and throughout 2017, LMAC worked with UNDP and other partners, under a project funded by the EU, to revise the standards.<sup>54</sup> The revision took place with a view to enhancing efficiency by harmonising national standards with IMAS and international best practice, as well as to add new modules not present in the original NMAS.<sup>55</sup> LMAC adopted a consultative approach to the NMAS revision process, and liaised extensively with demining operators, who submitted recommendations and comments during the revision process.<sup>56</sup>

In February 2018, the revised edition of Lebanon’s NMAS was sent to the Ministry of Defence for approval. In March, the new NMAS were presented to operators during a workshop at the Regional School, during which next steps were discussed for operationalising the new provisions.<sup>57</sup> The revised NMAS have a solid focus on land release and evidence-based decision-making, in line with the IMAS, and based on analysis of operational data collected by the implementing agencies and

recommendations from clearance operators. These include reduction of the required clearance depth of anti-personnel mine from 20cm to 15cm and revision of fade-out requirements for pattern minefield (see the *Land Release* section of this report for more information).<sup>58</sup>

It is expected that these changes will dramatically improve efficiency,<sup>59</sup> and international clearance operators commended the constructive dialogue with LMAC and RMAC during the NMAS revision process.<sup>60</sup> LMAC views the NMAS as a living document, which will need updating regularly to ensure continued harmonisation with relevant developments in IMAS, and taking into consideration field experiences in Lebanon.<sup>61</sup>

NGOs are required to modify their SOPs according to the new NMAS. Pending updating and approval of their SOPs, however, operators can include relevant NMAS revisions in their clearance plans for each task, which are approved by LMAC.<sup>62</sup>

Despite these very positive revisions to the NMAS, use of non-technical survey and technical survey to identify the presence or absence of threat could be strengthened further with respect to mined areas.<sup>63</sup> Historically, clearance tasks assigned to operators by LMAC tend to be deemed to already reflect survey data, and LMAC does not formally permit operators to conduct additional survey as standard matter of course, other than during pre-clearance assessments.<sup>64</sup> At present, clearance operators do have an opportunity to discuss with LMAC/RMAC specific land release considerations for assigned clearance tasks that 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.<sup>65</sup> However, this approach is somewhat contingent on the decision of individual LMAC/RMAC officials, and the process would benefit from a more systematic approach that employs objective land release principles, including priority being given to use of non-technical and technical survey.

LMAC, in collaboration with the clearance operators, will continue to explore ways in which to improve operational efficiencies.<sup>66</sup>

## Quality Management

Between 10% and 40% sampling is conducted during clearance operations by the organisation site supervisor and QA officer; 10% sampling is conducted by the LMAC QA/QC (quality control) officer during work. Up to 30% sampling of a cleared area is conducted by LMAC’s sampling team at the end of the task, but the decision to conduct sampling is decided on a case-by-case basis, and not all released areas are sampled.<sup>67</sup> All areas released in 2017 were checked by QC teams beforehand.<sup>68</sup>

## Information Management

IMSMA is used by LMAC and RMAC to record contamination and land release in Lebanon. LMAC has reported that the system for database entry now more accurately reflects operational data, especially in instances where the task size/area of mine-contamination exceeds the original task size in the database.<sup>69</sup> Previously, any area cleared in excess of the original task size was entered into the database as a new task. Now, while the

contaminated area and area cleared are both recorded, area in excess of the original task size is not recorded as additional tasks in the database.<sup>70</sup>

As at April 2018, there were plans to integrate the RMAC information management database on the LMAC server. Full harmonisation and consolidation of the servers was expected in the course of 2018, which will facilitate synchronisation, as IMSMA reports will be sent directly to LMAC for approval, improving the accuracy and efficiency of the process. The integration will also help better protect data and decrease maintenance costs.<sup>71</sup>

Furthermore, LMAC has secured funding for the migration from its current version of IMSMA (IMSMA NG) 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.<sup>72</sup> UNDP has executed an information technology (IT) assessment to determine the needs of LMAC; how to ensure harmonisation between RMAC and LMAC and enhance data security; explore the options for migration to IMSMA Core; and determine the financial costs of such projects.<sup>73</sup>

## Operators

In 2017, mine clearance was conducted by international operators DanChurchAid (DCA), Handicap International (HI), MAG, NPA, and by the Engineering Regiment of the LAF. Capacity of the NGOs totalled 11 teams,<sup>74</sup> with another two teams working for the LAF Engineering Regiment; five mechanical teams (four operated by the Engineering Regiment of the LAF and one by MAG); and seven MDD teams operated by the Engineering Regiment.<sup>75</sup> In addition, LMAC had four non-technical survey teams in 2017.<sup>76</sup> In addition, UNIFIL also has sufficient demining capacity to enable conduct its operations on the Blue Line.<sup>77</sup>

MDDs and machines are mostly used as secondary assets to support the clearance teams, and in some cases for technical survey, based on needs and the terrain of the area. Machines are used for ground preparation, including rubble removal and vegetation cutting.<sup>78</sup> However, often the terrain is not suitable for MDDs or machines.

In 2017, DCA deployed two manual mine clearance teams.<sup>79</sup>

HI deployed four mine clearance teams in north Lebanon in 2017,<sup>80</sup> totalling 28 deminers, plus supervisors, team leaders, and support staff.<sup>81</sup> This represents the same capacity as the previous year. HI's mine clearance operations in north Lebanon and the Mount Lebanon area are determined by seasonal factors: clearance of minefields below 1,000 metres occurs during winter (October to April), and then clearance tasks above 1,000 metres begin in April and continue through the summer, depending on snow.<sup>82</sup> 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.<sup>83</sup> HI expected its demining capacity to remain the same in 2018.<sup>84</sup>

The number of manual clearance teams deployed by MAG in 2017 varied from three to six (averaging 85 personnel across the year), in addition to one mechanical team.<sup>85</sup> MAG reported an increase in funding for its operations on the Blue Line, mainly due to donors switching from CMR clearance to mine clearance, most notably Japan and the United States. Furthermore, MAG expected an expansion of five demining teams in 2018, under several donors including the United Kingdom and Sweden.<sup>86</sup> In 2018, MAG planned to improve operational efficiency by trialling new methodologies and technologies, including dual sensor technology to reduce the amount of excavation needed on scrap metal.<sup>87</sup>

Prior to 2017, NPA, had only conducted CMR operations in Lebanon, but in January 2017 it expanded the scope of its operations to include mine clearance operations in southern Lebanon along the Blue Line.<sup>88</sup> NPA deployed two manual mine clearance teams in 2017,<sup>89</sup> totalling 18 personnel, including a medic and driver. It expected to maintain this capacity in 2018.<sup>90</sup>

The 2017 capacity of the Engineering Regiment (for combined mine and CMR operations) was said to comprise two mine clearance teams, four mechanical demining teams, and seven MDD teams.<sup>91</sup>

UNIFIL was established in 1978<sup>92</sup> to confirm 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.<sup>93</sup> 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. UNIFIL does not conduct clearance on the Blue Line for humanitarian purposes but only to facilitate placement of markers by clearing three-metre-wide lanes into mined areas.<sup>94</sup> UNIFIL coordinates demining activities with the LAF and LMAC.<sup>95</sup> The UN Mine Action Service (UNMAS) continues to engage with UNIFIL regarding the possibility of UNIFIL re-engaging in humanitarian mine action.<sup>96</sup> LMAC reported that it held a meeting with UNIFIL in April 2018 to discuss a memorandum of understanding (MoU) for cooperation on demining.<sup>97</sup> UNMAS reported that Lebanon and UNIFIL has discussed the topic of UNIFIL tasking assets for humanitarian mine clearance, but as at August 2018, no agreement had been signed.<sup>98</sup>

In 2017, operational assets were provided by two UNIFIL Troop Contributing Countries: Cambodia and China. Operational capacities and capabilities of UNIFIL are determined by operational need, and capacity as at August 2018 comprised five manual clearance teams, two EOD teams, and one mechanical team.<sup>99</sup>

UNMAS trains UNIFIL demining units and conducts QA and monitoring of UNIFIL demining to ensure compliance with NMAS and IMAS.<sup>100</sup>

## LAND RELEASE

Total mined area released by clearance in 2017 was just below 0.51km<sup>2</sup>,<sup>101</sup> slightly less than the 0.55km<sup>2</sup> of mined area released by clearance in 2016, but with significantly more anti-personnel mines destroyed during the year (8,847 anti-personnel mines in 2017, compared to 417 in 2016). This is due to clearance of high-density mapped minefields on the Blue Line in the South and clearance undertaken by the LAF as part of operation "fajr-al-jouroud", to re-capture Lebanese territory from Islamic State, in outskirts of Ras Baalbek and al-Qaa [towns] on the Syrian Border in August 2017.<sup>102</sup>

A further 0.1km<sup>2</sup> of mined area was reduced by technical survey. Most notably, over 1.2km<sup>2</sup> was cancelled by non-technical survey – a significant increase on 2016.

### Survey in 2017

In 2017, 99,694m<sup>2</sup> of mined area was reduced by technical survey and 1,219,025m<sup>2</sup> of mined area was cancelled through non-technical survey by the LAF, in 23 areas (see Table 2).

In addition, a further 8,000m<sup>2</sup>, in one dangerous area was cancelled, for which the specific type of contamination was not disaggregated.<sup>103</sup>

A total of 221,062m<sup>2</sup> was confirmed as mined.<sup>104</sup>

**Table 2: LAF landmine survey in 2017<sup>105</sup>**

Province	SHAs cancelled	Area cancelled (m <sup>2</sup> )	Areas confirmed as mined	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
Al Janoub (south Lebanon)	10	397,000	0	0	0
Al Nabatiyeh (south Lebanon)	6	818,875	24	218,662	0
Jabal Loubnan (Mount Lebanon)	4	3,100	3	2,400	87,316
Al Shimal (north Lebanon)	3	50	0	0	12,378
<b>Totals</b>	<b>23</b>	<b>1,219,025</b>	<b>27</b>	<b>221,062</b>	<b>99,694</b>

TS = Technical survey

### Clearance in 2017

LMAC reported clearance of almost 0.51km<sup>2</sup> in 2017, with the destruction of 9,205 anti-personnel mines, 184 anti-vehicle mines, and 302 other items of UXO (see Table 3).<sup>106</sup>

**Table 3: Mine clearance in 2017<sup>107</sup>**

Region	Operator	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Mount Lebanon	DCA	18,940	55	0	1
South Lebanon	MAG	48,022	3,166	37	105
North Lebanon	HI	128,904	2,163	0	157
South Lebanon	NPA	42,295	3,463	0	0
	LAF	267,008	358	147	*39
<b>Totals</b>		<b>505,169</b>	<b>9,205</b>	<b>184</b>	<b>302</b>

AP = Anti-personnel AV = Anti-vehicle

\*Number of items of UXO destroyed during clearance in minefields and dangerous areas

In addition, national NGO, Peace Generation Organization for Demining (POD), which conducts CMR clearance in Lebanon, destroyed one anti-personnel mine during its 2017 operations.<sup>108</sup> Furthermore, UNIFIL reported destruction of 317 anti-personnel mines during its 2017 operations on the Blue Line.<sup>109</sup>

HI's clearance output increased by 18% in 2017, compared to the previous year, and the daily productivity of the deminers increased by 20%. HI attributed this increase to the experience of the HI teams; good collaboration with LMAC, especially on the allocation and management of tasks; and to regular internal and external QC visits.<sup>110</sup>

HI reported that of the 16 tasks it cleared in 2017, 5 were found not to contain anti-personnel mines, representing 12% of HI's total clearance output.<sup>111</sup> 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 more accurately define areas of actual contamination. As at August 2018, non-technical survey by LMAC in north Lebanon was ongoing (since 2016), and HI was awaiting the final results of the non-technical survey in order to define its strategy for the coming years.<sup>112</sup> 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.<sup>113</sup>

MAG reported that it cleared one Blue Line minefield, in Meiss El-Jabal (MF1526), in the course of which no anti-personnel mines were found.<sup>114</sup>

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.<sup>115</sup>

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 the CHA based on discussion and agreement between LMAC/RMAC operations officers and clearance operators.<sup>116</sup> 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 fadeout of 5 metres from the mine rows, and technical survey (with a minimum of 30% area covered by technical assets, including mechanical assets) from the edge of the 5-metre fadeout up to the minefield fence. If there is no fence, 10 metres of technical survey is required from the edge of the 5-metre fadeout. Furthermore, the required fadeout for anti-vehicle mines has been reduced from 20 metres to 10 metres.<sup>117</sup> Previously, operators have been required to fully clear the area between the mine-rows and the minefield fence, plus an additional 2 metres outside the fence, with one asset.<sup>118</sup>

Clearance operators expected the enhancements in methodology to result in increased land release output and cost savings in 2018.<sup>119</sup> MAG and NPA also noted that to further enhance efficiencies, fadeout requirements

at the Blue Line could be further assessed based on empirical evidence. Evidence from clearance operations on the Blue Line to date reveals that no mines have been found outside of 5-metres from the outer mine row. In the operators' opinion, technical survey beyond the 5-metre fadeout (up to the minefield fence or for 10-metres in the absence of a fence) should only be required if there is sufficient evidence to suggest mines have migrated from the mine rows to beyond the edge of the 5-metre fadeout (e.g. where there are missing mines or evidence of soil movement) and not as standard.<sup>120</sup> Furthermore, in MAG's opinion, LMAC could consider adjusting the 5-metre fade-out to 3-metres.<sup>121</sup>

In other positive developments, NPA reported that it was now permitted for its clearance teams to breach directly from the safe area to the mine row, in its demining operations on the Blue Line.<sup>122</sup> In addition, MAG was given permission by LMAC to use mechanical assets for missing mine excavations in 2017, which reportedly saves considerable time.<sup>123</sup> Typically, MDDs and mechanical assets are only used as a secondary asset or for fadeout,<sup>124</sup> and furthermore, 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.<sup>125</sup> MAG, however, believes that mechanical assets could also usefully be deployed as a primary asset in South Lebanon, when the terrain permits.<sup>126</sup>

MAG also reported that permission had now been granted for team leaders and deputy team leaders to prepare mine demolitions, rather than just site supervisors as was the required permission system before. This allows for greater flexibility in work planning and operations. At present, mines are destroyed in batches of seven mines per demolition. Operators believe that the number of mines per demolition could be increased to ten or more to further improve efficiency.<sup>127</sup>

All updates are reflected in the NMAS and SOPs, and operators expected these enhancements in methodology to result in increased land release output and cost savings in 2018.<sup>128</sup>

## Deminer Safety

One deminer from the Engineering Regiment of the LAF was injured during anti-personnel mine clearance operations in 2017.<sup>129</sup>

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## ARTICLE 5 COMPLIANCE

Lebanon is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

It has also been stated that "While Lebanon is not signatory to the Ottawa Convention, LMAC works in spirit of the treaty",<sup>130</sup> and that LMAC adheres to its noble causes and tries to work along with the Maputo Action Plan.<sup>131</sup>

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.<sup>132</sup> Current mine clearance capacity is far lower.

The second mid-term review, conducted in 2016, and finally released in March 2018, confirmed that progress against the strategy has fallen well behind schedule, and that significant increased capacity would be required to bridge the gap. LMAC calculates that with a constant capacity of 45 demining teams, supported by two mechanical teams and nine MDD teams, mine clearance (excluding the Blue Line) could be completed within 10 years. Current capacity is however, far lower.<sup>133</sup>

Lebanon has cleared less than 4km<sup>2</sup> of mined area in the last five years, as detailed in Table 4. Based on the reported 20km<sup>2</sup> of total mined area as at the end of 2017, and average clearance rates of less than 1km<sup>2</sup> per year, it will take many years for Lebanon to become mine-free. However, there is the potential for operational efficiencies and swifter progress through reduction of the mine clearance depth from 20cm to 15cm and adjustment of fade-out requirements as enshrined in the new NMAS, along with LMAC's stated commitment to promote effective use of non-technical and technical survey in its operations.<sup>134</sup>

**Table 4: Mine clearance in 2013–17<sup>135</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	0.51
2016	0.55
2015	0.92
2014	1.28
2013	0.54
<b>Total</b>	<b>3.80</b>

LMAC reported that 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), and lack of funding.<sup>136</sup>

As in the previous year, Lebanon reported contributing US\$9 million annually in 2017 towards mine action in Lebanon (including both mine and CMR-related work), to support costs associated with the running of LMAC (facilities and staff); and the LAF Engineering Regiment companies to cover rapid response call-outs; risk education, and emergency assistance and hospitalisation for victims.<sup>137</sup>

LMAC expected to receive additional funding in 2018 to help address the contamination on the north-east border with Syria and for Blue Line mine clearance in the south. LMAC was optimistic that its adoption of the revised NMAS, in alignment with IMAS, would help improve the credibility and efficiency of demining operations in Lebanon.<sup>138</sup>

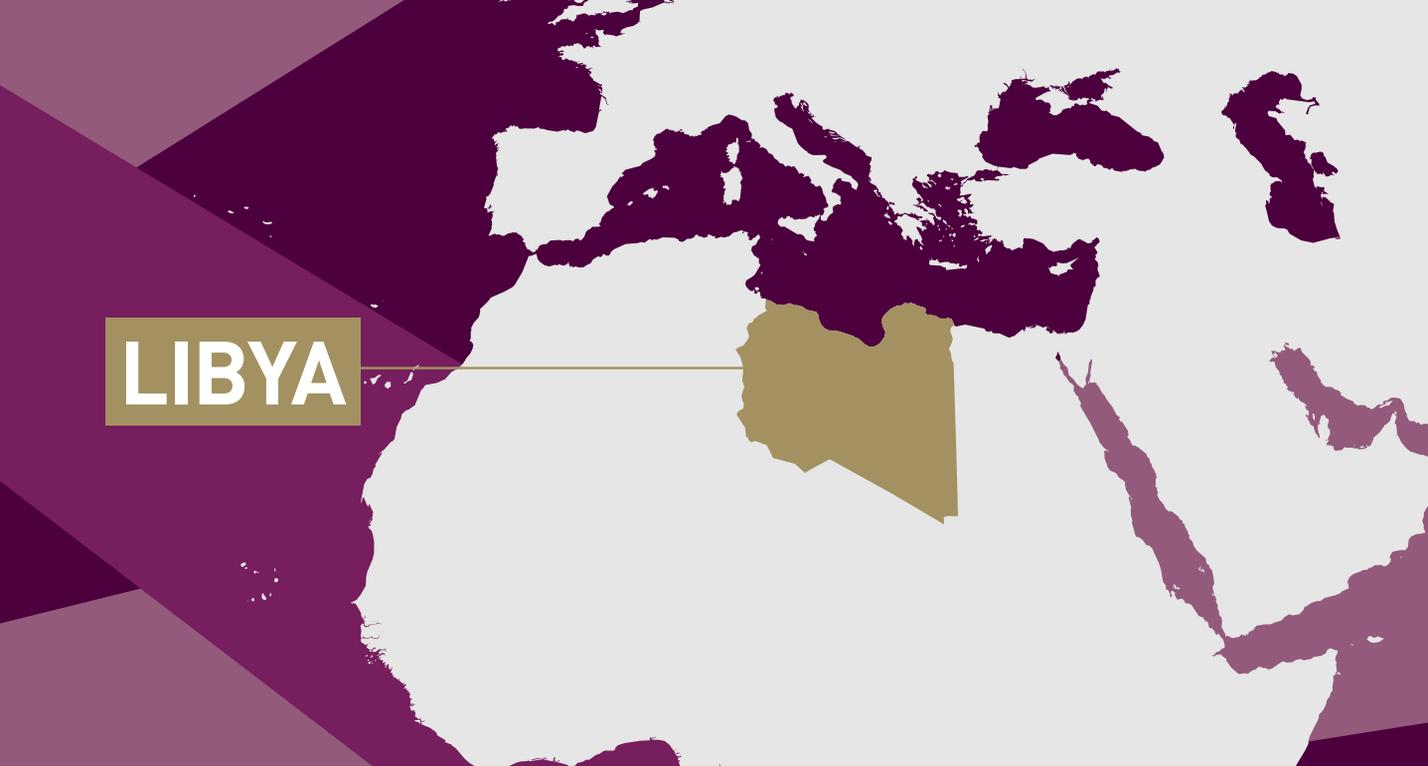
During the January 2018 workshop, in which the Mine Action Forum was established, it was agreed that international donors should strive for more clarity, transparency, and information sharing on how mine action funds are being spent in Lebanon, where potential funding gaps exist, and how funding can be better coordinated. It was also agreed that clearer cost calculations (both anticipated and actual) for survey and clearance operations should be established by LMAC, to help with analysis and work planning.<sup>139</sup>

LMAC recognises the value of enhanced cooperation, communication, sharing of information, and establishment of partnerships, and plans to embrace this throughout the implementation of the remainder of its National Mine Action Strategy.<sup>140</sup> At present, EU funding for UNDP support to LMAC is due to end by 2019, which would leave a funding gap for this support between 2019 and 2021.<sup>141</sup>

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- 2 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 31.
- 3 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; LMAC, "Annual Report 2017", p. 38; and "Recap Day 1: Army launches Fajr al-Joroub operation against Daesh, *The Daily Star*, 19 August 2017.
- 4 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; LMAC, "Annual Report 2017", p. 38; and Statement of Lebanon, APMBSC Sixteenth Meeting of States Parties, Geneva, 20 December 2018.
- 5 Email from Ali Nasreddine, Programme Officer, MAG, 24 August 2018.
- 6 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 12.
- 7 Interview with Brig.-Gen. Elie Nassif (then) Director, and Brig.-Gen. Fakhri, then Head of Operations, LMAC, Beirut, 18 April 2016.
- 8 Ibid.
- 9 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 10 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2018; and LMAC, "Annual Report 2017", p. 14. Contamination includes the Blue Line.
- 11 Emails from Brig.-Gen. Ziad Nasr, Director, LMAC, 24 April and 17 October 2017.
- 12 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 13 Email from Brig.-Gen. Ziad Nasr, LMAC, 28 September 2018.
- 14 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 15 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2018.
- 16 Emails from Brig.-Gen. Elie Nassif, LMAC, 12 May 2015; Jacqui Brownhill, Desk Office, Mines Advisory Group (MAG), 1 May 2015; and Catherine Smith, Deputy Desk Officer, Handicap International (HI), 20 March 2015; and Brig.-Gen. Ziad Nasr, LMAC, 24 April 2018.
- 17 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.
- 18 Interview with Henri Francois Morand, UN Mine Action Service (UNMAS), Naquaora, 14 April 2016; and Report of the UN Secretary-General on the implementation of Security Council Resolution 1701 (2006), UN doc. S/2016/189, 26 February 2016, p. 4.
- 19 LMAC, "Annual Report 2017", p. 6.
- 20 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 21 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014, pp. 4–5.
- 22 LMAC, "2012 Annual Report Lebanon Mine Action Centre", March 2013.
- 23 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.
- 24 Email from Brig.-Gen. Ziad Nasr, LMAC, 22 June 2017.
- 25 Interview with Col. Pierre Bou Maroun, Director, RMAC, Nabatiyeh, 16 November 2016.
- 26 UNDP, "Mine Action in Lebanon: A Review of the Lebanon Mine Action Programme and UNDP Support to mine action in Lebanon", Final Report, September 2011, p. 9.

- 27 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016; and LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018; and "Mine Action Forum: Action Points 1<sup>st</sup> Quarter Progress Report, March 2018".
- 28 Interview with Lt.-Col. Henry Edde, then Director, RMAC, Nabatiyeh, 12 April 2016; and Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 18 May 2016; and LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 29 Email from Anna-Lena Schluchter, containing data from Rana Elias, Focal point for Lebanon, GICHD, 21 June 2017.
- 30 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
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- 32 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 33 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; CCM Article 7 Report (for 2017), Form I; and Statement of Lebanon on International Cooperation and Assistance, CCM Seventh Meeting of States Parties, Geneva, 4–6 September 2017.
- 34 CCM Article 7 Report (for 2017), Form I.
- 35 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 36 Expert workshop under the framework of supporting Lebanon in meeting its CCM Article 4 obligations, attended by Lucy Pinches, Project Manager and Senior Researcher, Mine Action Review, Beirut, 17 November 2016.
- 37 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 38 Expert workshop on cluster munition and landmine survey and clearance in Lebanon, Beirut, 17 January 2018.
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- 40 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.
- 41 Response to Cluster Munition Monitor questionnaire by Brig.-Gen. Imad Odiemi, LMAC, 2 May 2014.
- 42 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014.
- 43 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018; LMAC, "2017 Annual Report", undated; and email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
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- 48 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.
- 49 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 50 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 51 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 52 Email from Brig.-Gen. Ziad Nasr, LMAC, 14 September 2018.
- 53 Email from Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.
- 54 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Rory Logan, then Programme Manager, NPA, 20 April 2015; Statement of Lebanon, First CCM Review Conference, Dubrovnik, 7–11 September 2015; and email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 55 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Rory Logan, NPA, 20 April 2015.
- 56 Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016; and Craig McDiarmid, NPA, Tyre, 12 April 2016; and email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.
- 57 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Dave Wiley, MAG, 27 April 2018.
- 58 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.
- 59 "Mine Action Forum: Action Points 1<sup>st</sup> Quarter Progress Report, March 2018"; LMAC, "2017 Annual Report Lebanon Mine Action Centre", undated; and emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.
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- 62 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 63 Emails from Dave Wiley, MAG, 27 April 2018; and Craig McDiarmid, NPA, 17 April 2018.
- 64 Emails from Bekim Shala, MAG, 21 June 2016, and Craig McDiarmid, NPA, 30 March 2017.
- 65 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 66 "Mine Action Forum: Action Points 1<sup>st</sup> Quarter Progress Report, March 2018".
- 67 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.
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- 69 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 70 Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.
- 71 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 72 Ibid.; email from LMAC Operations Department, 28 June 2018; and "Mine Action Forum: Action Points 1<sup>st</sup> Quarter Progress Report, March 2018".
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- 75 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April and 14 September 2018; and LMAC, "Annual Report 2017", pp. 11 and 12.
- 76 Email from Brig.-Gen. Ziad Nasr, LMAC, 14 September 2018.
- 77 Email from Alan Macdonald, Programme Director, UNMAS, 24 August 2018.
- 78 Emails from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016; Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017; Samuel Devaux, HI, 4 April 2017; and Dave Wiley, MAG, 25 April 2017.
- 79 LMAC, "Annual Report 2017", p. 11.
- 80 Ibid.
- 81 Email from David Ligneau, HI, 29 August 2018.
- 82 Email from Chris Chenavier, HI, 7 April 2016.
- 83 Email from David Ligneau, HI, 29 August 2018.
- 84 Ibid.
- 85 LMAC, "Annual Report 2017", pp. 11 and 12; and emails from Ali Nasreddine, MAG, 24 July and 24 August 2018.
- 86 Email from Ali Nasreddine, MAG, 24 July 2018.
- 87 Ibid.
- 88 Emails from Craig McDiarmid, NPA, 30 March 2017 and 17 April 2018.
- 89 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 11.
- 90 Email from Craig McDiarmid, NPA, 17 April 2018.
- 91 Emails from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017 and 14 September 2018; and LMAC, "Annual Report 2017", p. 11.
- 92 UN Security Council Resolutions 425 (1978) and 426 (1978).
- 93 UNIFIL, "UNIFIL Mandate", at: <http://unifil.unmissions.org/Default.aspx?tabid=11553&language=en-US>.
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- 95 Email from Alan Macdonald, UNMAS, 24 August 2018.
- 96 Emails from Henri Francois Morand, UNMAS, 18 September 2017; and Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.

- 97 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 98 Email from Alan Macdonald, UNMAS, 24 August 2018.
- 99 Ibid.
- 100 Ibid.
- 101 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 12.
- 102 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; LMAC, "Annual Report 2017", pp. 11 and 38; and "Recap Day 1: Army launches Fajr al-Joroub operation against Daesh", *The Daily Star*, 19 August 2017.
- 103 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 13.
- 104 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 105 Ibid.; and LMAC, "Annual Report 2017", pp. 12 and 13.
- 106 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 107 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Ali Nasreddine, MAG, 24 July 2018; Craig McDiarmid, NPA, 17 April 2018; and David Ligneau, Mine Action Programme Manager, HI, 29 August 2018; and LMAC, "Annual Report 2017", pp.11 and 12. There were some discrepancies between data reported by LMAC and what was reported by HI, MAG, and NPA. HI reported destroying 2,168 (rather than 2,163) anti-personnel mines and 179 (rather than 157) other items of UXO during mine clearance in 2017. MAG recorded clearing a total of 131,351m<sup>2</sup> of mined area in 2017 (far more than the 48,022m<sup>2</sup> reported by LMAC, which referred to the manual clearance), and 106 (rather than 105) other items of UXO during mine clearance in 2017. NPA reported destroying three items of UXO, in addition to 3,463 anti-personnel mines. DCA did not provide clearance data to Mine Action Review, so cross-verification was not possible.
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- 110 Email from David Ligneau, HI, 29 August 2018.
- 111 Ibid.
- 112 Ibid.
- 113 Interview with Chris Chenavier, HI, Toula, 18 April 2016.
- 114 Email from Ali Nasreddine, MAG, 24 July 2018.
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- 119 Emails from Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.
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- 123 Email from Ali Nasreddine, MAG, 24 July 2018.
- 124 Interviews with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhir, LMAC, Beirut, 11 and 18 April 2016; and Bekim Shala, MAG, Nabatiyeh, 14 April 2016.
- 125 Interview with Chris Chenavier, HI, Toula, 18 April 2016.
- 126 Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.
- 127 Emails from Ali Nasreddine, MAG, 24 July, 24 and 29 August 2018; and interview with Craig McDiarmid, NPA, 31 September 2018.
- 128 Emails from Craig McDiarmid, NPA, 17 April 2018, and Ali Nasreddine, MAG, 24 July and 24 August 2018.
- 129 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 130 LMAC, "Annual Report 2017", Foreword.
- 131 Statement of Lebanon, APMBC Sixteenth Meeting of States Parties, Geneva, 20 December 2018.
- 132 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, pp. 16 and 17.
- 133 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 134 Ibid.; and LMAC, "Annual Report 2017", p. 12.
- 135 See Mine Action Review and Landmine Monitor reports on clearance in Lebanon covering 2013–17.
- 136 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 137 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and CCM Article 7 Report (for 2017), Form I; and LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 138 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 139 Expert workshop on cluster munition and landmine survey and clearance in Lebanon, Beirut, 17 January 2018.
- 140 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018; and email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 141 "Mine Action Forum: Action Points 1<sup>st</sup> Quarter Progress Report, March 2018".



# LIBYA

## RECOMMENDATIONS FOR ACTION

- Libya's Government of National Accord should ensure that forces loyal to it do not use mines.
- Libya should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- 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 conduct a baseline survey to identify the extent of anti-personnel mine contamination, at the earliest opportunity possible and as soon the security situation permits.
- Libya should initiate survey and clearance of mined area as soon as possible.
- Libya should develop national capacity to conduct landmine survey and clearance, with the support of international actors.

## CONTAMINATION

Mine contamination in Libya is a legacy of the Second World War as well as subsequent armed conflict with Egypt in 1977 and with Chad in 1980–87, which resulted in mines being laid on Libya's borders with these two neighbours. The border with Tunisia is also believed to be affected. During Colonel Muammar Qaddafi's four decades in power, mines were emplaced around a number of locations, including military facilities and key infrastructure.

Mines were used by both the government and the opposition forces during the 2011 conflict leading to Colonel Qaddafi's overthrow. The only confirmed instance of landmine use by rebels occurred in Ajdabiya, but other locations where pro-government elements laid mines included Brega, Khusha, Misrata, and the

Nafusa Mountains.<sup>1</sup> The escalation of conflict in Libya in 2014 brought new reports of mine use by armed groups fighting around Tripoli airport.<sup>2</sup> There is also evidence of landmine use by non-state armed groups in 2015 and 2016, especially in areas controlled by the Islamic State.<sup>3</sup>

Libya is also contaminated by cluster munition remnants (CMR) and other explosive remnants of war (ERW) (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Libya for further information).

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 February 2017, national contamination data from the Libyan Mine Action Centre (LibMAC)

Information Management System for Mine Action (IMSMA) database, reported six confirmed hazardous areas (CHAs) four in Sirte and two in Misrata, totalling almost 41.5km<sup>2</sup>, contaminated by anti-personnel mines, while a seventh CHA, in Sirte, of some 7.5km<sup>2</sup>, was contaminated by anti-vehicle mines. A massive single SHA, of almost 223km<sup>2</sup>, was suspected to contain only anti-vehicle mines.<sup>4</sup> It is likely that further survey will drastically reduce these figures, but at the same time many further suspected areas have not been surveyed.

UNMAS advocates for the need for survey to help quantify the scale and type of contamination, but the ongoing security situation poses major challenges to operationalising the necessary survey.<sup>5</sup>

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.<sup>6</sup> In July 2017, the engineering divisions of Operation Dignity<sup>7</sup> 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.<sup>8</sup>

The impact of mine contamination is unknown, but according to the United Nations Support Mission in Libya (UNSMIL), the presence of landmines, improvised explosive devices (IEDs), and other unexploded ordnance (UXO) poses a persistent threat to the Libyan population. It also hinders the safe return of internally displaced people and restricts access for humanitarian workers.<sup>9</sup>

## PROGRAMME MANAGEMENT

Mine action exists in a fragmented and violent political context. Following years of armed conflict, a new United Nations-backed “unity” government, the Government of National Accord, was formally installed in a naval base in Tripoli in early 2016. Through early 2017, however, it continued to face opposition from two rival governments and a host of militia forces.

The LibMAC was mandated by the Minister of Defense to coordinate mine action in December 2011.<sup>10</sup> As at March 2017, it was operating under the UN-backed Government of National Accord. LibMAC’s headquarters are in Tripoli, in the west of the country, and it also has offices in Benghazi<sup>11</sup> and Misrata.<sup>12</sup> In April 2016, a regional Operations Manager was appointed for the east.<sup>13</sup> In July 2016, LibMAC also established a small office in Misrata.<sup>14</sup> The operating costs and salaries for the LibMAC are funded by the United States Department of State and administered by ITF Enhancing Human Security (ITF).<sup>15</sup>

### Strategic Planning

There is no national mine action strategy for Libya.

LibMAC does, however, prioritise survey and clearance operations and is responsible for issuing task orders. Prioritisation is, in part, informed by data collected and reported to LibMAC by operators such as the Danish Demining Group (DDG), during non-technical survey or explosive ordnance disposal (EOD), and by reports from the local community.<sup>16</sup>

### Legislation and Standards

There is no national mine action legislation in Libya, but National Mine Action Standards (NMAS), in Arabic and English, have been elaborated with the support of the UN Mine Action Service (UNMAS), and were approved by the Government of National Accord in August 2017. Libya’s NMAS are available on the LibMAC website.<sup>17</sup>

As at April 2018, Humanity and Inclusion (HI) was reviewing and updating its standing operating procedures (SOPs) for Libya following the release of the new NMAS, which are aligned with the International Mine Action Standards (IMAS).<sup>18</sup> DDG was also in the final stages of updating its SOPs, as at June 2018.<sup>19</sup>

### Quality Management

UNMAS provides remote training and assistance to LibMAC in quality management (QM), from its office in Tunis.<sup>20</sup>

### Information Management

LibMAC receives technical support for the IMSMA database from the Geneva International Centre for Humanitarian Demining (GICHD) and UNMAS.

### Operators

Mine action operations have been conducted by the army engineers, a police unit, and the Ministry of Interior’s National Safety Authority (NSA), also known as Civil Defense.<sup>21</sup> The NSA is mandated to conduct EOD in civilian areas.<sup>22</sup> These institutions liaise with LibMAC but are not tasked or accredited by them, nor do they provide clearance reports to the Centre.

The deteriorating security situation resulted in the withdrawal of UNMAS and international mine action operators from Libya in mid-2014.

UNMAS has been operating from Tunis since November 2014, from where it provides institutional and operational capacity-building, training, including in EOD, and support and advice to LibMAC, including in establishing processes for the accreditation and activities of mine action actors in Libya.<sup>23</sup> Despite the relocation of the programme to Tunisia, due to poor security in Libya since 2014, UNMAS Libya continues to coordinate with national authorities and implementing partners, including by providing technical advice and advisory support on arms and ammunition management. The UNMAS Libya Programme is an integral part of the UNSMIL.<sup>24</sup>

Since 2015, UNMAS has trained more than 70 NSA operators and military engineers in advanced EOD and 30 officers from eastern Libya in non-technical survey, and has provided advanced medical first-responder training to 72 EOD operators from Benghazi and other personnel in Sirte.<sup>25</sup>

DanChurchAid (DCA) is operational in Libya, clearing ERW, and providing risk education, psychosocial support, armed violence reduction, and training of national authorities. Now in its seventh year of working in Libya, DCA reportedly has offices in Benghazi, Misrata, and Tripoli.<sup>26</sup>

DDG set up its Libya mine action programme remotely from Tunisia in 2014, but in early 2017 it relocated to Libya. DDG is operational in three areas of Libya: Benghazi, Sabha (in the south-west), and Tripoli.<sup>27</sup> After setting up in Benghazi in December 2017, DDG spent the first quarter of 2018 obtaining accreditation and putting in place necessary policies and procedures before becoming operational. DDG hoped to expand non-technical survey and EOD capacity in Benghazi from the late summer of 2018. In Sabha, DDG has one non-technical survey team and one EOD team, which it manages remotely. Security issues in the south continue to disrupt mine action operations and prevent continuous operations. In Tripoli, DDG works through its implementing partner, National NGO Free Fields Foundation (3F). 3F operates under DDG's accreditation and SOPs, and has an operational capacity of 37 people, comprising three EOD teams and one non-technical survey team.<sup>28</sup>

HI's mine action programme in 2017 continued to be remotely managed from Tunis.<sup>29</sup> In 2017, HI had three risk education teams, but no survey or clearance capacity in Libya. HI hoped to be able to deploy a roving survey and EOD capacity in 2018 in the Sirte and Misrata regions, in addition to risk education.<sup>30</sup>

HI trained two local partners in non-technical survey in 2016: Peace Organisation from Zintan, and World Without War (3W) from Misrata. Both organisations received accreditation for non-technical survey from LibMAC after the training. Following the training, Peace Organization conducted non-technical survey under remote management by HI from Tunis.<sup>31</sup> Another of HI's implementing partners, AMACC, conducted non-technical survey in one CMR-suspected area in 2017.<sup>32</sup>

A number of other Libyan civil society organisations are also reported to carry out mine action operations, but they are not accredited by LibMAC.

Military engineers reportedly lack mine detectors and are working with rudimentary tools. According to a military source quoted in the New York Times, 50 have been killed and a further 60 wounded.<sup>33</sup>

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## LAND RELEASE

There were no reports of planned mine clearance during 2017 although several operators engaged in EOD operations. No mined area was reported to have been released by survey in 2017 either, although HI identified an SHA in 2017, which it believes contains anti-personnel and anti-vehicle contamination.

### Survey in 2017

No mined area was reported to have been reduced by technical survey or cancelled by non-technical survey in 2017.

HI reported that non-technical survey in 2017 in Kikla, northern Libya, identified a 26km<sup>2</sup> SHA in a wooded area, which it suspects contains both anti-personnel and anti-vehicle mines.<sup>34</sup>

### Clearance in 2017

No planned mine clearance was reported for 2017.

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## ARTICLE 5 COMPLIANCE

Libya is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which require the clearance of mines in areas under its jurisdiction or control as soon as possible.

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 IED disposal capacity in Libya; the vast geographical area; and the shortfall in governmental and international support.<sup>35</sup> Security conditions continued to pose a challenge to mine action in Libya, and as at June 2018, non-governmental organisations were frequently forced to suspend operations in the south-west due to poor security.<sup>36</sup>

In his February 2018 report on the work of UNSMIL, the UN Secretary-General stated that explosive ordnance "continue to pose a significant, indiscriminate threat to the civilian population" and urged "Member States to expand their funding to activities in priority areas equipment."<sup>37</sup>

As at September 2018, the security situation in Libya had deteriorated significantly, posing considerable challenges for mine action operations for both national and international organisations, including issues of access.<sup>38</sup>

- 1 Human Rights Watch, "Landmines in Libya: Technical Briefing Note", 19 July 2011, at: <http://www.hrw.org/news/2011/07/19/landmines-libya-technical-briefing-note>.
- 2 Human Rights Watch, "Libya: New evidence of landmine use", 5 November 2014.
- 3 Landmine Monitor, "Libya: Mine Ban Policy", last updated 23 October 2017, at: <http://www.the-monitor.org/en-gb/reports/2018/libya/mine-ban-policy.aspx>; email from Lutz Kosewsky, DDG, 22 February 2017; and telephone interview with Darren Devlin, DDG, 20 June 2018.
- 4 Emails from Abdullatif Abujarida, LibMAC, 20 February and 9 March 2017.
- 5 Email from Lance Marlin, Chief, UNMAS Libya, 11 September 2018.
- 6 "Libya forces de-mine and clear Sirte after liberation from Isis militants", *Independent*, 11 August 2016
- 7 Khalifa Haftar launched Operation Dignity to take Benghazi under his forces' control from what he described as Islamist militants and terrorists in May 2014. See, e.g., "Operation Dignity in east Libya declares full control of Benghazi", *Libyan Express*, 5 July 2017, at: <http://www.libyanexpress.com/operation-dignity-in-east-libya-declares-full-control-of-benghazi/>.
- 8 Landmines in Africa blog, July 2017, at: <https://landminesinfrica.wordpress.com/tag/libya/>.
- 9 "Lives and Limbs Shattered by Libya Mines", *Asharq Al-Awsat*, 5 April 2018.
- 10 LibMAC website, accessed 25 June 2018 at: <http://www.lmac.gov.ly/EN/about.html>.
- 11 Email from Jakob Donatz, Associate Programme Officer, UNMAS, 21 June 2018.
- 12 Email from Roman Turšič, Head of Implementation Office Libya/Afghanistan, ITF, 26 February 2017.
- 13 Skype interview with Ezzedine Ata Alia, Administration Manager, LibMAC, 20 March 2017.
- 14 Interview with Col. Turjoman, Director, LibMAC, in Geneva, 10 January 2017.
- 15 Email from Roman Turšič, Head of Implementation Office Libya/Afghanistan, ITF, 26 February 2017.
- 16 Telephone interview with Darren Devlin, Programme Manager Libya, DDG, 20 June 2018; and email, 4 July 2018.
- 17 Libyan Mine Action Centre (LibMAC) website, accessed 25 June 2018, at <http://www.lmac.gov.ly/>; and Report of the Secretary-General on the UN Support Mission in Libya, UN doc. S/2018/140, 12 February 2018, p.12.; and UNMAS, "Programmes: Libya", March 2018, at: <http://www.mineaction.org/programmes/libya>.
- 18 Email from Catherine Smith, Head of Mission, HI, 30 April 2018.
- 19 Telephone interview with Darren Devlin, DDG, 20 June 2018.
- 20 UNMAS, "Programmes: Libya", March 2018, at: <http://www.mineaction.org/programmes/>.
- 21 Interview with Col. Turjoman, LibMAC, in Geneva, 10 January 2017.
- 22 Email from Diek Engelbrecht, UNMAS Libya, 20 July 2013.
- 23 UNMAS, "Programmes: Libya", March 2018, at: <http://www.mineaction.org/programmes/libya>; and emails from Lyuba Guerassimova, Programme Officer, UNMAS, 28 February 2017 and Dandan Xu, Associate Programme Management Officer, UNMAS, 12 July 2017; and Report of the Secretary-General on the UN Support Mission in Libya, UN Doc. S/2018/140, 12 February 2018, p.12.
- 24 Email from Jakob Donatz, UNMAS, 21 June 2018.
- 25 UNMAS, "Programmes: Libya", June 2018, at: <http://www.mineaction.org/programmes/libya>.
- 26 DCA website, accessed 18 June 2018, at: <https://www.danchurchaid.org/where-we-work/libya>.
- 27 Telephone interview with Darren Devlin, DDG, 20 June 2018; and email, 4 July 2018.
- 28 Ibid.
- 29 Email from Catherine Smith, HI, 30 April 2018.
- 30 Ibid.
- 31 Email from Catherine Smith, HI, 22 February 2017.
- 32 Email from Catherine Smith, HI, 30 April 2018.
- 33 "Mine still claim legs and lives in Libya's Benghazi, months after war ceased", *New York Times*, 21 January 2018.
- 34 Email from Catherine Smith, HI, 30 April 2018.
- 35 PowerPoint presentation by Mohammad Turjoman, LibMAC, at the National Programme Director's Meeting, Geneva, 8 February 2017.
- 36 Telephone interview with Darren Devlin, DDG, 20 June 2018.
- 37 Report of the Secretary-General on the United Nations Support Mission in Libya, UN doc. S/2018/140, 12 February 2018, p. 16.
- 38 Email from Lance Marlin, UNMAS, 11 September 2018.



# MOROCCO

## RECOMMENDATIONS FOR ACTION

- Morocco should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Morocco should continue to submit voluntary APMBC Article 7 reports.
- Morocco should seek assistance to develop a functioning civilian mine action programme.
- Morocco should ensure freedom of access and unhindered movement of all civilian UN Mission for the Referendum in Western Sahara (MINURSO) staff and take all necessary measures to facilitate the conduct of demining.
- Morocco is strongly encouraged to provide any minefield records or cluster strike data to other relevant stakeholders to facilitate survey and clearance of affected areas.

## CONTAMINATION

The exact extent of contamination of the area of Western Sahara controlled by Morocco, on the west side of the Berm,<sup>1</sup> is not known. In the past, Morocco declared, highly improbably, that a total of 120,000km<sup>2</sup> of area was contaminated,<sup>2</sup> although the threat is undoubtedly significant.

Morocco's contamination is a result of the conflict between the Royal Moroccan Army and Polisario Front forces over Western Sahara. Morocco has reported having registered and mapped the minefields it has laid, and has pledged to clear them as soon as the conflict over Western Sahara is over.<sup>3</sup>

In April 2013, Morocco had identified ten areas as having been mined by the Polisario Front since 1975: Bir Anzarane, Douiek, Gerret Auchfaght, Gor Lbard, Gor Zalagat, Hagounia, Idiriya, Imlili, Itgui, and Tarf Mhkinza.<sup>4</sup> It repeated this list in a voluntary Article 7 report it submitted for calendar year 2017.<sup>5</sup> 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.<sup>6</sup>

In its voluntary Article 7 report for 2017, Morocco reported that three people were killed and sixteen others injured in anti-personnel mine incidents during the year. This compares to two people killed and seventeen injured in 2016.<sup>7</sup> In June 2018, Morocco stated that a total of 2,640 victims of mines and explosive remnants of war (ERW) had been recorded, including 810 deaths since 1975.<sup>8</sup>

## PROGRAMME MANAGEMENT

Morocco does not have a national mine action authority or a mine action centre.

### Legislation and Standards

Morocco has not adopted national mine action legislation or standards, but reported, most recently in 2013, that “normal safety and environmental protection standard have been followed.”<sup>9</sup>

### Operators

Morocco initiated major demining efforts in 2007, following an increase in the number of incidents. All mine clearance in Morocco is conducted manually by the Royal Moroccan Army (RMA). In 2017, it reported that 16 demining modules and 89 demining detachments were operational and responded to 175 interventions during the year.<sup>10</sup>

In March 2016, it was reported that United States (US) Marines were providing training to build the demining capacity of the RMA. US instructors covered ordnance identification, safety, basic demolition, and basic combat casualty care.<sup>11</sup> In a voluntary Article 7 report for 2017,

Morocco reported receiving humanitarian demining training from the National Guard of the US State of Utah and that six senior government officials, including from the Ministries of Health and Solidarity, the Royal Armed Forces, and the Moroccan Red Crescent visited the Lebanon Mine Action Center (LMAC).<sup>12</sup> The Utah National Guard previously reported providing landmine clearance training to Moroccan military officials through the State Partnership Programme in April 2015.<sup>13</sup>

MINURSO has been coordinating mine action activities with both parties to the conflict. In March 2016, however, Morocco required that MINURSO international civilian personnel “leave the Kingdom of Morocco within three days”.<sup>14</sup> This included all international staff overseeing the UN Mine Action Service (UNMAS)-managed demining project within MINURSO, resulting in the suspension of all demining activities east of the berm from 20 March 2016–15 September 2016, when the MINURSO Mine Action Coordination Centre resumed its operations from Tindouf, where it had been relocated.<sup>15</sup> Morocco demanded the staff leave because UN Secretary-General Ban Ki-moon had used the term “occupation” to describe the situation east of the Berm during a visit to the region.<sup>16</sup>

## LAND RELEASE

Morocco has not reported with any detail on its release of mined areas in recent years. In a voluntary Article 7 report for 2017, Morocco reported release of 232km<sup>2</sup>, with the destruction of 69 anti-personnel mines, 82 anti-vehicle mines, and 595 items of ERW.<sup>17</sup> This is an apparent decrease from 2016, when Morocco reported release of 283km<sup>2</sup> with the destruction of 288 anti-personnel mines, 170 anti-vehicle mines, and 1,899 ERW.<sup>18</sup>

Morocco reported that since demining efforts began and as of end March 2018, a total of 96,451 mines, including 49,087 anti-personnel mines, and a further 19,618 items of ERW had been destroyed during “release” of 5,127km<sup>2</sup>.<sup>19</sup> It also reported that, as at November 2017, a total of 4,987km<sup>2</sup> over the previous decade with the destruction of 4,833 anti-personnel mines and 16,813 anti-vehicle mines.<sup>20</sup>

In his 2018 report to the UN Security Council, the UN Secretary-General noted that the RMA had reported “clearing” nearly 145km<sup>2</sup> of land to the west of the Berm with the destruction of 1,121 items, including 1,008 items of unexploded ordnance (UXO), as well as 57 anti-vehicle and 56 anti-personnel mines during the period 10 April 2017 to 29 March 2018.<sup>21</sup> No further details were provided.

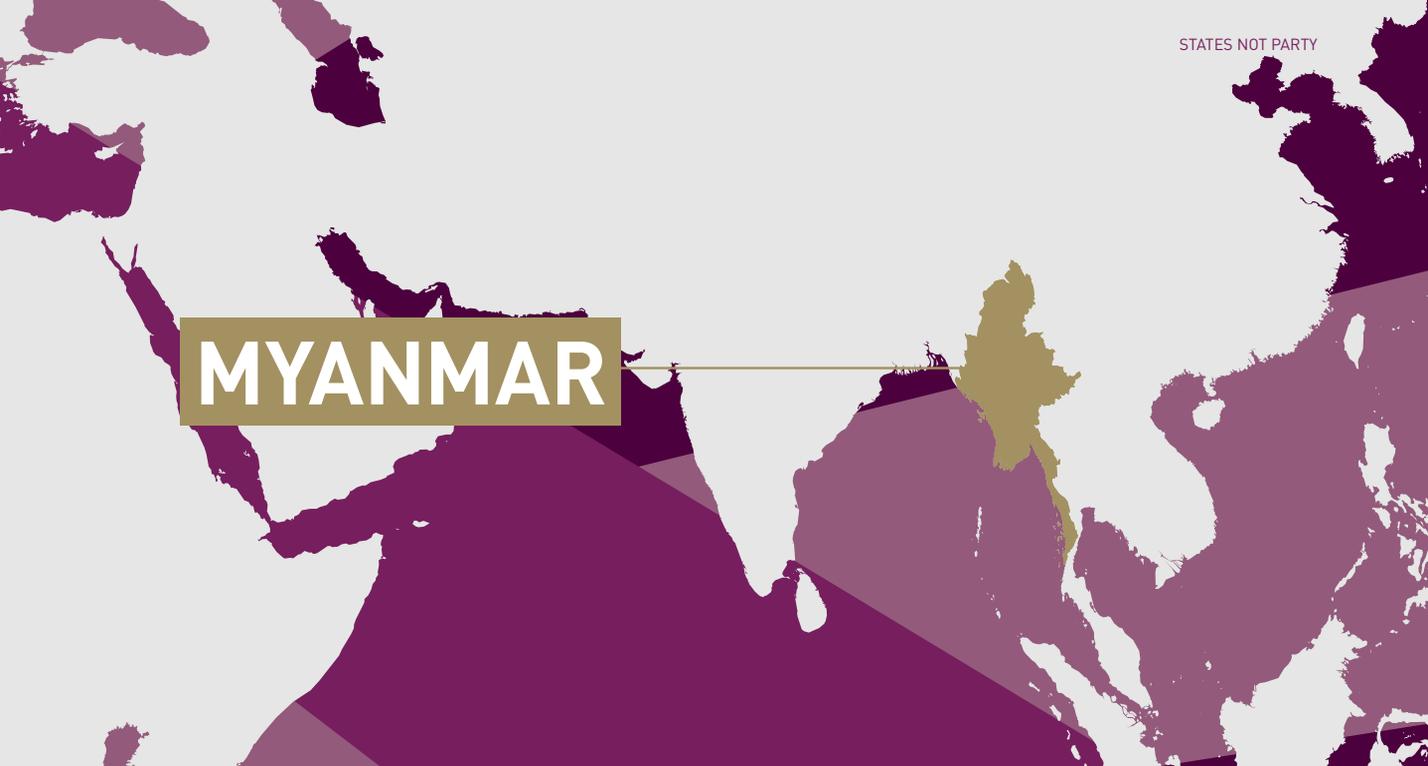
In 2010, Morocco declared it had employed 10,000 deminers, though only 400 detectors were at their disposal at that time.<sup>22</sup> This raised serious questions both about the procedures being used and the accuracy of clearance figures being reported.

In April 2016, Morocco was planning to launch a new effort to clear mines from the Berm that divides Western Sahara into the Moroccan-controlled area and the Polisario-controlled area. The units to be deployed were reportedly those trained by the US Marines.<sup>23</sup>

## ARTICLE 5 COMPLIANCE

Morocco is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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- 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 three metres in height. Morocco controls the area located on the west side of the Berm.
- 2 Statement of Morocco, Intersessional meetings (Standing Committee on General Status and Operation of the Convention), Geneva, 25 May 2009.
- 3 Voluntary Article 7 Report (for 2014), Form C.
- 4 Voluntary Article 7 Report, April 2013, Form C.
- 5 Voluntary Article 7 Report (for 2017), Form C.
- 6 Voluntary Article 7 Report, April 2011, Form C.
- 7 Voluntary Article 7 Report (for 2017), Form C; and Voluntary Article 7 Report (for 2016), Form C.
- 8 Statement of Morocco, Intersessional Meetings, Geneva, 8 June 2018.
- 9 Voluntary Article 7 Report, (for 2017), Form D.
- 10 Statement of Morocco, APMBC 16th Meeting of States Parties, Vienna, 21 December 2017.
- 11 “U.S., Morocco improve demining capability”, *The Globe*, 31 March 2016, at: [http://www.campejeuneglobe.com/news/u-s-morocco-improve-demining-capability/article\\_0e45e62e-f6a0-11e5-9b3b-d9775e6458de.html](http://www.campejeuneglobe.com/news/u-s-morocco-improve-demining-capability/article_0e45e62e-f6a0-11e5-9b3b-d9775e6458de.html).
- 12 Voluntary Article 7 Report (form 2017), Form H.
- 13 Staff Sgt. Annie Edwards, “Moroccan state partners observe Utah Guard landmine removal training”, Official US Air Force Website, 16 April 2015, at: <http://www.151arw.ang.af.mil/News/Article-Display/Article/8664416/moroccan-state-partners-observe-utah-guard-landmine-removal-training/>.
- 14 “Report of the Secretary-General on the situation concerning Western Sahara”, UN doc. S/2016/355, 19 April 2016, para. 4.
- 15 “Report of the Secretary-General on the situation concerning Western Sahara”, UN doc. S/2017/307, 10 April 2017, para. 40.
- 16 “Morocco’s U.N. expulsion puts Western Sahara ceasefire at risk: movement”, *Reuters*, 22 March 2016, at: <http://www.reuters.com/article/us-morocco-sahara-idUSKCN0W02BK>.
- 17 Voluntary Article 7 Report (for 2017), Form C.
- 18 Voluntary Article 7 Report (for 2016), Form C.
- 19 Statement of Morocco, Intersessional Meetings, Geneva, 8 June 2018.
- 20 Statement of Morocco, 16th Meeting of States Parties, Vienna, 21 December 2017.
- 21 “Report of the Secretary-General on the situation concerning Western Sahara”, UN doc. S/2018/277, 29 March 2018, para. 43.
- 22 Statement of Morocco, Standing Committee on General Status and Operation of the Convention, Geneva, 23 June 2010.
- 23 “Morocco to Deploy Highly Qualified Team to Remove Sahara Landmines”, *Sahara Question*, 25 March 2016, at: <http://sahara-question.com/en/news/morocco-deploy-highly-qualified-team-remove-sahara-landmines>.



# MYANMAR

<b>PROGRAMME PERFORMANCE</b>	2017	2016
<b>Problem understood</b>	2	2
<b>Target date for completion of mine clearance</b>	1	1
<b>Targeted clearance</b>	1	1
<b>Efficient clearance</b>	1	1
<b>National funding of programme</b>	1	1
<b>Timely clearance</b>	1	1
<b>Land-release system in place</b>	2	2
<b>National mine action standards</b>	2	3
<b>Reporting on progress</b>	1	1
<b>Improving performance</b>	2	1
<b>PERFORMANCE SCORE: VERY POOR</b>	<b>1.5</b>	<b>1.4</b>

## PERFORMANCE COMMENTARY

Myanmar still has no functioning national mine action programme. Non-technical survey conducted by three international organisations in 2017 marked a significant step forward for operators previously restricted to risk education and limited community mapping but the government and ethnic groups do not yet permit clearance. In addition, allegations of new mine use persisted in 2017.

## RECOMMENDATIONS FOR ACTION

- Myanmar should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- The Myanmar army (Tatmadaw) and armed groups should stop all use of anti-personnel mines.
- Myanmar should accelerate non-technical survey, authorise international marking of hazardous areas, and permit accredited operators to conduct clearance and explosive ordnance disposal.
- Myanmar should establish a national mine action authority to plan and coordinate comprehensive humanitarian mine action.

## CONTAMINATION

Myanmar is heavily mine-affected as a result of conflicts between the Tatmadaw and numerous non-state armed groups affiliated with ethnic minorities. The violence started after the country's independence in 1948. Mined areas are located in areas of Myanmar adjacent to borders with Bangladesh, China, and Thailand, and pose a particular threat in northern and eastern parts of the country.

Some 55 townships (out of a total of 325) in 10 states and regions are believed to suffer from some degree of mine contamination, primarily anti-personnel mines.<sup>1</sup> Karen (Kayin) state and Pegu (Bago) division are among those with the heaviest mine contamination and the highest number of recorded victims. Townships on the Indian border of Chin state and in the Sagaing region are also believed to have suspected hazardous areas.<sup>2</sup>

A United Nations Fact Finding Mission reported in September 2018 that "despite the signing of the Nationwide Ceasefire Agreement in October 2015, which committed all parties to end the use of landmines and cooperate on mine-clearance operations, new landmines continue to be laid." It cited credible reports that the Tatmadaw and ethnic armed groups had laid landmines and observed that "Tatmadaw soldiers lay landmines in villages they have attacked or after civilians have fled, or on roads frequently used by civilians. Civilians have also laid landmines in order to protect their property."<sup>3</sup> Additional mine use occurred in 2017 when the Tatmadaw reportedly planted anti-personnel mines on the border between northern Rakhine state and Bangladesh during a military campaign in August and September.<sup>4</sup>

Additional mine use occurred in 2017 when the UN Fact Finding Mission said the Tatmadaw systematically planted anti-personnel mines on some main roads and pedestrian in Buthidaung township, resulting in many deaths and injuries among civilians fleeing the military clearance operations that were initiated in August 2017.<sup>5</sup> Mines were also reportedly laid along the border between northern Rakhine state and Bangladesh during a military campaign in August and September, as part of a deliberate and planned strategy of dissuading Rohingya refugees from attempting to return to Myanmar. Some mines dug up by displaced villagers were identified as PMN-1s which are produced or purchased by Myanmar and used by the Tatmadaw.<sup>6</sup>

No estimate exists of the extent of contamination but suspected hazardous areas (SHAs) have been reported in the following states and townships:

- Kayah state: all seven townships
- Kayin state: all seven townships
- Kachin state: Chipwi, Hpakant, Mansi, Mogaung, Momauk, Myitkyina, Tsawlaw, and Waingmaw
- Mon state: Bilin, Kyaikto, Mawlamyine, Thanbyuzayat, Thaton, and Ye
- Bago region: Kyaukkyi, Shwekyin, Tantabin, and Taungoo
- Rakhine state: Maungdaw
- Shan state: Hopong, Hsenwi, Hsihseng, Konkyan, Kyaukme, Langkho, Loilen, Mawkmai, Mongpan, Mongton, Monghpyak, Namhsan Tachileik, Namtu, Nanhkan, Yaksawk, and Ywangan
- Tanintharyi region: Bokpyin, Dawei, Tanintharyi, Thayetchaung, and Yebyu
- Chin state and Sagaing region.

The Tatmadaw uses anti-personnel mines most of which are produced in state-owned factories. These locally manufactured mines include copies of Russian PMNs (locally designated MM-2), POMZ fragmentation mines (designated MM-1), and United States M14s. LTM-76 bounding fragmentation mines based on British or Indian designs have been found around electrical pylons. Ethnic armed groups acknowledge use of anti-personnel mines of an improvised nature as well as a number of anti-vehicle mines, but unconfirmed reports have suggested groups in the north have also obtained Chinese factory-made Type 72 anti-vehicle mines.<sup>7</sup>

Data collected by Myanmar's Mine Risks Working Group (MRWG) recorded 176 mine and explosive remnants of war (ERW) casualties, including 52 deaths, in 2017. This is an increase on the 161 casualties, including 41 killed, recorded in 2016. The great majority of casualties in 2017, as in the previous year were in Kachin and Shan states.<sup>8</sup> The MRWG reported 163 mine and ERW casualties in the first half of 2018 alone: 24 killed and 139 injured.<sup>9</sup>

## PROGRAMME MANAGEMENT

Myanmar has no functioning national mine action programme. The government set up a Myanmar Mine Action Centre (MMAC) under the Myanmar Peace Centre (MPC) in 2013 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 that reports to the head of government. State Counsellor Aung San Suu Kyi, however, said that concluding a National Ceasefire Agreement with non-state actors was a precondition for proceeding to survey and clearance and would be her administration's priority.<sup>10</sup> The government formed under her leadership in March 2016 had not, as at September 2018, formulated a clear direction for mine action or established a centre to coordinate it.<sup>11</sup>

The Ministry of Social Welfare, Relief and Resettlement 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 four state-level coordination agencies (in Kachin, Kayah, Kayin and Shahn states).<sup>12</sup> The group meets quarterly in the capital, Naypyidaw, and focuses on risk education and victim assistance. The Ministry of Social Welfare established a new Department of Rehabilitation in 2018 and operators were informed it would take the lead on mine action from the Department of Social Work (DSW) but as at August 2018 the Department of Rehabilitation had no presence in the capital and stakeholders had received no guidance on how the change would be conducted.<sup>13</sup>

Operators have conducted risk education and community liaison activities which in recent years included limited community mapping of hazardous areas in some locations. In 2017, for the first time, operators were permitted to conduct non-technical survey in Kayin state and southern Shan State.

### Legislation and Standards

Myanmar does not have national mine action legislation or standards and therefore operators have followed International Mine Action Standards (IMAS) and their own standard operating procedures.

### Information Management

Operators also retain their own survey results in the absence of a neutral national entity to store hazardous area data which remains sensitive in view of continuing conflict.

### Operators

Seven international demining organisations had offices in Yangon and some provincial locations: DanChurchAid (DCA), Danish Demining Group (DDG), The HALO Trust, Handicap International, Mines Advisory Group (MAG), Norwegian People's Aid (NPA), and the Swiss Foundation for Mine Action (FSD).

Tatmadaw engineers have reportedly conducted some mine clearance but operations are not systematic or recorded.

## LAND RELEASE

No land release has occurred in Myanmar as humanitarian mine action operators are not permitted to conduct clearance by either the government or ethnic minority authorities.

Operators were authorised to conduct non-technical survey in some locations for the first time in 2016 and that activity continued in 2017, but have not been permitted to mark suspected or confirmed hazardous areas (SHAs and CHAs) with standard international marking. They have so far been unable to carry out surveys across an entire state (province) which would enable them to determine a baseline level of contamination.

MAG, which worked with 18 community liaison teams, received authorisation from the DSW in December 2016 to conduct non-technical survey in 74 villages across 6 townships of Kayah State and in 2017 was allowed to start non-technical survey in southern areas of Shan state. In 2017 it mapped 114 hazardous areas, including 86 CHAs covering 214,276m<sup>2</sup>. It also identified and recorded 23 explosive ordnance disposal (EOD) spot tasks.<sup>14</sup>

DDG conducted non-technical survey in Kayah state's Demoso township in 2017, finding 51 of its 169 villages affected by mines and ERW. It confirmed 95 hazardous areas covering 127,720m<sup>2</sup> and identified 33 SHAs covering 233,898m<sup>2</sup> as well as 67 EOD spot tasks. DDG passed on information about the location of unexploded ordnance (UXO) to military engineers who reportedly cleared some items. After completing non-technical survey in Demoso township in March 2018, DDG shifted its teams to survey Hpruso and Hpasawng townships.<sup>15</sup>

The HALO Trust also received authorisation to carry out non-technical survey in 2017. Operating with a total of 47 staff including three non-technical survey teams and seven risk education teams, HALO Trust worked in northern Shan state and Kayin state, identifying CHAs covering 85,315m<sup>2</sup> and SHAs over an estimated total of 46,058m<sup>2</sup>.<sup>16</sup>

NPA did not conduct survey in 2017 as it awaited amendment of its Memorandum of Understanding (MoU) to allow non-technical survey but it collaborated with HALO Trust and MAG on a joint initiative discussed with authorities at national and state level for the survey and clearance of 37 villages in the Kyone Htao waterfalls

area close to Hpa-An in Kayin state. The aim of the project is to facilitate tourism and the return of internally displaced persons. The project received support from the DSW in Naypyidaw but was put on hold by regional military authorities due to security considerations.<sup>17</sup>

## ARTICLE 5 COMPLIANCE

Myanmar is not a state party to the APMBBC, but nonetheless has obligations under international human rights law to protect life, which require the clearance of mines in areas under its jurisdiction or control as soon as possible.

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- |  |   |
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| <p>1 Myanmar is divided into states and regions. States are the “home area” of ethnic groups. Other areas, which are not identified with a specific ethnic group, are administrative regions. The former military junta changed the name from Burma to Myanmar in 1989 and also changed the names of some states. Many ethnic groups within the country still prefer to use the name Burma. Internal state and division names are given in their common form or with the name adopted by the ruling State Peace and Development Council (SPDC) in parentheses.</p> <p>2 Research by Landmine Monitor. Data sources included casualty information, sightings of mine warnings, and reports by NGOs and other organisations of use, as well as interviews with field staff and armed forces personnel. The survey included casualty data from January 2007 through September 2015 and data from other informants from January 2008 through September 2015.</p> <p>3 United Nations, “Report of the Detailed Findings of the Independent International Fact Finding Mission on Myanmar”, A/HRC/39/CRP.2., 17 September 2017, p. 95.</p> <p>4 Amnesty International, “Myanmar Army landmines along border with Bangladesh pose deadly threat to fleeing Rohingya”, 9 September 2017; Human Rights Watch, “Burma: Landmines Deadly for Fleeing Rohingya”, 23 September 2017.</p> <p>5 United Nations, “Report of the Detailed Findings of the Independent International Fact Finding Mission on Myanmar”, A/HRC/39/CRP.2., 17 September 2017, p. 213.</p> <p>6 United Nations, “Report of the Detailed Findings of the Independent International Fact Finding Mission on Myanmar”, A/HRC/39/CRP.2., 17 September 2017, pp. 286–288; Amnesty International, “Myanmar Army landmines along border with Bangladesh pose deadly threat to fleeing Rohingya”, 9 September 2017; Human Rights Watch, “Burma: Landmines Deadly for Fleeing Rohingya”, 23 September 2017.</p> | <p>7 Information provided by mine action stakeholders on condition of anonymity, 2018.</p> <p>8 Yanghee Lee, “Report of the Special Rapporteur on the Situation of Human Rights in Myanmar”, (A/HRC/37/70), pp 8–9, 15, 9 March 2018; “Strategic Workplan 2017”, Mine Risks Working Group, undated but 2017, p. 16.</p> <p>9 MRWG, “Overview of documented Landmine/ERW incidents and MRE outreach”, PowerPoint presentation, undated but 2018.</p> <p>10 Roger Fasth and Pascal Simon, “Mine Action in Myanmar”, Journal of Mine Action, Issue 19.2, July 2015.</p> <p>11 Interviews with Aksel Steen-Nilsen, Country Director, Norwegian People’s Aid (NPA); Greg Crowther, Regional Director, South and South East Asia, Mines Advisory Group (MAG), in Phnom Penh, 1 May 2017; and email from Melissa Andersson, Programme Manager, NPA, Yangon, 27 September 2017.</p> <p>12 UNICEF, “Landmines and explosive remnants of war threaten children and communities across Myanmar”, 4 April 2018.</p> <p>13 Emails from mine action operators, July–August 2018.</p> <p>14 Email from Greg Crowther, Regional Director, South and South East Asia, MAG, 3 August 2018.</p> <p>15 Email from Pascal Simon, Programme Manager, DDG, 8 August 2018.</p> <p>16 Email from Samuel Fricker, Programme Manager, HALO Trust, 9 July 2018.</p> <p>17 Email from Kyaw Lin Htut, Programme Manager, NPA, 17 August 2018.</p> |
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# NORTH KOREA

## RECOMMENDATIONS FOR ACTION

- The Democratic People's Republic of Korea (North Korea) should cease all use of anti-personnel mines.
- North Korea should accede to the Anti-Personnel Mine Ban Convention (APMBC) and clear all mined areas as a matter of priority.

## CONTAMINATION

The precise extent of the mine problem in North Korea is not known. North Korea admitted in 1998 that it had laid mines in the Demilitarised Zone (DMZ) between the north and south of the peninsula. The affected areas are reported to be marked and fenced.<sup>1</sup> In early 2006, officials commented to the APMBC Implementation Support Unit (ISU) that North Korea had not laid mines elsewhere in the country,<sup>2</sup> despite fears that, among others, sections of the east coast were also mined.

In April 2018, the North Korean leader, Kim Jong-un, and the South Korean president, Moon Jae-in, met and issued a statement promising to bring “lasting peace” to the peninsula with a commitment to denuclearisation and to ending hostilities, turning the DMZ into a peace zone.<sup>3</sup> In June 2018, President Moon Jae-in called for an inter-Korean operation to excavate the remains of soldiers in the DMZ killed in the 1950–53 Korean War.<sup>4</sup> In September 2018, the North Korean and South Korean Ministers of Defence signed a military agreement, the Panmunjom declaration, which mandates that North Korea, South Korea and the United Nations Command (UNC) “will remove all mines in the Joint Security Area

(of the DMZ) in Panmunjom within 20 days, beginning on October 1, 2018”.<sup>5</sup> 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.<sup>6</sup> North Korea were reported to have cleared five mines while South Korea found none.<sup>7</sup> Mine clearance will also take place from 1 October to 30 November 2018 in Cheolwon, Gangwon province, to enable joint recovery of the bodily remains of soldiers, and to enable the establishment of an inter-Korean road within the joint recovery site.<sup>8</sup>

In 2016, as in the previous year, there were reports of new use of mines by North Korea, in areas both on its side of the DMZ, and in those patrolled by South Korea. On 23 August, for instance, South Korean officials reported that North Korea had planted mines near the village of Panmunjom, which is jointly administered by North Korea and the United Nations (UN) Command inside the DMZ. A South Korean official stated “the North Korean’s military was seen laying several landmines last week on the North’s side of the Bridge of No Return”, which spans the military demarcation line.<sup>9</sup> The UN

Command “strongly condemned” any action by North Korea that jeopardises the safety of personnel in the DMZ, but indicated it would not speculate on the North’s actions.<sup>10</sup>

In August 2015, two South Korean soldiers were seriously wounded in a mine blast while conducting a routine patrol inside the DMZ near the town of Paju, 50km north of Seoul.<sup>11</sup> The US-led UN Command Military Armistice Commission sent a multi-national Special Investigation Team to examine the incident, which concluded “the North Korean People’s Army violated paragraphs 6, 7 and 8 of the Armistice Agreement by emplacing wooden box land mines along a known Republic of Korea patrol route in the southern half of the Demilitarized Zone, injuring two Republic of Korea soldiers. Additionally, the investigation determined that the devices were recently emplaced, and ruled out the possibility that these were legacy landmines which had drifted from their original placements due to rain or shifting soil”.<sup>12</sup> North Korea rejected the allegation, stating it would make “no sense” for it to use landmines south of the border and that it only used mines in self-defence.<sup>13</sup>

In June 2015, it was also reported to the media by a South Korean official that North Korean forces had been using anti-personnel mines along the DMZ border “for the past couple of months”, ostensibly to prevent North Korean soldiers from fleeing to South Korea.<sup>14</sup>

## PROGRAMME MANAGEMENT

North Korea has no functioning mine action programme.

## LAND RELEASE

No release of mined area is believed to have taken place in 2017, similar to earlier years.

## ARTICLE 5 COMPLIANCE

North Korea is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

1 Statement of North Korea, United Nations (UN) General Assembly, New York, 4 December 1998, UN doc. A/53/pv79, pp. 8–9.

2 Email from Kerry Brinkert, Director, APMBC ISU, 1 February 2006.

3 “North and South Korean leaders promise ‘lasting peace’ for peninsula”, *The Guardian*, 27 April 2018, at: <https://www.theguardian.com/world/2018/apr/27/north-south-korea-summit-leaders-promise-lasting-peace-denuclearisation-kim-jong-un-moon-jae-in>.

4 “S. Korea’s first mine-clearing tank wins battle suit”, *Aju Business Daily*, 9 July 2018, at: <http://www.ajudaily.com/view/20180709110922386>.

5 Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain, Song Young-moo and No Kwang Chol, 19 September 2018, Annex 2, p. 7, at: <https://www.ncnk.org/resources/publications/agreement-implementation-historic-panmunjom-declaration-military-domain.pdf>; and “Korean leaders sign agreement for North Korea to take further steps to denuclearize”, *ABC News*, 20 September 2018, at: <https://abc7chicago.com/korean-leaders-sign-agreement-for-north-korea-to-take-further-steps-to-denuclearize/4281506/>.

6 “Koreas finish removing land mines from border village”, *Associated Press*, 22 October 2018, at: <https://www.apnews.com/6ab59a08c6e347bba1ab1a767b3fc368>.

7 “Two Koreas Complete Mine Removal in JSA”, *KBS World Radio*, 19 October 2018, at: [http://world.kbs.co.kr/service/news\\_view.htm?lang=e&Seq\\_Code=140124](http://world.kbs.co.kr/service/news_view.htm?lang=e&Seq_Code=140124).

8 Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain, Song Young-moo and No Kwang Chol, 19 September 2018, Annex 3, p. 9.

9 “North Korea planting landmines at border with South, claims UN”, *The Independent*, 23 August 2016, at: <http://www.independent.co.uk/news/world/asia/north-korea-planting-landmines-border-with-south-un-claims-a7205241.html>; and “Bride of No Return: Seoul Accused Pyongyang of Planting Landmines on Border”, *Sputnik International*, 28 August 2016, at: <https://sputniknews.com/asia/20160823/1044569788/seoul-accuses-pyongyang-planting-landmines.html>.

10 Ibid.

11 “South Korea Accuses the North After Land Mines Maim Two Soldiers in DMZ”, *The New York Times*, 10 August 2012, at: [http://www.nytimes.com/2015/08/11/world/asia/north-korea-placed-mines-that-maimed-2-south-korean-soldiers-at-dmz-seoul-says.html?\\_r=0](http://www.nytimes.com/2015/08/11/world/asia/north-korea-placed-mines-that-maimed-2-south-korean-soldiers-at-dmz-seoul-says.html?_r=0); and J. Park, “South Korea condemns North on land mine blast, vows retaliation”, *Reuters*, 10 August 2015, at: <http://www.reuters.com/article/us-southkorea-northkorea-mines-idUSKCN0QF07A20150810>.

12 US Forces Korea, “United Nations Command Military Armistice Commission Investigates land mine detonation in demilitarized zone”, Press release, 13 August 2015, at: <http://www.usfk.mil/Media/Press-Releases/Article/613531/united-nations-command-military-armistice-commission-investigates-land-mine-det/>.

13 “North Korea Rejects Landmine Blasts Blame”, *Sky News*, 14 August 2015, at: <http://news.sky.com/story/north-korea-rejects-landmine-blasts-blame-10349417>; and Statement of North Korea’s Ambassador, UN press conference, 21 August 2015, available at: <https://www.scribd.com/doc/275521285/North-Korea-Ambassador-s-August-21-2015-Opening-Statement-at-UN-Press-Conference>.

14 “North Korea plants landmines in DMZ apparently to prevent soldiers fleeing”, *Yonhap*, 14 June 2015, at: <http://english.yonhapnews.co.kr/national/2015/06/14/0301000000AEN20150614000700315.html>.



# PAKISTAN

## RECOMMENDATION FOR ACTION

- Pakistan should accede to the Anti-Personnel Mine Ban Convention (APMBC) and clear mined areas as a matter of priority.

## CONTAMINATION

Pakistan remains heavily affected by mines and other ordnance from the Soviet occupation of Afghanistan (1979–89) and three wars with India, as well as from more recent and continuing conflicts in areas bordering Afghanistan, including, in particular, the Federally Administered Tribal Areas (FATA).

In 2017, Pakistan reiterated past statements that it “faces no problem of uncleared mines”. It again acknowledged that the army laid mines on its eastern border with India during an escalation of tensions in 2001–02, but stated those mines were all cleared and that no mines have since been laid.<sup>1</sup> However, it has reported that attacks by non-state armed groups again employed anti-personnel and anti-vehicle mines of an improvised nature during 2017.<sup>2</sup>

Indeed, in 2017–18, civilian mine casualties were reported by the media across Pakistan: from mines of an improvised nature laid by non-state armed groups, 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).<sup>3</sup> In 2017, according to a report from Geneva International Centre for Humanitarian Demining (GICHD), Pakistan had the highest number of recorded casualties from anti-vehicle mines, amounting to 28% of the global total.<sup>4</sup>

## PROGRAMME MANAGEMENT

Pakistan has no formal civilian mine action programme. Pakistani military engineering units are believed to be responsible for mine clearance in conflict zones, while the Frontier Constabulary has said it conducts mine clearance in contaminated areas of Baluchistan, FATA, and other conflict zones in the North-West Frontier Province.<sup>5</sup>

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## LAND RELEASE

There are no reports of formal survey or clearance of mined area in 2017. Pakistan reported a total of 262 attacks causing casualties due to improvised explosive devices (which include anti-personnel and anti-vehicle mines, although the figures are not disaggregated) “all over the country” and said that in 2017 the Army destroyed 955 “unserviceable” anti-personnel mines.<sup>6</sup>

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## ARTICLE 5 COMPLIANCE

Pakistan is not a state party to the APMBBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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- 1 Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (for 2017), Form B; and Statement of Pakistan, 16th Meeting of the States Parties to the APMBBC, 18–21 December 2017.
  - 2 CCW Article 13 Report (for 2017), Form B.
  - 3 See, e.g., “Two people killed in landmine blasts”, *DAWN*, 23 August 2017, at: <https://www.dawn.com/news/1353281/two-people-killed-in-landmine-blasts>; “Man Dies In Dera Bugti Landmine Blast”, *Urdu Point*, 28 December 2017, at: <https://www.urdupoint.com/en/pakistan/man-dies-in-dera-bugti-landmine-blast-236377.html>; “Two tribal elders killed in Orakzai Agency landmine blast”, *The Express Tribune*, 15 February 2018, at: <https://tribune.com.pk/story/1635462/1-one-tribal-elder-killed-two-injured-orakzai-agency/>; “Summer brings with it landmines in Azad Kashmir”, *Pakistan Today*, 6 July 2018, at: <https://www.pakistantoday.com.pk/2018/07/06/summer-brings-with-it-landmines-in-pakistani-kashmir/>; and “Landmines killing people in Pakistan’s South Waziristan”, *Al Jazeera*, 5 February 2018, at: <https://www.aljazeera.com/news/2018/02/landmines-killing-people-pakistan-south-waziristan-180205091656542.html>.
  - 4 “Global Mapping and Analysis of Anti-Vehicle Mine Incidents in 2017”, GICHD and the Stockholm International Peace Research Institute (SIPRI), Geneva, 2018.
  - 5 Interviews with Khalil Ur Rehman, Director, Disarmament Division, Ministry of Foreign Affairs, Islamabad, 9 April 2011; with Muhammad Kamran Akhtar, then-Director, Disarmament Division, Ministry of Foreign Affairs, Islamabad, 23 April 2009, and 10 April 2007; with Brig. Azmat Ali, Spokesman, Inter Services Public Relations, Peshawar, 22 March 2010; and with Sifat Ghayur, Inspector General, Frontier Constabulary, Peshawar, 19 March 2010.
  - 6 CCW Amended Protocol II Article 13 Report (for 2017), Form B and F.



# RUSSIA

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	5	5
Target date for completion of mine clearance	5	5
Targeted clearance	6	6
Efficient clearance	5	5
National funding of programme	7	7
Timely clearance	4	4
Land-release system in place	4	4
National mine action standards	4	4
Reporting on progress	3	3
Improving performance	4	4
<b>PERFORMANCE SCORE: POOR</b>	<b>4.7</b>	<b>4.7</b>

## PERFORMANCE COMMENTARY

Russia is continuing to demine in Chechnya and Ingushetia, but the extent of progress being made and the expected completion date are not known, as this information is not officially reported by Russia.

## RECOMMENDATIONS FOR ACTION

- Russia should accede to and abide by the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority, including the prohibition on use of anti-personnel mines.
- Russia should take the necessary measures to identify the extent and impact of mine contamination (in particular in Chechnya and the North Caucasus) and complete clearance of mined areas to humanitarian standards as soon as possible.
- Russia should be more transparent in detailing the extent of its mine contamination and clearance operations.
- Russia should ensure the protection of civilians from munitions in areas it controls or occupies.

## CONTAMINATION

Russia is heavily contaminated with mines and explosive remnants of war (ERW) as a result of World War II, 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.<sup>1</sup> In 2010, Russia's deputy prime minister and presidential special envoy to the Caucasus, Aleksandr Khloponin, claimed that mines affected 14km<sup>2</sup> of land and posed a major obstacle to development.<sup>2</sup> In contrast, Chechen officials and human rights organisations have previously estimated that 245km<sup>2</sup> of land was mined, including 165km<sup>2</sup> of farmland and 73km<sup>2</sup> of woodland.<sup>3</sup>

In January 2017, a commander in the Russian Armed Forces reportedly told press agency Interfax that more than 100km<sup>2</sup> of land remained to be cleared in Chechnya, and a further 20km<sup>2</sup> in neighbouring Ingushetia.<sup>4</sup> 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.<sup>5</sup>

As at 2011, according to 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.<sup>6</sup>

### 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 'phony minefields' or areas containing trip-flares. Trip-flares are not covered by the APMBC.<sup>7</sup>

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."<sup>8</sup> 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.<sup>9</sup> 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'.<sup>10</sup>

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.<sup>11</sup> 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.<sup>12</sup>

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.<sup>13</sup> 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".<sup>14</sup>

## 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).<sup>15</sup>

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.<sup>16</sup>

Clearance of explosive ordnance in 2017 was reportedly undertaken by 7,050 military personnel, including 846 officers, 97 demining teams, 978 vehicles and 51 pieces of demining machinery.<sup>17</sup>

## LAND RELEASE

In its CCW Protocol V transparency reports for 2017, Russia reported that its armed forces engineering units conducted demining and explosive ordnance disposal (EOD) in the "territories of the Russian Federation", including the Western, Southern, Central, and Eastern military districts, and the Northern navy district. In total, more than 331,607 explosive devices were destroyed, including 30,292 improvised explosive devices.<sup>18</sup>

In 2016, the Deputy Chief Engineer of Russia's armed forces, Colonel Ruslan Alahverdiev, had reportedly promised to complete clearance of Chechnya and Ingushetia by 2018.<sup>19</sup> However, in the online media report, it was unclear whether Colonel Alahverdiev was

referring only to clearing all roads and forests, or if roads and forests are the only remaining mined areas in Chechnya and Ingushetia. In September 2017, online media reported that combat engineers had been working since April 2017 to clear forests in mountainous areas and foothills in Chechnya.<sup>20</sup>

### Progress in 2018

For 2018, Russia planned to clear more than 53km<sup>2</sup> of ERW: 14.7km<sup>2</sup> in the Western Military District, 14.2km<sup>2</sup> in the Southern Military District, 13.9km<sup>2</sup> in the Central Military District, 6.2km<sup>2</sup> in the Eastern Military District, and 4.1km<sup>2</sup> in the Northern Navy District.<sup>21</sup>

## ARTICLE 5 COMPLIANCE

Russia is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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# SOUTH KOREA

## RECOMMENDATIONS FOR ACTION

- The Republic of South Korea (South Korea) should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- South Korea should clear all anti-personnel mines from the Demilitarised Zone (DMZ) as soon as possible.

## CONTAMINATION

The Korean War left mines and explosive remnants of war (ERW) in southern Korea, and because of a security threat, South Korea laid barrier minefields along the DMZ separating it from the Democratic People's Republic of Korea in the north (North Korea).

The 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. In 2006, South Korea indicated that about 970,000 mines were emplaced in the southern part of the DMZ, about 30,000 mines in the CCZ, and about 8,000 mines in 25 military sites that cover an area of about 3km<sup>2</sup> in the northern parts of Gyeonggi-do and Gangwon provinces, below the CCZ.<sup>1</sup> Previously, a report by the National Defence Committee in 2010 said that South Korea had about 1,100 "planned" mined areas covering 20km<sup>2</sup> and some 209 unconfirmed mined areas covering 97.82km<sup>2</sup>.<sup>2</sup>

In April 2018, the North Korean leader, Kim Jong-un, and the South Korean president, Moon Jae-in, met and issued a statement promising to bring "lasting peace" to the peninsula with a commitment to denuclearisation and to ending hostilities, turning the DMZ into a peace zone.<sup>3</sup> In June 2018, President Moon Jae-in called for an inter-Korean operation to excavate the remains of soldiers in the DMZ killed in the 1950–53 Korean War.<sup>4</sup> In September 2018, the North Korean and South Korean Ministers of Defence signed a military agreement, the Panmunjom declaration, which mandates that North Korea, South Korea and the United Nations Command (UNC) "will remove all mines in the Joint Security Area (of the DMZ) in Panmunjom within 20 days, beginning on October 1, 2018".<sup>5</sup> 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.<sup>6</sup> North Korea were reported to have cleared five mines while South Korea found none.<sup>7</sup> Mine clearance will also take place from 1 October 2018 in Cheolwon, Gangwon province, to enable joint recovery of the bodily remains of soldiers, and to enable the establishment of an inter-Korean road within the joint recovery site.<sup>8</sup>

South Korea has also had to contend periodically with wooden box mines carried by flood water from North Korea during the rainy season. An incident was reported in July 2017, when a wooden mine was found and destroyed on a small island along the maritime border by the South Korean navy during a sweep for displaced box mines after heavy rains.<sup>9</sup> In June 2016, South Korean military officials reported that close to 260 North Korean wooden box mines had washed up along the border region in 2010–15.<sup>10</sup>

In 2016, South Korea made allegations of new anti-personnel mine use by North Korea. On 23 August 2016, South Korean officials reported that the North had planted mines near the village of Panmunjom inside the DMZ, which is jointly administered by North Korea and the United Nations (UN) Command. A South Korean official stated “the North Korean’s military was seen laying several landmines last week on the North’s side of the Bridge of No Return”, which spans the military demarcation line. The UN Command “strongly condemned” any action by North Korea that jeopardises the safety of personnel in the DMZ, but would not speculate on the North’s actions.<sup>11</sup>

Previously, in 2015, two South Korean soldiers were seriously wounded in a landmine blast while conducting a routine patrol inside the DMZ near the town of Paju, 50km north of Seoul.<sup>12</sup> The US-led UN Command Military Armistice Commission sent a multi-national Special Investigation Team to examine the incident which concluded “the North Korean People’s Army violated paragraphs 6, 7 and 8 of the Armistice Agreement by emplacing wooden box land mines along a known Republic of Korea patrol route in the southern half of the Demilitarized Zone, injuring two Republic of Korea soldiers. Additionally, the investigation determined that the devices were recently emplaced, and ruled out the possibility that these were legacy landmines which had drifted from their original placements due to rain or shifting soil”.<sup>13</sup> North Korea rejected the allegation, stating it would make “no sense” for it to use landmines south of the border and that it only used mines in self-defence.<sup>14</sup>

It was also reported in the media in 2016 and 2015 that North Korean forces had been using anti-personnel mines along the DMZ border, apparently to prevent North Korean soldiers from fleeing to South Korea.<sup>15</sup>

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## PROGRAMME MANAGEMENT

There is no national mine action authority or mine action centre in South Korea. Demining is conducted by the South Korean army, which has undertaken limited clearance of the DMZ and CCZ, and has concentrated mostly on demining military bases in rear areas. In September 2018, it was reported that the South Korean army had called for the establishment of an agency dedicated to removing landmines in the DMZ. The agency would be tasked with planning and executing the removal process.<sup>16</sup>

In 2013, the Ministry of Defence said it had submitted a bill on mines to the parliament to allow civilian organisations to remove mines laid during the Korean War, in order to facilitate ongoing military clearance. “The bill is aimed at making legal grounds and a process to allow both the military and civilians to remove mines so as to protect lives and the property of people”, the Ministry said in a press release.<sup>17</sup> As at September 2017, South Korea’s National Assembly had not passed the bill.

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## LAND RELEASE

In its latest Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency report for calendar year 2017, South Korea reported that 462 military deminers had cleared a total of 102,828m<sup>2</sup> and destroyed 142 mines, at a cost of US\$1.12 million.<sup>18</sup> For 2016, South Korea had reported clearing 191,019m<sup>2</sup> and destroyed 134 mines.<sup>19</sup>

At the end of September 2018, clearance began at the JSA in Panmunjom in South Korea, following the agreement between Kim Jong-un and Moon Jae-in the previous month. All the mines in the JSA, the only section of the DMZ where forces stand face-to-face, were expected to be cleared before the end of October.<sup>20</sup>

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## ARTICLE 5 COMPLIANCE

South Korea is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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# SYRIA

## RECOMMENDATIONS FOR ACTION

- Syria should ensure that its armed forces and other state agents do not use mines.
- Other states engaged in supporting the Syrian regime should ensure that their armed forces and any armed groups they support do not use landmines.
- Non-state armed groups should cease all use of landmines.
- Syria should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Syria should establish a national mine action authority and facilitate participation by international demining organisations in developing an effective mine action programme.
- Syria should initiate survey and clearance of mines as soon as possible and take other measures to protect civilians from mines and explosive remnants of war (ERW).

## CONTAMINATION

Syria is contaminated by landmines left by successive Arab-Israeli wars since 1948 but particularly by the conflict in Syria since 2011. Ongoing hostilities and reports of continuing use of landmines by pro- and anti-government forces have prevented systematic large-scale survey to determine the extent and types of contamination.<sup>1</sup>

Landmines, whether commercial or of an improvised nature, affect all regions and vary according to the armed groups active there. In 2017, Islamic State and other non-state armed groups reportedly used landmines in Aleppo, Deir ez-Zor, Idlib, and Raqqa governorates.<sup>2</sup> Contamination is likely to be particularly dense in areas that were occupied by Islamic State.

The Syrian government reportedly laid mines along borders with Turkey and Lebanon in 2012 and Turkish authorities reportedly 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 replaced by Turkish forces.<sup>3</sup> Heavy casualties that occurred in Manbij, close to the Turkish border, after Kurdish forces pushed out Islamic State in mid-August 2016 attest to massive contamination by mines and other improvised devices that were still inflicting casualties in 2017.<sup>4</sup>

Islamic State 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 Commission of Inquiry monitoring the conflict in Syria reported in March 2017.<sup>5</sup> From Raqqa, former capital of the self-proclaimed Islamic State caliphate, to Hassakeh governorate in the north-east, and south to Deir ez-Zor, retreating Islamic State forces left massive contamination by mines of an improvised nature and other improvised devices that have taken a heavy toll on civilians returning in their wake.

Medical non-governmental organisation (NGO) Médecins sans Frontières reported that the number of victims of landmines 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, alongside fields, on rooftops, and under staircases, as well as rigged in common household items from refrigerators and air conditioners to televisions and cooking pots.<sup>6</sup>

In north-western Idlib and neighbouring Aleppo governorates, volunteers similarly report mines and other explosive devices planted in agricultural fields,

next to roads, inside villages, and around schools and hospitals.<sup>7</sup> 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.<sup>8</sup> Further south in Hama and Homs governorates, open-source reports of mine casualties, although unconfirmed, are suggestive of significant contamination left by all sides during years of conflict.<sup>9</sup>

In parts of southern governorates bordering Israel and Jordan accessible to volunteers, they have reported fewer mines than other types of explosive hazard,<sup>10</sup> but Syrian reports point to the presence of Russian PMN-2 and PMN-4 anti-personnel mines.<sup>11</sup> Remotely delivered T-84 anti-vehicle mines were reportedly used in the Golan Heights in the south-west of Syria (already heavily contaminated with anti-personnel mines).<sup>12</sup> There have also been reports that T-84 mines have been remotely deployed in Daraa governorate in the south-west of the country.<sup>13</sup>

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## PROGRAMME MANAGEMENT

Syria does not have a national mine action authority or a national programme for survey and clearance. Mine action has been conducted by a wide range of organisations, including military engineers of parties to the conflict, civil defence organisations, humanitarian demining organisations, and commercial companies.

Russia deployed several hundred military deminers from the Armed Forces Demining Centre supported by mine detection dog teams and Uran-6 mine detection robots. Deployments included 200 deminers sent to Aleppo governorate, 150 to Palmyra, and 175 who were due to be sent to Deir ez-Zor governorate.<sup>14</sup> Some deminers were reportedly among troops due to return to Russia under the withdrawal announced in December 2017.<sup>15</sup> Russian deminers also provided training for Syrian army engineers at Hmeimim air base 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.<sup>16</sup>

International humanitarian and commercial operators were active mainly in north-eastern Syria in areas recaptured from Islamic State by Kurdish and US-led coalition forces, but their identities remain anonymous on the basis of security concerns. Syrian Civil Defence, supported with training and funding through Mayday Rescue, had clearance teams working in five governorates (Daraa, Hama, Homs, Idlib, and Quneitra) and conducted a range of other activities (community liaison; risk education) in several other governorates.<sup>17</sup>

The HALO Trust partnered with a Syrian NGO, SHAFAK, which conducted community impact survey, risk education, and victim data collection in Aleppo, Idlib and Rural Damascus provinces in 2017. The partnership agreement with SHAFAK, based in Gaziantep, Turkey, started in mid-2016. Deteriorating security forced it to stop operating in Rural Damascus in March 2018.

In mid-2017, HALO Trust started partnering with another Syrian NGO to recruit, train, and deploy teams for non-technical survey and disposal of ERW. In mid-December 2017, these three teams deployed in Daraa and some districts of Quneitra provinces, and were reconfigured into five teams in March 2018. The teams worked under supervision of five HALO Trust international staff working from a remotely located operations room. The teams photograph all items for identification and receive instruction on disposal and render-safe.<sup>18</sup>

Following UN Security Council Resolution 2165 (2014), which authorised cross-border humanitarian assistance into Syria, the UN Regional Humanitarian Coordinator requested the UN Mine Action Service (UNMAS) to provide assistance for mine action in Syria. In 2015, UNMAS opened an office in Gaziantep and established a mine action sub-cluster to integrate mine action into the broader Syria humanitarian response. In September 2017, UNMAS opened an office in Beirut to coordinate support provided through offices in Gaziantep and Amman for 27 mine action organisations, undertaking activities that included community-level contamination impact surveys, marking of some hazardous areas, risk education, and clearance.<sup>19</sup> UNMAS also maintained an incident database in Amman, making data on contamination available to humanitarian agencies. By June 2018, UNMAS said it had received almost half of its \$14.8 million appeal for 2018.<sup>20</sup>

After months of discussions, UNMAS signed an MoU with the Syrian government in July 2018, Syria's state news agency quoted UNMAS director Agnès Macaillou as saying the agreement provided an encouraging start for UNMAS to undertake the necessary role in mine risk education.<sup>21</sup>

## LAND RELEASE

Continuing conflict prevented a coordinated national programme of mine action in 2017 though mine action interventions gathered significant momentum, albeit at levels that varied in different regions according to the level of security.

UNMAS reported that contamination impact surveys and non-technical surveys were conducted mostly in north-west and southern Syria, within Aleppo, Daraa, Idlib, and Rural Damascus, governorates, and in Quneitra governorate, particularly in the sub-districts of Atareb, Busra Ash-Sham, Hrak, Izra', Maaret Tamsrin, and Suran.<sup>22</sup> International operators also conducted community impact assessments and non-technical and technical survey in the north and north-east of the country.

Russia said its armed forces mine clearance personnel conducted four operations in 2016–17, including two at historic Palmyra, one in Aleppo and one in Deir ez-Zor, clearing a total area of 66km<sup>2</sup>, 1,500 kilometres of roads, and more than 17,000 various buildings and structures. It said the Russian military deactivated 105,000 explosive items, including over 30,000 improvised explosive devices.<sup>23</sup>

Russian media reported that military deminers had cleared more than 30km<sup>2</sup> in Syria between December 2016 and the end of February 2017.<sup>24</sup> Army engineers reported clearing some 20km<sup>2</sup> in Palmyra in 2016 and 2017, removing more than 24,000 ERW, but did not break down the items.<sup>25</sup> A Russian Defence Ministry spokesman was reported to have claimed that Russian deminers had

cleared an area of 3.6km<sup>2</sup> around Aleppo, along with 75 kilometres of road, destroying 1,000 ERW, all in the space of a week.<sup>26</sup> Russian and Syrian army engineers were also active around Damascus and its suburbs, where opposition-held areas became the target of a major Syria-Russian offensive in early 2018.

In the areas of north and north-east Syria recaptured by Syrian Democratic Forces and the United States-led coalition, humanitarian and commercial operators sharply scaled up operations, employing several hundred staff to conduct community needs assessment and ERW clearance in al-Hassakeh, Deir ez-Zor, and Raqqa governorates. Mines of an improvised nature made up more than three-quarters of items destroyed by one international operator round Raqqa and more than 60% of items it destroyed in Hassakeh governorate.<sup>27</sup>

Syria Civil Defence (SCD) conducted community impact surveys that provided a basis for clearance teams to plan and prioritise tasks. At the start of 2018, capacity included one clearance team in each of Hama, Idlib, and Quneitra governorates and two teams in Daraa, clearing mostly cluster munitions.<sup>28</sup> HALO Trust and SHAFAK started operations in early December 2017, with community liaison teams surveying and compiling maps of contaminated areas in Daraa and by March had conducted 234 spot tasks involving mainly UXO.<sup>29</sup> After Syrian government forces took control of southern governorates in July 2018 mine action in Quneitra and Daraa ceased.<sup>30</sup>

## ARTICLE 5 COMPLIANCE

Syria is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which require the clearance of mines in areas under its jurisdiction or control as soon as possible.

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- 24 "Russian deminers continue to clear east Aleppo of explosives", *Almasdam News*, 28 February 2017.
- 25 "Russian army engineers demined 24,065 explosive objects in Syria's Palmyra", *Defence World.net*, 6 October 2017.
- 26 "Russian sappers demined some 890 acres in Aleppo in a single week", *Sputnik International*, 30 January 2017, at: <https://sputniknews.com/middleeast/201701301050140911-russian-sappers-demine-aleppo/>.
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- 28 Telephone interview with Luke Irving, Mayday Rescue, 28 March 2018; Mayday Rescue, "Syria Civil Defence, Explosive Hazard Mitigation Project Overview, Nov 2015–Mar 2018", 1 March 2018.
- 29 Email from Adam Boyd and Rob Syfret, HALO, 18 May 2018; and HALO Trust, "Survey and Explosive Hazard Removal in Dar'a and Quneitra Governorates, Southern Syria", undated but 2018.
- 30 Skype interview with Luke Irving, Mayday Rescue, 24 July 2018; and email from Alannah Ellis, Programme Officer, HALO Trust, 10 September 2018.



# UZBEKISTAN

## RECOMMENDATIONS FOR ACTION

- Uzbekistan should accede to and abide by the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Uzbekistan should take the necessary measures to identify the extent and impact of mine contamination and clear mined areas in a timely manner.
- Uzbekistan should be more transparent in detailing the extent of its mine contamination and clearance operations.

## CONTAMINATION

Uzbek forces have laid mines along its international borders at various times, including on its borders with Afghanistan in 1998, with Kyrgyzstan in 1999, and with Tajikistan in 2000. In 2010, the Secretary-General United Nations (UN) Ban Ki-moon criticised as “unacceptable” Uzbekistan’s emplacing of mines along parts of its border that have not been delineated.<sup>1</sup>

Soviet troops also laid mines on the Uzbek-Afghan border. Survey on the Tajik side of the border over several years had identified a total of 57 suspected hazardous areas (SHAs) as at December 2008 (size unknown), which were subsequently deemed to be on Uzbekistan territory. 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.<sup>2</sup> The first ever state visit by the President of Uzbekistan to Tajikistan took place in March 2018, and several agreements were signed between the two countries, including one on demarcation of the separate regions of the Tajik-Uzbek

border. Tajikistan expected decisions to be taken in 2018 regarding clarification and identification of SHAs on the Uzbek border, and any demining operations will require agreement and cooperation between both nations (see Mine Action Review’s *Clearing the Mines* report on Tajikistan for further information).<sup>3</sup>

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.<sup>4</sup> According to the most recent information available (2005), Uzbekistan has no plans to clear mines laid on its 150km border with Afghanistan.

## PROGRAMME MANAGEMENT

There is no functioning mine action programme in Uzbekistan.

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## LAND RELEASE

There are no reports of any land release occurring in 2017.

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## ARTICLE 5 COMPLIANCE

Uzbekistan is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

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1 "Ban calls Uzbekistan land mines 'unacceptable'", *The Hindu*, 6 April 2010, at: <http://www.thehindu.com/news/international/ban-calls-uzbekistan-land-mines-unacceptable/article389776.ece>.

2 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.

3 Email from Muhabbat Ibrohimzoda, Tajikistan National Mine Action Centre, 27 April 2018.

4 IRIN, "Kyrgyzstan-Tajikistan: Landmine threat along Uzbek border removed", at: [www.irinnews.org](http://www.irinnews.org).

## VIETNAM

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	5	5
Target date for completion of mine clearance	2	2
Targeted clearance	4	4
Efficient clearance	3	3
National funding of programme	6	5
Timely clearance	4	4
Land-release system in place	4	4
National mine action standards	5	5
Reporting on progress	4	4
Improving performance	6	5
<b>PERFORMANCE SCORE: POOR</b>	<b>4.3</b>	<b>4.1</b>

## PERFORMANCE COMMENTARY

Vietnam continued to strengthen the Vietnam National Mine Action Centre (VNMAC) as a mechanism for coordinating mine action, which is taking steps to develop legislation, standards, and information management and sharing. The extent and management of Vietnam's national mine action capacity remains opaque and it has not demonstrated progress in defining the extent and location of remaining mine contamination or in reporting the progress of action to address it.

## RECOMMENDATIONS FOR ACTION

- Vietnam should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Vietnam should prepare and publish a detailed assessment of remaining mined areas.
- VNMAC should draw up a strategic plan for completing mine clearance.
- VNMAC should provide regular detailed reporting on the progress of demining.

## CONTAMINATION

Vietnam's mine problem is certainly small compared with its explosive remnants of war (ERW) contamination, though its full extent is unknown. A survey conducted between 2010 and 2014 reported anti-personnel mine contamination in 26 of 63 cities and provinces but gave no further details.<sup>1</sup> Most mines were left by conflicts in the 1970s with neighbouring Cambodia and China, and affect areas close to its borders with those countries.<sup>2</sup> Some mines have also been found around former United States (US) military installations.<sup>3</sup>

Vietnam cleared an area up to 1km deep along its northern border in the 1990s under an agreement with China, but areas further inland from the border are believed to be still contaminated with mines emplaced by the military of both countries. Since 2004, military

engineers have reportedly cleared around 95km<sup>2</sup> of contaminated land in the northern provinces of Cao Bang, Ha Giang, Lai Chau, Lang Son, and Quang Ninh bordering China under a project known as "Programme 120", destroying mainly Type 72, K58, and PPM-2 anti-personnel mines.<sup>4</sup> Vietnam has made no disclosure on the extent of remaining contamination in recent years.

Cambodian border areas were affected by irregularly emplaced mines reflecting the more sporadic nature of the fighting there,<sup>5</sup> but Engineering Command reported in 2013 that the problem had been eliminated.<sup>6</sup> 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.<sup>7</sup>

## PROGRAMME MANAGEMENT

Vietnam's mine action programme is undergoing a process of restructuring, but management and operations continue to depend largely on the armed forces. A Prime Minister's Decision in 2006 assigned responsibility to the Ministry of National Defence for the national oversight of mine action, with clearance to be undertaken by the Army Engineering Corps of the People's Army of Vietnam (PAVN).<sup>8</sup> BOMICEN, part of the Ministry of National Defence, acted as a central coordinating body for clearance and survey by national operators.<sup>9</sup>

Vietnam set up Steering Committee 504 in 2010 under the Prime Minister, with the Minister of National Defence and the Minister of Labour, War Invalids and Social Affairs as deputies, charged with overseeing the national mine action programme for 2010–25. In March 2018, the government merged Steering Committee 504 and Steering Committee 33 (in charge of responses to the impact of toxic chemical defoliants dropped by the United States) into Steering Committee 701 on the Settlement of Post-war Unexploded Ordnance and Toxic Chemical Consequences.

Under a 2013 Prime Ministerial decision (No. 738 of 2013), Vietnam set up a national mine action centre – VNMAC – to strengthen the direction of mine action and provide a focal point for mine action operations.<sup>10</sup> A 2014 decree assigned responsibility for managing and coordinating the national mine action programme to the Ministry of National Defence. VNMAC, "under the

leadership of the Prime Minister, directly directed by the Ministry of Defence" has responsibility to propose policy, draw up plans, serve as the focal point for international cooperation, lead fundraising, and "preside over" mine action information management. It is also responsible for organising and implementing quality assurance.<sup>11</sup>

VNMAC has four departments (Planning, Coordination, Technical Affairs and Finance) and three subordinate centres (Training, Information Management Unit, and Survey Consultancy and Supervision Centre). The government appointed VNMAC's director and two deputy directors in 2014 with the centre becoming officially operational in February 2015.<sup>12</sup>

A further decree on management of mine action under preparation since 2016 is intended to clarify VNMAC's mandate as well as to define the role of all state agencies involved in mine action to eliminate overlap.<sup>13</sup> A draft of the decree circulating in 2018 stated the Ministry of National Defence will elaborate and preside over the national mine action programme in coordination with other relevant ministries and sectors. It also identified the Ministry of National Defence as the focal point for international cooperation in mine action. The decree instructed "VNMAC, under the direction of the Prime Minister and managed by Ministry of Defence, to monitor, coordinate and implement mine action tasks."<sup>14</sup> By April 2018, the draft had received endorsement of 20 ministries and was awaiting the Prime Minister's approval.<sup>15</sup>

A Mine Action Partnership Group (MAPG), whose formation was approved by the Prime Minister in 2016 to strengthen coordination between national and international stakeholders, had its first Executive Committee meeting in June 2017. The committee agreed to set up four thematic working groups to take up priority issues in the second half of the year. These were:

- Contributing comments on the (long-awaited) decree on mine action management and the updating of national standards
- Evaluating the status of victim assistance and risk education
- Reviewing the status of information management and plans for a national database; and
- Reviewing resource mobilisation.

Delays in setting up a steering committee, however, stalled further activity.

## Strategic Planning

Vietnam does not have a strategy specifically targeting landmines. Decision 504, approved by the Prime Minister in April 2010, set out a National Mine Action Plan for 2010 to 2025. The plan 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<sup>2</sup> of ERW contamination between 2016 and 2025.<sup>16</sup>

A VNMAC action plan for 2018 included three main targets:<sup>17</sup>

- Finalise legislation, decrees, and guidelines for the mine action sector in order to provide a unified framework for the sector country-wide
- Clarify estimates of contamination through the release of the landmine impact survey and develop risk education; and
- Clearance of some 300km<sup>2</sup> of ERW affected land.

## Information Management

On a national level, data remains a considerable challenge. VNMAC is in the process of setting up an information management unit that is intended to combine the data on operations and victim assistance held by other national agencies. The project is supported by Norwegian People’s Aid (NPA), which has provided software, hardware, and training. In 2017, support included training in advanced database development and management, data consolidation and developing information management standard operating procedures. VNMAC also started drafting national legislation that would provide for the sharing of information, and was revising the national standards for information management.<sup>18</sup>

Priority tasks in 2017 included populating the database with results of survey and other operations and getting the draft legislation approved.<sup>19</sup> VNMAC’s release in 2018 of the results of an impact survey was welcomed by mine action stakeholders as an important step towards information sharing. With the exception of Quang Tri, Vietnamese provinces with active mine action programmes do not have databases, so operators maintain their own.<sup>20</sup>

## Operators

Most clearance in Vietnam is conducted by the Army Engineering Corps and military-owned commercial companies. Its current strength and deployment are unknown. Officials have previously reported that it had 250 mine clearance and battle area clearance (BAC) teams. Vietnam reportedly has more than 70 military-owned companies undertaking clearance related to infrastructure and commercial and development projects.<sup>21</sup>

International operators conclude agreements to work in Vietnam with the People’s Aid Coordinating Committee, but negotiate their programme of operations separately with the authorities of each province. Humanitarian operators were concentrated in central provinces on either side of the DMZ, which are among the most heavily contaminated.

International operators active in 2017 included Danish Demining Group (DDG) (in Quang Nam and Thua Tien Hue provinces); Mines Advisory Group (MAG) (in Quang Binh and Quang Tri provinces); NPA (in Quang Tri and Thua Thien Hue provinces); and PeaceTrees Vietnam (who have been working in Quang Tri province since 1995).

Under an agreement with the Korea International Cooperation Agency (KOICA), VNMAC, KOICA, and UNDP are collaborating on a US\$20 million project for ERW survey and clearance, information management, risk education, and victim assistance in two central provinces (Binh Dinh and Quang Binh) for three years in 2018–20. A Joint Project Management Unit (JPMU), with representatives of each of these three organisations, will be responsible for the daily and coordinated project management, supported by a United Nations Development Programme (UNDP) chief technical adviser who joined in March 2018. A Joint Project Coordination Committee (JPCC), comprising representatives from the Ministry of Defence, VNMAC, the UNDP and KOICA, will provide overall strategic guidance and oversight.<sup>22</sup>

## LAND RELEASE

VNMAC did not respond to requests for details of mine clearance in 2017. Based on partial reporting, a total of 34 mines were destroyed in 2017.

Among international operators, MAG reported it destroyed three anti-personnel mines out of a total of 8,123 ERW items it cleared in 2017.<sup>23</sup> Operators in Quang Tri province cleared 31 anti-personnel mines in 2017 out of 21,772 items destroyed.

In five years from 2013 to 2017, the Legacy of War Coordination Centre recorded clearance of 497 landmines, 4% of the total number of items cleared, but the number of landmines cleared annually has fallen steadily.<sup>24</sup>

## ARTICLE 5 COMPLIANCE

Vietnam is not a state party to the APMBBC, but nonetheless has obligations under international human rights law to protect life, which require the clearance of mines in areas under its jurisdiction or control as soon as possible.

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- 1 VNMAC, "Report on Explosive Remnants of War Contamination in Vietnam, Based on the Explosive Remnants of War Contamination Survey and Mapping – Phase 1", provided by VNMAC 19 April 2018, p. 38.
  - 2 Interview with Sr. Col. Phan Duc Tuan, Deputy Commander, Military Engineering Command, People's Army of Vietnam (PAVN), in Geneva, 30 June 2011.
  - 3 Landmine Action, Explosive remnants of war and mines other than anti-personnel mines, London, March 2005, p. 181.
  - 4 Information provided by Sr. Col. Phan Duc Tuan, PAVN, in email received from Vietnam Veterans of America Foundation (VVAFA), Hanoi, 24 September 2012; and in interview in Geneva, 30 June 2011.
  - 5 Interview with Sr. Col. Phan Duc Tuan, PAVN, in Geneva, 30 June 2011.
  - 6 Interview with Sr. Col. Nguyen Thanh Ban, Head of Bomb and Mine Department, Engineering Command, Hanoi, 18 June 2013.
  - 7 Landmine Action, Explosive Remnants of War and Mines Other than Anti-personnel Mines, London, March 2005, p. 181.
  - 8 Prime Minister's Decision No. 96/2006/QĐ-TTg, 4 May 2006.
  - 9 Email from Col. Nguyen Trong Duc, Ministry of National Defence, 6 August 2006.
  - 10 Interview with Maj. Gen. Pham Quang Xuan, Director, VNMAC, in Geneva, 31 March 2014.
  - 11 Prime Minister's Decision 319/QĐ-TTg, 4 March 2014; information provided by VNMAC, received by email from Ed Rowe, Senior Technical Adviser to VNMAC, Norwegian People's Aid (NPA), 24 July 2018.
  - 12 Information provided by Do Van Nhan, Deputy Director General, VNMAC, received by email from VVAFA, 19 June 2015.
  - 13 Interview with Dang Van Dong, Deputy Director General, VNMAC, in Geneva, 7 February 2017.
  - 14 Draft Decree on the "management and implementation of mine action activities", Hanoi, April 2018.
  - 15 Interview with Nguyen Hang Phuc, Deputy Director General, VNMAC, Hanoi, 18 April 2018; and information provided by VNMAC, received by email from Ed Rowe, NPA, 24 July 2018.
  - 16 Prime Minister, "Decision on Approval of the National Mine Action Plan Period 2010–2025", Hanoi, 21 April 2010.
  - 17 Interview with Nguyen Hang Phuc, VNMAC, Hanoi, 18 April 2018.
  - 18 Email from Edward Rowe, NPA, 2 August 2018.
  - 19 Interview with Dang Van Dong, VNMAC, in Geneva, 7 February 2017; and email from Resad Junuzagic, NPA, 7 April 2017.
  - 20 Emails from Resad Junuzagic, Country Director, NPA, 7 April 2017; Simon Rea, Country Director, MAG, 11 April 2017; and Clinton Smith, DDG, 23 March 2017.
  - 21 Interview with Sr. Col. Nguyen Thanh Ban, Engineering Command, Hanoi, 18 June 2013; email from Executive Office of the National Steering Committee, 6 August 2012; and interviews with mine action stakeholders, Hanoi, 16–20 April 2018.
  - 22 Interview with Nguyen Hang Phuc, Deputy Director General, VNMAC, Hanoi, 18 April 2018; telephone interview with Nils Christiansen, Chief Technical Adviser, UNDP, 23 April 2018; and emails, 3 May and 11 June 2018.
  - 23 Email from Simon Rea, MAG, 17 April 2018.
  - 24 LWCC database, accessed at: [lwcc-dbu-quangtri.vn/en-us/FACTS-AND-FIGURES/](http://lwcc-dbu-quangtri.vn/en-us/FACTS-AND-FIGURES/). Operators cleared 210 landmines in 2013, 108 in 2014, 94 in 2015, and 54 in 2016, mostly US-made M-14 and M-16 anti-personnel mines.

# OTHER AREAS

The background consists of several overlapping, semi-transparent geometric shapes in various shades of purple and pink. A prominent dark purple shape is at the top left, overlapping a lighter purple shape. A large, light pink shape is in the center, overlapping a darker purple shape below it. A diagonal band of medium purple crosses the lower half of the image. The overall effect is a layered, abstract composition.

# KOSOVO

TARGET DATE FOR COMPLETION: 2021

PROGRAMME PERFORMANCE	2017	2016
Problem understood	7	7
Target date for completion of mine clearance	6	5
Targeted clearance	5	5
Efficient clearance	7	7
National funding of programme	5	4
Timely clearance	6	5
Land-release system in place	7	7
National mine action standards	7	7
Reporting on progress	5	5
Improving performance	5	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>6.0</b>	<b>5.7</b>

## PERFORMANCE COMMENTARY

Kosovo released 1.12km<sup>2</sup> by survey and clearance in 2017, an increase on land released in 2016, though areas were still being cleared that prove not to contain any mines. An increase in donor funding enabled The HALO Trust to conduct more clearance in 2017 than the previous year. The Kosovo Mine Action Centre (KMAC), with the support of The HALO Trust, has begun a nationwide socio-economic impact assessment, the results of which will guide the development of a new strategic plan for 2018–24.

## RECOMMENDATIONS FOR ACTION

- Kosovo cannot accede to the Anti-Personnel Mine Ban Convention (APMBC) due to its political status, but its government should nevertheless commit to respect and implement the Convention and to clear all mined areas as soon as possible. This could be done through submission of a voluntary Article 7 transparency report, as the authorities in Western Sahara have done.
- Kosovo should report more accurately and consistently on land release and contamination data.
- Kosovo should ensure implementation of efficient land release operations, including optimum use of high-quality survey, to accurately identify the location of mined areas and avoid clearing areas that are not contaminated.

## 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 FRY and North Atlantic Treaty Organization (NATO) member states in 1999.<sup>1</sup> At the end of 2017, 49 mined areas covered more than 1.6km<sup>2</sup>, down from 58 mined areas over 1.9km<sup>2</sup> the year before.<sup>2</sup> The difference in the number of mined areas between the two years, though, cannot be satisfactorily reconciled.

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 low metal content, making detection more difficult.<sup>3</sup> Although the total number of mines emplaced during the conflict is not known, the United Nations Mine Action Coordination Centre (UNMACC) reported, as at 31 May 2000, a total of 7,232 mines cleared in the preceding year (3,448 anti-personnel mines and 3,784 anti-vehicle mines).<sup>4</sup>

The UN reported in 2002 that “the problems associated with landmines, cluster munitions and other items of unexploded ordnance [UXO] in Kosovo have been virtually eliminated”,<sup>5</sup> but further investigation revealed considerably more contamination.<sup>6</sup> In 2013, The HALO Trust and the KMAC conducted a joint non-technical survey of mined areas and cluster munition strikes across Kosovo, with the exception of four districts in

the north. The survey confirmed 130 hazardous areas: 79 mined areas covering an estimated 2.76km<sup>2</sup> and 51 cluster munition strikes covering an estimated 7.63km<sup>2</sup>.<sup>7</sup> The total of 79 mined areas was a considerable increase on the 48 mined areas that had been identified at the end of 2012.<sup>8</sup> By the end of 2014, KMAC reported the number of confirmed mined areas had fallen slightly, to 77 covering 2.75km<sup>2</sup>.<sup>9</sup>

Mines are found mainly on Kosovo’s borders with Albania and the former Yugoslav Republic of Macedonia, but also in the area of Dulie Pass in south-central Kosovo.<sup>10</sup> Mines in Kosovo impede use of land for agriculture, pasture, tourism, the building of infrastructure, and firewood collection, and most directly affect the rural poor.<sup>11</sup> Many of the minefields cleared by The HALO Trust in Kosovo are only a few metres from occupied houses.<sup>12</sup>

KMAC, with the support of The HALO Trust, is in the process of undertaking a nationwide socio-economic impact assessment to further understand the impact of CMR and mine contamination. The result will be used to prioritise release of the remaining hazardous areas according to need and according to national development priorities.<sup>13</sup> The assessment began on 12 March 2018 and was expected to be completed at the end of May, however, there have been some delays due to difficulties obtaining information about land ownership. As at 1 October 2018, the impact assessment and prioritisation of future tasks was expected to be completed and signed off by the end of the month.<sup>14</sup>

## PROGRAMME MANAGEMENT

In January 2011, the EOD [explosive ordnance disposal] Coordination Management Section became KMAC under the Ministry of the Kosovo Security Force (KSF). KMAC is responsible for managing the clearance of mines and ERW. It prepares an annual workplan in cooperation with demining non-governmental organisations (NGOs) and coordinates operations of both NGOs and the Kosovo Protection Force (KFOR). It also coordinates survey, quality assurance (QA), risk education, public information, and victim assistance.<sup>15</sup>

### Strategic Planning

The current 2015–18 multi-year strategic plan for the Kosovo Mine Action Programme aims to reduce the social, economic, and environmental impact of mines, submunitions, and other UXO in Kosovo.<sup>16</sup> A new strategic plan for 2019–24 is being developed with the aim of clearing all minefields by 2021.<sup>17</sup> The nationwide baseline socio-economic impact assessment conducted in 2018 will guide the development of the new strategic plan.<sup>18</sup>

## Legislation and Standards

Kosovo has a law on humanitarian demining, which was adopted on 11 April 2012, in addition to a number of other relevant regulations.<sup>19</sup> Kosovo has mine action standards in place, which are said to conform to the International Mine Action Standards (IMAS).<sup>20</sup>

## Quality Management

KMAC has two QA officers, who conduct site visits at least once a week to ensure work is conducted in accordance with the standards as well as the standing operating procedures (SOPs).<sup>21</sup>

## Information Management

KMAC uses the Information Management System for Mine Action (IMSMA) database.

## Operators

The KSF provide clearance capacity in Kosovo, including around-the-clock EOD emergency response.<sup>22</sup> NGOs have also been conducting land release of mined area

in Kosovo, including The HALO Trust, the Bosnia-based Mine Detection Dog Centre (MDDC), and Norwegian People's Aid (NPA).<sup>23</sup>

KSF reported that in 2017 it deployed one platoon for demining operations; a reduction from the three platoons it deployed the year before.<sup>24</sup>

In 2017, The HALO Trust deployed nine manual demining teams and two battle area clearance (BAC) teams, with an average total operational staff of 97 (deminers, team leaders, supervisors, and medics combined). This was a similar capacity to 2016.<sup>25</sup>

In December 2014, NPA received accreditation to conduct non-technical survey for BAC, and subsequently conducted non-technical survey for CMR-contaminated areas in July 2015.<sup>26</sup> NPA subsequently received accreditation for technical survey, BAC, and risk education in July 2016. It started technical survey for CMR in November 2016, with follow-on clearance beginning in February 2017.<sup>27</sup> In 2017, NPA supported KSF demining operations with one team of two mine detection dogs (MDDs). As at September 2018, the MDDs had also been deployed for technical survey in northern Kosovo.<sup>28</sup>

## LAND RELEASE

A total of just over 0.23km<sup>2</sup> of mined area was released by clearance in 2017 and a further 0.89km<sup>2</sup> reduced by technical survey.

### Survey in 2017

In 2017, KMAC reported that The HALO Trust reduced 88,934m<sup>2</sup> by technical survey.<sup>29</sup>

### Clearance in 2017

KSF and the HALO Trust cleared a combined total of more than 0.23km<sup>2</sup> in 2017, an increase from just over 0.15km<sup>2</sup> in 2016.<sup>30</sup>

Table 1: Mine clearance in 2017<sup>31</sup>

Operator	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed
KSF	1 suspended	16,690	2	0
HALO	12 cleared and 8 suspended	215,575	30	1
<b>Totals</b>		<b>232,265</b>	<b>32</b>	<b>1</b>

AP = Anti-personnel AV = Anti-vehicle

KSF cleared one mined area in 2017, totalling 16,690m<sup>2</sup>, destroying two anti-personnel mines. Clearance of the mined area was suspended at the end of the year due to the onset of winter and the consequent end of the demining season.

NPA deployed two MDDs in support of KSF, clearing 4,055m<sup>2</sup> of the 16,690m<sup>2</sup> and destroying one anti-personnel mine. KSF also conducted EOD spot tasks during which it destroyed 129 anti-personnel mines in 2017.<sup>32</sup>

In contrast to the figures reported by KMAC for 2017, The HALO Trust reported that it had cleared 12 areas and suspended 8 others totalling 229,265m<sup>2</sup>. This is 14,151m<sup>2</sup> more than KMAC reported that they cleared. Despite working in confirmed mined areas, The HALO Trust cleared 35,188m<sup>2</sup> which contained no anti-personnel mines. In 2017, The HALO Trust destroyed three anti-personnel mines during EOD callouts.<sup>33</sup>

According to KMAC, confirmed mined areas with high impact are prioritised for clearance.<sup>34</sup> Clearance tasks are selected from the high priority areas where people are prevented access to land for cultivation and grazing, but also where communities are prevented from safely accessing wooded areas to gather firewood.<sup>35</sup>

## ARTICLE 5 COMPLIANCE

Kosovo is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

KMAC expects to complete clearance of anti-personnel mines in Kosovo by 2021, but it reported in 2018 that securing funding for NGOs may pose an obstacle to this completion date.<sup>36</sup>

**Table 2: Mine clearance in 2013–17<sup>37</sup>**

Year	Area cleared (km <sup>2</sup> )
2017	0.23
2016	0.15
2015	0.22
2014	*0.84
2013	*0.40
<b>Total</b>	<b>1.84</b>

\* Figure combines mine clearance and BAC

The Kosovo government provided approximately €135,000 in financial support to KMAC in 2017, up from approximately €125,000 the year before. The KSF

received €980,000 for mine and CMR clearance in 2017, up from €960,000 in 2016. KMAC expected the same level of funding in 2018.<sup>38</sup>

In 2015, HALO Trust reported securing a commitment from an anonymous donor, who pledged to fund mine clearance in Kosovo, and to offer matching funds for clearance of all remaining mined areas provided HALO Trust can raise the other half.<sup>39</sup> HALO Trust secured funding in 2016 that allowed it to increase the number of clearance teams. HSTAMIDS (Handheld Standoff Mine Detection System) was introduced to its programme in 2015,<sup>40</sup> which HALO Trust finds has increased clearance speed in almost all the minefields in which they have been deployed.<sup>41</sup> The increased clearance that HALO Trust conducted in 2017 is due to new contracts with the United States and the Netherlands that started in October 2017. The Netherlands contract supports one team of deminers, and a matched contribution to the United States funding contributes to two demining teams.<sup>42</sup>

Unfortunately, misinformation persists that mine and CMR clearance was completed in 2001, whereas the reality is that significant contamination remains to be cleared. Kosovo is a poor country, and needs economic assistance to help it complete mine clearance in a timely manner, otherwise completion risks being prolonged to decades after the end of the conflict.<sup>43</sup>

- See United Nations 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, pp. 6 and 15, at: [https://www.icrc.org/eng/assets/files/other/icrc\\_002\\_0780.pdf](https://www.icrc.org/eng/assets/files/other/icrc_002_0780.pdf).
- Email from Ahmet Sallova, Head of Mine Action Centre, KMAC, 4 May 2018
- ICRC, Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo, June 2001, p. 15.
- Ibid.
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# NAGORNO-KARABAKH

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	6	6
Target date for completion of mine clearance	6	6
Targeted clearance	6	6
Efficient clearance	6	6
National funding of programme	2	2
Timely clearance	5	5
Land-release system in place	7	7
National mine action standards	7	7
Reporting on progress	5	6
Improving performance	5	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.5</b>	<b>5.6</b>

## PERFORMANCE COMMENTARY

There was a small increase in the amount of land released by survey and clearance in Nagorno-Karabakh in 2017, however, there were some discrepancies in the reported contamination and clearance data. Progress towards completion in Nagorno-Karabakh is impacted by the fact that bilateral funding is typically restricted to within the traditional Soviet-era boundaries of Nagorno-Karabakh, which represent 18% of the overall

mined area still to be cleared. The remaining 82% of mine contamination is in “green areas”, between the traditional Soviet boundary of the autonomous oblast of Nagorno-Karabakh, the militarised line of contact with Azerbaijan, and other international borders, for which it is more difficult to secure international funding.

## RECOMMENDATIONS FOR ACTION

- The Nagorno-Karabakh authorities should commit to never use anti-personnel mines and provide resources for mine survey and clearance.
- The Nagorno-Karabakh authorities should make a commitment to respect the Anti-Personnel Mine Ban Convention (APMBC) and set a deadline for the clearance all anti-personnel mines.
- Nagorno-Karabakh should report more accurately on the extent of contamination and progress in survey and clearance in a manner that is consistent with the International Mine Action Standards (IMAS).

## CONTAMINATION

In 1988, a decision by the parliament of the Nagorno-Karabakh Autonomous Province to secede from Azerbaijan and join Armenia resulted in armed conflict in 1988–94 between Armenia and Azerbaijan. Nagorno-Karabakh declared independence in 1991, but this has not been internationally recognised.

All regions of Nagorno-Karabakh have been affected by mines and submunitions as a result of the 1988–94 conflict between Armenia and Azerbaijan. Mines were laid by both the Azeri and pro-Karabakh forces during the war, with a relatively high proportion of anti-vehicle mines being used in some regions, as well as anti-personnel mines throughout.<sup>1</sup> The mines were of Soviet design and manufacture, and due to the nature of the conflict certain areas were mined several times.<sup>2</sup>

New contamination was added in 2013. In July 2013, Nagorno-Karabakh’s military chief, General Movses Hakobian, reportedly stated that “his forces have placed more anti-personnel landmines this year along the Armenian-Azerbaijani ‘line of contact’ east and north of the disputed territory.”<sup>3</sup> General Hakobian said use was aimed at preventing “sabotage” attacks by Azerbaijani troops.<sup>4</sup>

In a September 2013 response to a letter by the International Campaign to Ban Landmines (ICBL) to authorities in Nagorno-Karabakh, the Minister for Foreign Affairs of Nagorno-Karabakh did not deny that mines had been used. He said that “due to the ongoing conflict with Azerbaijan ... today we are not in a position to refrain from using AP [anti-personnel] mines for defensive purposes along the line of contact.” He noted further that, “these mines are neither aimed at the civilian population nor at the extermination of the adversary but for limiting its advances and ceasing any possible military aggression against us.”<sup>5</sup>

As at the end of 2017, anti-personnel mine contamination throughout the whole of Nagorno-Karabakh, including both within the Soviet-era boundaries and in the adjacent territories, was estimated to cover just under 3.56km<sup>2</sup> across 73 mined areas (see Table 1).<sup>6</sup> This is down from 4.41km<sup>2</sup> across 75 mined areas as at the end of 2016.<sup>7</sup> The difference in total mine contamination between the end of 2016 and end of 2017, cannot be explained or reconciled by the total area released. Anti-personnel and anti-vehicle mine contamination covered a total of 86 areas over 5.1km<sup>2</sup> as at end of 2017. As at beginning of September 2018, anti-personnel mine contamination had fallen slightly to just over 3.42km<sup>2</sup> across 73 mined areas.<sup>8</sup>

**Table 1: Anti-personnel mine contamination by province (at end-2017)<sup>9</sup>**

Region	CHAs	Area (km <sup>2</sup> )
Askeran	8	0.29
Hadrut	21	1.86
Lachin	19	0.55
Martakert	18	0.52
Martuni	3	0.17
Shaumyan	4	0.17
<b>Totals</b>	<b>73</b>	<b>3.56</b>

CHA = Confirmed hazardous area

As at April 2017, 88% of mined areas across the whole of Nagorno-Karabakh have been cleared, including 97% of all known minefields in Soviet-era Nagorno-Karabakh.<sup>10</sup> Of the remaining mined area, 82% is in “green areas” (areas between the traditional Soviet boundary of the autonomous oblast of Nagorno-Karabakh, the militarised line of contact with Azerbaijan, and other international borders), and the remaining 18% is within the traditional Soviet-era boundaries.<sup>11</sup> Mined areas remain along the line of contact with Azerbaijan, but are inaccessible for clearance as this remains a conflict zone.<sup>12</sup> The HALO Trust is currently conducting survey to quantify the remaining landmine contamination in Nagorno-Karabakh, working in areas that had not been surveyed in the past. This process will continue through to the end of 2018 and into 2019 and therefore, as at August 2018, HALO Trust could not provide exact percentages of clearance.<sup>13</sup>

Minefields in Nagorno-Karabakh are prioritised by two main factors: the density and type of minelaying, and their impact (including proximity to population and economic impact). The HALO Trust has traditionally given highest priority to agricultural areas. Minefields with a higher number of direct beneficiaries have also been prioritised.<sup>14</sup> The vast majority of designated high-priority minefields have now been cleared.<sup>15</sup> Limiting factors, such as climate and donor priorities, mean that, during this process, clearance is not necessarily always conducted according to a simple prioritisation matrix.<sup>16</sup>

Most people living in mine-affected areas in Nagorno-Karabakh are dependent on the land for their livelihoods.<sup>17</sup> Mines impede use of land, roads, and other areas, and affect the rural population in particular, whose main income is from herding animals and farming.<sup>18</sup> The bulk of the remaining anti-personnel mine threat in Nagorno-Karabakh is located in wooded hillsides between former Armenian and Azerbaijani military positions. As such, the most vulnerable group of Karabakhis are adult men who are engaged in woodcutting, hunting, and foraging (though women and children often engage in the latter activity as well). A 2017 study from the University of Southern California (USC) into the effects of landmines on livelihoods shows a direct relationship between mines and economic development. According to the analysis of survey data gathered by HALO from over 200 rural households, “the presence of landmines causes, on average, a 45% decrease in overall household economic welfare among the rural population of Nagorno Karabakh.”<sup>19</sup>

In 2017, there was one anti-vehicle mine incident involving civilians and one from a submunition victim. There were no anti-personnel mine incidents.<sup>20</sup> On 23 July 2017, a truck with three passengers drove over an anti-tank mine near the abandoned village of Novruzlu in Martuni region. The blast wave of the explosion threw the car onto a second mine causing another detonation. All three passengers suffered only mild concussion from the incident.<sup>21</sup>

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## PROGRAMME MANAGEMENT

A mine action coordination committee is responsible for liaising between the local authorities and The HALO Trust.<sup>22</sup> Regular coordination committee meetings are held between the local authorities, The HALO Trust, and the International Committee of the Red Cross (ICRC).<sup>23</sup>

In 2000, The HALO Trust established the Nagorno-Karabakh Mine Action Centre (NKMACH), which consolidates all mine-action-related information and responds to requests from the government ministries, other non-governmental organisations (NGOs), and local communities.<sup>24</sup>

### Legislation and Standards

No national standards exist in Nagorno-Karabakh and The HALO Trust follows its own standard operating procedures (SOPs).<sup>25</sup>

### Quality Management

The HALO Trust uses its own quality management systems, with quality assurance (QA) and quality control (QC) applied by four levels of management.<sup>26</sup>

### Information Management

The NKMACH maintains maps and a database of all suspected hazardous areas surveyed, all areas cleared of mines and explosive remnants of war (ERW), locations of all mine- and ERW-related incidents, and a record of all risk education given.<sup>27</sup>

## Operators

Since 2000, The HALO Trust has been the sole organisation conducting land release in Nagorno-Karabakh. Operations cover both mine and cluster munition remnants (CMR) clearance, and HALO Trust does not field separate teams dedicated solely to either. Operational staff are trained and experienced for both.<sup>28</sup>

At the peak of its clearance activities in 2017, The HALO Trust had 153 staff in demining and survey roles, an increase over the 142 personnel employed the previous year. Between January and December 2016, its total capacity for mine and CMR operations grew from nine operational teams to fifteen.<sup>29</sup> As at August 2017, The HALO Trust was employing 21 manual demining teams, 2 mechanical demining teams, and 2 survey/explosive ordnance disposal (EOD) teams. In August 2018, The HALO Trust had increased its manual demining teams to 28.<sup>30</sup>

The HALO Trust deployed two armoured front loaders in 2017, as it did in previous years. Machines are predominantly deployed in clearance of roads with a plastic TM62P anti-vehicle mine threat, and on ground where it is more cost effective for anti-personnel and anti-vehicle mine clearance due, in most cases, to high levels of metal contamination.<sup>31</sup>

While survey and clearance are ultimately conducted by The HALO Trust alone, the Nagorno-Karabakh Rescue Service is involved in various stages of the broader process. For example, the Rescue Service often receives information from local communities about

mine contamination, which it shares with HALO. The Rescue Service is also part of the QA process through its participation in the handover ceremony when The HALO Trust officially returns formerly mined areas back to local communities for safe and productive use.<sup>32</sup>

## LAND RELEASE

Just over 0.29km<sup>2</sup> was released by clearance in 2017 while 0.29km<sup>2</sup> of mined area was cancelled by non-technical survey and 0.27km<sup>2</sup> was reduced by technical survey. An additional 0.13km<sup>2</sup> was reported by The HALO Trust as cancelled, due to overly large polygons. This compares to the 0.12km<sup>2</sup> of mined area that was cleared, 0.28km<sup>2</sup> reduced by technical survey and 0.36km<sup>2</sup> cancelled by non-technical survey in 2016.<sup>33</sup> A further 0.22km<sup>2</sup> was confirmed as containing anti-personnel mines in 2017.

### Survey in 2017

In 2017, two mined areas in Hadrut totalling 555,849m<sup>2</sup> were released through survey, of this 285,747m<sup>2</sup> was cancelled by non-technical survey and 270,102m<sup>2</sup> was reduced by technical survey.<sup>34</sup> Five suspected hazardous areas (SHAs) were confirmed as containing anti-personnel mines in Askeran, Lachin and Martakert covering 219,355m<sup>2</sup>.<sup>35</sup>

In addition, The HALO Trust also cancelled 132,024m<sup>2</sup> due to overly large polygons following clearance of mined areas in Lachin, Martakert, and Martuni.<sup>36</sup>

In 2016, HALO Trust trialled the use of special detection dogs (SDDs), provided by Norwegian People's Aid (NPA), for the reduction of SHAs and confirmed hazardous areas (CHAs) in Nagorno-Karabakh.<sup>37</sup> The HALO Trust has not used SDDs since the 2016 trial ended and a report will be published once follow-up clearance behind the SDDs clearance has been completed.<sup>38</sup>

### Clearance in 2017

In 2017, a total of 28 mined areas covering 292,176m<sup>2</sup> were released by clearance along with the destruction of 88 anti-personnel mines, 19 anti-vehicle mines, and 36 items of unexploded ordnance (UXO).<sup>39</sup> In addition to planned clearance, The HALO Trust destroyed 38 anti-personnel mines during explosive ordnance disposal (EOD) spot tasks in 2017.<sup>40</sup>

**Table 2: Clearance and EOD spot tasks in 2017**

Activity	Areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
Clearance	28	292,176	188	19	36
EOD spot tasks	0	0	38	0	0
<b>Totals</b>	<b>28</b>	<b>292,176</b>	<b>226</b>	<b>19</b>	<b>36</b>

AP = Anti-personnel AV = Anti-vehicle

During 2017, The HALO Trust found one mine for every 1,974m<sup>2</sup> of land cleared during anti-personnel mine clearance tasks. HALO Trust also cleared two minefields (one anti-personnel and one mixed anti-personnel/anti-vehicle) without finding any mines. This is largely because the majority of more densely mined areas have already been cleared.<sup>41</sup>

### Progress in 2018

The HALO Trust has received a commitment from the United States government to complete clearance of all known remaining minefields within Soviet-era boundaries. To this end, the United States Agency for International Development (USAID) will provide US\$3.5 million over 2018 and 2019 to finish this task. This enables HALO Trust to upscale the programme to more than 30 manual demining teams over the summer months of 2018 and 2019.<sup>42</sup>

The HALO Trust will continue to clear outside these boundaries through private sources of funding. HALO Trust is also aware of areas within Nagorno-Karabakh which are suspected to be mined and which will need to be surveyed in order to reveal the extent of the problem. HALO's survey teams will focus on preparation of traditional mine clearance tasks ahead of the scale-up and then continue survey of suspected hazardous areas.<sup>43</sup>

## ARTICLE 5 COMPLIANCE

Nagorno-Karabakh is not a state party to the APMB, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

Despite the clear need to clear mines and ERW – a recent study estimated that the presence of landmines causes a 45% decrease in rural household economic welfare at the national level – Nagorno-Karabakh’s unrecognised status prevents many governments from funding humanitarian activities in the territory.<sup>44</sup> The HALO Trust receives no funding from Armenia or the Nagorno-Karabakh authorities.<sup>45</sup> Progress in mine clearance has fluctuated over the last five years, as shown in Table 3, but with clearance output averaging below 0.5km<sup>2</sup> annually.

**Table 3: Mine clearance in 2013–17<sup>46</sup>**

Year	Area cleared [km <sup>2</sup> ]*
2017	0.29
2016	0.12
2015	0.21
2014	0.54
2013	0.31
<b>Total</b>	<b>1.47</b>

\* Includes anti-vehicle and anti-personnel mines.

One of HALO’s greatest challenges for mine clearance in Nagorno-Karabakh is the reluctance of bilateral donors to fund clearance in areas outside the Soviet-era boundaries of Nagorno-Karabakh. The bulk of the remaining mine problem, however, lies in these surrounding territories. There are also several minefields close to the line of contact that HALO Trust is unable to safely survey or clear, due to ongoing tension between the two sides.<sup>47</sup>

Since 2015, the HALO Trust has received support from an anonymous donor for mine clearance outside the Soviet oblast boundary, along with matching funds, with a view to completing all clearance. This has attracted a number of private individuals and foundations.<sup>48</sup> The HALO Trust secured a partnership with ONEArmenia, which successfully crowdfunded in 2017 to help raise funds for HALO Trust’s demining operations.<sup>49</sup> The HALO Trust increased its capacity in April and May 2017, principally as a result of an anonymous donor committing funding for manual clearance teams and matched-funding for clearance of “green areas” outside of the traditional Soviet oblast boundary.<sup>50</sup>

Funding for HALO Trust survey and mine risk education from the United Kingdom Foreign and Commonwealth Office (FCO), through its conflict, stability and security fund (CSFF), ended on 31 March 2017.<sup>51</sup>

In 2014, HALO Trust reported that full clearance of minefields in Soviet-era Nagorno-Karabakh could be achieved within three years if sufficient funding were available.<sup>52</sup> As at 2014, 95% of mine contamination in Soviet-era Nagorno-Karabakh had been addressed, and this figure had risen to 97% by April 2017.<sup>53</sup> In 2018, HALO Trust reported that full clearance of minefields in Soviet-era Nagorno-Karabakh could be achieved by 2019.<sup>54</sup>

The majority of remaining mined areas are only accessible during the dry summer months of May to October, and HALO Trust planned to expand its clearance capacity through training and to deploy more teams over this period. As at April 2017, clearance in the “green areas” was focused on high- and medium-priority tasks in the Lachin corridor and Martuni region, with private funding; with clearance of the remaining minefields within the traditional Soviet oblast boundary, conducted with USAID funding.<sup>55</sup>

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- 1 United States Agency for International Development (USAID), "De-mining Needs Assessment in Nagorno-Karabakh", September 2013, p. 2.
- 2 HALO Trust, "Nagorno-Karabakh: The Problem", accessed 12 October 2015 at: <http://www.halotrust.org/where-we-work/nagorno-karabakh>.
- 3 L. Musayelian, "Karabakh Enhances Defense Capabilities", *Asbarez*, Stepanakert, 26 July 2013, at: [www.asbarez.com/112014/karabakh-enhances-defense-capabilities/](http://www.asbarez.com/112014/karabakh-enhances-defense-capabilities/).
- 4 Ibid.
- 5 ICBL, "ICBL gravely concerned about use of anti-personnel mines by Nagorno-Karabakh", Geneva, 20 September 2013, at: <http://www.icbl.org/index.php/icbl/Library/News/Nagorno-Karabakh>.
- 6 Email from Amasia Zargarian, Programme Support Officer, HALO Trust, 21 September 2018.
- 7 Email from Ash Boddy, Regional Director Nagorno-Karabakh, HALO Trust, 3 April 2017.
- 8 Email from Amasia Zargarian, HALO Trust, 21 September 2018.
- 9 Email from Amasia Zargarian, HALO Trust, 4 May 2018. The difference between reported contamination in 2016 and 2017 (0.71km<sup>2</sup>) is less than the amount of land released, also taking into account land that was confirmed as contaminated (0.29km<sup>2</sup> + 0.56km<sup>2</sup> + 0.13km<sup>2</sup> - 0.22km<sup>2</sup> = 0.76km<sup>2</sup>).
- 10 Email from Ash Boddy, HALO Trust, 3 April 2017.
- 11 Ibid.
- 12 Email from Andrew Moore, HALO Trust, 1 October 2016.
- 13 Email from Amasia Zargarian, HALO Trust, 31 August 2018.
- 14 Email from Amasia Zargarian, HALO Trust, 4 May 2018.
- 15 Email from Ash Boddy, HALO Trust, 3 April 2017.
- 16 Email from Amasia Zargarian, HALO Trust, 4 May 2018.
- 17 HALO Trust website, accessed 15 September 2017 at: <http://www.halotrust.org/where-we-work/nagorno-karabakh>.
- 18 USAID, "De-mining Needs Assessment in Nagorno-Karabakh", September 2013, p. 3.
- 19 Email from Amasia Zargarian, HALO Trust, 4 May 2018; and The HALO Trust, "The Economic Impact of Landmines In Nagorno-Karabakh: Estimating Causal Effects Using Instrumental Variables", July 2017.
- 20 Email from Amasia Zargarian, HALO Trust, 31 August 2018.
- 21 Ibid.
- 22 Email from Andrew Moore, HALO Trust, 28 June 2013.
- 23 Email from Andrew Moore, HALO Trust, 26 May 2016.
- 24 Email from Andrew Moore, HALO Trust, 28 June 2013.
- 25 Email from Andrew Moore, HALO Trust, 26 May 2016.
- 26 Ibid.
- 27 USAID, "De-mining Needs Assessment in Nagorno-Karabakh", September 2013, p. vii.
- 28 Response to Mine Action Monitor questionnaire by Andrew Moore, HALO Trust, 22 May 2015.
- 29 Emails from Ash Boddy, HALO Trust, 27 and 29 April 2017.
- 30 Email from Amasia Zargarian, HALO Trust, 31 August 2018.
- 31 Ibid.
- 32 Email from Amasia Zargarian, HALO Trust, 4 May 2018.
- 33 Email from Ash Boddy, HALO Trust, 28 September 2017.
- 34 Email from Amasia Zargarian, HALO Trust, 21 September 2018.
- 35 Email from Amasia Zargarian, HALO Trust, 4 May 2018.
- 36 Email from Amasia Zargarian, HALO Trust, 21 September 2018.
- 37 Ibid.; and email from Darvin Lisica, NPA Regional Programme Manager, 2 October 2016.
- 38 Email from Amasia Zargarian, HALO Trust, 4 May 2018.
- 39 Ibid.
- 40 Ibid., and 21 September 2018.
- 41 Email from Amasia Zargarian, HALO Trust, 4 May 2018.
- 42 Ibid.
- 43 Ibid.
- 44 The HALO Trust, "The Economic Impact of Landmines In Nagorno-Karabakh: Estimating Causal Effects Using Instrumental Variables", July 2017.
- 45 Email from Amasia Zargarian, HALO Trust, 4 May 2018.
- 46 See Landmine Monitor and Mine Action Review reports on Nagorno-Karabakh covering 2012-15.
- 47 Email from Amasia Zargarian, HALO Trust, 4 May 2018.
- 48 Email from Ash Boddy, HALO Trust, 28 September 2017.
- 49 Emails from Ash Boddy, HALO Trust, 3 April and 28 September 2017.
- 50 Email from Ash Boddy, HALO Trust, 3 April 2017.
- 51 Emails from Ash Boddy, HALO Trust, 3 and 27 April 2017.
- 52 Emails from Andrew Moore, HALO Trust, 19 March 2014 and 11 June 2015.
- 53 Email from Ash Boddy, HALO Trust, 3 April 2017.
- 54 Email from Amasia Zargarian, HALO Trust, 31 August 2018.
- 55 Email from Ash Boddy, HALO Trust, 28 September 2017.

# WESTERN SAHARA

## PROGRAMME PERFORMANCE

	2017	2016
Problem understood	8	7
Target date for completion of mine clearance	3	3
Targeted clearance	5	6
Efficient clearance	6	7
National funding of programme	3	3
Timely clearance	1	1
Land-release system in place	8	8
National mine action standards	8	8
Reporting on progress	3	4
Improving performance	5	5
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.0</b>	<b>5.2</b>

## PERFORMANCE COMMENTARY

There was a significant increase in the cancellation and reduction of areas suspected to contain anti-personnel mines through survey in 2017 in Western Sahara, with a total of close to 8.3km<sup>2</sup> released through survey compared to just under 1km<sup>2</sup> in 2016. This was, though, countered by a massive amount of area confirmed as contaminated by anti-personnel mines, of nearly 89km<sup>2</sup>. These areas were previously thought to contain only anti-vehicle mines but were found during survey to also contain anti-personnel mines. However, no anti-personnel mines were cleared for yet another year in Western Sahara.<sup>1</sup>

Clearance of cluster munition remnant (CMR)-contaminated areas was prioritised in 2017, while the primary focus with respect to mines continued to be non-technical survey of suspected hazardous areas (SHAs), with a view to reducing the inflated estimates of the size of SHAs recorded in a 2008 survey and confirming areas of actual contamination.<sup>2</sup>

With the return to full operational capacity and the removal of political restrictions by Morocco on United Nations Mine Action Service (UNMAS)-contracted mine action operations, along with an increase in available resources in 2017, UNMAS reported that Western Sahara remained on track to complete clearance of all mined areas east of the Berm and outside the buffer strip by 2025.<sup>3</sup>

## RECOMMENDATIONS FOR ACTION

- The Saharawi Arab Democratic Republic (SADR) should formally commit to respect and implement the Anti-Personnel Mine Ban Convention (APMBC), including to clear all mine contamination east of the Berm as soon as possible.
- Greater efforts should be focused to ensure that mine clearance capacity is only deployed on areas which contain actual anti-personnel and anti-vehicle contamination.
- All efforts should be taken to complete clearance of all mined areas in Western Sahara by 2025.
- Morocco should ensure freedom of access and unhindered movement of all civilian UN Mission for the Referendum in Western Sahara (MINURSO) staff and take all necessary measures to facilitate the conduct of demining.
- Morocco is strongly encouraged to provide minefield and cluster strike data to other relevant stakeholders to facilitate survey and clearance of affected areas.

## CONTAMINATION

The exact extent of mine contamination across Western Sahara is not known, although the areas along the Berm<sup>4</sup> are thought to contain some of the densest mine contamination in the world.<sup>5</sup> 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 UNMAS, the primary mine threat in Western Sahara east of the Berm, excluding both the Berm itself and the buffer strip, is from anti-vehicle rather than anti-personnel mines; CMR are also a major hazard.<sup>6</sup> It stated that, at the start of 2017, only a limited number of areas suspected to contain anti-personnel mines remained to the east of the Berm, and the majority of mine contamination identified during ongoing and historical clearance efforts was from anti-vehicle mines.<sup>7</sup> However, UNMAS reported that during the year, as a result of non-technical survey conducted in the Agwanit Area of Responsibility, a number of large minefields previously thought to contain only anti-vehicle mines were found to also contain anti-personnel mines.<sup>8</sup>

At the end of 2017, land in Western Sahara to the east of the Berm contained a total of 27 areas confirmed and suspected to contain anti-personnel and anti-vehicle mine contamination covering a total of more than 218km<sup>2</sup>, as set out in Table 1.<sup>9</sup> This is close to 34km<sup>2</sup> less than what UNMAS reported as mine contamination remaining at the end of 2016, when it reported that a total of 37 areas with a size of 252km<sup>2</sup> remained to be addressed.<sup>10</sup>

In September 2018, UNMAS reported that following non-technical survey efforts, 10 of the 27 mined areas, were reported to remain covering an estimated total of almost 120km<sup>2</sup>, and are located within the 5km-wide buffer strip and are inaccessible for clearance.<sup>11</sup> Clearance of the buffer strip of mines and explosive remnants of war (ERW) is not foreseen in MINURSO mission agreements, which according to the UN, considerably limits the ability of MINURSO military observers to patrol and verify developments.<sup>12</sup>

**Table 1: Mine contamination east of the Berm (at end-2017)<sup>13</sup>**

Type of contamination	CHAs	Area (km <sup>2</sup> )	SHAs	Area (km <sup>2</sup> )
AP mines	1	0.10	0	0
AV mines	8	11.15	8	37.48
AP/AV mines	5	80.02	5	89.36
<b>Totals</b>	<b>14</b>	<b>91.27</b>	<b>13</b>	<b>126.84</b>

AP = Anti-personnel AV = Anti-vehicle CHA = Confirmed hazardous area

Both the north and south of Western Sahara are known or suspected to contain anti-personnel mines, with 11 areas confirmed or suspected areas with a total size of almost 169.5km<sup>2</sup> remaining to be addressed at the end of 2017, as set out in Table 2.<sup>14</sup> This is compared to

the end of the previous year, when a total of 11 areas confirmed or suspected to contain anti-personnel mines were reported to remain with a total size of more than 154.5km<sup>2</sup>.<sup>15</sup>

**Table 2: Areas containing anti-personnel mines by province east of the Berm (as at end-2017)<sup>16</sup>**

Province	CHAs	Area (km <sup>2</sup> )	SHAs	Area (km <sup>2</sup> )
North Region	3	0.31	2	0.81
South Region	3	79.81	3	88.55
<b>Totals</b>	<b>6</b>	<b>80.12</b>	<b>5</b>	<b>89.36</b>

The figure of 169.5km<sup>2</sup> of remaining suspected and confirmed anti-personnel mine contamination is not consistent with the figure reported at the end of 2016, adjusted by release and confirmation reported during the year. This figure would be just under 235km<sup>2</sup>.<sup>17</sup>

A survey in 2006–08 by an international non-governmental organisation (NGO), Landmine Action, later renamed Action on Armed Violence (AOAV), initially identified 37 mined areas on the east of the Berm, nearly half of which were in Bir Lahlou, followed by Tifariti, Mehaires, and Agwanit.<sup>18</sup>

Neither survey nor clearance has been conducted in the 5km-wide buffer strip to the east of the Berm. The extent of contamination west of the Berm remains unknown, and as of 2018, no survey had been carried out there.<sup>19</sup> UNMAS reported in 2018 that there were areas of known contamination in the buffer strip that remained inaccessible for clearance due to military agreements.<sup>20</sup> 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, helping to build a clearer understanding of the mine and ERW threat across Western Sahara.<sup>21</sup>

The significant mine, submunition, and other unexploded ordnance (UXO) contamination in Western Sahara continues to pose a daily threat to the local, nomadic, and refugee populations, along with UN personnel and military observers, and humanitarian actors.<sup>22</sup> Contamination from mines and ERW negatively impacts socio-economic growth and development, limiting access to fluctuating and seasonally dependent water sources vital for animal herding and small-scale agriculture on which local populations depend.<sup>23</sup>

According to Norwegian People's Aid (NPA), the impact of contamination is primarily socio-economic, although human accidents continued to occur. In 2017, the local mine action authority, the Saharawi Mine Action Coordination Office (SMACO), reported 11 victims in 13 incidents.<sup>24</sup>

In 2017, mines and ERW, including CMR, continued to block access to arable land and critical water sources for the local population and impeded the free movement of UN personnel on patrol routes and in areas of UN operations.<sup>25</sup> Areas near to the Berm are considered the most heavily contaminated, though mines and ERW remain a significant risk along frequently used tracks and in close proximity to traditional settlements. According to UNMAS, a number of incidents have occurred in the vicinity of the Berm in areas rich with river beds, *wadis*, and water sources, which are fertile for seasonal agricultural cultivation, and a direct threat to the Saharawi population.<sup>26</sup>

NPA reported that, in 2017, mines and ERW continued to pose a threat to the approximately 12,000 Saharawi nomads and internally displaced persons in refugee camps who traversed contaminated areas to graze livestock, cultivate land, and visit relatives. Once cleared, the majority of land released is put to use for pasture and grazing of livestock by nomadic and semi-nomadic communities, while released land located close to village centres is used for building.<sup>27</sup>

## PROGRAMME MANAGEMENT

In Western Sahara, MINURSO manages a Mine Action Coordination Centre (MACC). UNMAS contracted a survey/clearance capacity through Dynasafe MineTech Limited (DML) in 2017, with quality assurance (QA) performed externally by UNMAS staff in accordance with the International Mine Action Standards (IMAS). Survey and clearance were also implemented by international humanitarian demining NGO NPA in 2017.<sup>28</sup>

In 2013–14, the Polisario Front, with UN support, established SMACO, which is responsible for coordinating mine action activities in Western Sahara east of the Berm and for land release activities.<sup>29</sup>

In 2017, UNMAS implemented an ongoing capacity development project with SMACO, funded for 28 months, which was due to end in October 2018.<sup>30</sup> It contracted a technical advisor for capacity development to work with SMACO to improve operations and coordination with the MACC and operators. Individual training was provided to SMACO staff on all aspects of mine action programme management, including information management and support services. Training on operational skills such as prioritisation, tasking, marking, accreditation, the development of mine action standards, and survey and clearance methodology were also conducted. Emphasis was placed on building the programme's capacity to translate local mine action requirements into proposals and budgets with the aim of ensuring that SMACO can independently seek funds and report on progress in the future.<sup>31</sup>

UNMAS stated that efforts were also aimed at regularly raising the profile of SMACO within the local and wider communities and internationally.<sup>32</sup> The construction of an office building for SMACO in 2017 with German funding was another significant contributor to increasing its capacity and effectiveness.<sup>33</sup>

### Strategic Planning

MINURSO MACC's activities are conducted in accordance with the Strategy of the United Nations on Mine Action 2013–18, the Local Mine Action Standards (LMAS), and the IMAS. UNMAS planned to develop a mine action strategy specific to Western Sahara in the second half of 2015.<sup>34</sup> According to UNMAS, the strategy was finalised in 2017, yet still was considered an internal document and had not been made publicly available as at September 2018.<sup>35</sup> According to UNMAS, the strategy foresees completion of non-technical survey in 2017–18; release of all recorded cluster munition strike areas east of the Berm by the end of 2019; and a 50% reduction in the total number of recorded SHAs and CHAs remaining in Western Sahara by the end of 2022.<sup>36</sup>

In 2017, NPA claimed that the development of the strategy had brought about a significant improvement in the management of mine action in Western Sahara and increased coordination between the MACC, SMACO, and the operators. Meetings were convened every two months where all mine action stakeholders provided updates on their progress against the plan and future activities, it said.<sup>37</sup>

### Legislation and Standards

There is no mine action legislation in Western Sahara but mine action standards were in place and implemented in 2017. The standards were developed and finalised in 2016 by UNMAS, together with SMACO, and in coordination with mine action partners, and were planned to be translated into Arabic.<sup>38</sup> NPA reported that operators had updated their standing operating procedures (SOPs) accordingly, and that the local mine action standards set realistic benchmarks for efficient operations.<sup>39</sup> A first annual review of the standards was set to be held in 2018 with a review board consisting of representatives from UNMAS, SMACO, and all implementing partners.<sup>40</sup>

The MACC identifies priorities for minefield clearance to the east of the Berm in conjunction with SMACO and MINURSO. SMACO identifies priorities based on humanitarian needs for the safety and freedom of movement of local populations, while the MACC ensures that observation patrol routes are safe for military observers and the transport of logistical supplies.<sup>41</sup> NPA confirmed that operators were always consulted in priority setting to ensure sufficient resources and equipment were available to conduct operations in a given area.<sup>42</sup>

In 2017, UNMAS reported that gender policies were implemented in accordance with UNMAS, United Nations Office for Project Services (UNOPS), and MINURSO guidelines, as well as with direction from the Polisario.<sup>43</sup> NPA stated that gender mainstreaming considerations were included in its Memorandum of Understanding with SMACO, in NPA's internal strategy documents, and taken into account during recruitment processes. Additionally, during survey efforts are made to ensure the needs of men, women, girls, and boys are taken into consideration for more effective and efficient operations.<sup>44</sup>

### Quality Management

An external quality management system was in place in 2017 and implemented by MINURSO MACC, consisting of a series of QA inspection visits for organisational and operational accreditation and periodic monitoring of clearance operations. UNMAS reported that 78 QA visits were conducted in 2017 to assess mine clearance activities.<sup>45</sup> NPA stated that internal QA and quality control (QC) activities were carried out on a daily basis and integrated with external quality management across Western Sahara. It reported that despite the remote areas of task locations, the MACC and SMACO conducted regular QA/QC and accredited all new demining personnel and teams during the year.<sup>46</sup>

This compared to 2016, when no external QA/QC was carried out on demining activities in April–September owing to the expulsion of UNMAS and MINURSO staff from Western Sahara by Morocco.<sup>47</sup>

## Information Management

According to UNMAS, the Information Management System for Mine Action (IMSMA) database for Western Sahara improved appreciably as a result of an ongoing data audit initiated at the end of 2015, a process that continued throughout 2017.<sup>48</sup> UNMAS reported that a revised SOP for data management was introduced, putting a stronger emphasis on verification of information.<sup>49</sup> In 2017, UNMAS reported regular support from the Geneva International Centre for Humanitarian Demining (GICHD) to correct database errors, and said that plans were under consideration to upgrade the database to the latest IMSMA Core version.<sup>50</sup>

NPA noted significant improvements in information management during the year, with better coordination and monthly updates from the database sent to operators, and easier access for SMACO to receive trainings at the MACC's relocated office in Tindouf.<sup>51</sup>

## Operators

DML and NPA were the implementing operators conducting survey and clearance in Western Sahara in 2017. UNMAS reported that the overall mine action capacity in Western Sahara in 2017 consisted of nine multi-task teams (MTTs) and one community liaison/survey team, with a total of 116 operational staff in the field, 18 support staff, and 8 senior staff.<sup>52</sup> This included six DML teams and one community liaison/survey team.<sup>53</sup> NPA continued its operations in Bir Lahlou and deployed two MTTs to conduct non-technical survey, technical survey, and clearance with a total of two team leaders and 15 deminers. At the end of 2017, a new team was trained to bolster NPA's demining capacity and deployed at the start of 2018.<sup>54</sup> No mechanical assets or mine detection dogs were deployed in Western Sahara for mine clearance activities in 2017.<sup>55</sup>

This is an increase from 2016, when in January–November, there were a total of five MTTs (three DML teams and two NPA teams), with two NPA teams deployed to conduct mine clearance along with two of the three teams contracted from DML.<sup>56</sup>

## LAND RELEASE

There was a significant increase in the cancellation and reduction of areas suspected to contain anti-personnel mines through survey in 2017 with a total of close to 8.3km<sup>2</sup> released through survey compared to just under 1km<sup>2</sup> in 2016, along with a nearly 168% increase in areas confirmed to contain anti-personnel mines, with just under 89km<sup>2</sup> confirmed as anti-personnel mine-affected, compared to 0.5km<sup>2</sup> in 2016.<sup>57</sup>

While UNMAS reported that a total of just under 284,200m<sup>2</sup> of area thought to contain anti-personnel mine contamination was cleared, no anti-personnel mines were found. In 2016, no areas containing anti-personnel mines were cleared.<sup>58</sup>

### Survey in 2017

According to UNMAS and NPA, four areas suspected to contain anti-personnel mine contamination with a size of just under 7km<sup>2</sup> were cancelled by non-technical survey in 2017, with a further 1.3km<sup>2</sup> of areas suspected to contain anti-personnel mines reduced by technical survey. A total of six areas were confirmed as containing anti-personnel mines, with a total size of nearly 89km<sup>2</sup>.<sup>59</sup> According to UNMAS, these were areas previously thought to contain only anti-vehicle contamination which were instead found to have mixed anti-personnel and anti-vehicle contamination.<sup>60</sup>

NPA reported releasing more than 3.5km<sup>2</sup> of suspected anti-personnel mine contamination by cancellation in 2017. It reported that technical survey was also conducted to avoid the use of full clearance methodology in areas where mines were not found, resulting in the further reduction of over 1km<sup>2</sup> of suspected anti-personnel mine contamination in its areas of operations during the year.<sup>61</sup> NPA did not conduct survey in any areas suspected or confirmed to contain anti-personnel mines in 2016.<sup>62</sup>

DML was reported to have cancelled one SHA where anti-personnel mines were suspected with a size of over 3.4km<sup>2</sup> in 2017, and reducing a further 284,000m<sup>2</sup> through technical survey. It confirmed five areas with a total size of close to 85.5km<sup>2</sup> as contaminated with anti-personnel mines.<sup>63</sup> This was a sizeable increase in cancellation and confirmation of anti-personnel contaminated areas from 2016, when DML was reported to have cancelled two SHAs where anti-personnel mines had been suspected, covering nearly 0.46km<sup>2</sup>, and confirmed two SHAs with a size of 0.53km<sup>2</sup> as containing anti-personnel mines.<sup>64</sup>

**Table 3: Mined area survey in 2017<sup>65</sup>**

Operator	SHAs cancelled	Area cancelled (m <sup>2</sup> )	SHAs confirmed as mined	Area confirmed (m <sup>2</sup> )	Area reduced by TS (m <sup>2</sup> )
DML	1	3,446,147	5	85,517,546	284,192
NPA	3	3,534,047	1	3,446,148	1,021,273
<b>Totals</b>	<b>4</b>	<b>6,980,194</b>	<b>6</b>	<b>88,963,694</b>	<b>1,305,465</b>

## Clearance in 2017

In 2017, according to UNMAS, a total of just under 284,200m<sup>2</sup> of areas thought to contain anti-personnel contamination was cleared by DML. However, no anti-personnel mines were found or destroyed. Thirty-two anti-vehicle mines and ten items of UXO were destroyed.<sup>66</sup> No areas containing anti-personnel mines were cleared in 2016, and no anti-personnel mines were destroyed during the year.<sup>67</sup>

According to UNMAS, in 2017, over 32.3km<sup>2</sup> of anti-vehicle mine contamination was released, of which 471,696m<sup>2</sup> was by clearance and nearly 31.9km<sup>2</sup> cancellation by non-technical survey.<sup>68</sup> This is compared to 2016, when nearly 4.5km<sup>2</sup> of area containing anti-vehicle mines and ERW was released: of which 328,355m<sup>2</sup> was by clearance and 4,037,993m<sup>2</sup> that was cancelled by non-technical survey.<sup>69</sup> As was the case in 2016, all tasked areas were believed to be contaminated with anti-vehicle mines and no anti-personnel mines were located during clearance.<sup>70</sup>

NPA reported completing clearance of two CHAs reportedly containing anti-vehicle mines, though no anti-vehicle mines were actually found in 2017.<sup>71</sup> This

compared with 2016 when NPA had cleared a total of 132,493m<sup>2</sup> in two mined areas in Bir Lahlou, with the destruction of six anti-vehicle mines. It released a further 0.13km<sup>2</sup> through technical survey and cancelled a total of almost 3.5km<sup>2</sup> during the year.<sup>72</sup>

In 2017, NPA reported that 66 items of UXO were found and destroyed as spot tasks, including an aircraft bomb.<sup>73</sup>

In 2017, over 32.3km<sup>2</sup> of area containing anti-vehicle mines was released by DML, of which just over 0.47km<sup>2</sup> was cleared and nearly 31.9km<sup>2</sup> was cancelled by non-technical survey, locating and destroying 32 anti-vehicle mines.<sup>74</sup> This compared to 2016, when DML released nearly 0.74km<sup>2</sup> of area containing anti-vehicle mines, of which 195,862m<sup>2</sup> was cleared and 548,892m<sup>2</sup> was cancelled by non-technical survey, locating and destroying 17 anti-vehicle mines.<sup>75</sup>

To the west of the Berm, according to a UN Secretary-General report, RMA reported, highly improbably in the view of Mine Action Review, that it had cleared nearly 145km<sup>2</sup> in territory under its control between April 2016 and April 2017. Clearance operations destroyed more than 1,000 items of UXO, 57 anti-vehicle mines, and 56 anti-personnel mines.<sup>76</sup>

## ARTICLE 5 COMPLIANCE

Western Sahara is not a state party to the APMBC. In June 2014, however, the SADR 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".<sup>77</sup> The SADR has obligations under international human rights law to clear mines in areas under its jurisdiction or control as soon as possible, including by virtue of being a state party to the 1981 African Charter on Human and Peoples' Rights.

Under Western Sahara's draft mine action strategic plan, non-technical survey was planned to be completed before the end of 2018 and the number of recorded SHAs and CHAs are sought to be reduced by half by the end of 2022.<sup>78</sup>

Despite the significant increase in survey output in 2017, UNMAS reported that delays to clearing areas suspected to contain anti-personnel mines continued as a result of restrictions on accessing certain areas of the buffer strip established by various MINURSO and other party agreements.<sup>79</sup> NPA cited other challenges to operations, including working in a remote desert environment allied to serious difficulties with the procurement of certain equipment and materials.<sup>80</sup> Temperatures of up to 60 degrees Celsius in July and August, strong winds, sandstorms, and heavy rain during the wet season can also cause mine action activities to be suspended.<sup>81</sup>

According to UNMAS, clearance of all mined areas containing anti-personnel mines in the three northern districts of Western Sahara, Bir Lahlou, Tifiariti, and Mehaires, is planned to be completed in 2018. After which

clearance operations will commence in the southern sector, in Agwanit district, following the completion of non-technical survey and the confirmation of all hazardous areas identified in re-survey in 2017. It did not expect significant changes in clearance capacity, funding, or output in 2018.<sup>82</sup>

In keeping with previous estimates, UNMAS has estimated that all high and medium hazardous areas in Western Sahara east of the Berm could be released by 2025.<sup>83</sup> Specifically, UNMAS maintained that survey and clearance of all anti-personnel mine contamination in Western Sahara could be completed within three to seven years, between 2021 and 2025, depending on financial support and a stable political and security environment.<sup>84</sup>

NPA reported that as at 31 December 2017, only three minefields remained to be addressed in its area of operations, in the remote region of Bir Lahlou, which it planned to complete by mid-2018. However, at September 2018, clearance was still ongoing in the last remaining minefield, where NPA reported that teams were finding and clearing anti-personnel mines, which was scheduled to be completed at the end of October 2018. It then planned to deploy teams to Agwanit in the south.<sup>85</sup>

On 27 April 2018, the UN Security Council voted to extend MINURSO's mandate in Western Sahara for six months until 31 October 2018, a change from prior resolutions which extended MINURSO's mandate for one year.<sup>86</sup> In 2017-18, UNMAS reported no restrictions on movement in UNMAS's areas of operations east of the Berm.<sup>87</sup>

1	Emails from Graeme Abernethy, Programme Manager, UNMAS, 1 March and 5 May 2018.	48	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
2	Email from Virginie Auger, Associate Programme Officer, UNMAS, 29 March 2017.	49	Email from Graeme Abernethy, UNMAS, 1 March 2018; and Virginie Auger, UNMAS, 24 April and 29 March 2017.
3	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.	50	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
4	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 Berlin Wall and second in length only to the Great Wall of China.	51	Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.
5	See UNMAS, "About UNMAS in Western Sahara", updated May 2015, at: <a href="http://www.mineaction.org/programmes/westernsahara">http://www.mineaction.org/programmes/westernsahara</a> ; and Action on Armed Violence (AOAV), "Making life safer for the people of Western Sahara", London, August 2011.	52	Email from Graeme Abernethy, UNMAS, 1 March 2018.
6	Email from Graeme Abernethy, UNMAS, 1 March 2018.	53	Emails from Graeme Abernethy, UNMAS, 1 March and 18 May 2018. Of the six DML teams contracted by UNMAS, three were funded by the mission and three by the German Federal Foreign Office.
7	Email from Virginie Auger, UNMAS, 29 March 2017.	54	Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.
8	Email from Graeme Abernethy, UNMAS, 1 March 2018.	55	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
9	Ibid.	56	Email from Virginie Auger, UNMAS, 10 May 2017.
10	Email from Virginie Auger, UNMAS, 29 March 2017.	57	Emails from El Hadji Mamadou Kebe, NPA, 14 March and 31 May 2018; and Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
11	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: <a href="https://minurso.unmissions.org/Default.aspx?tabid=11421&amp;language=en-US">https://minurso.unmissions.org/Default.aspx?tabid=11421&amp;language=en-US</a> .	58	Email from Virginie Auger, UNMAS, 29 March 2017.
12	"Report of the Secretary-General on the situation concerning Western Sahara", UN doc. S/2017/307, 10 April 2017, p. 8.	59	Emails from El Hadji Mamadou Kebe, NPA, 14 March and 31 May 2018; and Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
13	Email from Graeme Abernethy, UNMAS, 1 March 2018.	60	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
14	Ibid.	61	Emails from El Hadji Mamadou Kebe, NPA, 14 March and 31 May 2018.
15	Ibid. This includes areas recorded as having mixed anti-personnel and anti-vehicle mines.	62	Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.
16	Email from Graeme Abernethy, UNMAS, 1 March 2018.	63	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
17	Email from Graeme Abernethy, UNMAS, 21 September 2016.	64	Ibid.; and email from Graeme Abernethy, UNMAS, 7 September 2017.
18	Email from Penelope Caswell, Field Programme and Geographic Information System Manager, AOAV, 18 May 2010.	65	Emails from El Hadji Mamadou Kebe, NPA, 14 March and 31 May 2018; and Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
19	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018; and UNMAS, "2017 Portfolio of Mine Action Projects: MINURSO".	66	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
20	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.	67	Emails from Graeme Abernethy, UNMAS, 7 and 26 September 2017.
21	Email from Graeme Abernethy, UNMAS, 14 September 2018; and UNMAS, "2017 Portfolio of Mine Action Projects: MINURSO".	68	Email from Graeme Abernethy, UNMAS, 14 September 2018.
22	Email from Graeme Abernethy, UNMAS, 1 March 2018.	69	Email from Graeme Abernethy, UNMAS, 24 August 2016.
23	Ibid.; and UNMAS, "2016 Portfolio of Mine Action Projects: MINURSO".	70	Ibid.
24	Email from El Hadji Mamadou Kebe, Programme Manager, NPA, 14 March 2018.	71	Emails from El Hadji Mamadou Kebe, NPA, 14 March and 31 May 2018. NPA reported that two anti-vehicle mines had been found in 2016.
25	Email from Graeme Abernethy, UNMAS, 1 March 2018.	72	Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.
26	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.	73	Emails from El Hadji Mamadou Kebe, NPA, 14 March and 31 May 2018.
27	Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.	74	Email from Graeme Abernethy, UNMAS, 14 September 2018.
28	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.	75	Emails from Graeme Abernethy, UNMAS, 7 and 26 September 2017.
29	Response to questionnaire by Sarah Holland, UNMAS, 24 February 2014; and email, 25 February 2014.	76	"Report of the UN Secretary-General on the situation concerning Western Sahara", UN doc. S/2018/277, 29 March 2018, p. 8.
30	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.	77	"SADR initiative welcomed by Maputo Conference on Mine Ban", Sahara Press Service, 2 July 2014, at: <a href="http://www.spsrasd.info/en/content/sadr-initiative-welcomed-maputo-conference-mine-ban">http://www.spsrasd.info/en/content/sadr-initiative-welcomed-maputo-conference-mine-ban</a> .
31	Ibid.	78	Email from Virginie Auger, UNMAS, 29 March 2017.
32	Ibid.	79	Emails from Virginie Auger, UNMAS, 15 March 2017; and Graeme Abernethy, UNMAS, 14 September 2018.
33	Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.	80	Emails from El Hadji Mamadou Kebe, NPA, 8 April 2017 and 14 March 2018.
34	Email from Sarah Holland, UNMAS, 5 June 2015.	81	UNMAS, "About UNMAS in Western Sahara", updated January 2017, at: <a href="http://www.mineaction.org/programmes/westernsahara">http://www.mineaction.org/programmes/westernsahara</a>
35	Emails from Graeme Abernethy, UNMAS, 18 May and 14 September 2018.	82	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
36	Email from El Hadji Mamadou Kebe, Programme Manager, NPA, 8 April 2017.	83	Emails from Virginie Auger, UNMAS, 10 May and 29 March 2017; and Sarah Holland, UNMAS, 21 April and 18 May 2016.
37	Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.	84	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.
38	Emails from Virginie Auger, UNMAS, 24 April and 29 March 2017; El Hadji Mamadou Kebe, NPA, 8 April 2017; and Graeme Abernethy, UNMAS, 31 May 2018.	85	Emails from El Hadji Mamadou Kebe, NPA, 14 March, 31 May, and 14 September 2018. NPA reported that operations had to be halted in 1 July–15 August due to the high temperatures.
39	Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.	86	The Security Council Report's "What's in Blue" analysis reported that it appeared that the decision to only extend the mandate for a six-month period rather than a year "was done to increase pressure on the parties to the conflict to resolve the current tensions and bring them to the table for a fifth round of formal negotiations". It further stated that "In this regard, the draft resolution also requests the Secretary-General to brief the Council 'on a regular basis, and at any time he deems appropriate during the mandate period, on the status and progress of these negotiations'. A renewal of MINURSO's mandate in October will also allow the Council to consider the strategic review of the mission scheduled for mid-2018". What's in Blue: Insights on the work of the UN Security Council, "Western Sahara: Mandate Renewal", Security Council Report, 27 April 2018, at: <a href="http://www.whatsinblue.org/2018/04/western-sahara-mandate-renewal.php">http://www.whatsinblue.org/2018/04/western-sahara-mandate-renewal.php</a>
40	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.	87	Emails from Virginie Auger, UNMAS, 29 March 2017; and Graeme Abernethy, UNMAS, 1 March 2018.
41	Ibid.		
42	Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.		
43	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.		
44	Email from El Hadji Mamadou Kebe, NPA, 14 March 2018.		
45	Emails from Graeme Abernethy, UNMAS, 1 March and 5 May 2018.		
46	Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.		
47	Ibid.		

# ANNEXES

The background of the page is composed of several overlapping, semi-transparent geometric shapes in various shades of purple and dark purple. The shapes are angular and layered, creating a complex, abstract pattern. The top-left corner is a solid dark purple, while other areas are filled with lighter, semi-transparent purple tones that overlap each other.

# 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.

## ANNEX 2: REPORTING TEMPLATES

Annex 2 provides templates for reporting accurately and meaningfully on landmine contamination and identification and release of land confirmed or suspected to contain mines.

**Table 1: Mine contamination by province (as at end [2017])**

Province/Region	No. of CHAs with mines	Area (km <sup>2</sup> )	No. of SHAs with mines	Area (km <sup>2</sup> )
<b>Totals</b>				

CHAs = Confirmed hazardous areas

SHAs = Suspected hazardous areas

**Table 2: Non-technical survey in [2017]**

Operator	No. of SHAs cancelled	Area cancelled (m <sup>2</sup> )	No. of SHAs confirmed as mined	Area confirmed (m <sup>2</sup> )
<b>Totals</b>				

**Table 3: Technical survey of mined area in [2017]**

Operator	Area covered (km <sup>2</sup> )	No. of CHAs identified	Area confirmed (km <sup>2</sup> )	Area reduced (km <sup>2</sup> )
<b>Totals</b>				

**Table 4: Clearance of mined areas in [2017]**

Operator	No. of areas cleared	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	UXO destroyed
<b>Totals</b>					

AP = Anti-personnel

AV = Anti-vehicle

UXO = Unexploded ordnance

## GLOSSARY OF ACRONYMS AND ABBREVIATIONS

<b>AP mine</b>	Anti-personnel mine	<b>MAG</b>	Mines Advisory Group
<b>APMBC</b>	Anti-Personnel Mine Ban Convention	<b>MAPA</b>	Mine Action Programme of Afghanistan
<b>AV mine</b>	Anti-vehicle mine	<b>MAT</b>	Mine Action Team
<b>AXO</b>	Abandoned explosive ordnance	<b>MoU</b>	Memorandum of Understanding
<b>BAC</b>	Battle area clearance	<b>MTT</b>	Multi-Task Team
<b>CCM</b>	Convention on Cluster Munitions	<b>NATO</b>	North Atlantic Treaty Organization
<b>CHA</b>	Confirmed hazardous area	<b>NGO</b>	Non-governmental organisation
<b>CMR</b>	Cluster munition remnants	<b>NMAA</b>	National Mine Action Authority
<b>DDG</b>	Danish Demining Group	<b>NMAS</b>	National Mine Action Standards
<b>DRC</b>	Democratic Republic of Congo	<b>NPA</b>	Norwegian People's Aid
<b>EOD</b>	Explosive ordnance disposal	<b>NTS</b>	Non-technical survey
<b>ERW</b>	Explosive remnants of war	<b>QA</b>	Quality assurance
<b>EU</b>	European Union	<b>QC</b>	Quality control
<b>FSD</b>	Swiss Foundation for Mine Action	<b>SHA</b>	Suspected hazardous area
<b>HALO</b>	The HALO Trust	<b>TS</b>	Technical survey
<b>HI</b>	Humanity and Inclusion (formerly Handicap International)	<b>UK</b>	United Kingdom
<b>ICC</b>	Integrated Clearance Capacity (team)	<b>UN</b>	United Nations
<b>IED</b>	Improvised explosive device	<b>UNDP</b>	United Nations Development Programme
<b>IMAS</b>	International Mine Action Standards	<b>UNICEF</b>	United Nations Children's Fund
<b>IMSMA</b>	Information Management System for Mine Action	<b>UNMAS</b>	United Nations Mine Action Service
<b>Lao PDR</b>	Lao People's Democratic Republic	<b>US</b>	United States
<b>MAC</b>	Mine action centre	<b>UXO</b>	Unexploded ordnance
<b>MACCA</b>	Mine Action Coordination Centre of Afghanistan		



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