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MINE
ACTION
REVIEW

CLEARING THE MINES 2019

*A REPORT BY MINE ACTION REVIEW FOR THE FOURTH REVIEW
CONFERENCE OF THE 1997 ANTI-PERSONNEL MINE BAN CONVENTION*

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AT WWW.MINEACTIONREVIEW.ORG*

1 October 2019

MINE ACTION REVIEW ADVISORY BOARD:



Norwegian People's Aid



A REPORT BY MINE ACTION REVIEW FOR THE FOURTH REVIEW CONFERENCE OF THE 1997 ANTI-PERSONNEL MINE BAN CONVENTION



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OTHER INFORMATION

This publication is available for download at www.mineactionreview.org

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FOREWORD

We welcome the publication of Mine Action Review's Clearing the Mines 2019 in this important year of the Oslo Review Conference, where the mine action community is taking stock of progress made and setting the agenda for the next five years. In positive developments, since last year's report Jordan has completed clearance of the remaining mined areas that required verification and Palau has determined that it does not have any mined areas under its jurisdiction or control. It is always preferable to report good news, but the reason we came together as Advisory Board members to support this project was to ask the difficult questions, even when we don't like the answers. This is how we improve programme performance.

We believe that Mine Action Review has changed the mine action narrative since it was launched at the Third Review Conference in 2014. Many states have shown great maturity by engaging positively with the project and continue to do so, even when this means openly discussing the challenges and not just the progress. The Mine Action Review works best where it has provoked debate and discussion. In-country coalitions which bring together the national authority, implementing partners, and donors, can use the annual report to pull together towards completion, despite operators working in a sector in which competition is hardwired in national and international frameworks. Impressively, some of the closest intra and inter-sector cooperation has happened in the most challenging environments, where recent conflict has led to new contamination – and new victims.

In around 20 of the total 34 affected states parties, there has been progress in Article 5 implementation and we congratulate them. But this progress is fragile and should not be taken for granted, especially where long-standing programmes dealing with legacy contamination risk being at the mercy of changing political priorities of governments. States and mine action programmes that do the right things in the right way need to be supported and rewarded. This also means that national governments need to allocate more of their own resources to mine action, even if they're not able to meet the donors half way.

More has happened in some of the most highly complex environments, such as South Sudan and Afghanistan, than in a number of wealthier and more stable states parties. States with huge resources at their disposal have absolutely no excuse for inaction. But as the report illustrates, in

some countries there is an unwillingness to apply good practice in land release or worse still, inaction in survey and clearance. Sadly, in a minority of countries and contexts even the good faith application of the Anti-Personnel Mine Ban Convention that international law demands is being called into question. The time has come for such inaction in Article 5 implementation to be addressed as a compliance issue.

Completion of clearance is of course of fundamental importance, but how we get there is also a measure of success. This year, for the first time, the Mine Action Review asked basic questions of mine action programmes on how they address gender and diversity. There was not just a paucity of data but an absence of understanding in far too many. Now that we know how bad the problem is, we need to act to address it.

Looking ahead, the new landmine emergency in states such as Afghanistan, Iraq, and Syria has shown the value of our work as a key protection issue. As NGOs, we are there to save lives and safeguard livelihoods. We need to build on this and ensure our work is firmly embedded in the wider humanitarian response in the face of increasingly complex conflict. Where mine contamination is less of a humanitarian imperative and more of a disarmament and developmental endeavour, we need to be relevant to development agendas and the Sustainable Development Goals (SDGs), and to help address the impact on mine action of the environmental crisis facing our planet.

All of us in the mine action sector need to commit to not repeat errors of years ago, as we have no time to waste. It is utterly unacceptable to be wasting time and money clearing uncontaminated land. In addition, it does not matter under the Treaty how anti-personnel mines were produced: all improvised, as well as more conventionally manufactured mines designed to be detonated by a person are covered and banned. All must be cleared, destroyed, and reported on. We also need to plan for completion and the management of residual risk, link our work to assistance to victims, meaningfully mainstream gender and diversity, coordinate our efforts, and actively engage in the transparent and open discussions which need to be had.

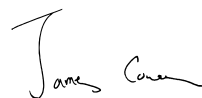
So in Oslo, let us look forward to the next five years and accelerate the pace of change in our sector as we push on towards 2025. If we are not being bold, we are not doing enough, and that is simply not an option.



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KEY FINDINGS

- In the 20 years since the entry into force of the **Anti-Personnel Mine Ban Convention (APMBC)** on 1 March 1999, a total of at least **2,880 square kilometres of mined area has been cleared**. This equates to an area greater than the size of Nairobi, New York City, and Rome combined. Operations have **destroyed more than 4.6 million anti-personnel mines**.
- In 2018 alone, a global total of more than **155 square kilometres was cleared** of anti-personnel mines; with more than 96% of recorded clearance in states parties to the APMBC. This represents a 16% increase on the 2017 total (almost 134 square kilometres). The true total area of clearance is probably considerably greater, but data recording and reporting problems, especially in Iraq, prevent accurate reporting of a higher figure, in addition to a lack of transparency by several states not party.
- Clearance operations in 2018 destroyed more than 146,200 anti-personnel mines while “spot tasks” destroyed a further 7,600. In total, **more than 153,800 emplaced anti-personnel mines** were destroyed during clearance and explosive ordnance disposal operations (EOD), compared to 181,600 in 2017. In addition, over 38,500 anti-vehicle mines were also destroyed during clearance of mined areas in 2018, significantly higher than the 7,500 destroyed in 2017.
- Two states fulfilled their APMBC Article 5 obligations to survey and clear all mined areas containing anti-personnel mines in 2018: Jordan and Palau. Jordan completed verification of mined area that had not been cleared to humanitarian standards, while Palau confirmed that survey of potentially contaminated areas was complete and that no mined areas had been identified.
- However, several affected states parties to the APMBC, including Eritrea, Niger, and Senegal, seemingly released no mined area in areas under their jurisdiction or control in 2018, putting their compliance with the duty in Article 5 to complete clearance “as soon as possible” into very serious question.
- As at 1 October 2019, **56 states and 3 other areas** were confirmed or suspected to have anti-personnel mines in mined areas under their jurisdiction or control.¹ Of the 56 states, 34 are party to the APMBC. These include Cameroon and Nigeria, both of which have mined area under their jurisdiction or control as a result of the use of anti-personnel mines of an improvised nature by Boko Haram, but which have yet to request an extension to their respective Article 5 deadline.
- In the last 20 years, 33 states (all states parties to the APMBC, except for Nepal) and 1 other area (Taiwan), have completed mine clearance.²
- Although all estimates should be treated with caution – and the picture is complicated by the addition of significant amounts of new contamination from anti-personnel mines of an improvised nature in a relatively small number of countries – Mine Action Review estimates that global contamination from anti-personnel mines covers **no more than 2,000 square kilometres** in total.
- Based on Mine Action Review’s assessment of the extent of contamination in affected states parties, Afghanistan, Cambodia, and Iraq are massively contaminated (defined as covering more than 100km² of land), while heavy contamination (covering more than 20km²) exists in Angola, Bosnia and Herzegovina, Thailand, Turkey, and Yemen. In other affected states, the extent of anti-personnel mine contamination is medium or light.
- For operations in 2018, six states parties had demining programmes Mine Action Review rated as good: Afghanistan, Jordan (which has now fulfilled its Article 5 obligations), Sri Lanka, Thailand, the United Kingdom, and Zimbabwe. A further 11 states parties had demining programmes rated as average: Angola, Bosnia and Herzegovina, Cambodia, Chile, Croatia, Oman, Serbia, South Sudan, Sudan, Tajikistan, and Turkey. Colombia, DR Congo, Ecuador, Ethiopia, Iraq, Peru, Somalia, Ukraine, and Yemen attained only a rating of “poor”, while Chad, Eritrea, Niger, and Senegal all rated “very poor”.

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

2 States Parties: *Albania, Algeria, Bhutan, Bulgaria, Burundi, Rep. of Congo, Costa Rica, Denmark, Djibouti, France, The Gambia, Germany, Greece, Guatemala, Guinea-Bissau, Honduras, Hungary, Jordan, Malawi, Mauritania, Montenegro, Mozambique, Nicaragua, Republic of North Macedonia, Palau, Rwanda, Suriname, Swaziland, Tunisia, Uganda, Venezuela, and Zambia*; State not Party: *Nepal*; and “other area” *Taiwan*. States parties in italics are those that reported mined areas under the APMBC, and which have subsequently reported completion under the APMBC.

OVERVIEW

THE LEGAL LANDSCAPE

Adopted on 18 September 1997, the Anti-Personnel Mine Ban Convention (APMBC) entered into force as binding international law on 1 March 1999. Its implementation has encompassed sustained action to rid the world of millions upon millions of emplaced anti-personnel mines. Demining programmes over the past 20 years in some 90 countries worldwide have cleared a total of at least 2,880 square kilometres of mined area, with the destruction of more than 4.6 million anti-personnel mines. Tens of thousands of lives have undoubtedly been saved as a direct result of mine action, and demining's broader contribution to development has been huge. This herculean effort been supported by more than US\$10 billion of combined national funding and international aid.

From the first 40 states that ratified the Convention, triggering its entry into force, the APMBC has grown to boast a membership of 164 parties. It is the most widely ratified conventional disarmament treaty in history, with only 33 states still to adhere, one of which is a treaty signatory. Traditionally, disarmament treaties were preventive instruments of international law, seeking to remove weapons from the hands of states before they could be used, or used widely. The APMBC differs in that it *also* addresses the harm that has been inflicted by use of the weapons it prohibits. Its provisions do sustain a preventive approach, requiring its states parties to destroy all but a handful of anti-personnel mines that can be lawfully retained for training in mine clearance. But, significantly, a duty is also imposed to clear all anti-personnel mines on the territory of a state party (irrespective of whoever laid them) as well as on any areas its forces occupy abroad. It also sets a time-bound deadline for this clearance. Under Article 5 of the Convention, each state is obligated to destroy all anti-personnel mines in all mined areas under its jurisdiction or control *as soon as possible, but not later than ten years* after becoming a state party to the Convention. This duty of clearance is a remarkable innovation in international law.

And where gaps in the legal framework for this clearance have become clear, states parties have acted to fill them. The APMBC did not address the legal ramifications of a state party finding anti-personnel mine contamination after its ten-year deadline had expired. But this occurred during implementation of the Convention.¹ Accordingly, in 2012 the Twelfth Meeting of States Parties agreed that such a state should either clear and report (if the contamination

was minimal) or seek a new deadline for clearance. Niger, which discovered colonial-era minefields laid by France on its north-eastern border in 2012, submitted an Article 5 deadline extension request in June 2013. This procedure is also relevant for both Cameroon and Nigeria, part of whose territory has been contaminated with anti-personnel mines of an improvised nature laid by Boko Haram, and whose original 10-year clearance deadlines have already expired. However, as at 1 October 2019, neither Cameroon nor Nigeria had sought a new Article 5 deadline for clearance, which they must both do as soon as possible to ensure compliance with the Convention.

During the negotiation of the APMBC, the issue arose of what would happen to those states whose contamination was so significant that ten years would not be sufficient to complete clearance. The suggestion was made to adapt and apply the approach from the 1992 Chemical Weapons Convention, which allowed states parties that were unable to complete stockpile destruction within the allotted period to seek a (single) extension to the deadline. States negotiating the APMBC agreed to allow heavily affected states parties to seek multiple extensions, but each may be for no more than ten years. Subsequently, states parties have also shown flexibility in allowing extensions purely for survey, to enable an affected state party to better understand the extent of contamination. As discussed below, high-quality survey is integral to an effective and efficient mine action programme.

Unfortunately, the extension process has also allowed states to drag their feet on clearance. Currently, almost every state party, whether their contamination is great or small, is subject to an extended deadline. Only recent adherents Oman, Palestine, Somalia, South Sudan, and Sri Lanka are facing their initial Article 5 deadline, and of these only Sri Lanka is currently on course to meet it. Worse, a number of states have failed to request extensions to their deadlines, putting them in serious violation of the Convention. Eritrea was, as of writing, the latest state to find itself in such a position, having failed to submit an Article 5 deadline extension request as at 1 October 2019. It joins Ethiopia, Jordan, and Ukraine on the list of those who have been in violation for lack of an extended deadline, but each subsequently returned to compliance: Ethiopia and Ukraine through requesting and gaining approval of new Article 5 deadlines, and Jordan by completing clearance of remaining mined areas.

MEETING THE GLOBAL CHALLENGE

AFFECTED COUNTRIES

In 1999, when the APMBBC entered into force, it was suspected that as many as 91 states and 4 “other areas” were mine- or UXO-affected. Over time, five further states were found to have confirmed or suspected mined area, three as a result of new information,² and two as a result of existing states allowing part of the sovereign territory to secede and become a new state,³ while seven states were found to be affected only by UXO. Since 1999 and through 1 October 2019, a total

of 33 states have completed mine clearance; all but one of these states (Nepal) are party to the APMBBC (see Table 1). In 2018, two states parties fulfilled their Article 5 demining obligations: Jordan and Palau.

Taiwan completed mine clearance several years ago, leaving Kosovo, Nagorno-Karabakh, and Western Sahara as mine-affected “other areas”.

Table 1: Completion of Demining of Anti-Personnel Mined Area Since 1997*

State			
Albania**	France**	Malawi**	Rwanda**
Algeria**	The Gambia**	Mauritania**	Suriname**
Bhutan**	Germany**	Montenegro	Swaziland**
Bulgaria**	Greece**	Mozambique** & ***	Tunisia**
Burundi**	Guatemala**	Nepal	Uganda**
Rep. of Congo**	Guinea-Bissau**	Nicaragua**	Venezuela**
Costa Rica**	Honduras**	North Macedonia** (previously known as the former Yugoslav Republic of Macedonia)	Zambia**
Denmark**	Hungary**	Palau	Other area
Djibouti**	Jordan**		<i>Taiwan</i>
Total			33 states and 1 other area

* States parties to the APMBBC are in bold. The sole other area (Taiwan) is in italics.

** States parties which reported mined areas under the APMBBC and subsequently reported completion.

*** Mozambique has four very small suspected mined areas that remain underwater. These areas, which were declared by Mozambique to the other APMBBC states parties, must be released as soon as possible.

Table 2: Global Anti-Personnel Mine Contamination (at 1 October 2019)

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

* 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.

** Have not yet submitted a request to extend their Article 5 deadline.

Table 3 below summarises what is known or reasonably believed about the extent of contamination in affected states parties. It is therefore an assessment by Mine Action Review of the extent of anti-personnel mine contamination based on available evidence, as opposed to the claims of governments or mine action programmes, some of which do not stand up to scrutiny.

In nearly three quarters of affected states parties, the extent of anti-personnel mine contamination is believed to be medium or light. In these states, the necessary survey and clearance could be completed within a few years with the necessary approach and commitment.

Over the coming 18 months, both Chile and the Democratic Republic of Congo (DR Congo) are expected to complete mine clearance on their respective territory. Chile has an Article 5 deadline of 1 March 2020 while DR Congo is obligated to complete mine clearance by 1 January 2021. If, however, by November 2019, Chile is not firmly on course to complete clearance in time, at the Fourth Review Conference it should

request a short extension period (of no more than one year) in order to fulfil its Article 5 obligations in a treaty-compliant manner. Sri Lanka may complete mine clearance in the course of 2021, which would make it one of the most heavily affected states yet to do so.

Other welcome news has come from Cyprus and Angola. A series of confidence-building measures agreed upon in February 2019 by the President of Cyprus, Nicos Anastasiades, and the Turkish Cypriot leader, Mustafa Akinci, included survey and clearance of 18 suspected hazardous areas (SHAs), nine on each side of the buffer zone. It is expected that this work will be completed by February 2020. Cyprus could be made a mine-free island in short order if all the parties agreed to facilitate the United Nations and their contractors in this endeavour, something they have not thus far agreed to do. In Angola, Norwegian People's Aid (NPA) reported completing clearance of all known and registered tasks in Malanje province in 2018, putting the province on track to become Angola's first to be declared free of the threat of mines.

Table 3: Extent of Anti-Personnel Mined Areas in Affected States Parties (at 1 October 2019)

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

* Argentina is considered 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.

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

NEW CONTAMINATION AND ANTI-PERSONNEL MINES OF AN IMPROVISED NATURE

But new contamination is still being added to the global problem, largely at the hands of non-state armed groups. Use of mines of an improvised nature, predominantly by Islamic State, has added huge swathes of new contamination to an already huge problem in Iraq and created one in Syria. Anti-personnel mines of an improvised nature pose the biggest humanitarian threat in Afghanistan (despite a significant threat coming also from anti-vehicle mines), with contamination continuing to expand as a result of persistent conflict. In Yemen, huge quantities of anti-personnel mines of an improvised nature have been laid by Houthi forces over the past three years. In Colombia, new mines have been laid in recent times, often to protect coca production, but also as a result of a rise in the resurgence of non-state armed groups.

These improvised munitions are both captured by and prohibited under the APMBC whenever they are designed to be exploded by the presence, proximity or contact of a person. It does not matter under the APMBC how these weapons were produced or employed, nor by whom they were laid; if they fall within the jurisdiction or control of a state party, all of the Convention's provisions apply, including obligations to clear and report under Article 5 and Article 7, respectively, just as they do to more conventionally manufactured anti-personnel mines.

The APMBC text and the *travaux préparatoires* of the Convention make that clear. This has also been highlighted by the APMBC Committee on Article 5 Implementation in its “Reflections and understandings on the implementation and completion of Article 5 mine clearance obligations”;⁴ by the International Committee of the Red Cross (ICRC) in its non-paper, “Views and Recommendations on Improvised Explosive Devices Falling Within the Scope of the Anti-Personnel Mine Ban Convention”; in the UN General Assembly 73/67 Resolution of December 2018; and in the International Mine Action Standards (IMAS) glossary. Mine Action Review hopes that the issue of whether anti-personnel mines of an improvised nature fall under the APMBC – which should not have been open to debate in the first instance – is finally put to bed at the Fourth Review Conference.

Accordingly, in states parties affected by victim-activated improvised explosive devices (IEDs) that meet the definition of an anti-personnel mine, all relevant stakeholders should support the national authorities to correctly record and report this type of mine contamination under the APMBC, along with the requisite efforts to survey and clear it. This requires the use of reporting forms and establishment of information management systems that are able to

disaggregate victim-activated IEDs that meet the treaty definition of an anti-personnel mine, from time delay-, command detonated-, or suicide borne-IEDs, all of which do not. Recording and reporting by APMBC states parties of anti-personnel mines of an improvised nature only under the catch-all term “IED” is legally incorrect and should be treated as a compliance issue.

Unfortunately, to date, the United Nations Mine Action Service (UNMAS) has, in a number of key countries, impeded compliance with the APMBC in this regard. It has done so by declining to require that demining actors report victim-activated devices of an improvised nature as anti-personnel mines, which would help ensure that states parties recognise and comply with the full extent of their APMBC obligations under international law. In Iraq, for instance, where UNMAS is the main channel for international mine action funding, it does not disaggregate results of clearance by operators it contracts to report anti-personnel mines of an improvised nature even though this is required by the APMBC. In Afghanistan, the UN Assistance Mission to Afghanistan (UNAMA), acting on advice from UNMAS, reports on the protection of civilians describing all anti-personnel mines using the term IED.

CLEARANCE IN 2018

Globally, clearance in 2018 covered more than 155 square kilometres of mined area. This was a 16% increase on clearance in 2017, but still amounted to the third lowest output in more than a decade, in part a reflection of continuing economic pressures on the mine action sector. The number of anti-personnel mines destroyed in demining programmes dropped significantly in 2018, down to just over 153,800 from more than 181,000 the previous year, raising concerns about the targeting of clearance. However, the number of emplaced anti-vehicle mines destroyed in 2018 was over 38,500, a marked increase from the 7,500 in 2017. Table 4 summarises clearance output in major mine action programmes globally in 2018 and describes changes in recorded clearance compared to 2017.

Table 4: Major Recorded Anti-Personnel Mine Clearance in 2018*

State/area*	Area cleared in 2018 (km ²)	AP mines destroyed (excluding spot tasks)	Comparison to 2017 clearance (+/- km ²)	Comment
Croatia	48.8	984	+ 18.4	The huge increase in clearance output for 2018 over the previous year is in part because of a change in the recording of clearance output (now only upon official certification). In addition, realisation of major funds for demining in forests was delayed to 2018.
Cambodia	41.0	11,718	+ 13.3	Overall land release output in Cambodia fell slightly in 2018 compared to the previous year even though clearance increased significantly. To reach its ambitious targets for 2025, Cambodia will need to secure additional funding and extra capacity and gain access to the non-demarcated border areas with Thailand.
Afghanistan	30.9	8,818	+ 2.7	The mine action programme has maintained anti-personnel mine clearance at a consistent level in the face of funding and insecurity constraints, but in 2018 was still elaborating its strategy for dealing with mines of an improvised nature.
Iraq	8.4**	9,112	- 14.9	Iraq achieved very significant destruction of anti-personnel mines of an improvised nature in 2018, but the inability or unwillingness of the authorities to disaggregate the destruction of mines from that of remotely detonated IEDs has prevented accurate reporting.
Sri Lanka	3.5	31,323	0.3	Sri Lanka has set a highly ambitious goal of completing clearance of all mines and by end 2020. It did not, however, meet its national mine action strategy target for land release in 2018 and the 2020 goal is entirely dependent on increasing clearance resources.

State/area*	Area cleared in 2018 (km ²)	AP mines destroyed (excluding spot tasks)	Comparison to 2017 clearance (+/- km ²)	Comment
<i>Western Sahara</i>	2.4	37	+ 2.1	In 2018, according to UNMAS, a total of just over 2.38km ² of mined area was cleared, but with the destruction of only 37 anti-personnel mines.
Zimbabwe	2.1	22,013	+ 0.4	A total of nearly 9.4km ² of land was released in 2018, surpassing Zimbabwe's 2018 target for land release under its national mine action strategy.
South Sudan	2.1	1,163	+ 0.4	While South Sudan will not meet its current Article 5 deadline of 2021, its remarkable progress in land release output and obtaining a more realistic picture of remaining contamination in 2018 place it in a much better situation as it prepares its second Article 5 deadline extension request, with a much more achievable problem to tackle.
Somalia	1.6	220	+ 0.7	Of the total clearance in 2018, 0.03km ² was cleared in Somalia (no AP mines destroyed), 1.49km ² in Somaliland (219 AP mines destroyed), and 0.08km ² in disputed area (1 AP mine destroyed). Land release outputs remained limited in 2018, primarily due to ongoing armed conflict, new security threats, and a lack of resources and operational capacity.
United Kingdom	1.5	588	+ 0.4	The United Kingdom released nearly 1.5km ² of mined area in 2018 and conducted technical survey of the eight mined areas which will remain as at the end of the current phase of demining in March 2020.
Turkey	1.2	22,220	+ 0.4	Turkey increased its clearance output in 2018, and also cancelled a significant amount of mined area on the Syrian border.
Ethiopia	1.1	582	+0.7	With a poor track record for clearance in recent years, it is encouraging that Ethiopia reported clearing 1.1km ² in 2018, with the destruction of 582 anti-personnel mines. In addition, there was also significant cancellation through non-technical survey.
Angola	1.0	1,646	- 0.2	Funding constraints are impeding progress in Angola, especially since the US decision to withdraw its support for mine action there. Collectively, the resources of the three largest operators in Angola, HALO Trust, Mines Advisory Group, and Norwegian People's Aid, have declined by nearly 90% over the past decade.
Sudan	1.0	31	+ 0.3	Despite increased clearance in 2018, only 31 anti-personnel mines were destroyed, raising questions about the targeting of demining efforts.
Chile	1.0	3,908	+ 0.1	It is unclear whether Chile is on track to meet its impending Article 5 deadline as the small increase in clearance output in 2018 may not be enough to enable it to meet its legal target.
Colombia	1.0	322	+0.5	Colombia is not on track to meet its current Article 5 deadline and has already stated it will request a second extension in 2020.
Jordan	1.0	6	- 0.4	Jordan completed clearance/verification in 2018, which explains the drop in area cleared and the small number of anti-personnel mines destroyed.
Bosnia and Herzegovina	0.9	2,101	+ 0.2	The amount of land released through clearance and cancelled through non-technical survey in 2018 was a slight increase on 2017, while technical survey output decreased slightly. Efforts in the latter half of 2018 were put into the "country assessment" project, to set a new baseline for realistic Article 5 implementation planning.

State/area*	Area cleared in 2018 (km ²)	AP mines destroyed (excluding spot tasks)	Comparison to 2017 clearance (+/- km ²)	Comment
Tajikistan	0.6	4,998	+ 0.0	Tajikistan cleared nearly 0.6km ² of mined area in 2018, less than it had planned to clear and substantially less than the amount foreseen in its deadline extension request.
Thailand	0.5	7,392	+ 0.1	Land release output in 2018 was on a par with 2017. Its land release targets are ambitious and require sustained funding, extra capacity, and a resolution of border demarcation issues that affect responsibility for mined areas.
North Korea	0.3	636	+0.3	In 2018, clearance took place of a Joint Security Area by North and South Korea, in which North Korea cleared 636 mines. North Korea also reportedly cleared a 1.3km ² -long mine belt in the Arrowhead Hill region.
Other programmes	3.5	16,443		
Spot task clearance		7,613		
Totals	155.4	153,874		

* APMBC states parties are in bold. Other areas are in italics. Clearance figures are rounded to the nearest decimal point.

** As compared to 2017 estimate. 2018 data excludes items recorded only as IEDs and not disaggregated.

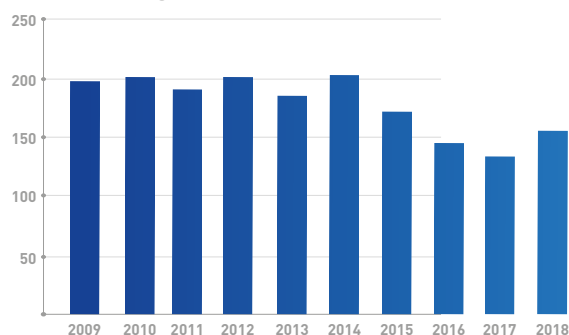
The disparity in density of contamination is obvious from Table 4. But while some contaminated areas will certainly be very much more heavily mined than others, figures of 37 anti-personnel mines cleared from 2.4km² of mined area in Western Sahara and 31 anti-personnel mines cleared from 1km² of mined area in Sudan raise serious questions about the quality of survey.

CLEARANCE SINCE 1999

In the past 20 years of clearance through the end of 2018, a total of more than 2,880 square kilometres of mined area has been cleared. This equates to an area greater than the size of Nairobi, New York City, and Rome combined. Operations have destroyed more than 4.6 million anti-personnel mines. Of the total global clearance since the entry into force of the APMBC, 1,780 square kilometres were cleared in the last decade, as Figure 1 illustrates.

This suggests that at current rates of clearance, most countries would be cleared of mine contamination by 2030, the deadline for the achievement of the Sustainable Development Goals (SDGs), leaving just a small number of conflict-affected regions to be addressed in the 2030s. SDG 16.1 seeks a significant reduction in all forms of violence and related death rates everywhere.⁵

Figure 1: Clearance in 2009-2018



COMPLIANCE CHALLENGES AND CONCERNS

The impressive overall progress achieved under the auspices of the APMBC has, however, not been either smooth or consistent across states parties. Many have been too slow to initiate and conduct mine clearance; a few, notably the United Kingdom, failed to clear a single mined area during the 10 years originally allotted under the Convention for clearance to be completed (it is, however, now making solid progress towards completion). In more recent times, Chad, Ecuador, Eritrea, Niger, Peru, and Senegal have carried out little or no clearance of mined areas over the past five years, putting their compliance with the duty in Article 5 to complete clearance “as soon as possible” into very serious question. In Ecuador, as of writing, due to the lack of budget for demining, only two days of clearance operations were planned for the whole of 2019. This simply does not comply with the requirements of the APMBC. Other states parties have resisted clearing mines laid in sensitive areas, such as along national borders or around military facilities. Such inaction is not permitted by the Convention.

ARTICLE 5 DEADLINES AND COMPLIANCE

Two states parties, Jordan and Palau, fulfilled their Article 5 obligations in 2018. That leaves 34 states parties with outstanding Article 5 obligations of survey and clearance. Table 5 summarises the situation in these 34 states parties and identifies key implementation priorities. Of these 34 states parties, only 5 – DR Congo, Serbia, Sri Lanka, the United Kingdom, and Zimbabwe – were on track to meet their respective Article 5 deadlines as at 1 October 2019. The position in Chile was unclear, even though its Article 5 deadline expires on 1 March 2020.

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

State Party	Article 5 deadline	Status of progress	Implementation priorities
Argentina	1 January 2020	Three-year extension requested	Renew earlier offer to the United Kingdom to support demining of the Malvinas/Falkland Islands.
Cambodia	1 January 2020	Five-year extension requested	Accelerate clearance of dense anti-personnel mined areas and only clear land with firm evidence of contamination. Conclude early agreements with Thailand on border demining and commence pilot-project clearance without delay.
Chad	1 January 2020	Five-year extension requested	Complete national non-technical survey as soon as possible and restart clearance operations.
Eritrea	1 February 2020	Not on track and no extension requested as of writing	An extension must be requested and granted by the Fourth Review Conference if Eritrea is not to be in serious violation of the APMBC. Eritrea should report on progress in demining as required by the Convention and respect its international legal duty to clear mined areas as soon as possible.
Chile	1 March 2020	Unclear whether on track and no extension requested as of writing	Accelerate clearance in order to meet the Article 5 deadline (or request a one-year extension to finish the job, for consideration and approval at the Fourth Review Conference).
Yemen	1 March 2020	Three-year interim extension requested	Conduct a nationwide survey to generate a baseline of mine contamination, and strengthen coordination, national standards, and information management.
Tajikistan	1 April 2020	Five-year, nine-month extension requested	Complete survey of all mined areas and secure the additional funding needed to expand capacity in line with its Article 5 extension request projections.
Ethiopia	1 June 2020	Five-year, seven-month extension requested	Seek additional capacity and resources needed to implement its Article 5 deadline extension request projections and cooperate in cross-border mine action activities with Eritrea.
Niger	31 December 2020	Not 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.
Bosnia and Herzegovina	1 March 2021	Interim extension granted in 2018 for new national survey	Complete its “country assessment” project on schedule and prepare its upcoming Article 5 deadline extension request based on realistic planning and concrete milestones.
Colombia	1 March 2021	Not on track	Conduct national baseline survey of contamination and significantly strengthen the effectiveness of its 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.

State Party	Article 5 deadline	Status of progress	Implementation priorities
Ukraine	1 June 2021	Not on track	Ensure no use of anti-personnel mines by its forces and formally establish a national mine action centre to facilitate better coordination, elaboration of a national strategy, and reporting under the APMBC.
South Sudan	9 July 2021	Not on track	Set concrete and realistic annual targets for completing survey and clearance in its forthcoming Article 5 deadline extension request.
Turkey	1 March 2022	Not on track	Approve and publish its national strategic mine action plan for 2019-21 as soon as possible and move forward, without delay, to expand large-scale survey and clearance of border and non-border areas.
Cyprus	1 July 2022	Not on track	Cyprus and Turkey to facilitate clearance of all mined areas inside and outside the Buffer Zone.
Somalia	1 October 2022	Not on track	Conduct a national survey to elaborate a baseline of mine contamination.
Ecuador	31 December 2022	Not on track	Accelerate demining to complete clearance as soon as possible, but no later than the end of 2022.
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 reflect reduced funding and clarify the implications for meeting its Article 5 deadline.
Serbia	1 March 2023	On track (just) to meet extended deadline granted in 2018	Fully apply land release methodologies including non-technical and technical survey, to improve operational efficiency.
Sudan	1 April 2023	Not on track	Clarify plans for demining in Western Kordofan state and Abyei.
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 on border demining and commence pilot-project clearance without delay.
United Kingdom	1 March 2024	On track to meet extended deadline granted in 2018	Provide an update on the results of technical survey of the remaining eight mined areas in Yorke Bay and on the planned timeline for contracting and completing clearance of this final phase of demining.
Peru	31 December 2024	Unclear whether 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	Continue to release mined areas with a view to completion as soon as possible and no later than 1 February 2015. Seek to apply non-technical and technical survey, to confirm contamination prior to clearance, whenever possible.
Angola	31 December 2025	Not on track	Strengthen coordination, improve its national mine action database, and complete a comprehensive review of its national mine action standards.
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.
Croatia	1 March 2026	Unclear whether on track to meet extended deadline granted in 2018	Enhance use of non-technical and technical survey to improve land release efficiency.
Iraq	1 February 2028	Not on track	Incorporate in its reporting data on contamination and clearance of all anti-personnel mines of an improvised nature (instead of reporting them within the catch-all category of IEDs) to comply with the APMBC.
Palestine	1 June 2028	Not on track	Report accurately and consistently on the extent of mined area and annual clearance output.
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			
Cameroon	1 March 2013	Needs extension	Request extended Article 5 deadline and conduct non-technical survey in Extrême-Nord (Far North) region.
Nigeria	1 March 2012	Needs extension	Request extended Article 5 deadline and conduct non-technical survey in Borno, Yobe, and Adamawa states.

Demining security continues to be a challenge in certain conflict-affected states parties, including Afghanistan, Cameroon, Chad, Iraq, Niger, Nigeria, DR Congo, Colombia, Somalia, South Sudan, Ukraine, and Yemen, further impeding Article 5 compliance. Afghanistan's increasingly volatile security environment poses a major challenge to operators. The Mine Action Programme of Afghanistan (MAPA) recorded 29 security incidents in 2018 in which 6 deminers were killed and a further 18 injured. In Senegal in 2019, five deminers were kidnapped for a day by a non-state armed group in Casamance.

In 2019, Afghanistan became the first country programme to release a national standard for tackling mines of an improvised nature. AMAS 06.10: Abandoned Improvised Mine Clearance was released in March 2019. As its title makes clear, and to protect the neutrality of humanitarian mine action, the Department of Mine Action Coordination (DMAC) in the Afghan government permits clearance only of items that are not subject to areas of active hostilities. Under international humanitarian law, direct participation in hostilities (which includes mine clearance in contested areas without the consent of all the parties to the conflict) makes a person a lawful target of lethal force by a party to an armed conflict.

THE 2025 ASPIRATION

In 2014, at the Third Review Conference of APMBC, states parties affirmed that they would intensify efforts to complete their respective time-bound obligations with the urgency that the completion work requires and aspired to meet these goals to the fullest extent possible by 2025. After a decade of repeated Article 5 extension requests being the norm, this marked a commitment to draw a line in the sand and set an end date for completion of clearance by affected states parties. While some states parties, such as Sri Lanka, United Kingdom, and Zimbabwe, are rising to the challenge, implementing requisite action plans, applying an efficient land release methodology, and securing funding to ensure sufficient capacity to finish clearance as soon as possible and before 2025; others are not.

Mine Action Review has provided a rough assessment of the likelihood of each of the 34 affected states parties fulfilling their Article 5 obligations by end of 2025, based on current progress, and which can be found in each country-specific report. Worryingly, more than half of affected states parties are currently not on track to meet the 2025 aspiration.

It is, however, not too late to improve this trajectory. With the exception of the most contaminated countries, or those with ongoing conflict or access issues, most states parties could still complete by 2025 if national authorities, operators, and donors were to employ the right resources in the right way. But this is a big 'if', which will require stronger leadership and commitment from all, sustained funding, and adoption of the most efficient and effective land release possible.

TWENTY YEARS OF THE APMBC: KEY LESSONS FOR MINE ACTION

LOCATION, LOCATION, LOCATION

It is self-evident that clearing areas that actually contain mines is the basis of an effective mine action programme. Understanding and localising the mine threat at an early stage is therefore the launching pad for success. Indeed, one of the largest impediments to achieving Article 5 compliance quickly and cheaply, once demining programmes are underway, has been the widespread poor quality of survey. Even today, surveyors without technical expertise continue to hamper the elaboration of a robust baseline of contamination, reporting vast mined areas where they do not exist, and filling the national database with incorrect or inflated polygons.

Historically, perhaps the greatest culprit has been the Landmine Impact Survey (LIS), now defunct as a survey methodology, but once the darling of the donors. The LIS was conceived in the late 1990s with the very best of intentions: to identify all the mined areas and explosive remnants of war (ERW)-affected areas in a country, as well as to determine their impact on nearby communities. But instead of generating a robust baseline of contamination for the purpose of Article 5 implementation, the LIS led to many suspected hazardous areas (SHAs) being entered in the national mine action database that would prove to contain no contamination at all, while the size of those SHAs that actually contained contamination was often vastly inflated. Its fundamental flaw was its perception-based methodology: using surveyors without technical expertise to ask members of local communities whether and where they thought mines were present. Community participation in mine action is

of critical importance, but what was actually needed for such methods to work was also supporting evidence and validation. As the International Mine Action Standards (IMAS) make clear, a suspicion of the presence of mines must be "reasonable".

Globally mine action has paid the price of these early mistakes in survey, with greatly exaggerated estimates of the problem, and ultimately demands for re-survey to remedy the misdemeanours wrought on the sector by the LIS and other like surveys. Bosnia and Herzegovina, for instance, one of those countries in which a LIS was conducted (in 2003), still does not have an accurate picture of baseline contamination more than 20 years after becoming a state party to the APMBC. A nationwide survey, termed a "country assessment" is now underway with a view to enabling a far more accurate baseline to be established. Efforts to gain greater clarity on the extent of mine contamination are welcome, but in truth are long overdue. In total, in Angola more than 90% of SHAs recorded as a result of inflated estimates from a 2004-07 LIS were cancelled during re-survey, now almost complete. In Thailand, precious time is similarly being used up correcting problems from the LIS conducted there in 2001. The Thailand Mine Action Centre (TMAC) has forecasted that up to 80% of existing SHAs can be cancelled or reduced through survey so will be focusing their efforts in 2019-20 on cancelling land through non-technical survey before moving on to technical survey and full clearance in 2021-23.

It is essential that as a sector we learn from lessons and apply best practice as standard across the board, ensuring high-quality evidence-based survey to identify tightly delineated SHAs and CHAs. These principles must also be applied to all mined areas, including new contamination from anti-personnel mines of an improvised nature, whether in rural or urban areas, in order to avoid unnecessary complications and costs further down the line caused by hugely inaccurate sizes and locations of hazardous areas.

According to analysis by Mine Action Review, only 12 states parties have established their national baseline of anti-personnel mine contamination to a reasonable degree of accuracy.⁶ The remaining affected states parties still need to conduct further survey to more accurately identify the location and extent of mined area, confirming contamination where direct evidence exists and releasing SHAs found not to be contaminated.

LAND RELEASE METHODOLOGY

Hand in hand with high-quality non-technical and technical survey goes an efficient land release methodology based on the planned assessment of risk. No mine action is risk free, but wasting resources clearing SHAs also has significant implications for truly affected communities.

The notion of land release did not exist when the APMBC was being drafted and it remains subject to differing application, but is now the backbone – and mainstream – of demining methodology. It is based on a risk management approach that is implemented through evidence-based survey rather than a mere fear of the presence of mines. Unfortunately, some states parties continue to fully clear too many mined areas in which no anti-personnel mines are found, typically at considerable time and cost. Better targeting of clearance, enabled by high-quality evidence-based survey, would help avoid clearance of areas with no contamination and must be implemented routinely by all stakeholders in all affected states parties, without exception.

Astonishingly, Colombia, which has had a mine action programme for more than 15 years, does not yet have a national standard for land release that has been approved and implemented by the national authority, Descontamina Colombia. Operators are not allowed to call for cancellation of an area being cleared before at least 50% of it has been cleared, even if all the indications are that no explosive items will be found. This is an unforgivable waste of precious clearance resources. In Serbia, where the national mine action centre continues to express a preference for full clearance of SHAs over technical survey, it did reduce some mined area through technical survey in 2017 and 2018, demonstrating a greater willingness to adopt more efficient land release practices.

INFORMATION MANAGEMENT

The Information Management System for Mine Action (IMSMA) has become the *de facto* standard database for mine action programmes. Of 34 affected states parties with Article 5 obligations, 24 use IMSMA. Zimbabwe fully transitioned to IMSMA in 2018. Bosnia and Herzegovina and Serbia do not yet use IMSMA (though Bosnia is in the process of switching to IMSMA Core and Serbia has previously discussed the possibility of IMSMA installation with the Geneva International Centre for Humanitarian Demining, GICHD).⁷ Other states parties not using IMSMA are Cameroon, Croatia, Niger, Nigeria, Oman, and the United Kingdom. The situation in Eritrea is unclear. Argentina claims sovereignty over the Malvinas/Falklands but does not have control of territory that would enable it to conduct mine action.

A sophisticated database does not, though, mean that data is accurate and up to date. “Rubbish in, rubbish out” may be a cliché, but it holds true for national mine action databases. In Chad, for example, the national mine action centre does use IMSMA, but many records of past survey have been “lost” from the database. Colombia continues to collect and report on “events” (including media reports) related to anti-personnel mines and other ordnance, with this data serving as the main indicator of contamination and the basis of demining planning and prioritisation. Operators, though, report that these IMSMA “events” are beset with errors, including duplications and inaccuracies. For example, Humanity and Inclusion (HI) found that more than three quarters of the anti-personnel mines found in each assigned task in 2018 did not correspond to the respective IMSMA events.

Reporting under the APMBC continues to disappoint. Only a handful of states parties reported accurately on progress in demining in 2018 in their respective Article 7 transparency reports, and the reporting of the vast majority of states parties contained inaccuracies or inconsistencies. Either this was due to different figures to those included in the report being submitted to Mine Action Review, or as a result of errors and inconsistencies within the Article 7 report itself. Some states parties simply do not report at all, even though this is a legal requirement under the APMBC. Eritrea's failure to submit any Article 7 report over the past five years is a persistent and ongoing violation of the Convention.

As previously mentioned, anti-personnel mines of an improvised nature must be recorded and reported under the APMBC. Unfortunately, for some affected states parties, three years of discussion to confirm what was already agreed and clear (i.e. that victim-activated IEDs that meet the definition of an anti-personnel mine must be reported as such under the APMBC), has led to three years of data which now must to be cleaned. This must not continue. Correct reporting on anti-personnel mines of an improvised nature must be applied by all affected states parties and implementing partners, without exception.

INTERNATIONAL MINE ACTION STANDARDS (IMAS)

The International Mine Action Standards have ensured that demining programmes can attain an acceptable standard of competence, efficiency, and safety. These standards, which have been developed collaboratively, continue to evolve, and promote minimum good practice – most recently in Minimum Data Requirements – which will become an appendix to the IMAS on Information Management. An increasing number of states parties have incorporated latest developments and best practice from IMAS into their national mine action standards and standing operating procedures. We encourage all states to make use of this valuable resource.

RESIDUAL RISK

Article 5 obligations are fulfilled when an affected state party has completed clearance of all confirmed and suspected mined areas under its jurisdiction or control. However, this does not mean that every mine (much less every items of unexploded or abandoned explosive ordnance) will have been found and destroyed. In states which were once heavily contaminated, munitions will be found post-completion. Affected states must plan for this and establish sustainable national capacity to address contamination discovered post completion, and this must be commenced well in advance of completion. The majority of states parties with Article 5 obligations should already be taking measures to plan for capacity to address residual risk, assessing where such capacity is best placed (be it with the armed forces, police, or civil protection, or other appropriate entity) and where the all-important information management system will be housed. Failure to do so could result in significant cost, such as unnecessarily requiring international clearance operators to address what should be dealt with nationally and creating a problem which is both predictable and avoidable.

GENDER AND DIVERSITY IN DEMINING

It is not only important that states parties duly fulfil their Article 5 obligations, it is also important *how* they achieve completion. The mine action community has been increasingly seeking to strengthen performance in areas not adequately covered in the Convention drafted twenty years ago, in particular the importance of ensuring gender- and diversity-sensitive mine action. Thus, states parties agreed in the 2014 Maputo Action Plan that they would implement the commitments in a “gender-sensitive manner”, building on the Cartagena Action Plan and the Nairobi Action Plan. This represented a step forward towards integration of gender perspectives in mine action, but there is still significant room for improvement in practice.

As mentioned below, Mine Action Review has introduced a new criteria on gender (see Table 7 overleaf), as part of the assessment of mine action programme performance by states parties. Findings from the new criterion have shown that, despite progress, the mine action community has significant work still to do to improve its understanding of and approach to gender along with properly integrating gender and diversity considerations in mine action. This demands the removal of barriers to the full, equal, and meaningful participation of women.

For a sector that in some countries is the largest private employer, mine action has had a pretty dreadful record in promoting gender equality. In Bosnia and Herzegovina, of the national mine action centre's 171 employees, only 42 were women (less than a quarter). Moreover, of its 107 operations staff in the field, only 10 were women (less than one in ten). Norwegian People's Aid (NPA) reported that, as at April 2019, the overall gender split of its own mine action staff in Bosnia was 98 men (91%) and 10 women (9%), which also leaves significant room for improvement.

The promotion of gender equality in mine action has, though, been improving in recent years in a number of countries. In Afghanistan, for example, the national mine action programme (MAPA) drafted a policy on gender in 2016 after consultation with the GICHD and the Gender and Mine Action Programme (GMAP, now part of the GICHD). The MAPA included mainstreaming gender as one of the four goals of its 2016–20 strategic plan though it is still in the process of developing steps and capacity for implementing it within the constraints of Afghan society. In 2018, Danish Demining Group (DDG) deployed the first all-women mine clearance team in Bamyan province. Further clearance by an expanded all-woman team followed in 2019.

Where survey and community liaison teams are inclusive and gender balanced, this facilitates access and participation by all groups, including women and children. Consulting women as well as girls and boys during non-technical survey can lead to a more accurate picture of mine contamination and, therefore, more efficient and effective land release. Mine action NGOs have started to include gender-focused objectives in organizational strategies, and are increasingly conducting gender analysis and disaggregating data by sex and age. But despite the increased collection of disaggregated data in the sector, weaknesses remain around the operationalisation of such data in prioritization and programming.

If gender remains work in progress, diversity is work yet to start. Mine Action Review postponed plans to assess diversity in mine action given the paucity of practice in mine action programmes. The problem – and lack of action – is particularly disappointing in countries in which ethnic minorities have suffered during earlier conflicts. A few programmes have, though, made a start. As at July 2019, NPA Colombia was in the process of developing a gender and diversity policy and has made diversity the focus of one of its key performance indicators. Women and people from indigenous communities were targeted during a recent recruitment drive where of 32 new staff, 11 were female (34%), 2 were persons with disability (6%), and 4 were from indigenous communities (13%).

COUNTRY-FOCUSED APPROACHES

Since the Third APMBC Review Conference in 2014, there has been a growing appreciation of the importance of adopting a country-focused approach to Article 5 implementation. Country-focused initiatives enable national authorities and implementing partners in-country to collectively and constructively discuss local progress and challenges to Article 5 implementation. Only through open and transparent dialogue can obstacles to efficient and effective land release be identified and overcome and improvements and greater progress made.

Initiatives, such as the “Individualised Approach” and the European Union-funded National Stakeholder Dialogue workshops, have provided useful platforms for country-focused approaches. However, to yield meaningful results and sustained outcomes, such initiatives must be translated into regular in-country workshops that bring together relevant stakeholders, present progress reports and updates on Article 5 implementation, improve coordination, and demonstrate strong national ownership and political commitment to completion. There is a common misconception that such forums already exist in most affected states parties; they do not. Whether called “National Mine Action Platforms” (NMAPs), as most recently proposed under the APMBC, or Country Coalitions, as promoted under the Convention on Cluster Munitions, such forums should be established in *all* affected states parties.

DEMINING PROGRAMME PERFORMANCE IN STATES PARTIES

To help affected states parties and their partners focus their capacity building and technical assistance efforts on areas of weakness, and to improve the efficiency and effectiveness of survey and clearance programmes, a performance scoring system is used by Mine Action Review. As part of a five-year review of the Mine Action Review project and in view of the Fourth Review Conference of the APMBC in 2019, Mine Action Review overhauled its programme performance criteria and scoring system this year.

The seven new criteria were developed in consultation with the Mine Action Review’s Advisory Board Members (The HALO Trust, MAG, and NPA), and with input from the GICHD,

including GMAP. The new and improved set of criteria have been used to assess 2018 performance in all affected states parties (with the exception of those not assessed due to issues relating to jurisdiction or control of mined areas or insufficient information), resulting in a re-ranking. Comparisons with previous years’ assessments by Mine Action Review of programme performance are not meaningful.

Table 7 overleaf explains the new programme performance criteria and key factors in detail. Comments are welcome from states, international mine action organisations, and other stakeholders on both the criteria and the factors.

Table 7: Programme Performance Criteria and Factors

Criterion	Performance Commentary
UNDERSTANDING OF ANTI-PERSONNEL MINE CONTAMINATION (20% of overall score)	<ul style="list-style-type: none"> ■ Has a national baseline of anti-personnel mine contamination been established and is it up to date and accurate? ■ If no national baseline, or only a partial or inaccurate baseline, exists, is survey and/or re-survey being conducted or is it planned? ■ Are anti-personnel mined areas disaggregated from areas with other types of explosive ordnance (e.g. anti-vehicle mines or explosive remnants of war (ERW))? ■ Is contamination from anti-personnel mines of an improvised nature included in the national baseline of anti-personnel mine contamination? ■ Is anti-personnel mine contamination classified into suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs), based on whether there is indirect or direct evidence of emplaced anti-personnel mines respectively? ■ Is there a high ratio of CHAs to SHAs?
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	<ul style="list-style-type: none"> ■ Is there a national entity, such as a national mine action authority, overseeing mine action? ■ Is there a national mine action centre coordinating operations? ■ Are the roles and responsibilities in mine action clear and coherent within the national programme? ■ Is the mine action centre adequately staffed and skilled? ■ Are clearance operators involved in key decision-making processes? ■ Does national legislation, or other suitable administrative measures, effectively underpin the mine action programme? ■ Have the authorities created an enabling environment for mine action? ■ Has the government facilitated the receipt and efficient use of international assistance? ■ Is there political will for timely and efficient implementation of Article 5 of the Anti-Personnel Mine Ban Convention (APMBC)? ■ Does the affected state contribute national resources to support the cost of the mine action centre and/or survey and clearance of anti-personnel mined areas? ■ Does the affected state have a resource mobilisation strategy in place for Article 5 implementation?
GENDER (10% of overall score)	<ul style="list-style-type: none"> ■ Does the national mine action programme have a gender policy and implementation plan? Do the main mine action operators have one? ■ Is gender mainstreamed in the national mine action strategy and national mine action standards? ■ Are all groups affected by anti-personnel mine contamination, including women and children, consulted during survey and community liaison activities? ■ Are survey and community liaison teams inclusive and gender balanced, to facilitate access and participation by all groups, including women and children? ■ Are relevant mine action data disaggregated by sex and age? ■ Is gender taken into account in the prioritisation, planning, and tasking of survey and clearance activities? ■ Is there equal access to employment for qualified women and men in survey and clearance teams, including for managerial/supervisory positions?
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	<ul style="list-style-type: none"> ■ Is there a national information management system in place (e.g. IMSMA), and is the data accurate and reliable? ■ Are data collection forms consistent and do they enable collection of the necessary data? ■ Is data in the information management system disaggregated by type of contamination and method of land release? ■ Is the data in the information management system accessible to all operators? ■ Are ongoing efforts being made to ensure or improve the quality of data in the mine action database? ■ Does the affected state party to the CCM submit accurate and timely annual Article 7 reports on Article 5 progress? ■ Are Article 5 extension requests of a high-quality and submitted in a timely manner? ■ Is the reported survey and clearance data accurate and disaggregated by type of contamination (i.e. anti-personnel mines from other mines or explosive ordnance) and method of land release? ■ Does the affected state party report on progress in Article 5 implementation at the intersessional meetings and meetings of states parties, and is reporting accurate and consistent between reporting periods?

Criterion	Performance Commentary
PLANNING AND TASKING (10% of overall score)	<ul style="list-style-type: none"> ■ Is there a national mine action strategy in place and does it include realistic goals for land release? ■ Is there a realistic annual workplan in place for land release? ■ Are there agreed and specified criteria for prioritisation of tasks? ■ Are key stakeholders meaningfully consulted in planning and prioritisation? ■ Is clearance of anti-personnel mines tasked in accordance with agreed prioritisation? ■ Are task dossiers issued in a timely and effective manner? ■ Where relevant, is there a plan for dealing with residual risk and liability? Is it realistic and sustainable?
LAND RELEASE SYSTEM (20% of overall score)	<ul style="list-style-type: none"> ■ Does the affected state have national mine action standards in place for land release? ■ Do the standards enable or impede efficient evidence-based survey and clearance? ■ Are national standards reflected in standing operating procedures (SoPs)? ■ Are standards and SoPs periodically reviewed against IMAS and international best practice, in consultation with clearance operators? ■ Is there an effective and efficient: i) non-technical survey capacity, ii) technical survey capacity, iii) clearance capacity in the programme? Does this include national capacity? ■ Are areas being cleared that prove to have no anti-personnel mines? ■ Where relevant, is there national survey and clearance capacity in place to address anti-personnel mines discovered after the release of anti-personnel mine-contaminated areas or post completion? ■ Is there an appropriate range of demining assets (manual, mechanical, and animal detection systems) integrated into land release operations? ■ Is there an effective quality management system in place for survey and clearance operations? ■ Where an accident has occurred within a mine action programme was there an effective investigation? Were lessons learned shared between operators?
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	<ul style="list-style-type: none"> ■ Is the affected state seeking to clear all anti-personnel mine contamination from territory under its jurisdiction or control, including anti-personnel mines of an improvised nature, border minefields, anti-personnel mine contamination in and around military installations, hard to access minefields etc.? ■ Have national mine action authorities set a target date for the completion of anti-personnel mine clearance and is this within the state party's Article 5 deadline? ■ Is the target date for completion realistic based on existing capacity? ■ Is the target date sufficiently ambitious? ■ What were the outputs of survey and clearance of anti-personnel mine-contaminated area in 2018, and were they greater or lesser than the previous year and why? ■ Are survey and clearance outputs in line with plans and Article 5 obligations? ■ Is the affected state on track to meet its Article 5 deadline (or its target completion date, if earlier)?

The country-specific assessments of the seven criteria, which should be viewed alongside the Recommendations for Action, are intended as an implementation tool, offered in the spirit of openness and constructive dialogue, to assist states parties to identify and overcome challenges and fulfil their Article 5 obligations as efficiently and effectively as possible. A score of between 0 and 10 is accorded for each of the seven criteria (three of which carry a higher weighting) 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 obligations under Article 5 apply equally to all states parties and the same set of criteria are applied by Mine Action Review to assess the performance of all affected states parties with Article 5 obligations, irrespective of the extent of mined area or factors such as national gross domestic product (GDP). That said, there is a big disparity in wealth between the affected states parties and their national financial capacity for land release varies.

More detail is provided to explain the scoring for each state and the criteria are reflected directly in the subsections used in each country profile. Table 8 below summarises the scoring for 2018 for all affected states parties with an Article 5 obligation, with the exception of Argentina, Cyprus, and Palestine (not assessed due to issues relating to jurisdiction or control of mined areas), and Cameroon and Nigeria (not assessed due to insufficient information available to assess performance in 2018).

Six states parties had demining programmes rated as good: Afghanistan, Jordan (which has fulfilled its Article 5 obligations), Sri Lanka, Thailand, the United Kingdom, and Zimbabwe. A further 11 states parties had demining programmes rated as average: Angola, Bosnia and Herzegovina, Cambodia, Chile, Croatia, Oman, Serbia, South Sudan, Sudan, Tajikistan, and Turkey. Colombia, DR Congo, Ecuador, Ethiopia, Iraq, Peru, Somalia, Ukraine, and Yemen attained only a rating of "poor", while Chad, Eritrea, Niger, and Senegal all rated "very poor".

Table 8: Mine Action Programme Performance in States Parties to the APMBC

State party	Average performance score for 2018	Classification of national programme
Zimbabwe	7.8	Good
Jordan	7.7	Good
Sri Lanka	7.4	Good
United Kingdom	7.1	Good
Afghanistan	7.0	Good
Thailand	7.0	Good
Cambodia	6.8	Average
Croatia	6.8	Average
Sudan	6.8	Average
South Sudan	6.5	Average
Chile	6.4	Average
Angola	6.3	Average
Tajikistan	6.3	Average
Turkey	6.2	Average
Bosnia and Herzegovina	6.0	Average
Serbia	6.0	Average
Oman	5.0	Average
DR Congo	4.9	Poor
Ecuador	4.9	Poor
Ethiopia	4.9	Poor
Iraq	4.9	Poor
Somalia	4.6	Poor
Colombia	4.4	Poor
Peru	4.3	Poor
Ukraine	4.0	Poor
Yemen	4.0	Poor
Chad	3.9	Very Poor
Senegal	3.9	Very Poor
Niger	3.7	Very Poor
Eritrea	2.7	Very Poor

CONCLUDING REMARKS

As the APMBC enters its third decade of operation it is in strong health. While some major military powers remain outside its purview (most notably China, India, Pakistan, Russia, and the United States), use of this inhumane weapon is largely restricted to groups that use terror as a method of warfare. In less than 25 years, a once indispensable and ubiquitous weapon of war has come to be perceived as a cold-blooded killer of civilians.

But amid the self-congratulation that should legitimately form part of the Convention's Fourth Review Conference in Oslo, delegates should spare a thought for the words and wisdom of Paulo Coelho. "The challenge will not wait. Life does not look back. A week is more than enough time for us to decide whether or not to accept our destiny." Decisions taken and implemented in Oslo will shape the destiny of the Anti-Personnel Mine Ban Convention.

1 In 2011, Germany reported that a former Soviet military training facility in the former East Germany might contain anti-personnel mines. It submitted an Article 5 deadline extension request in April 2013, but later discounted the presence of anti-personnel mines following survey.

2 Bhutan, Cameroon, and Palau.

3 Montenegro and South Sudan.

4 APLC/MSP.17/2018/10 <https://www.apminebanconvention.org/fileadmin/APMBC/MSP/17MSP/Reflections-Art.5-en.pdf>.

5 See: <https://sustainabledevelopment.un.org/sdg16>.

6 Angola, Chile, Croatia, Democratic Republic of Congo, Ecuador, Niger, Palestine, Peru, Serbia, Sri Lanka, United Kingdom, and Zimbabwe.

7 Ethiopia continues to report problems with IMSMA installation. Although a version of the IMSMA database software was installed and customised before 2015, the mine action authority said it was still using an "alternative data processing package" alongside IMSMA, due to a "gap" in the IMSMA system's installation.

STATES PARTIES

The background of the page is composed of several large, overlapping triangles in different shades of blue, ranging from a deep navy blue to a lighter sky blue. These geometric shapes create a dynamic, abstract pattern that fills the entire page.

AFGHANISTAN



CLEARING THE MINES 2019

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MASSIVE, 200 km² (ESTIMATED)
AT LEAST

AP MINE
CLEARANCE IN 2018

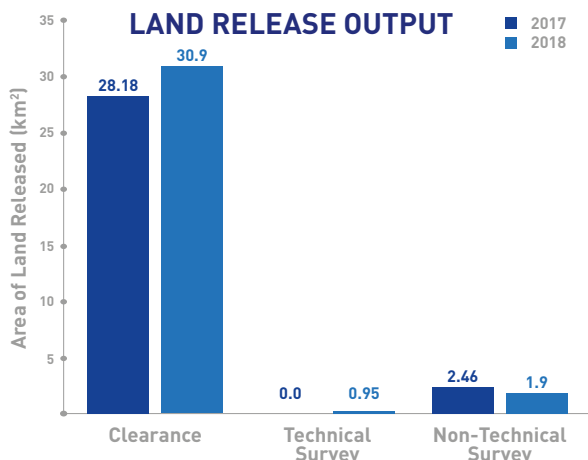
30.90 km²

AP MINES
DESTROYED IN 2018

8,865

(including 47 destroyed
during spot tasks)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Improved donor funding enabled the Mine Action Programme of Afghanistan (MAPA) to increase annual clearance of anti-personnel mined area to 30.9 km² in 2018. The Department of Mine Action Coordination (DMAC) introduced a national standard for clearing mines of an improvised nature (called "Abandoned Improvised Mines" (AIMs) nationally) in March 2019, the first national programme to do so. Clearance capacity

operating to the national standard had been deployed by The HALO Trust already in November 2018. DMAC also established a technical working group to address survey and clearance of these improvised mines. Danish Demining Group (DDG) deployed the first all-woman demining team in Bamyan province in 2018.

RECOMMENDATIONS FOR ACTION

- Afghanistan should revise and update its Article 5 deadline extension request to provide a timeline to take account of lower levels of donor funding and the additional challenge of AIMs.
- The Afghan government should provide funding to mine action, particularly in areas where survey and clearance facilitate priority national development projects.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	The MAPA has an advanced understanding of its anti-personnel mine problem but is still getting to grips with the extent of contamination by improvised mines, which now account for the vast majority of casualties.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	8	DMAC manages and coordinates mine action and completed its transition to full national ownership in June 2018 but the government does not provide significant funding, leaving it dependent on international donors.
GENDER (10% of overall score)	6	Gender policies are in the process of development and subject to regional cultural practices. DDG pioneered deployment of an all-women demining team in Bamyan province, but the extent to which national organisations pursue gender issues is unclear. Casualty and risk education data are disaggregated by gender.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	8	DMAC has an experienced information management team working with an Information Management System for Mine Action (IMSMA) New Generation database that provides extensive, disaggregated data although operators say data entry sometimes lags. Afghanistan submits Article 7 transparency reports annually but sometimes late. Most national operators did not respond to requests for information.
PLANNING AND TASKING (10% of overall score)	8	Afghanistan's Article 5 deadline extension request was among the most comprehensive and DMAC produces annual workplans. Implementation has been hampered by funding shortfalls and insecurity.
LAND RELEASE SYSTEM (20% of overall score)	6	The MAPA has updated national standards compliant with the International Mine Action Standards (IMAS). It introduced new standards for clearance of mines of an improvised nature in March 2019 and has also set out an environmental policy and set of standing operating procedures (SoPs). DMAC and the Geneva International Centre for Humanitarian Demining (GICHD) were reviewing land release standards with a view to increasing operational efficiency.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	The MAPA has maintained anti-personnel mine clearance at a consistent level in the face of funding and insecurity constraints, but in 2018 was still developing a strategy for dealing with mines of an improvised nature.
Average Score	7.0	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT

- Afghan National Disaster Management Authority
- Department of Mine Action Coordination (DMAC)

NATIONAL OPERATORS

- Afghan Technical Consultants (ATC)
- Agency for Rehabilitation and Energy Conservation in Afghanistan (AREA)
- Demining Agency for Afghanistan (DAFA)
- Mine Clearance Planning Agency (MCPA)
- Mine Detection Centre (MDC)
- Organisation for Mine Clearance and Afghan Rehabilitation (OMAR)
- 15 commercial companies accredited, one reported active in anti-personnel mine clearance in 2018

INTERNATIONAL OPERATORS

- Danish Demining Group (DDG)
- Swiss Foundation for Mine Action (FSD)
- The HALO Trust (HALO)

OTHER ACTORS

- UN Mine Action Service (UNMAS)
- Norwegian People's Aid (NPA)

UNDERSTANDING OF CONTAMINATION

Afghanistan estimated that 177.8km² of confirmed and suspected anti-personnel mined area remained at the end of 2018 (see Table 1). Added to this is massive contamination from mines of an improvised nature (anti-personnel and anti-vehicle) that is still being defined, but which significantly exceeds the 32km² reported so far (see Table 2).¹

Table 1: Anti-personnel mined area by region (at end 2018)²

Region	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Central	467	25,563,554	49	5,871,852	31,435,406
East	100	7,033,558	7	2,535,350	9,568,908
North	234	10,371,079	10	2,446,660	12,817,739
North-East	654	43,652,720	27	11,898,665	55,551,385
South	62	10,178,628	64	12,315,425	22,494,053
South-East	137	10,763,889	50	7,498,419	18,262,308
West	15	2,362,615	45	25,319,308	27,681,923
Total	1,669	109,926,043	252	67,885,679	177,811,722

Afghanistan's mine contamination resulted from the decade-long war of resistance that followed the Soviet invasion of 1979, the 1992–96 internal armed conflict, and the 1996–2001 fighting between the Taliban and the Northern Alliance. The intervention of the United States (US)-led coalition in late 2001 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.³

Estimated anti-personnel mine contamination fell for the third successive year in 2018 to 178km² despite the continuing addition of previously unrecorded hazards to the database as

a result of survey. By contrast, the threat from anti-vehicle mines has risen every year for the last five years and now exceeds anti-personnel mined area (see Table 2). DMAC recorded 98km² of additional mine and explosive remnants of war (ERW) contamination in 2018, of which just short of 17km² were anti-personnel mine and mixed anti-personnel mine/anti-vehicle mined areas.⁴

In addition to the challenge from landmines, Afghanistan contends with huge areas of ERW. DMAC reported total mine and ERW contamination of 1,762km² at the end of March 2019. Estimates of anti-vehicle mined area are still rising and pose a challenge to current land release methods. Afghanistan also has North Atlantic Treaty Organization (NATO) firing ranges covering 630km² remaining to be cleared.⁵

Table 2: Mined areas (at end 2018)⁶

Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
Anti-personnel mines	1,669	109,926,043	252	67,885,679
Anti-vehicle mines	783	129,114,092	382	190,510,163
Improvised mines*	61	11,705,330	21	20,730,871
Total	2,513	250,745,465	655	279,126,713

CHAs = Confirmed hazardous areas SHAs = Suspected hazardous areas

* It is not known what percentage is of anti-personnel mines and what percentage is of anti-vehicle mines.

NEW CONTAMINATION

Mines of an improvised nature pose the biggest humanitarian threat in Afghanistan and contamination continues to expand as a result of persistent conflict.⁷ The 32km² presented in official statistics for 2018 represent only a fraction of suspected hazards. At the end of March 2018, DMAC estimated that pressure-plate mines of an improvised nature affected an area of 248km².⁸ Little more than a year later, DMAC said an area of 465km² may be affected by AIMS.⁹

Clearance of abandoned improvised mines by The HALO Trust in Helmand province found stacked devices triggered by pressure plates with a high metal signal and main charges of between 0.5kg and 16kg. The devices were placed in routes and locations that were expected to be used by security forces when moving towards armed opposition group positions.¹⁰

A rapid assessment of 22 provinces conducted by DMAC's implementing partners (IPs) at the end of 2016 reported five as inaccessible for security reasons (Baghdīs, Ghor, Laghman, Sar e Pul, and Zabul) and in the other seventeen, they identified a total of 270 areas affected by post-2001 mine and ERW contamination covering an estimated 421km². Anti-personnel mines accounted for 5.3km² while improvised devices, including pressure-plate mines of an improvised nature, affected 228km². This included almost 55km² classified as high risk, mostly in Helmand, Kandahar, and Uruzgan provinces, as well as 3.5km² of medium risk and 170km² as low risk. Anti-vehicle mines affected 90,000m² and ERW nearly 188km².¹¹

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Afghanistan's mine action programme, originally established in 1989, is led by DMAC, which comes under the Afghan National Disaster Management Authority. DMAC fulfils the role of a national mine action centre. From its headquarters in Kabul and seven regional offices, DMAC manages and coordinates the work of national and international implementing partners. DMAC provides strategic planning and annual workplans, sets priorities and standards, accredits operators, conducts quality assurance (QA) and quality control (QC), manages the mine action database, and conducts resource mobilisation. It coordinates closely with operators through a technical working group and in 2018 set up a separate technical working group to deal with AIMs.¹²

Since 2012, the MAPA has transitioned from being a project of the UN Mine Action Service (UNMAS) to national management, a process formally completed with the transfer of the last positions from UNMAS to DMAC in June 2018. However, the Afghan government does not provide a budget for mine action, which continues to depend on international donor funding channelled bilaterally through UNMAS and the ITF Enhancing Human Security (ITF). Although management now rests entirely with DMAC, 91 of DMAC's 143 staff are paid through UNMAS funding, 35 are paid through the ITF, and 17 are on Afghan civil servant salaries. The MAPA's 2016–20 strategic plan sets out the intention to gain recognition that "its services are demanded, and paid for, by national government agencies, internationally supported development projects and other programmes."¹³

UNMAS, with five international and thirty-five national staff, has continued to support the MAPA and DMAC, providing a channel for donor funding through the Voluntary Trust Fund

for Mine Action (VTF), which handled approximately one-third of total donor funding for the MAPA in 2018. UNMAS also focused on promoting humanitarian access for IPs to areas outside effective government control, working through established UN channels for engagement with the Taliban representative office in Doha, Qatar. UNMAS supported DMAC organising an emergency response by IPs to clearance and risk education needs in Ghazni in August 2018 after heavy fighting between government forces and the Taliban. Additionally, UNMAS was active in advocacy with local authorities in Bamyan province for the first ever deployment of women deminers in 2018 and was preparing in 2019 to explore the possible use of women deminers in northern provinces.¹⁴

Norwegian People's Aid (NPA) operates with a staff of 18, including 6 internationals, who provide third-party monitoring and oversight of all US Department of State-funded conventional weapons disposal projects.¹⁵

International donor contracts awarded for a fixed term primarily on the basis of square metre costs have become increasingly challenging for IPs facing increasingly volatile security conditions. Deminer safety requires close contact with local communities, with access to conflicted districts sometimes taking weeks to negotiate. Threats to security forced demining teams to stand down 18 times in the year to mid-2019, sometimes for a period of days, and on some occasions causing IPs to move work sites or redeploy deminers to different districts and tasks, causing delays, raising costs, and making it difficult to achieve targets.¹⁶ Armed opposition groups in some areas demand IPs pay a "tax".

GENDER

The MAPA drafted a policy on gender in 2016 after consultation with the Geneva International Centre for Humanitarian Demining (GICHD) and the Gender and Mine Action Programme (GMAP, now part of the GICHD). The MAPA included mainstreaming gender as one of the four goals of its 2016–20 strategic plan but it is still in the process of developing steps and capacity for implementing it within the constraints of Afghanistan's deeply conservative society. The Strategic Plan observes that "achievable targets, reflecting prevailing circumstances and conditions, will be adopted to support and encourage progress wherever possible".¹⁷

The gender strategy called for participation of women and girls as well as boys and men in non-technical survey, community liaison, and pre- and post-clearance impact assessments and for equal access to employment. It called for IPs to recruit more gender-balanced risk education teams, identify forums in which to access under-represented groups, including women and girls, for direct risk education (RE), and to ensure data collection and reporting was disaggregated for gender and age.¹⁸

In 2018, DDG deployed the first all-women mine clearance team with eight deminers in Bamyan province. Further clearance by an expanded all-women team followed in 2019. DDG employed 53 women out of a total staff of 550, of whom 41 were working in the field, conducting demining, risk education, or armed violence reduction.¹⁹ The HALO Trust employed women in the field (for livelihoods surveys and risk education) and in the office (information, donor support, and finance). Survey teams included at least one woman to ensure access to women and children.²⁰

Among national IPs, performance appears to be uneven, partly reflective of varying social norms in different regions. The conditions that permit all-female demining teams to work in Bamyan would not apply in the south. MCPA hired 13 couples for a 2017 risk education project to provide 13 male and 13 female trainers. Community liaison projects undertake detailed interviews with all sections of the community and focal points are appointed to ensure project results reach women and the impact of their inclusion is communicated to community elders.²¹

INFORMATION MANAGEMENT AND REPORTING

DMAC operates an IMSMA NG database but in 2018 started preparations for an upgrade to IMSMA Core. DMAC was still in the process of migrating legacy data to IMSMA; as part of a continuous effort to increase efficiency the database eliminated some duplicates of historical data.²² Operators endorse the accessibility and accuracy of data but reported significant delays in DMAC uploading completion reports into the database.²³

DMAC worked with the GICHD in 2018 to improve data quality, removing duplicate records from IMSMA and updating the IMSMA template.²⁴ In 2019, it planned to develop a mobile application to monitor field activity using geotag photos and

geolocation data. It was also developing a cloud-based data warehouse to back up information.²⁵

Afghanistan submits comprehensive Article 7 reports, and provides regular updates on the progress of survey and clearance at intersessional meetings and meetings of states parties. Afghanistan's Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request in 2012, prepared in consultation with, and endorsed by, Afghan implementing partners, was regarded as a model providing a comprehensive overview of all aspects of the country's threat from explosive devices.

PLANNING AND TASKING

Afghanistan's Article 5 deadline extension request set out a timeline for completing clearance of all known mine and ERW contamination by 2023 but as a result of reduced funding it soon fell behind those targets. The request also did not take account of heavy contamination from mines of an improvised nature.

The national strategic plan for 2016–20 reaffirms Afghanistan's broad commitment to the APMBC and its Article 5 obligations, but concentrates on four broad goals: facilitating development; engaging with other sectors and government departments to have them include mine action in their development plans; preventive action to reduce the impact of mines and ERW, including by enhanced resource mobilisation, completing survey of all communities and keeping its extension request workplan on track; and gender and diversity mainstreaming.²⁶

DMAC's annual workplans set more specific targets. For Afghan year 1398 (1 April 2019 – 30 March 2020), targets included calling for release of 44.7km² of pre-2001 mine and ERW contamination, non-technical survey of 29 districts, post-demining impact assessments in 85 contaminated areas, along with 12 livelihood surveys.²⁷

In its Article 5 deadline extension request, MAPA split hazards into projects to facilitate resource mobilisation and monitoring.²⁸ IPs are tasked for survey and clearance through a process of competitive bidding for projects. Non-technical survey tasks are also assigned by DMAC on the basis of requests received from its regional offices, government departments, or local communities.²⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The MAPA has comprehensive national mine action standards that DMAC reviews annually and amends in consultation with IPs. DMAC and GICHD started to review land release standards in 2019 and were expected to undertake revisions to strengthen non-technical survey and increase operational efficiency. In 2018, DMAC introduced a new policy and standing operating procedures (SoPs) for environmental protection in mine action. Afghanistan became the first country programme to release a standard for tackling mines of an improvised nature. AMAS 06.10, Abandoned Improvised Mine Clearance, was released in March 2019. As its title

makes clear, and to protect the neutrality of humanitarian mine action, DMAC permits clearance only of items that are not part of active hostilities.

The standard requires operators to get prior written consent from local authorities and other "key local stakeholders", including armed opposition groups, and confirmation by the party that laid devices that they are abandoned and that clearance may proceed. It stipulates clearance should take place only in a rural or semi-rural setting. All action to neutralise AIMs should be conducted remotely or semi-remotely, and where possible devices should be destroyed in situ.³⁰

OPERATORS

DMAC reported a total of 44 organisations accredited for mine action at the end of 2018 of which 23 humanitarian IPs had total personnel of 6,873. It expected the number of their employees to increase in 2019. DMAC mine clearance data, however, shows only nine organisations conducted anti-personnel mine clearance in 2018, including five national humanitarian IPs, one national commercial company, and three international NGOs.³¹

Afghanistan's five longstanding national IPs collectively accounted for about 40% of mined area clearance in 2018 (see Table 4). ATC (550 staff), MCPA (489 personnel), and OMAR (650 staff) conducted clearance mainly in central and north-eastern provinces.³² MCPA, whose staff included 384 deminers, added mechanical capacity in the form of a cultivator and ripper to boost clearance productivity and increasingly sought to link mine clearance work to wider development initiatives.³³ MDC (750 staff), the biggest of the five, has conducted little mine clearance in the last two years.

DAFA (350 staff), was the main operator engaged in cluster munition clearance in 2018 (see *Clearing Cluster Munitions Remnants 2019*) but has strong links to the south and has previously conducted clearance of abandoned improvised mines around Kajaki in Helmand province. In 2019, DAFA had eight teams trained by The HALO Trust in non-technical survey of areas containing mines of an improvised nature.³⁴

The HALO Trust remained much the biggest operator with 2,519 deminers in a total staff of 3,497 at the end of 2018, more than all of the national humanitarian IPs combined. HALO started working in the southern province of Kandahar in 2017 and increased capacity there in 2018 as well as resuming operations in Logar province. The award of several new contracts and the extension of others saw HALO Trust's capacity increase around 20% in 2018 but the likely reduction in bilateral United Kingdom funding and delays in the start of other projects in 2019 was expected to result in lower staffing levels.

The HALO Trust took a lead in developing the response to mines of an improvised nature. It established an improvised mine training area open to use by other IPs to develop survey and clearance techniques and developed courses in AIM-focused non-technical survey (three weeks), explosive ordnance disposal (EOD) (four weeks), and manual clearance (six weeks). It also provided two-day AIM awareness training for all teams working in areas affected by these devices. The HALO Trust deployed two five-person manual clearance teams and a non-technical survey team as a pilot project to address

contamination by mines of an improvised nature. It also set up an AIM operations room, where staff monitor all AIM-related activities in real time. From July 2019, HALO Trust expected to expand its improvised mine capacity to two manual clearance teams and two dedicated non-technical survey teams. HALO was also worked closely with and tasked eight teams combining DAFA and HALO Trust personnel and trained by HALO Trust for improvised mine non-technical survey.³⁵

DDG, benefitting from improved funding, added 28 clearance teams in 2018 and tripled the number of deminers from 90 at the end of 2017 to 270 deminers, a total staff of 552 at the end of 2018. A US Department of State/WRA contract that supported significant additional capacity was due to expire in mid 2019, leaving the possibility that DDG would reduce capacity in the course of the year. DDG deployed a team of 10 women deminers in Bamyan province in 2018, who cleared one task releasing 51,520m². The team was expanded to 16 women deminers in 2019.³⁶

The Swiss Foundation for Mine Action (FSD) continued to operate in Kunduz province working with four demining teams with 66 deminers in 2018 in areas heavily contaminated with Soviet-era "butterfly" PFM-1 mines. Staffing levels in 2019 were dependent on the outcome of discussions with donors. The project's remote operating area is accessible through Tajikistan and to circumvent the complications of obtaining visas for DMAC QA/QC staff, FSD's activities are quality assured by the Tajikistan National Mine Action Centre.³⁷

OPERATIONAL TOOLS

Manual clearance continues to account for most anti-personnel mine clearance but to boost productivity most demining IPs employed a range of tools, including increased use of mechanical assets, with capacity varying from MCPA deploying four mechanical teams, to HALO Trust with 22 teams at the start of 2019 and around 60 armoured machines.³⁸ The annual workplan for 1398 (2019–20) intended to "search for the proper utilisation of mine detection dogs" but there was no report of IPs using dogs in mine action in 2018.

DMAC and IPs were still in the process of developing their response to improvised mines in 2018. HALO Trust was trialling a range of specialist detectors capable of finding hard-to-detect switches such as carbon rod and bare wire switches. From mid 2019, HALO Trust planned to deploy armoured mechanical assets designed specifically to address the different threat posed by improvised mines compared with other ordnance and was also testing a range of different personal protection equipment for comfort, mobility and protection. The HALO Trust had one excavator armoured in the UK in 2019 according to a design tailored to the specific threat of improvised mines it expected to encounter and was buying a second excavator in Afghanistan and having it armoured to a similar design.³⁹

DEMINER SAFETY

Three demining incidents occurred in 2018 resulting in injuries to three deminers,⁴⁰ a significant downturn in demining casualties from previous years when the MAPA sustained numerous fatalities. In one 2018 incident, a HALO deminer injured his hand, losing two fingers. HALO's investigation suggested it was not an accident but an act of self-harm intended to obtain an insurance pay-out.⁴¹

Afghanistan's increasingly volatile security environment posed a major challenge to operators. The MAPA recorded 29 security incidents in 2018 in which six deminers were killed and eighteen injured. IPs also suffered loss of equipment, including 23 Minelab detectors, digital cameras, and personal protection equipment.⁴² IPs depend on contact with local communities to facilitate survey and clearance but still faced interruptions and delays from insecurity that required teams to stop work for a period of time or completely withdraw from tasks and move to different locations.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

Afghanistan reported to Mine Action Review that it released a total of 35.05km² of anti-personnel mined area in 2018 through survey and clearance. Clearance accounted for 30.9km² while 2.2km² was cancelled through non-technical survey and 0.95km² was reduced through technical survey.⁴³ Afghanistan's Article 7 Report for 2018 recorded total land release of 32.89km², of which 30.05km² was through full clearance, 1.9km² was cancelled and 0.95km² was reduced.⁴⁴

SURVEY IN 2018

Afghanistan's Article 5 deadline extension request foresaw a nationwide Mine/ERW Impact Free Community Survey (MEIFCS). Six years later, the survey has completed 290 of 400 districts and it remains a MAPA aspiration but no further survey was conducted under this programme in 2018 due to lack of funding.⁴⁵

Additional survey conducted by IPs in 2018 added 185 previously unrecorded anti-personnel mined areas covering a total of 16.57km² and three areas containing mixed anti-personnel and anti-vehicle mines and affecting 421,643m². At the same time, non-technical survey, mainly by The HALO Trust and MCPA, led to cancellation of 1,895,176m² (see Table 3). DMAC reported that no IPs conducted stand-alone technical survey in 2018 but reduced some area (0.95km²) in the course of technical survey conducted as part of mine clearance operations.⁴⁶

Survey in 2018 also produced some preliminary findings on improvised mine tasks. The HALO Trust deployed an improvised mine survey team to central Helmand province which worked on 30 areas containing mines of an improvised nature in Lashkar Gah, Nad Ali, and Nawa-I Barakzai districts. The teams deployed in November and as of the start of February 2019 had lifted four devices. The tasks were in semi-rural areas, defined by smaller agricultural plots mixed with compounds and small villages. Tasks are considerably smaller than conventional mine clearance tasks, with a mean size of about 27,000m² and a median size of 6,000–12,000m² and were expected to contain about four items per hazardous area (~1 improvised mine per 2,000m²), reflecting the different use of improvised mines compared with conventional mines.⁴⁷

Table 3: Cancellation of anti-personnel mined area through non-technical survey⁴⁸

Operator	Region	Area cancelled (m ²)
HALO Trust	Central, South, South East, West	1,029,990
MCPA	Central, North East, South, South East	865,086
MDC	East	100
Total		1,895,176

CLEARANCE IN 2018

The amount of anti-personnel mined area cleared in 2018, as reported to Mine Action Review, amounted to 30.9km² in 2018, almost 10% more than the area of clearance DMAC recorded in 2017. The six Afghan IPs accounted for 12.82km² of the total, an increase of about one third in terms of area cleared compared with the previous year made possible by increased donor funding, which also pushed their share of total anti-personnel mine clearance from 35% in 2017 to 41% in 2018.⁴⁹ HALO Trust cleared 7% less anti-personnel mined area and 25% fewer anti-personnel mines than the previous year, but it also cleared close to 10km² of anti-vehicle mined area in 2018, which pushed its total mine clearance for the year above the previous year's level.⁵⁰

With the progress of clearance in recent years, IPs have deployed on more remote and less densely contaminated minefields, a factor reflected in a significant drop in the number of mines destroyed from 14,492 in 2017 to 8,818 in 2018. A further 47 anti-personnel mines were destroyed in the course of spot tasks.⁵¹

Table 4: Mine clearance in 2018⁵²

Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Area	12	788,958	270	0	60
ATC	60	4,084,228	989	11	2,582
DAFA	2	524,360	76	0	1
DDG	26	1,507,947	154	0	295
FSD	0	182,831	1,948	0	848
HALO Trust ⁵³	153	16,321,433	4,457	17	2,690
MCPA	34	3,934,542	339	0	634
MDC	1	31,252	5	0	236
OMAR	45	3,458,673	580	0	2,779
TDC	3	67,499	0	0	0
Totals	336	30,901,723	8,818	28	10,125

ARTICLE 5 DEADLINE AND COMPLIANCE



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

The MAPA has cleared more than 120km² of anti-personnel mined area since the Maputo conference (see Table 5) and continuously looked for ways to improve performance quality and productivity with a view to fulfilling its Article 5 commitments. These included the goal of completing clearance of all known mine and ERW contamination by 2023, subject to the availability of funds.

Table 5: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	30.90
2017	28.12
2016	27.12
2015	13.44
2014	22.28
Total	121.86

Three main factors have combined to put that objective beyond the MAPA's reach:

Funding shortfalls: donor funding increased from \$40 million in Year 1396 (2016–17) to \$51.4 million in 1397 but that represented little more than half the funding needed to achieve clearance targets set out in the extension request.⁵⁴ The Afghan government has not yet committed funding to the sector.

Insecurity: more areas appear to be inaccessible as a result of conflict but even in areas where operators continue to work access is becoming more challenging requiring lengthy negotiation with local communities and armed opposition groups active in those areas and slowing progress.

New contamination: the MAPA has continued to identify significant amounts of suspected anti-personnel mined area – close to 200km² in the past five years – slowing progress towards completion. The rate of new discoveries of mined areas appears, though, to be slowing and the net level of new contamination has fallen every year for the last three years. Afghanistan's Article 7 report for 2018 estimates its remaining Article 5 obligation as 210.25km² but this includes only 32.48km² of contamination by mines of an improvised nature.⁵⁵ However, the MAPA has also pointed to areas suspected to contain mines of an improvised nature in excess of 465km² much of which will need to be addressed as part of its Article 5 obligation.⁵⁶

- 1 Email from Abdul Qudous Ziaee, Head of Operations, DMAC, 3 April 2019.
- 2 Ibid.
- 3 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.
- 4 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 5 MAPA Fast Facts, Quarterly Update for 4th quarter of Afghan year 1397 (April 2018 – March 2019).
- 6 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 7 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.
- 8 DMAC, "MAPA Fast Facts, Quarterly Update, 4th Quarter 1396 (January–March 2018)".
- 9 Statement to the APMBC Intersessional Meetings, Geneva, 23 May 2019.
- 10 Email from Calvin Ruysen, Head of Region – Afghanistan, Middle East, North Africa, HALO Trust, 24 June 2019.
- 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 Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 13 DMAC, "National Mine Action Strategic Plan 1395–1399 (2016–2020), State Ministry for Disaster Management and Humanitarian Affairs, undated but 2016, p. 2; and email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 14 Interviews with Patrick Fruchet, Country Director, UNMAS, 5 February and 28 July 2019; UNMAS website, updated February 2019, at: bit.ly/ZZd73c5.
- 15 Email from Russell Bedford, Country Director, NPA, 28 July 2019.
- 16 Interviews with operators attending Afghanistan Donor and Implementing Partners Coordination Workshop for Mine Action, Geneva, 23–25 March 2019.
- 17 DMAC, "National Mine Action Strategic Plan 1395–1399 (2016–2020), State Ministry for Disaster Management and Humanitarian Affairs, undated but 2016, p. 17.
- 18 DMAC, "Gender mainstreaming strategy of the Mine Action Programme of Afghanistan", undated but 2013, pp. 3–9.
- 19 Emails from Abdul Qudous Ziaee, DMAC, 3 April 2019; and Daniel Bertoli, Head of Programme – Afghanistan, DDG, 15 April 2019.
- 20 Email from Calvin Ruysen, HALO Trust, 24 June 2019.
- 21 Email from Mir Mohammad, Executive Operations Manager, MCPA, 19 March 2019.
- 22 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 23 Interviews with operators, in Geneva, March 2019.
- 24 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 25 DMAC, "Annual Operational Work Plan 1398", undated but 2019, p. 20.
- 26 DMAC, "National Mine Action Strategic Plan 1395–1399 (2016–2020), State Ministry for Disaster Management and Humanitarian Affairs, undated but 2016, pp. 2–5.
- 27 DMAC, "Annual Operational Work Plan 1398", undated but 2019, pp. 1–2.
- 28 2012 Article 5 deadline Extension Request, pp. 183–88.
- 29 Email from Abdul Qudous Ziaee, DMAC, 31 July 2019.
- 30 Afghanistan Mine Action Standards, AMAS 06.10, March 2019, p. 5.
- 31 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019. DMAC's annual workplan for 1398 (2019–20) reported a total of 46 organisations accredited for mine action.
- 32 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019; DMAC website accessed at: dmac.gov.af.
- 33 Email from Mir Mohammad, MCPA, 19 March 2019.
- 34 Email from Calvin Ruysen, HALO Trust, 24 June 2019.
- 35 Ibid.; and email, 31 July 2019.
- 36 Email from Daniel Bertoli, Head of Programme – Afghanistan, DDG, 15 April 2019, interview with Patrick Fruchet, UNMAS, 28 July 2019.
- 37 Email from Peter Smethers, Country Director, FSD Iraq, 9 April 2019.
- 38 Emails from Mir Mohammad, MCPA, 19 March 2019 and from Calvin Ruysen, HALO Trust, 24 June 2019.
- 39 Emails from Calvin Ruysen, HALO Trust, 24 June and 31 July 2019.
- 40 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 41 Email from Calvin Ruysen, HALO Trust, 24 June 2019.
- 42 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 43 Ibid.
- 44 Article 7 Report for 2018, Form F.
- 45 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 46 Emails from Abdul Qudous Ziaee, DMAC, 3 April and 31 July 2019; and Article 7 Report for 2018, Form F.
- 47 Interview with Calvin Ruysen, HALO Trust, in Geneva, 5 February 2019; and email, 24 June 2019.
- 48 Ibid.
- 49 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 50 Email from Calvin Ruysen, HALO Trust, 31 July 2019.
- 51 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 52 Ibid. In its Article 7 Report for 2018 (Form F), Afghanistan reported 30.05km² cleared, with the destruction of 8,947 AP mines, 263 AV mines, and 161, 637 items of ERW.
- 53 HALO Trust reported clearance of 15,616,340m² of anti-personnel mined area in 2018.
- 54 Email from Abdul Qudous Ziaee, DMAC, 3 April 2019.
- 55 Article 7 Report for 2018, Form F.
- 56 Statement to the APMBC Intersessionals, Geneva, 23 May 2019.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 DECEMBER 2025 NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

HEAVY, 40KM²
(ESTIMATED)

AP MINE
CLEARANCE IN 2018

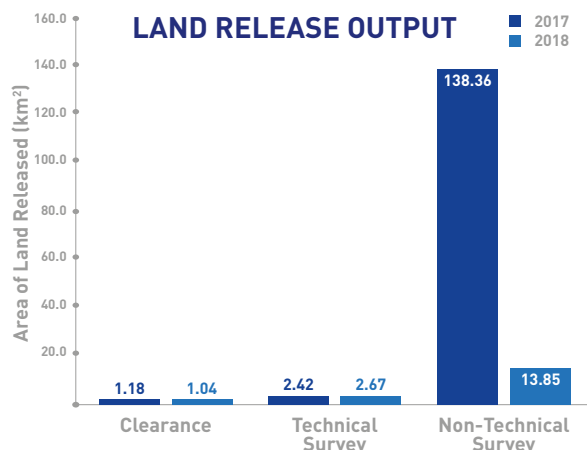
1.04KM²

AP MINES
DESTROYED IN 2018

1,736

(including 90 destroyed
during spot tasks)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Funding for mine action operations carried out by international NGO operators remained critically low for much of 2018, with serious gaps in funding resulting in the reduction of capacity and threatening the closure of international mine action operations altogether in Angola. The situation improved significantly with the securing of the United Kingdom (UK) Department for International Development (DFID) funding in September 2018 through a partnership grant to Angola's three largest international operators, The HALO Trust, Mines Advisory Group (MAG), and Norwegian People's Aid (NPA).

A nationwide re-survey of contamination was nearly complete by the end of the year, with only one province remaining in 2019. As a result, Angola has a far better estimate of its

remaining mine contamination and a much more realistic picture of the resources needed to meet it. With support from a dedicated capacity development advisor, the National Intersectoral Commission on Demining and Humanitarian Assistance (CNIDAH) was able to realign the national database with operators' records, resulting in a shared and accurate understanding remaining contamination.¹

NPA completed clearance of all known and registered tasks in Malanje province in May 2018, putting the province on track to become Angola's first to be declared free of the threat of mines and explosive remnants of war (ERW). An official declaration was awaited from CNIDAH as of writing.²

RECOMMENDATIONS FOR ACTION

- 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.
- Angola should complete a comprehensive review of its National Mine Action Standards (NMAS).
- Angola should clarify and empower the management structure of the national programme, including the roles and responsibilities and funding of the two mine action entities. The future of CNIDAH and its responsibility for mine action should be clearly established and resourced from the national budget.
- Angola should increase its national funding to mine action in order to accelerate clearance and demonstrate national commitment to respect its Article 5 obligations. It should implement its resource mobilisation strategy, increasing its international advocacy to attract new and former donors.

- Angola should ensure that no taxes are imposed on equipment imported by international operators to carry out mine action operations.
- 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.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	For the first time since mine action began decades ago, Angola was able to present a reasonable estimate of its remaining mine contamination problem, largely in part to the near completion of a nationwide re-survey, which resulted in cancellation of almost 90% of suspected hazardous area (SHA) in the national database.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	4	The outlook for the National Intersectoral Commission on Demining and Humanitarian Assistance (CNIDAH) was uncertain in 2018 after the expiration of its mandate and a delayed, and as yet, unresolved government decision as to its future. Government austerity cuts saw a significant reduction in its funding and ability to carry out core functions. Angola's national mine action programme has since its outset struggled with competing tensions between government entities responsible for mine action and a lack of clarity in responsibility. The government has allocated significant funding for mine action, but only for infrastructure development channelled through private commercial operators.
GENDER (10% of overall score)	5	Gender is not referenced in Angola's 2019–25 Anti-Personnel Mine Ban Convention (APMBC) mine action workplan, nor in Angola's national mine action standards in place in 2018. CNIDAH informed Mine Action Review in 2019 that gender mainstreaming will be included in its forthcoming National Mine Action Strategy to be developed in August 2019.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	6	The mine action programme has been plagued with difficulties in information management for more than a decade. Operators have persistently raised concerns about inaccurate data and lengthy delays in updating the database. However, a dedicated capacity development advisor embedded with CNIDAH throughout 2018 was able to make significant progress in reconciling the database with operators' records and improving the accuracy of the database.
PLANNING AND TASKING (10% of overall score)	6	In November 2018, Angola submitted a detailed annual workplan for 2019–25 with a view to meeting its extended APMBC Article 5 deadline. CNIDAH informed Mine Action Review in June 2019 that its annual projections are not achievable with the existing demining capacity and that planning is significantly hampered by ongoing financial uncertainty and reduction in operational capacity.
LAND RELEASE SYSTEM (20% of overall score)	6	National Mine Action Standards exist but do not cover all key areas necessary for a well-functioning national mine action programme. Efforts to review the standards are ongoing, with standards on quality and information management reviewed and updated in 2018.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	Angola was not on track to meet its 2025 deadline as at 2019. Meeting the deadline will not be possible without a substantial and sustained increase in funding. Collectively, the resources of the three largest operators, HALO Trust, Mines Advisory Group, and Norwegian People's Aid declined by nearly 90% in the past decade, making Article 5 implementation significantly more difficult. At the same time, despite many serious challenges, Angola was able to meet its land release target for 2019, of nearly 17.5km ² released through survey and clearance.
Average Score	6.3	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

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

NATIONAL OPERATORS

- National Demining Institute (Instituto Nacional de Desminagem, INAD)
- Angolan Armed Forces,
- Military Office of the President

- Police Border Guard (under the CED)
- The Association of Mine Professionals (APACOMINAS) (NGO)
- Various commercial operators

INTERNATIONAL OPERATORS

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

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

As at December 2018, according to CNIDAH, a total of 1,260 mined areas with a size of just over 122km² remained to be addressed. This included 1,120 areas with a size of just over 108km² of suspected hazardous area (SHA) and 140 areas with a size of close to 14km² of confirmed hazardous area (CHA).³ A major step forward was achieved at the end of the year, with every province, with the exception of Cabinda, having been fully re-surveyed. Following this nationwide re-survey, and as a result of the considerable efforts to improve the quality of the national mine action database, Angola has a much clearer assessment of the remaining challenge to be completed.

As at May 2019, CNIDAH reported that the remaining estimate of contamination had decreased to 1,216 hazardous areas with a total size of just over 104km².⁴ This was down from figures reported by CNIDAH in Angola's latest Article 7 transparency report, which indicated that as at April 2019, a total of 1,220 areas with a size of just over 105km² remained.⁵ This is a sizeable decrease of more than 43km² from figures reported by CNIDAH the previous year, in April 2018, when it stated that a total of 1,220 mined areas remained covering 147.6km².⁶ This, however, is not consistent with the approx. 17.5km² of mined area reported as released by CNIDAH during 2018.⁷ CNIDAH also reported that a total of approx. 6km² of mined area was added to the national database in 2018.⁸

In November 2018, MAG completed re-survey of Lunda Norte and Lunda Sul provinces, while The HALO Trust was scheduled to completed re-survey of Cabinda province by the end of August 2019, which would complete the re-survey of all of Angola's 18 provinces.⁹ In total, more than 90% of SHAs recorded as a result of inflated estimates from a 2004–07 Landmine Impact Survey (LIS) were cancelled during the re-survey. NPA also reported completing clearance of all known and registered tasks in Malanje province as at end-May 2018, the first and only province in Angola no longer reported to contain mined areas.¹⁰

Overall, Angola's progress in land cancelled and reduced through the re-survey has resulted in huge land release, with close to 274km² of land released in just two years.

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.

Table 1: Anti-personnel mined area by province (at end 2018)¹¹

Province	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Bengo	55	3,440,820	4	0	59	3,440,820
Benguela	67	3,442,333	0	0	67	3,442,333
Bié	122	5,683,552	0	0	122	5,683,552
Cabinda	2	49,500	34	7,643,567	36	7,693,067
Huambo	1	12,890	0	0	1	12,890
Huíla	36	3,219,680	0	0	36	3,219,680
Kuando Kubango	282	34,440,313	0	0	282	34,440,313
Kunene	35	2,575,367	9	0	44	2,575,367
Kwanza Norte	44	9,814,101	0	0	44	9,814,101
Kwanza Sul	136	9,407,241	1	35,000	137	9,442,241
Luanda	9	1,121,211	0	0	9	1,121,211
Lunda Norte	18	903,558	22	2,022,089	40	2,925,647
Lunda Sul	46	7,569,410	22	1,138,474	68	8,707,884
Malanje	0	0	0	0	0	0
Moxico	202	12,143,087	44	1,269,359	246	13,412,446
Namibe	3	253,750	1	0	4	253,750
Uíge	41	4,158,551	3	1,860,000	44	6,018,551
Zaire	21	9,828,847	0	0	21	9,828,847
Totals	1,120	108,064,211	140	13,968,489	1,260	122,032,700

OTHER EXPLOSIVE REMNANTS OF WAR AND CLUSTER MUNITION REMNANTS

Angola also has a significant problem of ERW, especially unexploded ordnance (UXO), and very limited contamination from cluster munition remnants (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Angola for further information).¹²

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Angola's national mine action programme is managed by two mine action structures. CNIDAH serves as the national mine action authority. It reports to the Council of Ministers or, in effect, to the Presidency of the Republic. The other coordination body, the Executive Commission for Demining (CED), reports to the Ministry of Social Action, Family, and Women's Promotion (MASFAMU, formerly the Ministry of Social Assistance and Reintegration, or MINARS). In 2002, in order to separate coordination and operational responsibilities, Angola established the National Demining Institute (INAD), which is responsible, under the auspices of the CED and MASFAMU for demining operations and training.

Tensions between these entities and a lack of clarity in responsibilities has negatively affected Angola's mine action programme for decades, with a lack of coordination and information sharing between the national demining entities, the CED, INAD, and CNIDAH. A primary fall-out has been the quality of the national database, held by CNIDAH, which does not contain data from the CED and commercial companies, making it difficult for Angola to describe in detail and with any degree of accuracy the extent of land released over the years.

In 2018, NPA initiated a capacity development project to assist CNIDAH to better manage the national mine action programme, including in key areas such as information and quality management. The project, which is scheduled to run through March 2020, was initiated with funding from UK DFID, as part of a contract with The HALO Trust, MAG, and NPA.

In 2019, CNIDAH reported that the financial challenges affecting Angola continued to negatively affect the national mine action programme. Government austerity measures resulted in reduced funding, which CNIDAH said seriously impeded its ability to monitor and coordinate mine action.¹³ Operators confirmed that CNIDAH's severe shortage of resources in 2018, including a lack of vehicles or resources for fuel and expenses greatly limited its ability to conduct mine action activities, most importantly in relation to quality management and processing of minefield completion reports from operators. As a result, there were lengthy delays in the sign-off of completed tasks, preventing them from being handed over to local communities.¹⁴

Positively, a draft resource mobilisation strategy had been developed and was waiting for formal approval from CNIDAH's management. It was hoped that the final draft would be ready for distribution in June 2019 at a planned donor coordination meeting in Luanda.¹⁵ However, as at August 2019, it was reported that the draft was undergoing further review.¹⁶

International mine action operators also continued to report lengthy bureaucratic obstacles in securing visas for expatriate personnel, compounded by a new tax law that entered into force in August 2018 and which added further tariffs to those already applied to the importation of equipment.¹⁷ A joint meeting was held at the end of the year with IPROCAC, the government entity responsible for coordination of humanitarian activities, in which NPA, MAG, and The HALO Trust expressed their concerns in relation to the implementation of the new law and its impact on humanitarian activities.¹⁸

GENDER

Gender and diversity are not referenced in Angola's 2019–25 Anti-Personnel Mine Ban Convention (APMBC) mine action workplan, nor are they included in Angola's national mine action standards in place in 2018.

CNIDAH informed Mine Action Review in 2019 that while it did not have a gender and diversity policy, provisions on gender mainstreaming will be incorporated into its new National Mine Action Strategy to be developed with support from the Geneva International Centre for Humanitarian Demining (GICHD) and NPA's capacity development project in August 2019. Sex- and age-disaggregated data collection requirements had been integrated into all relevant standing operating procedures, data collection forms, and other tools. All operators ensure that survey and community liaison teams are gender-balanced, and CNIDAH reported that, in 2018, a total of 23% of all deminers across the national programme were women. While men continued to dominate the sector, all operators were endeavouring to provide opportunities for fair female representation in their respective teams, CNIDAH said. Two of nine heads of department within CNIDAH were also held by women in 2018.¹⁹

International NGO operators confirmed that gender, age, and diversity-related concerns are taken into account during survey and clearance to ensure that the views and needs of different age and gender groups are reflected in the conduct of demining operations. They further reported taking into consideration gender balance in the hiring of staff in mine action operations, ensuring that a mix of male and female staff were employed in operational roles in the field, as well as in managerial positions.²⁰

The HALO Trust was continuing its "100 Women in Demining in Angola" project introduced in 2017, with the aim of empowering 100 women through recruitment, training, and employment across a range of mine action roles. It reported that the number of female staff had increased dramatically in two years, and the project would be an ongoing focus for its operations in Benguela province, while seeking its expansion in 2019 and beyond.²¹

INFORMATION MANAGEMENT AND REPORTING

Angola's mine action programme has long suffered from significant problems with information management, including the poor quality of the CNIDAH national database. This is exacerbated by the lack of integration of mine action data held by the CED. As noted above, during the year, an NPA Capacity Development Adviser was embedded in the CNIDAH team and focused on establishing an up-to-date and more accurate database, with assistance from operators. NPA reported that, as a result, discrepancies between operator reports from the field and the records contained in the

national database were being addressed and consequently, the accuracy of the data recorded in the database and reporting began to improve as well.²²

A monthly data-sharing mechanism was established between CNIDAH and all operators in-country in 2018 as part of mine action and information management coordination meetings. CNIDAH reported that progress in integrating data held by the CED was hampered by financial constraints that prevented the CED from being fully operational during the year.²³

PLANNING AND TASKING

In November 2018, Angola submitted a detailed annual workplan for 2019–25 to meet its extended APMBC Article 5 deadline. According to the plan, in 2019, operations in the provinces of Kuando Kubango, Uige, Moxico, Kwanza Sul, Huambo, and Cabinda would be prioritised.²⁴ It foresaw a total of close to 17.2km² of land release per year.²⁵ In June 2019, however, CNIDAH informed Mine Action Review that the annual projections are not achievable with existing demining capacity. Almost all operators were working at a reduced capacity due to limited funding.²⁶

In June 2019, CNIDAH informed Mine Action Review that it was already in the process of considering the formalisation of plans for residual contamination management capacity. Discussions, however, were in their infancy and no concrete decisions had yet been made.²⁷

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no specific national mine action legislation in Angola.²⁸

National mine action standards were in place in Angola in 2018. However, CNIDAH informed Mine Action Review that they did not cover all key areas considered necessary for a well-functioning national mine action programme. This resulted in a lack of standardisation for activities, and consequently, operators were relying on their own standing operating procedures.²⁹

Positively, CNIDAH reported that national standards on quality and information management were reviewed and updated with support from NPA's capacity development project in 2018. It stated that implementation of the revised standards had begun following internal training in 2019.³⁰ Further significant revisions were expected to be made with assistance from the GICHD in 2019.³¹

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. Under the NPA capacity development project's support for quality management (QM), CNIDAH reported that QM trainings had been initiated in 2018 and were continuing in 2019. As of June 2019, CNIDAH reported that five of its QA officers had received explosive ordnance disposal (EOD) Level 1 training, and 10 QA officers had completed a comprehensive quality management course.³²

Despite these much needed improvements, operators continue to report that CNIDAH lacked the resources and logistics to carry out QA/QC properly and continued to rely on operators to fund their transport and, if necessary, accommodation and per diem. This allowed CNIDAH to produce completion reports and remove completed tasks from the IMSMA database.³³ CNIDAH also acknowledged in its Article 5 deadline extension request that while improvements in its own and the CED's QC teams had been made in previous years, more remained to be done requiring "special measures in relation to this challenge".³⁴

OPERATORS

Four international NGOs conducted demining for humanitarian purposes in Angola in 2018: APOPO, The HALO Trust, MAG, and NPA.³⁵

The CED's four operators – the Armed Forces, the Military Office of the President, INAD, and the Police Border Guard – were operational across Angola. They are tasked by the government to clear or verify areas prioritised by national infrastructure development plans.³⁶ A number of national commercial companies have been accredited by CNIDAH and previously were mostly employed by the state or other private companies. However, CNIDAH reported that no commercial operators were conducting mine action in 2018–19. Only one national operator, APACOMINAS, was operational in 2018, which was tasked to complete ongoing tasks in Kwanza Sul province.³⁷

At its peak, NPA deployed seven manual demining teams, and one mine detection rat team, in a partnership with APOPO, which reduced to three manual teams and the mine detection rat team, as a result of the completion of a donor-funded project and subsequent termination of funding. However, the deployment of two additional manual teams in September 2018 was made possible by new funding under the DFID grant.³⁸ APOPO reported deploying one six-person manual demining team and one mine detection rat team of six handlers and 15 mine detection rats during the year.³⁹ APOPO's partnership with NPA ended in 2018, however, and

in 2019, it reported directly to CNIDAH as an independent operator.⁴⁰ MAG deployed three manual demining teams, one rapid response team with an EOD capacity, and three mechanical assets in 2018, a slight increase resulting from additional funding. The HALO Trust reported deploying a total of 19 manual teams, 2 survey/community liaison teams, and 2 weapons and ammunition disposal teams.⁴¹

The impact of the severe decline in funding for mine action in Angola in recent years cannot be overstated. This trend continued in 2018, reaching a nadir in April 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.

As reported above, in September 2018, 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 injected critically needed funding to sustain mine action operations in Angola, with a joint grant to the three largest operators. However, the continuing decline and gap in funding experienced by all operators negatively affected operations in 2018.

OPERATIONAL TOOLS

Operational tools in use in demining activities in Angola in 2018 included one MineWolf machine, two mechanical excavators (MAG), one brush cutter (NPA), 16 mine detection rats (APOPO), and one mechanical digger (HALO Trust).⁴²

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of more than 17.5km² of mine contamination was released in 2018, including just over 1km² through clearance, close to 2.7km² through technical survey, and over 13.8km² through non-technical survey.⁴³

SURVEY IN 2018

CNIDAH reported that international operators released a total of nearly 16.52km² through survey in 2018: cancelling 13.85km² through non-technical survey in 2018, and reducing a further 2.67km² through technical survey.⁴⁴

This is a significant decrease from 2017, when international operators reported cancelling more than 138km² of SHA through non-technical survey and reducing a further 2.4km² through technical survey.⁴⁵ This was due to the fact that the nationwide re-survey, which accounted for huge cancellation, was largely concluded by the end of 2018.⁴⁶

Table 2: Cancellation of mined area through non-technical survey in 2018⁴⁷

Province	Operator	Area cancelled (m ²)
Benguela	HALO Trust	356,964
Kuando Kubango	HALO Trust	1,340,072
Kwanza Sul	HALO Trust	111,000
Lunda Norte	MAG	5,458,008
Lunda Sul	MAG	5,924,008
Malange	NPA	65,829
Uíge	NPA	591,385
Total		13,847,266

Table 3: Reduction of mined area through technical survey in 2018⁴⁸

Province	Operator	Area reduced (m ²)
Moxico	MAG	485,624
Malanje	NPA	1,068,840
Uíge	NPA	1,119,485
Total		2,673,949

CLEARANCE IN 2018

According to CNIDAH, international NGO operators cleared a total of 1.04km² of mined area in 2018, destroying in the process 1,646 anti-personnel mines, 25 anti-vehicle mines, and 517 ERW.⁴⁹ In 2017, NGO operators reported clearing a total of over 1.18km² of mined area, destroying 3,480 anti-personnel mines, 114 anti-vehicle mines, and 2,201 ERW.⁵⁰ While the amount of area cleared remained fairly consistent, the number of anti-personnel mines found and destroyed in 2018 fell by over 1,800, compared with 2017.

Table 4: Mine clearance in 2018⁵¹

Province	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Benguela	HALO Trust	10	241,703	176	3	84
Huambo	HALO Trust	10	111,518	56	9	153
Kuando Kubango	HALO Trust	5	225,693	370	0	80
Kwanza Sul	HALO Trust	3	5,833	18	0	0
Malanje	NPA	4	16,998	692	0	15
Moxico	MAG	13	370,348	333	11	29
Uíge	NPA	10	71,319	1	2	156
Totals		55	1,043,412	1,646	25	517

AP = Anti-personnel AV = Anti-vehicle

The HALO Trust also reported destroying an additional 59 anti-personnel mines, MAG 27 anti-personnel mines, and NPA 4 anti-personnel mines as a result of EOD spot tasks.⁵²

The HALO Trust said its decrease in clearance output in 2018 was due to a reduction of funding and subsequent reduction in the number of teams deployed in Huambo province.⁵³ In contrast, MAG reported increased clearance in 2018, owing to its mechanical clearance teams and ground preparation team working in combination with manual teams.⁵⁴ NPA stated that despite the numbers of anti-personnel mines destroyed during the year, its completed tasks in Uíge province proved to be more heavily contaminated with ERW than mines.⁵⁵

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.⁵⁶ As at August 2019, however, CNIDAH had yet to make any such declaration and discussions as to when and how Malanje will be declared mine free were ongoing. The HALO Trust was also close to completing clearance of Huambo province, which will be another milestone achievement for mine action in Angola. It is hoped that with these two provinces declared completed, renewed momentum and additional resources can be secured to enable further progress in a province-by-province approach to completion.

ARTICLE 5 DEADLINE AND COMPLIANCE

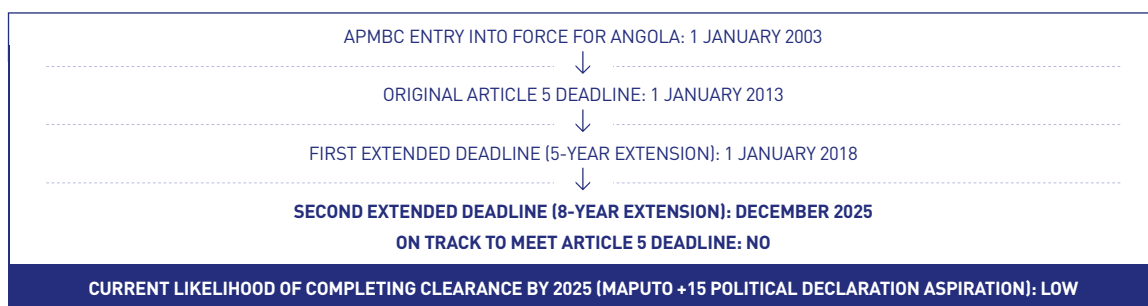


Table 5: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	1.0
2017	1.2
2016	4.1
2015	2.2
2014	3.8
Total	12.3

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.

Operators and CNIDAH maintain that with the requisite funding, Angola could still meet its 2025 Article 5 deadline. However, there was consensus that in 2018–19, the level of funding outlined as necessary to complete clearance by this time was simply not in place.⁵⁷ Collectively in the past decade, the resources of the three largest operators, HALO Trust, MAG, and NPA declined by nearly 90%.⁵⁸

On the margins of the 16th Meeting of States Parties to the APMBC in November 2018, Angola, with assistance from the APMBC's Committee on the Enhancement of Cooperation and Assistance, convened a joint meeting for relevant stakeholders and potential donors, under the Committee's "individualised approach" framework. At that meeting, CNIDAH stated that \$374 million would be needed to complete clearance by 2025. However, CNIDAH and operators have previously set the estimate of funding required significantly lower, at US\$275 million.⁵⁹

CNIDAH reported in June 2019 that it would be ambitious to think that Angola will achieve its 2025 Article 5 deadline.⁶⁰ Nonetheless, Angola managed to meet its Article 5 workplan target for land release in 2018, with nearly 17.5km² of contaminated area released through survey and clearance. News that clearance of two provinces, Malanje and Huambo, were being reported complete is also highly encouraging. Completion of clearance in these provinces will be major steps forward for Angola's mine action.

With a nationwide re-survey of all contamination nearly complete, Angola is on the verge of having a comprehensive estimate of remaining contamination. But without substantial new funding, Angola will not complete clearance by its Article 5 deadline and Maputo political declaration goal of end 2025.

1 Email from Ralph Legg, HALO Trust, 21 May 2019.

2 Email from Nicola Jay Naidu, Country Director, NPA, 11 September 2018.

3 Email from Robert Iga Afedra, Capacity Development Advisor, NPA, on behalf of CNIDAH, 3 June 2019.

4 Ibid.

5 Article 7 Report (for January 2018–April 2019), Form C.

6 APMBC Article 7 Report (for June 2017–April 2018), p. 8.

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

8 Ibid.

9 Email from Ralph Legg, Programme Manager, HALO Trust, 21 May 2019.

10 Email from Nicola Jay Naidu, NPA, 11 September 2018.

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

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

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

14 Email from Ralph Legg, HALO, 21 May 2019.

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

16 Email from Miroslav Pisarević, Country Director, NPA, 30 August 2019.

17 Email from Joaquim da Costa, Deputy Programme Manager, NPA, 6 May 2019.

18 Ibid.

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

20 Emails from Shadreck Njamba, MAG, 22 May 2019; Joaquim da Costa, NPA, 6 May 2019; and Ralph Legg, HALO Trust, 21 May 2019.

21 Email from Ralph Legg, HALO Trust, 21 May 2019.

22 Email from Joaquim da Costa, NPA, 6 May 2019.

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

24 Ibid.

25 CNIDAH, "Detailed workplan for the implementation of Article 5 of the Convention 2019–2025", p. 13.

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

27 Ibid.

28 Ibid.

29 Ibid.

30 Ibid.

31 Email from Ralph Legg, HALO Trust, 21 May 2019.

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

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

34 Revised 2017 Article 5 deadline Extension Request, p. 14.

35 MgM closed its operations in November 2015 upon completion of its last task in Cuando Cubango which formed part of a European Union-funded project. Previously, DanChurchAid (DCA) was forced to close its operations in early 2015 due to lack of funding. M. P. Moore, "Angola Avante – Onward Angola", Landmines in Africa blog, 26 February 2016, at: bit.ly/2Hem3jx.

36 CNIDAH, "Angola: workplan 2014–17 for the Ottawa Convention Article 5 extension period", June 2014, p. 6.

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

38 Email from Joaquim da Costa, NPA, 6 May 2019.

39 Email from Ashley Fitzpatrick, APOPO, 9 May 2019.

40 Ibid.

41 Emails from Shadreck Njamba, MAG, 22 May 2019; and Ralph Legg, HALO Trust, 21 May 2019.

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

43 Ibid.

44 Emails from Gerhard Zank, HALO Trust, 15 June 2018; Joaquim da Costa, NPA, 10 May 2018; and Jeanette Dijkstra, MAG, 24 April 2018.

45 Ibid.

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

47 Ibid.

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

49 Ibid.

50 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.

51 Email from Robert Iga Afedra, NPA, 3 June 2019. Figures differ from those provided by the operators.

52 Emails from Ralph Legg, HALO, 21 May 2019; and Shadreck Njamba, MAG, 22 May 2019.

53 Email from Ralph Legg, HALO, 21 May 2019.

54 Email from Shadreck Njamba, MAG, 22 May 2019.

55 Email from Joaquim da Costa, NPA, 6 May 2019.

56 Emails from Joaquim da Costa, NPA, 10 May 2018; and Nicola Jay Naidu, NPA, 11 September 2018.

57 Email from Ralph Legg, HALO, 21 May 2019.

58 Chris Loughran and Camille Wallen, "State of Play: The Landmine Free 2025 Commitment", MAG and HALO Trust, December 2017.

59 2017 Article 5 deadline Extension Request, p. 25.

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

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JANUARY 2020
THREE-YEAR EXTENSION REQUESTED TO 1 MARCH 2023

RECOMMENDATIONS FOR ACTION

- Argentina should work with the United Kingdom to reach an agreement on the joint clearance of the Malvinas/Falkland Islands.

UNDERSTANDING OF CONTAMINATION

Argentina reports that it is mine-affected by virtue of its claim to sovereignty over the Malvinas/Falkland Islands.¹ 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.”² It reiterated this declaration most recently at the Seventeenth Meeting of States Parties and the May 2019 APMBC Intersessional Meetings.³

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

PROGRAMME MANAGEMENT

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

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Argentina has stated that it is unable to meet its Article 5 obligations because it has not had access to the Malvinas due to the “illegal occupation” by the United Kingdom. It did, however, make an offer more than a decade ago to support demining of the islands. In November 2018, Argentina reiterated its claim of sovereignty over the islands and declared that if the United Kingdom entered into negotiations over sovereignty an agreement on demining could be reached between the two states.⁶

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. In March 2019, Argentina formally submitted a request to extend its Article 5 deadline until 1 March 2023. In the request, Argentina has indicated its predisposition to elaborate a new provisional agreement on the basis of a form of joint sovereignty that would permit the clearance of anti-personnel mines with the United Kingdom.⁷

In 2018, the United Kingdom submitted and was granted a request to extend its Article 5 deadline by an additional five years until 1 March 2024, which includes a plan to complete the demining of the Malvinas/Falkland Islands.⁸

1 Article 7 Report (for 2009), Form A.

2 Article 7 Report (for 1999), Form A.

3 Statement of Argentina, 17th Meeting of States Parties, Geneva, 27 November 2018; and Committee on Article 5 Implementation, Geneva, 22 May 2019.

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

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

6 Statement of Argentina, 17th Meeting of States Parties, Geneva, 27 November 2018.

7 Argentina 2019 Article 5 deadline Extension Request, 19 March 2019, at: bit.ly/2JBbkAM.

8 United Kingdom 2018 Article 5 deadline Extension Request.

BOSNIA AND HERZEGOVINA



CLEARING THE MINES 2019

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2021
INTERIM TWO-YEAR EXTENSION REQUESTED FOR SURVEY

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

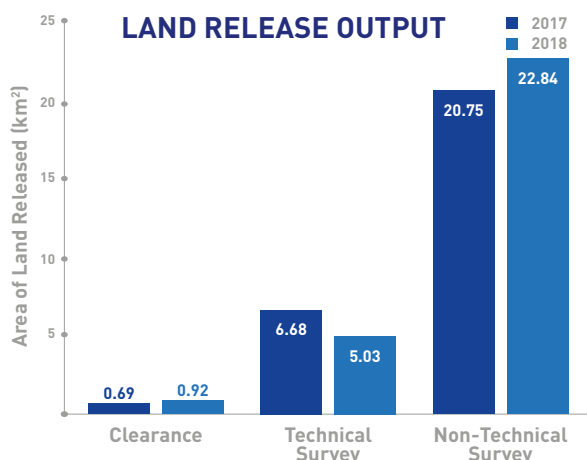
HEAVY, 50^{km²}
(ESTIMATED)

AP MINE
CLEARANCE IN 2018

0.92^{km²}

AP MINES
DESTROYED IN 2018

2,101



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Bosnia and Herzegovina (BiH) finalised a new national mine action strategy for 2018–25 in 2018, which was adopted by the Council of Ministers in January 2019. In 2018, BiH began a European Union (EU)-funded country assessment project to help determine a more accurate baseline of anti-personnel

mine contamination for realistic planning and to support the preparation of what is hoped will be its last Article 5 deadline extension request, due to be submitted before the end of March 2020.

RECOMMENDATIONS FOR ACTION

- BiH should adopt, without further delay, the amended demining law drafted in 2017.
- 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. In particular, BiH should continue reforming and strengthening the governance and management of the mine action programme.
- BHMIC should strive to ensure that all implementing partners are conducting evidence-based survey and clearance, to more accurately identify and delineate areas of contamination, in line with the National Mine Action Standards (NMAS) and Standing Operating Procedures (SoPs).
- BHMIC 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 International Mine Action Standards (IMAS).
- BHMIC should strive to improve gender balance in the sector, at the least by meeting the target of 40% female staff set by the 2003 Law on Gender Equality.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	BiH's current baseline of mined area is not accurate, with inflated SHAs. The "country assessment" project, currently underway, should help to determine a more accurate baseline and inform planning.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	5	National ownership of mine action in BiH falls under the responsibility of the Demining Commission and BHM MAC, and the BiH mine action strategy for 2018–25 has been adopted. Governance and management of the mine action programme could be strengthened and reformed. As at June 2019, the amended demining law was still awaiting parliamentary adoption.
GENDER (10% of overall score)	5	The National Mine Action Strategy 2018–2025 supports the 2003 Law on Gender Equality. BHM MAC has stated that, under its leadership, relevant actors will include gender in all phases of all mine action activities. However, of BHM MAC's own 107 operations staff in the field, only 10 were women.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	6	There is considerable scope to improve the accuracy and consistency of BHM MAC's mine action data and information management system, which should also be made consistent with the IMAS. BHM MAC is in the process of developing a new database, which will fulfil IMAS requirements.
PLANNING AND TASKING (10% of overall score)	6	BiH adopted its National Mine Action Strategy 2018–2025 in January 2019. It is hoped that the results of the EU-funded "country assessment" project, expected to be completed at the end of 2019, will assist planning and the realisation of the new National Strategy.
LAND RELEASE SYSTEM (20% of overall score)	8	BiH has NMAS and SoPs in place for the efficient release of mined areas through evidence-based survey (including technical survey with targeted investigation) and clearance. BHM MAC must ensure that all implementing partners adhere to the methodology.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	The amount of land released through clearance and cancelled through non-technical survey in 2018 was a slight increase on 2017, while technical survey output decreased slightly. Efforts in the latter half of 2018 were put into the "country assessment" project, to set a new baseline for realistic Article 5 implementation planning.
Average Score	6.0	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

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

NATIONAL OPERATORS

- Armed Forces of BiH
- BHM MAC
- Civil Protection Administration of Republic of Srpska
- Federal Administration of Civil Protection
- Non-governmental organisations:
 - Association UEM
 - DEMIRA
 - Mine Detection Dog Centre (MDDC)
 - Pro Vita
 - Stop Mines
 - Udruga "Pazi Mine Vitez"
 - WBE

- Commercial demining companies:

- Detektor
- N&N Ivsa
- In Demining N.H.O

INTERNATIONAL OPERATORS

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

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

BiH is heavily contaminated with mines, primarily as a result of the 1992–95 conflict related to the break-up of the Socialist Federal Republic of Yugoslavia. All warring factions in BiH laid mines, primarily between confrontation lines.² Nearly twenty-four years after the end of the conflict, BiH is still the most heavily mined country in Europe. BiH is also contaminated with explosive remnants of war (ERW), including cluster munition remnants (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on BiH for further information).

In its latest Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report, BiH claimed a total of 1,018km² of mined area, across 8,525 locations, but did not disaggregate SHA and CHA.³ This represents a decrease of 43km² compared to the 1,061km² of mined area as at the end of 2017.⁴ The difference in figures between mined area as at the end of 2017 and 2018 cannot be satisfactorily reconciled based on the land released through survey and clearance in 2018.

Mined area reported to Mine Action Review (see Table 1) also totalled 1,018km² (as per BiH's Article 7 report), but was reported to be across a total of 8,948 mined areas (8,141 SHAs and 807 CHAs).⁵

Table 1: Anti-personnel mined area by canton (at end 2018)⁶

Canton	"Known" mined areas	Area (km ²)	Suspected mined areas	Area (km ²)
Unsko-Sanki	132	3.00	640	98.70
Posavski	6	0.37	174	17.39
Tuzlanski	57	1.39	704	78.43
Zanicko-Dobojski	52	1.79	665	115.83
Bosansko-Podrinjski	19	1.14	222	44.18
Srednje-Bosanski	100	3.23	761	119.52
Hercegovacko-Neret	68	3.00	1,225	147.00
Zapadno-Hercegovacki	3	0.23	10	0.08
Sarajevo	29	1.02	285	67.84
Canton 10	36	1.07	475	74.20
Subtotal BiH Federation	502	16.24	5,161	763.17
Republika Srpska	303	5.79	2,834	218.12
Brčko district	2	0.05	146	14.64
Totals	807	22.08	8,141	995.93

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."⁷ Similarly, a 2015 UNDP evaluation reported that the Bosnia and Herzegovina Mine Action Centre (BHMIC) 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."⁸

During 2017, plans were formalised between BHMIC, clearance operators, and the EU for a country assessment to establish a more accurate baseline of mine contamination and improve the efficiency of clearance operations.⁹ The resultant 18-month project, "Country assessment of mine-suspected areas in Bosnia and Herzegovina 2018–2019" (hereafter, the "country assessment" project), was signed in August

and was planned to be completed by February 2020 (see the *Land Release System* section of this report for further information).¹⁰ If this leads to very significant reduction of SHA and identification of truly mined area, this will make a major contribution to improving programme performance.

Minefields in BiH generally contain relatively small numbers of mines, which are typically either "in groups or randomly laid". The quality of approximately 30% of minefield records was not sufficiently accurate for the identification of the precise minefield location and shape. Furthermore, approximately 40% of minefield records 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.¹¹ Physical changes to mined areas (such as in vegetation), and a lack of witnesses to the laying of the mines, pose additional challenges.¹²

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Demining Commission, under the BiH Ministry of Civil Affairs, supervises the state-wide BHMAL and represents BiH in its relations with the international community on mine-related issues.¹³ The Demining Commission is composed of representatives from three ministries (Civil Affairs, Defence, and Security) elected to represent BiH's three main ethnic groups (Bosniaks, Croats, and Serbs). Whereas the Minister for Civil Affairs remains ultimately responsible for mine action, the Demining Commission is the strategic body responsible for setting mine action policy, and it proposes the appointment of BHMAL senior staff, for approval by the Council of Ministers.¹⁴ The existing Demining Commission representatives were re-elected for a further two years (October 2017 to October 2019).¹⁵

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.¹⁶ Furthermore, according to the 2016 audit office report, "The Commission has not developed a methodology on how to monitor the work of the BHMAL".¹⁷

BHMAL, 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.¹⁸ BHMAL 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).¹⁹

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. BiH demining authorities are following the 2015 recommendation of the Council of Ministers to amend the existing law, instead of adopting a new law,²⁰ and a working group which consisted of representatives from the Ministry of Civil Affairs, the Demining Commission, BHMAL, the Armed Forces, and the entity Civil Protections, created a first draft of the amended demining law.²¹ However, as at June 2019 the amended text from 2017 was still awaiting parliamentary adoption. Clearer legislation on liabilities related to mine action activities would be beneficial to all mine action stakeholders in BiH.

After a 10-year hiatus, Board of Donor meetings resumed in September 2015.²² As at April 2019, however, the last Board of Donor meeting had taken place in Sarajevo in November 2017.²³ BiH's new National Mine Action Strategy 2018–2025 specifies that at least two such meetings should be organised every year.²⁴ In October 2016, expert working groups (EWGs), which used to meet until 2009, were reinitiated and continue to meet.²⁵

BiH's second goal, in its National Mine Action Strategy 2018–2025, is that the "Mine action programme in BH is promoted on both national and international level to increase its visibility and improve liability, commitment and support of the state", and the strategy includes operational goals linked to this strategic goal.²⁶ As committed to in its national mine action strategy, BiH published a separate financial plan for implementation of the BiH mine action strategy for 2018–25. The plan sees BiH commit a national budget of 4.5 million BAM (over US\$2.5 million) per annum for the Armed Forces and 5.945 million BAM (US\$3.4 million) per annum for BHMAL, for 2019 and 2020; which is forecast to increase to a total of 21.55 million BAM (over US\$12.3 million, at current exchange rates) per annum in 2021–25.²⁷ This national funding is in addition to forecast international funding, which is also budgeted in BiH's financial plan.²⁸

BHMAL is funded by the common institutions of BiH and other institutions at state level.²⁹ BiH has calculated that the required cost to fulfil BiH's plans during its two-year interim extension period is almost 80 million BAM (US\$46 million), of which 50% will be national funding and 50% donor funding. Funds for non-technical survey activities by BHMAL will be ensured from the budgets of BiH institutions and implemented through operational activities of BHMAL. Budgets of BiH institutions will also ensure funds for technical survey and mine clearance activities to be implemented by Armed Forces. Entity governments' budgets will ensure funds for technical survey and mine clearance operations, to be implemented by entity civilian protections. Other funding resources from BiH include: Brčko District budget, budgets of cantons and municipalities, and budgets of public and private companies.³⁰

GENDER

The National Mine Action Strategy 2018–2025 specifies that "Under the leadership of BHMAL, relevant actors will include gender and diversity into all phases of planning, realisation and follow-up of all mine activities".³¹ The mine action strategy considered and supported the 2003 Law on Gender Equality in BiH, which includes equal treatment of the genders and equality of opportunity, and prohibits direct and indirect discrimination on the grounds of gender. The Law on Gender Equality determines that equal representation of men and women exists when the percentage of either gender in bodies at all levels in BiH (state, entity, cantonal, and municipality level) is at least 40%. BiH's national mine action strategy also considered the 2017 Gender Equality Action Plan.³² However, as at April 2019, out of BHMAL's 171 employees, only 42 were women (25%). Of BHMAL's 107 operations staff in the field, 10 were women (9%).³³

BHMAL reported that it has a gender and diversity policy and that BHMAL upholds the Law on Gender Equality and routinely includes it in the development of strategies and standards.³⁴

Mines Advisory Group (MAG) has a gender policy and equal employment opportunities for suitably qualified females and males. However, as at August 2019 MAG's programme in BiH had never received applications from women for vacant operational roles, and of its 62 operational staff in BiH, only two medic positions were held by women, in addition to a female operations assistant. MAG does not have dedicated community liaison in BiH, but it reported that its survey and clearance teams seek to talk to all women and men living near the survey area to obtain as much data as possible. Of MAG's management team, the country director was female in 2018, along with a support services officer.³⁵

Norwegian People's Aid (NPA) reported that it promotes gender equality in all aspects of its programme activities in BiH. Mixed gender representation is an obligation for NPA teams conducting community liaison and risk education.³⁶ NPA reported that the overall gender split of its staff as at April 2019 was 98 male employees and 10 female (9%).³⁷ NPA reported that it is driving to achieve a gender balance, and that the programme encourages the employment of women, including into managerial and operational staff positions.

Four managerial positions in the NPA BiH programme are held by women.³⁸

All groups affected by mines, including women and children, are reported to be consulted during survey and community liaison activities by both BHMAL and NPA, and survey and community liaison teams are inclusive with a view to facilitating this. BHMAL and NPA also reported that relevant mine action data is disaggregated by sex and age.³⁹

INFORMATION MANAGEMENT AND REPORTING

As at April 2019, BHMAL was using its own information management system, the Bosnia and Herzegovina Mine Action Information System (BHMALIS).⁴⁰ However, BHMAL does not report accurately or consistently on mine contamination by SHAs and CHAs, in a manner consistent with IMAS. In addition, there are frequent inaccuracies in BHMAL reporting on land release.

Information in BHMAL's information management system is made available to clearance operators,⁴¹ but at present this is restricted to data for the specific tasks on which the operators are engaged.⁴²

BHMAL, with the support of UNDP and financing from the EU, plans to create a new web-based database to replace the existing system and increase accessibility and transparency of mine action data. The project aims "to influence policy and build the capacity to instil greater organisational openness and adaptability to new methodologies".⁴³ According to the Geneva International Centre for Humanitarian Demining (GICHD), the UNDP-supported project to improve information management through the development of a web-based database will improve the accessibility and transparency of data.⁴⁴ The joint development of the database (IMSMA Core) began in 2019 and was ongoing as at June 2019; it was expected to be completed by 2020.⁴⁵

PLANNING AND TASKING

In 2017, BiH developed a new national mine action strategy for 2018–25, with support from the GICHD, which addresses all mine and cluster munition remnant contamination. The strategy was formally adopted in January 2019.⁴⁶

The BiH previous Mine Action Strategy for 2009–19, adopted by the Council of Ministers in 2008,⁴⁷ set the target of the country becoming free of mines by 2019. BHMAL conducted the first of three planned revisions of the strategy in 2012–13⁴⁸ (the other two were due in 2015 and 2017, respectively).⁴⁹

In 2016, BHMAL, in consultation with the GICHD, started the third revision process. This time, BiH, with support from the GICHD, and participation from government ministries, clearance operators, and other stakeholders, produced an entirely new national mine action strategy for the period through to projected completion of mine and cluster munition remnant clearance (2018–25).

The new National Mine Action Strategy for 2018–2025, which was only adopted in January 2019, contains a general plan and timeframe for the completion of mine clearance, as well as for cluster munition remnants. It is due to be revised in 2020 and 2023, to consider progress and adjust for any changes in context.⁵⁰ The strategy also includes a section on management of residual contamination, which specifies that BiH is obliged to create a strategy for the management of residual contamination by 2022.⁵¹

BiH's annual operational mine action plan for 2019, in accordance with Article 16 of the Demining Law, has been adopted by the Demining Commission.⁵²

The EU-funded "country assessment" of the size and impact of mine and ERW contamination, was signed on 15 August 2018, with an implementation period of 18 months.⁵³ The assessment 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 implementation of its new National Strategy and prepare its final Article 5 extension through to completion.⁵⁴ Under the project, non-technical survey will be conducted by BHMAL (nine non-technical survey teams), the BiH Armed Forces (two non-technical survey teams), and NPA (three non-technical survey teams), with €1.1 million (approx. US\$1.25 million) of EU funding.

As part of the "country assessment" project, 1,030km² of remaining mined area is expected to be subdivided into about 500 MSAs (mine-suspected areas) requiring further survey and clearance, while 30km² is expected to be cancelled.⁵⁵ The MSA polygons will be made up of SHAs and CHAs that 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.⁵⁶ 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 community needs are prioritised and addressed. It is also intended to simplify the tasking procedure by assigning specific organisations a larger geographical area in which to carry out operations.⁵⁷ Local administrations and BHMAL will together agree on the size and priority of MSAs in accordance with humanitarian, developmental, and safety needs of municipality and local communities.⁵⁸ 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.⁵⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Results of mine action in BiH show that the applied land release model was efficient in the period 2005–09, and prior to 2009, BHMAL cancelled significant amounts of land annually through non-technical survey.⁶⁰ Since then, however, non-technical survey output has declined, but there remains significant potential for further reduction in the size of the SHA.

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 BHMAL.⁶¹ The resulting “IPA 2011 Land Release” was implemented from 2013 to 2016, with EU funding.⁶² The project enabled efficient tasking of systematic technical survey and technical survey with targeted investigation, helping ensure clearance assets were only directed into CHAs.⁶³ 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.⁶⁴ Assuming the six tasks are representative of much of BiH’s remaining SHAs, BHMAL predicts that only a minor proportion of the remaining SHAs contain contamination and deployment of clearance assets will therefore only be required for relatively small areas.⁶⁵ This has been factored into the new National Mine Action Strategy, and it is hoped that the new land release concept will greatly speed up release of suspected mined area.⁶⁶

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. As part of the process, BHMAL and NPA identified new sources of information, including former soldiers and commanders. Several methodologies can then be applied as part of technical survey to locate contamination, including manual clearance lane(s) towards

a specific target, MDDs to search for a specific target, or 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).⁶⁷ Further promotion of national ownership by BHMAL and the Demining Commission, including the adoption of a clear definition of “all reasonable effort” and an appropriate division of liabilities would enhance efficient and effective land release process in BiH.

In 2016, in collaboration with the GICHD and UNDP, BHMAL held a workshop on “standards and SOP revisions”.⁶⁸ Efforts focused on ensuring the standards and SoPs allow for the optimal release of land through evidence-based survey, including through technical survey.⁶⁹ The BiH Demining Commission has adopted three chapters of the standards so far: one on non-technical survey, one on technical survey, and one on the opening and monitoring of tasks.⁷⁰ In addition, a specific SoP was approved by the Demining Commission for the new 18-month “country assessment” project.⁷¹

There is broad agreement among operators and experts that technical survey with targeted investigation could significantly improve the efficiency of land release in BiH. This could more accurately define CHAs, potentially reducing the area released through clearance to between 1% and 3% of the original SHA.⁷²

The Federal Administration of Civil Protection, however, reported that it had suggested a number of suggested proposals for the improvement of current standards on mine clearance and UXO removal, non-technical survey, technical survey, and land release, but without significant results, which it attributed to a lack of readiness for dialogue from BHMAL leadership.⁷³

OPERATORS

As at September 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); 7 commercial organizations, and 14 non-government organizations (NGOs) (11 national and 3 international).⁷⁴ 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, BHMAL has at its disposal 44 surveyors (i.e. 22 survey teams for non-technical survey and emergency marking), 8 officers for planning non-technical survey operations, 12 inspectors and 28 senior clerks for QC/technical supervision/inspection.⁷⁵

During 2018, 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 twelve other clearance organisations, comprising nine NGOs (Association UEM, DEMIRA, Mine Detection Dog Centre (MDDC), MAG, NPA, Pro Vita, Stop Mines, Udruga “Pazi Mine Vitez”, and WBE) and three commercial organisations (Detektor, N&N Ivsa, and In Demining N.H.O).⁷⁶ BHMAL did not expect any major changes to demining capacity in 2019.⁷⁷

The BiH Armed Forces’ survey and clearance operations, which include use of machinery and explosive detection dogs, are fully engaged from March to November, and with reduced activity, predominantly in southern BiH, from December to February.⁷⁸ Since 2010, NPA has increasingly focused on building the capacity of the Army’s Demining Battalion. 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.⁷⁹ The BiH Armed Forces require ongoing support to secure personal protective

equipment, batteries for detectors, and fuel for demining machinery, since the Army's own complex procurement system often cannot deliver such items in sufficient time.⁸⁰ The Demining Battalion also receives support from Austria, France, Italy, and the United States, as well as EUFOR, which alone provides 90% of support.⁸¹

The state operators, the BiH Armed Forces' Demining Battalion and Civil Protection, are both good partners and have effective capacities, but have suffered from logistical challenges and equipment deficits, which can prevent them from working at full capacity.⁸² Deminers in the BiH Armed Forces, however, are forced to stop demining at the age of 38 (this upper limit, until recently, had been 35). This results in experienced deminers being forced to retire at a very early age and results in a high turnover of personnel.⁸³

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.⁸⁴

Federal administration of civil protection teams are spatially distributed to cover the entire territory of the Federation of BiH and are located in Bihac, Busovaca, Gorazde, Livno, Mostar, Orasje, Sarajevo, Travnik, Tuzla, and Zepce. Capacity includes 11 demining teams with 95 employees, 8 UXO teams with a total of 27 employees (solely responsible for removing UXOs in the Federation of BiH following reports from citizens and institutions), 4 MDD handlers with 4 dogs, a mechanical debris removal team that has one armoured excavator and two armoured trucks to remove UXO contaminated debris, and a demining team with two demining machines and 4 operators.⁸⁵

The teams of the Federal administration of civil protection are trained in fast response to remove injured persons (both civilians and deminers) from mine-contaminated areas. The Federal administration of civil protection believes that accident and incident investigation, which is currently only conducted by BHMAL staff, should be expanded to include representatives from the wider demining community, such as the entities civil protection authorities, the Armed Forces, and EUFOR, to help improve the safety and quality of operations.⁸⁶

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

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.⁸⁷ Both machines and dogs are integrated into NPA demining operations in BiH. NPA uses MDD and special detection dogs (SDDs) for clearance and technical survey tasks, including targeted technical survey.⁸⁸ In 2018, NPA had 8 manual clearance/technical survey teams with a total of 53 deminers, 6 MDD handlers and 9 dogs, and 4 machine operators and machines. In addition, NPA had one three-strong non-technical survey team in 2018. In 2019, this increased to three non-technical survey teams, as part of the EU-funded "country assessment" project.⁸⁹ As mentioned above, since 2010, NPA has also focused on building the capacity of the Armed Forces Demining Battalion.

MAG received operational accreditation in April 2017, and began technical survey and clearance operations in mid-May 2017.⁹⁰ In 2018, MAG deployed 61 staff to conduct technical survey and clearance, an increase of four teams (36 staff, plus 2 medics and 1 site surveyor), compared to MAG's capacity in the previous year. MAG expected capacity in 2019 to remain constant.⁹¹

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.⁹² 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.⁹³

Quality control and quality assurance (QA) is conducted by BHMAL.⁹⁴

OPERATIONAL TOOLS

Clearance and technical survey operations in BiH include mechanical preparation of land, manual clearance, and the use of MDDs and SDDs depending on the geographical conditions.⁹⁵ Much of the remaining mined area is in hilly or mountainous terrain, which restricts the use of machinery.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of 28.79km² of mined area was released in 2018, of which almost 0.92km² was cleared, over 5.03km² was reduced through technical survey, and 22.84km² was cancelled through non-technical survey.

SURVEY IN 2018

In 2018, over 5.03km² was reduced through technical survey, conducted by various government organisations, NGOs, and commercial organisations (see Table 2).⁹⁶ This is a decrease on the 6.68km² reduced through technical survey in 2017.⁹⁷ In addition, a further 22.84km² was cancelled through non-technical survey in 2018,⁹⁸ compared to 20.75km² in 2017.⁹⁹

Table 2: Reduction of mined area through technical survey by canton in 2018¹⁰⁰

Canton	Area reduced (m ²)
Unsko-Sanki	553,587
Posavski	515,654
Tuzlanski	602,633
Zanicko-Dobojski	130,153
Bosansko-Podrinjski	74,001
Srednje-Bosanski	472,011
Hercegovacko-Neret	193,600
Sarajevo	263,910
Canton 10	215,716
Total Federation BiH	3,021,265
Total Republika Srpska	1,684,002
Total Brčko district	330,015
Sum total	5,035,282

CLEARANCE IN 2018

A total of almost 0.92km² was cleared in 2018, during which 2,101 anti-personnel mines, 57 anti-vehicle mines, and 1,974 ERW were destroyed (see Table 3).¹⁰¹ This is an increase on the 0.69km² of mined area cleared and 1,749 anti-personnel mines destroyed, in 2017. Of 0.92km² 2018 clearance total, 431,808m² of mined area was cleared (and 1,497 anti-personnel mines and 942 items of ERW destroyed), through tasks created through the EU country assessment project and cleared by the federal administration of civil protection, MDDC, NPA, MAG and Provita.¹⁰²

Mine clearance operations were conducted by the BiH Armed Forces, the Civil Protection of FBiH, the Civil Protection of RS, nine non-governmental organisations, and three commercial demining companies (see Tables 4).¹⁰³

Table 3: Mine clearance by canton in 2018¹⁰⁴

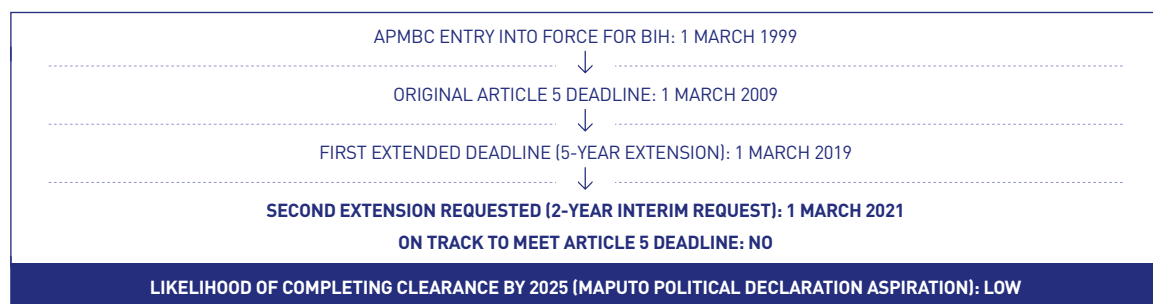
Canton	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	ERW destroyed
Unsko-Sanki	96,454	111	0	186
Posavski	75,137	33	0	20
Tuzlanski	93,765	100	10	88
Zanicko-Dobojski	19,774	9	0	14
Bosansko-Podrinjski	55,064	212	18	38
Srednje-Bosanski	744	1	0	6
Hercegovacko-Neret	375,864	1,061	0	858
Sarajevo	74,481	383	0	363
Total Federation BiH	791,283	1,910	28	1,573
Total Republic Srpska	106,169	174	29	235
Total Brčko district	22,080	17	0	166
Sum totals	919,532	2,101	57	1,974

AP = Anti-personnel AV = Anti-vehicle

Table 4: Mine clearance by operator in 2018¹⁰⁵

	Operator	No. of tasks	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	ERW destroyed
Government	Federal Administration of Civil Protection	6	41,041	59	10	355
	BiH Armed Forces	5	92,403	220	10	264
	Civil Protection Administration of RS	4	17,874	44	11	26
Local NGOs	Association UEM	2	33,833	22	0	7
	DEMIRA	2	3,158	2	0	0
	Pro Vita	4	357,528	884	0	888
	Stop Mines	1	1,735	1	0	0
	Udruga "Pazi Mine Vitez"	2	19,101	60	12	142
	WBE	1	615	0	0	0
International NGOs	Mine Detection Dog Centre (MDDC)	3	28,112	235	0	77
	NPA	3	33,213	322	0	16
	MAG	1	13,958	62	0	6
Commercial demining organisations	Detektor	5	27,857	72	5	10
	N&N Ivsa	16	229,728	115	5	182
	In Demining N.H.O	4	19,376	3	4	1
Totals		59	919,532	2,101	57	1,974

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC, BiH was granted a second extension request in 2018, for an interim two-year extension to 1 March 2021. Within this interim extension period, BiH plans to conduct a “country assessment”, to set a new baseline for realistic planning. Following completion of the “country assessment”, 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 2020.¹⁰⁶

Efforts to gain greater clarity on the extent of actual mine contamination are welcome but long overdue, considering that BiH still does not have an accurate picture of baseline contamination more than 20 years after becoming a state party to the APMBC.

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.¹⁰⁷ 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.¹⁰⁸ BiH has expressed its commitment to complete its Article 5 obligations by 2025, as detailed in the National Mine Action Strategy 2018–2025.¹⁰⁹

The “country assessment” project, currently being undertaken, is expected to result in the cancellation of 30km² 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 BHMBC's Article 5 completion planning. The possibility of new areas being recorded as contaminated through the “country assessment” is considered to be low, but is a possibility. Over the last five years, BiH has released less than 6.5km² thorough clearance (see Table 5). Since the ten-year extension to its initial Article 5 deadline, granted in 2008, BiH has continuously fallen far short of its annual land release targets. The painfully slow pace of 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.¹¹⁰

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.¹¹¹ 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 to mine action, owing to its economic situation.¹¹² The Ministry of Civil Affairs, the Demining Commission, and BHMACH have highlighted the limited funds for demining and have requested funds from the national budget.¹¹³ BiH has calculated that the required cost to fulfil its planned two-year interim extension request is almost 80 million BAM (US\$46 million), of which 50% will be national funding and 50% donor funding.¹¹⁴

BHMACH expected land release operations for 2018 and 2019 to continue in line with annual workplans, and predicted that a total of 237km² would be released: 179km² cancelled through non-technical survey by BHMACH (82km² in 2018 and 97km² in 2019); an additional 30km² cancelled through non-technical survey by BHMACH, BiH Armed Forces, and NPA as part of the “country assessment” project; 26km² reduced through technical survey by accredited organisations (13km² in 2018 and 13km² in 2019); and 2km² cleared (1km² in 2018 and 1km² in 2019). In addition, through non-technical survey BHMACH expected to prepare a total of approximately 120 MSAs, covering approximately 263km².¹¹⁵

Based on 2018 land release outputs of almost 0.92km² cleared, over 5.03km² reduced, and 28.79km² cancelled, BiH has already fallen behind on its new target, especially with regards to clearance output.

Table 5: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	0.92
2017	0.69
2016	1.34
2015	1.64
2014	1.85
Total	6.44

The new National Mine Action Strategy 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, in particular high-quality survey to allow for the release of what is expected to be substantial area found without direct evidence of contamination, will, however, require strong oversight and commitment from BHMACH, and the Demining Commission and their superiors in the government. It will also require continued funding of the operational activities in order to realise the goals within the envisaged timeframe.

- 1 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015; and Audit Office of the Institutions of Bosnia and Herzegovina, “Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina”, No. 01-02-03-10-16-1-1101/16, 4 November 2016, p. 22.
- 2 2018 Article 5 deadline Extension Request, p. 4.
- 3 Article 7 Report (for 2018), Form C.
- 4 Article 7 Report (for 2017), Form C.
- 5 Email from Ljiljana Ilić, Interpreter, BHMACH, 23 July 2019; and Article 7 Report (for 2018), Form C.
- 6 Email from Ljiljana Ilić, BHMACH, 23 July 2019.
- 7 Audit Office of the Institutions of Bosnia and Herzegovina, “Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina”, 4 November 2016, p. 5.
- 8 UNDP, Draft Mine Action Governance and Management Assessment for Bosnia and Herzegovina, 13 May 2015, p. 17.
- 9 Interviews with Darvin Lisica, then Programme Manager and Regional Director, NPA, Sarajevo, 8 May 2017; Fotini Antonopoulou, EU, Sarajevo, 8 May 2017; and Tarik Serak BHMACH, Sarajevo, 10 May 2017.
- 10 Email from Jonas Zachrisson, Country Director, NPA, 31 July 2019.
- 11 2018 Article 5 deadline Extension Request, p. 8.
- 12 Audit Office of the Institutions of Bosnia and Herzegovina, “Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina”, 4 November 2016, p. 26.
- 13 BHMACH Organisational chart, accessed 17 July 2019 at: bit.ly/2Ycj4xl.
- 14 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 22.
- 15 Emails from Ljiljana Ilić, BHMACH, 26 June 2018; and Suad Baljak, UNDP, 27 June 2018.
- 16 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 22; and Audit Office of the Institutions of Bosnia and Herzegovina, “Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina”, No. 01-02-03-10-16-1-1101/16, 4 November 2016, p. 22.
- 17 Audit Office of the Institutions of Bosnia and Herzegovina, “Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina”, 4 November 2016, p. 8.
- 18 Bosnia and Herzegovina Official Gazette, Sarajevo, 17 March 2002.
- 19 BiH, National Mine Action Strategy 2018–2025, p. 8.
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- 100 Email from Ljiljana Ilić, BHMIC, 9 July 2019. Of this, MAG reported reducing 779,526m² (email from Djadranka Gillesen, MAG, 27 August 2019) and NPA reported reducing 835,386m² through technical survey (email from Jonas Zachrisson, NPA, 22 April 2019).
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- 102 Email from Ljiljana Ilić, BHMIC, 17 May 2018; and APMBC Article 7 Report (for 2017), Form F.
- 103 Email from Ljiljana Ilić, BHMIC, 9 July 2019; and Article 7 Report (for 2018), Form C.
- 104 Email from Ljiljana Ilić, BHMIC, 9 July 2019; and Article 7 Report (for 2018), Form C. In 2018, NPA mechanically prepared 236,980m² for the Demining Battalion's tasks (email from Jonas Zachrisson, NPA, 22 April 2019).
- 105 Article 7 Report (for 2018), Form C; and emails from Ljiljana Ilić, BHMIC, 9 July and 23 August 2019 and Jonas Zachrisson, NPA, 22 April 2019; and Article 7 Report (for 2018), Form C. There was a discrepancy between clearance data provided by BHMIC for MAG, and that provided by MAG for its 2018 operations. MAG reported that it had cleared 5 mined areas, totalling 78,151m², with the destruction of 375 anti-personnel mines and 19 other items of ERW. Email from Djadranka Gillesen, MAG, 27 August 2019. The discrepancy is believed to be most likely due to BHMIC only considering clearance tasks to be completed once the land release declaration has been issued, whereas MAG data included tasks which were suspended due to winter and summer.
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ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JANUARY 2020
EXTENSION REQUESTED TO 31 DECEMBER 2025

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MASSIVE, 400 km² (ESTIMATED)
AT LEAST

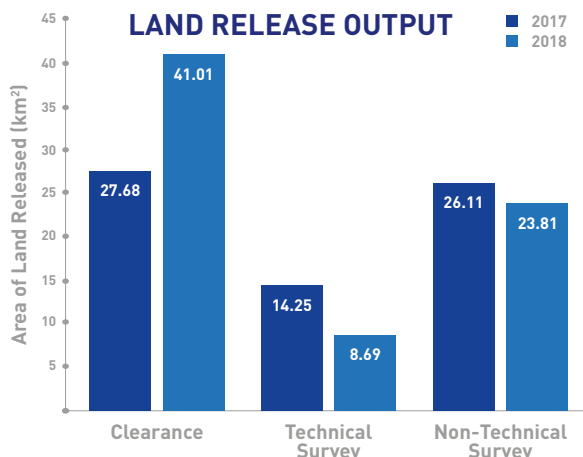
AP MINE
CLEARANCE IN 2018

41.01 km²

AP MINES
DESTROYED IN 2018

16,019

(including 4,301 destroyed
during spot tasks)



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Cambodia is working towards completing its baseline survey with 23 districts surveyed in 2018 and the remainder to be surveyed by 2020. This, along with the planned classification of mined areas into suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs), should improve Cambodia's understanding of the extent of remaining mine contamination. However, significant amounts of previously unrecorded contamination continue to be added to the database reducing the overall progress in land release.

In 2018, Cambodia launched its National Mine Action Strategy, Three-Year Implementation Plan, and Gender Mainstreaming in Mine Action Plan (GMAP 2018–22). The Cambodia Mine Action and Victim Assistance Authority (CMAA) continued to strengthen after a management shake-up in 2017. Cambodia submitted what is hoped to be its last Article 5 deadline extension request in March 2019. While progress is being made in planning, prioritisation, and land release, the target of completing anti-personnel mine clearance by 2025 is ambitious and will only be achieved with significantly increased funding and capacity.

RECOMMENDATIONS FOR ACTION

- Cambodia should report outstanding anti-personnel mine contamination classified into SHAs and CHAs.
- Cambodia should proceed to review all newly added mined areas to cancel any uncontaminated areas from its database. It should introduce quality control of newly surveyed areas to ensure that mined areas are being identified through high-quality, evidence-based survey.
- Cambodia should continue to improve its information management systems by eliminating discrepancies with operator data and ensuring synchronisation of reporting.
- Cambodia should provide regular progress updates on the implementation of its Gender Mainstreaming in Mine Action Plan for 2018–22.
- Cambodia should agree with Thailand to complete its pilot border clearance project by end 2019.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	All outstanding mine contamination in Cambodia continues to be classified by the CMAA as SHA. Its own classification system disaggregates dense from scattered anti-personnel mine contamination. The baseline survey (BLS) of the remaining districts will be completed by 2020; survey of 23 districts was completed in 2018. While land reclamation and the BLS are cancelling uncontaminated land a substantial amount of previously unrecorded contamination continues to be added to the database.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	8	The CMAA continued to strengthen in 2018. There is good, although at times superficial, consultation with operators and a permissive environment. The Cambodian government contributes national resources for mine action, but to achieve completion by 2025 it intends to seek additional international assistance.
GENDER (10% of overall score)	7	In 2018, Cambodia released its GMAP 2018–22, which is embedded in both its national mine action strategy and implementation plan. The aim is to increase female participation across the mine action sector.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	6	Cambodia made improvements to its information management system in 2018 setting up a virtual private network to allow operators to input directly into the database. Strengthening information management is one of the goals of the national mine action strategy, but data inconsistencies and a high turnover of information management staff remain an issue.
PLANNING AND TASKING (10% of overall score)	7	Cambodia has a comprehensive National Mine Action Strategy 2018–25 with a detailed three-year implementation plan 2018–20. Cambodia has clear criteria and processes for the prioritisation of tasks, involving consultation with key stakeholders. Cambodia fell short of its land release target for 2018 but has set itself an even higher target for 2019.
LAND RELEASE SYSTEM (20% of overall score)	7	Cambodia's mine action standards are consistent with international mine action standards (IMAS) and reflected in operators' standing operating procedures (SoPs). Operators' clearance capacity increased in 2018 but Cambodia has estimated an additional 2,000 deminers will be needed to meet its land release targets. A wide range of assets are deployed for demining in Cambodia, including machines, dogs, and rats.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	Overall land release output in Cambodia fell slightly in 2018 compared to the previous year, although clearance increased significantly. To reach its ambitious targets for 2025, Cambodia will need to secure additional funding and extra capacity and gain access to the non-demarcated border areas.
Average Score	6.8	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- Cambodian Mine Action and Victim Assistance Authority (CMAA)

NATIONAL OPERATORS

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

INTERNATIONAL OPERATORS

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

OTHER ACTORS

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

UNDERSTANDING OF AP MINE CONTAMINATION

As at December 2018, Cambodia estimates remaining anti-personnel mine contamination as over 890km² across 9,804 suspected hazardous areas (SHAs)¹ (see Table 1). The CMAA, which oversees the mine action database, operates its own classification system for anti-personnel mine contamination that disaggregates land containing a dense concentration of anti-personnel mines (A1) from land containing scattered anti-personnel mines (A4).² The CMAA only classifies contamination as SHA despite the operators classifying contamination into both SHAs and CHAs. In 2019, the CMAA planned to migrate CHA data resulting from the cluster munition remnant survey (CMRS) process into its database but has no plans to reclassify landmine data.³

The baseline survey (BLS) was originally conducted between 2009 and 2012 across 124 districts. As at July 2019, BLS activities were ongoing across districts that were not surveyed or were only partially surveyed during the original implementation period. At end 2018, according to Cambodia's National Mine Action Strategy 2018–2025, 23 districts had been surveyed and the remaining 50 were expected to be surveyed by 2020.⁴ Most of these districts are in the central and eastern provinces which have a high concentration of contamination from explosive remnants of war (ERW) with moderate to little mine contamination.⁵

The CMAA and demining operators acknowledge that the BLS data are somewhat imprecise with contamination being found outside BLS polygons and substantial areas identified by the BLS now under cultivation.⁶ The CMAA analysed land release data and found that, on average, 32% of land classified as A1, and 51% of land classified as A4 had been reclaimed.⁷ In 2015, the CMAA introduced the land reclamation non-technical survey and baseline survey (LRNTS+BLS) methodology, a stand-alone process to re-survey or re-verify SHAs identified during the BLS. In 2015–18, the LRNTS+BLS has led to release of more than 44.4km² of anti-personnel mined area across 1,076 SHAs.⁸ According to Cambodia's Three-Year Implementation Plan, LRNTS will be conducted in 12,000 polygons across the country between 2018 and end 2020 and will continue if sufficient funding is available.⁹

Cambodia has extensive contamination from mines and ERW left by 30 years of conflict that ended in the 1990s. It is estimated that four million anti-personnel mines were laid after the fall of the Khmer Rouge in 1979 until the end of the internal armed conflict in 1998. Cambodia's anti-personnel mine problem is concentrated in, but not limited to, 21 north-western districts along the border with Thailand, which account for the large majority of mine casualties. The K5 mine belt, which was installed along the border

with Thailand in the mid 1980s in an effort to block infiltration by armed opposition groups, ranks among the densest mine contamination in the world.¹⁰

Cambodia also has significant contamination from cluster munition remnants (CMR) and other ERW. In 2018, CMR contamination was estimated at 738km² while ERW contamination was estimated at 468km² (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Cambodia for further information).

Table 1: AP mined area by province (at end 2018)¹¹

Province	SHAs	Area (m ²)
Banteay Meanchey	2,547	172,665,603
Battambang	1,898	213,133,756
Kampong Cham	12	976,234
Kampong Chhnang	52	4,158,738
Kampong Speu	424	48,236,143
Kampong Thom	556	56,448,570
Kampot	137	12,486,197
Kandal	2	63,203
Kep	6	641,691
Kratie	361	24,092,367
Koh Kong	103	19,041,908
Mondul Kiri	46	7,476,491
Oddar Meanchey	1,092	120,169,272
Palin	532	34,012,575
Phnom Penh	13	1,122,444
Preah Sihanouk	22	1,681,420
Preah Vihear	480	34,786,425
Prey Veng	1	5,900
Pursat	521	44,982,657
Ratanak Kiri	20	2,690,487
Siem Reap	813	76,906,134
Svay Rieng	94	9,394,723
Takeo	56	3,770,625
Tboung Khmum	16	1,493,673
Totals	9,804	890,437,236

NEW CONTAMINATION

The LRNTS+BLS has also led to the identification of 1,363 SHAs of previously unrecorded anti-personnel mine contamination, covering a total area of 117.9km².¹² In 2018 alone, the LRNTS+BLS captured 39.4km² over 499 SHAs of additional contamination, see Table 2.¹³ The CMAA have stated that it is working with the database unit and operators to investigate all newly added mine contamination.¹⁴ The CMAA's Department of Regulation and Monitoring and its quality management teams (QMTs) have been tasked with an increased focus on baseline survey operations to ensure that previously unrecorded mined areas added to the national

database are supported by strong and clear evidence and are of an appropriate size. In addition, the Database Unit will review newly captured mined areas and verification will be conducted by the QMTs on any questionable polygons. The CMAA will also hold an annual meeting with operators to discuss baseline survey and resurvey activity to ensure that they are conducted in accordance with the national standard. The meeting will also cover land release methods to strengthen their application and to ensure a consistent approach is taken by all operators.¹⁵

Table 2: Newly added anti-personnel mined area in 2018¹⁶

Province	Operator	SHAs	Area (m ²)
Banteay Meanchey	CMAC	112	8,068,216
Banteay Meanchey	HALO Trust	34	1,068,551
Battambang	CMAC	55	5,917,685
Battambang	MAG	23	1,902,392
Battambang	HALO Trust	8	577,817
Kampong Speu	HALO Trust	21	1,840,533
Kampong Thom	CMAC	19	1,496,981
Oddar Meanchey	CSHD	1	15,333
Oddar Meanchey	HALO Trust	42	6,032,885
Pailin	CMAC	40	2,759,137
Pailin	CSHD	1	15,557
Pailin	MAG	6	595,108
Pailin	HALO Trust	11	676,796
Preah Vihear	CMAC	10	947,450
Preah Vihear	HALO Trust	14	559,141
Pursat	CSHD	1	38,417
Pursat	HALO Trust	14	667,802
Siemreap	CMAC	81	5,306,041
Siemreap	CSHD	1	159,932
Siemreap	HALO Trust	5	712,504
Totals		499	39,358,278

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The CMAA was established by royal decree in 2000 with the mandate to regulate, monitor and coordinate the mine action sector in Cambodia.¹⁷ Cambodian Prime Minister Hun Sen is the CMAA President and Senior Minister Ly Thuch its First Vice-President, overseeing the authority. Former CMAA Secretary-General, H.E. Prum Sophakmonkol, who was moved to the Ministry of Foreign Affairs in 2016, was reappointed to the position with effect from the start of January 2018 bringing extensive experience and knowledge of mine action to planning and operations. It has been reported that the CMAA has strengthened over the past two years, with roles and responsibilities more clearly defined.¹⁸

The Cambodian Mine Action Centre (CMAC) was established in 1992, ostensibly as the national mine action centre. Before the existence of the CMAA, it had the responsibilities to regulate and coordinate the sector as well as undertake clearance. Since 2000, CMAC's activities have been limited to conducting demining, risk education, and training.¹⁹ CMAC conducts both humanitarian and commercial demining within Cambodia and is the country's largest operator.²⁰

In 2004, the Cambodian government passed Sub-decree 70 on the Socio-Economic Management of Mine Clearance Operations, which established the Provincial Mine Action Committees (PMACs) and the Mine Action Planning Units (MAPUs). The PMACs and MAPUs were tasked with establishing clearance priorities in consultation with the

affected communities to ensure that clearance addresses their housing, agricultural and infrastructure needs.²¹

The Cambodian government established the Technical Working Group on Mine Action (TWG-MA) as a consultative mechanism between the government and development partners. The Mine Action Coordination Committee (MACC) and several Technical Reference Groups (TRGs) have been established by the CMAA to facilitate coordination and feedback at a strategic and technical level in areas such as survey and clearance, risk education, victim assistance, information management, gender, and capacity development.²²

Consultation is built into every stage of Cambodia's Three-Year Implementation Plan 2018–20 and operators provide input into key strategic documents through open discussion forums and written feedback.²³ However, it has been reported that at times the process can be rather superficial, with feedback not necessarily taken into account.²⁴ The operating environment in Cambodia is permissive, with the Cambodian government open to the presence of international operators and supportive in administrative actions such as the granting of visas, approval of Memoranda of Understanding (MoUs), and importation procedures. The CMAA is open to the trialling and use of innovative clearance methods and tools to improve efficiency.²⁵

The UN Development Programme (UNDP), Norwegian People's Aid (NPA), and the Geneva International Centre for Humanitarian Demining (GICHD) all provide capacity development support to the CMAA. NPA, as part of a United Kingdom Department for International Development (DFID)-funded partnership that includes Mines Advisory Group (MAG) and The HALO Trust, focuses on information management, planning and prioritisation, gender mainstreaming, quality management, and strategic planning.²⁶

UNDP is in the third phase of its "Clearing for Results" programme, which was due to come to an end in 2019, although UNDP has put together a proposal for phase four of the programme from 2020 to 2025 which would focus on institutional capacity development as well as clearance. Its key capacity development deliverables are to support the development of the National Mine Action Strategy 2018–2025, establish a Performance Monitoring System (PMS) that links human development to mine action, and strengthen the CMAA's international and national participation in relevant fora.²⁷ In 2019, UNDP is commissioning consultants to assess the CMAA's institutional capacities and develop a comprehensive Capacity Development Plan. The Plan will also inform the development of a formal partnership strategy following the recommendations of a mid-term review that found that capacity development needed to be institutional rather than individual and that there was a lack of coordination among capacity development stakeholders.²⁸

The GICHD provides information management and risk management support to the CMAA.²⁹ In 2018, the GICHD presented a case study on the Management of Residual ERW in Cambodia, and hosted a Long Term Risk Management workshop and an exchange visit between the CMAA and the national mine action centre in Sri Lanka.³⁰

The Cambodian government contributes funding towards clearance and the management of the sector.³¹ From 2010 to 2018, the Cambodian government has reported contributing just under 30% of the total funding to the mine action sector (US\$99.49 million of US\$340.2 million).³² This includes US\$110 million for mine clearance operations in support of public infrastructure projects such as hydropower plants, irrigation system, roads, and bridges. Cambodia has also provided funding to the institutions responsible for managing and delivering mine action in the country. Indirectly, tax exemptions on mine action equipment has contributed to humanitarian demining operations, the CMAA reports.³³ From 2020 to 2025, Cambodia has estimated it will require \$372 million for mine action, of which \$38 million is for sector management and \$165 million for release of anti-personnel mined area. It is expected that the Cambodian government will continue to contribute towards clearance and the management of the sector. It will also settle the importation taxes for mine clearance equipment and provide a 10% in-kind contribution to any new donor funding, and a 10% in-cash contribution to the UNDP Clearing for Results programme.³⁴ Cambodia has a resource mobilisation strategy and intends to secure additional funding from the government, existing and emerging donors, and the private sector.³⁵

GENDER

The CMAA has developed a Gender Mainstreaming in Mine Action Plan (GMAP 2018–2022), an objective of the National Mine Action Strategy 2018–2025, which consists of six goals. These include:

- Preparation of guidelines to aid gender mainstreaming across all mine action
- Capacity building of relevant stakeholders to implement the GMAP 2018–2022
- Female representation and participation in planning and prioritisation, risk education, and in mine action and advocacy at all levels.

The Three-Year Implementation Plan 2018–2020 sets out activities in support of these goals.³⁶ NPA, as part of its capacity development, will support the CMAA with training on gender mainstreaming in mine action, on implementation of the GMAP 2018–22 and the development of associated guidelines, and on how to use gender- and age-disaggregated data in planning and prioritisation processes.³⁷ As at March 2019, across all operators engaged in demining, women accounted for just 21% of staff overall.³⁸

CMAC provides equal employment opportunities to both men and women. As at April 2019, women made up 10.5% of CMAC's workforce. CMAC operates in accordance with Cambodian Labour Law and is actively recruiting women to reach 15% female employment. Women currently work across all levels of the organisation, including in managerial level/supervisory positions. As at April 2019, two of the six directors were women.³⁹

The HALO Trust and MAG both have organisational gender and diversity policies. Within MAG, Cambodia's staff handbook contains guidelines on equal opportunities and diversity but, as at May 2019, no specific national policy or implementation plan had been elaborated. One of MAG Cambodia's key strategic objectives in 2019–20 is to focus on "meaningful" gender mainstreaming and gender equity within the programme. The programme will closely review recruitment policies and procedures to identify areas in which MAG can further encourage the recruitment and retention of women, as well as their development and promotion into more senior positions.⁴⁰ MAG's community liaison teams are gender balanced to ensure full representation of all groups during data-collection and community liaison activities. In MAG's survey and clearance teams 42% of staff are female, while 21% of their managerial level/supervisory positions are staffed by women.⁴¹

As at May 2019, 44% of HALO Trust's operational staff were women while only 8% of HALO Trust's staff in managerial level/supervisory positions were female. HALO has mixed gender survey, risk education and clearance teams.⁴²

INFORMATION MANAGEMENT AND REPORTING

The CMAA upgraded to the Information Management System for Mine Action (IMSMA) New Generation in 2014. The CMAA Database Unit (DBU) is responsible for collecting, storing, analysing and disseminating data in support of planning and prioritisation.⁴³

The CMAA shares all available data with operators on a monthly basis. In 2018, the DBU set up a virtual private network (VPN), which allows operators to send their daily data input directly into the DBU IMSMA database. The DBU controls the quality of all submitted reports and approves them via this online network.⁴⁴ Information management remains a challenge, though, with incompatibilities between operator databases and IMSMA, and inconsistencies between operator data and the data held by the CMAA.⁴⁵ Strengthening the national information management system for mine action is an objective of Goal 8 of the National Mine Action Strategy 2018–25.⁴⁶

Cambodia submits timely Article 7 transparency reports and gives regular statements on progress at the APMBC meetings of states parties. There have, though, been issues with the accuracy of information in Cambodia's reporting in the past, evidenced by discrepancies between data submitted by operators and that offered by the CMAA. To reduce further discrepancies, as at September 2019, the CMAA has officially declared that all relevant mine action stakeholders should only report official mine action data from CMAA.⁴⁷ In 2019, Cambodia submitted a six-year Article 5 deadline extension request from 1 January 2020 to 31 December 2025. Cambodia's extension request was submitted on time and is comprehensive, outlining achievements in 2010–18, the extent of the remaining challenge, its workplan to 2025, and its financial requirements. The CMAA has provided updated land release data for 2018 to Mine Action Review which differs from the land release data for 2018 submitted in its latest Article 7 report and 2019 Article 5 deadline extension request.

PLANNING AND TASKING

Cambodia's National Mine Action Strategy 2018–2025 was officially launched in May 2018 with eight goals for clearance of mines, CMR, and other ERW. The accompanying Three-Year Implementation Plan 2018–20 sets out the activities and indicators that will need to be completed in order to meet these goals and objectives. The first goal is to release all known mined areas by 2025 through planned land release of 110km² a year.⁴⁸ Cambodia fell well short of this target for 2018, releasing only 65.8km².⁴⁹ In 2019, Cambodia submitted its Article 5 extension request with revised land release targets for 2019–25, as set out in Table 3. The targets seem arbitrary to say the least, and assume no contamination will be added, a highly questionable supposition.

Table 3: Annual targets for release of mined area in 2019–25⁵⁰

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

The CMAA maintains the annual clearance workplan made up of all the provincial clearance workplans. The MAPU is responsible for developing these workplans in accordance with the planning and prioritisation guidelines. The PMAC approves the workplans, which are then endorsed by the CMAA. The MAPU uses the provincial workplan to monitor clearance performance and report progress to the PMAC and the CMAA.⁵¹

The CMAA pursues a national mine action policy that is said to be “people centred”, balancing top-down policy-making with bottom-up community-up requirements.⁵² The CMAA establishes an annual list of priority villages based on area of BLS, casualty data, levels of poverty, and population size in accordance with the revised planning and prioritisation guidelines. At least 75% of funding and resources are allocated to these villages. The MAPU then develops a list of priority minefields within these villages, in consultation with operators, according to BLS land classification, casualty data, intended beneficiaries, level of threat, development needs and post-clearance land use.⁵³ In accordance with objective three of goal one of Cambodia's National Mine Action Strategy 2018–25, the CMAA has identified 500 priority villages that will be released by 2021.⁵⁴

Operators have expressed some reservations about the “mine-free village” approach with MAG advocating a province-by-province approach and The HALO Trust prioritising clearance of the highest impact, highest density minefields in the K5 minebelt. The HALO Trust has expressed concerns that the mine-free village approach will lead to clearance of low-impact, low-density minefields in order to declare the village mine-free, diverting resources from high impact areas.⁵⁵ MAG's concerns that impact should be taken into account in the prioritisation criteria have been noted by CMAA who have stated that there will be some degree of flexibility in the planning and prioritisation process.⁵⁶ The CMAA has stated it does not believe that high-density minefields should be the deciding factor for prioritisation as they believe the “mine-free village” approach addresses the needs of the affected communities.⁵⁷

Goal seven of the national mine action strategy focuses on establishing a sustainable national capacity to address residual contamination after 2025. Objectives include reviewing by 2020 the legal, institutional and operational framework, strategy, and capacity needed to address the residual threats.⁵⁸ The CMAA have stated that it is likely that the Royal Cambodian Army (RCA) will be tasked with addressing explosive threats after 2025.⁵⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Mine action is conducted according to Cambodian Mine Action Standards (CMAS), which are consistent with the International Mine Action Standards (IMAS). In 2018, a new CMAS on cluster munition remnant survey (CMRS) was adopted.⁶⁰ From 2019-21, the CMAA, with support from NPA, was planning to develop new standards – on animal detection, mechanical demining, information management, quality management, the environment, victim assistance and mine risk education – and to review the standards on accreditation of demining organisations and licensing of operations and on the monitoring of demining organisations.⁶¹ All operators will be consulted as part of this process and will provide feedback on any proposed modifications.⁶²

National standards are reflected in operators' standing operating procedures (SoPs).⁶³ Updates to the SoPs are conducted as and when required, such as when a need is identified through the CMAA-led Technical Reference Group. Reviews are conducted in consultation with all operators, and against IMAS and best practice.⁶⁴

The National Mine Action Strategy 2018–25 emphasises the need for more efficient use of demining assets. A 2016 review by the GICHD found that almost half the land released by full clearance or technical survey in 2015 contained no mines (26%) or very few (one to three) explosive items (23%).⁶⁵ In 2018, over 3.8km² was cleared without any anti-personnel mines being found.⁶⁶ While in a 2018 monitoring visit to Pailin province it was found that one in three of the mined areas could have been released by LRNTS rather than full clearance. UNDP has now mandated that all minefields in its targeted villages will be re-surveyed before clearance assets are deployed.⁶⁷ The CMAA recognises that for Cambodia to complete clearance by 2025 the full toolbox of land release methodologies must be properly applied and encourages operational efficiency amongst operators.⁶⁸ As at September 2019, the CMAA was planning to review the CMAS on baseline survey to strengthen the criteria on the evidence needed to capture polygons with new contamination. In addition, the CMAA will improve efficiency of the quality management team to strengthen quality assurance (QA) and quality control (QC) of survey and clearance activities.⁶⁹

OPERATORS

Mine clearance is undertaken mainly by the national operator, CMAC, and two international mine action non-governmental organisations (NGOs), MAG and The HALO Trust. To a lesser extent, mine clearance is also conducted by national operator the National Centre for Peace Keeping Forces, Mine and ERW Clearance (NPMEC), and by national NGO, Cambodian Self-help Demining (CSHD). International operator APOPO also conducts clearance in partnership with CMAC.⁷⁰

In 2018, CMAC deployed 25 non-technical survey personnel across five teams, the same as in 2017. In 2019, there were no plans to deploy non-technical survey teams. CMAC also deployed a total of 202 technical survey personnel across 30 teams of between five and seven staff each. This was an increase from the 187 staff deployed across 27 teams in 2017. In 2019, the number of technical survey personnel was due to increase to 231 across 37 teams. In 2018, CMAC deployed 1,248 clearance personnel, an increase of 7% from the 1,164 clearance personnel deployed in 2017. This decreased to 1,037 clearance personnel in 2019.⁷¹

In 2018, the HALO Trust deployed 45 personnel in nine teams of five, conducting non-technical survey, risk education and explosive ordnance disposal (EOD) callouts. HALO Trust considers technical survey equivalent to clearance so does not deploy separate personnel. In 2018, HALO deployed an average of 760 personnel per month for clearance (730 in teams and 30 in supervisory roles). There was no change in capacity from 2017 and HALO did not expect a change in 2019.⁷²

In 2018, MAG deployed a total of 228 personnel for mine survey and clearance. There was a significant increase from the 152 personnel in 2017 due to increased donor support with no significant change in numbers expected in 2019. MAG also deployed 15 community liaison staff, including its cluster munition remnant capacity, who undertake non-technical survey and risk education alongside other activities. This was an increase from the 11 staff deployed in 2017, with no change in capacity expected in 2019.⁷³

UNDP has supported the CMAA through the Clearing for Results (CFR) programme since 2006, awarding contracts funded by international donors through a process of competitive bidding.

In 2018, the CFR programme issued four contracts worth a total of \$1.43 million: three going to CMAC and the other to The HALO Trust. CMAC was also awarded land reclamation non-technical survey and baseline survey contracts worth about US\$180,000.⁷⁴ In 2019, CMAC was awarded three clearance contracts totalling \$1.06 million dollars with clearance targeted in high-priority villages in Battambang, Banteay Meanchey, and Pailin provinces. As at April 2019, CFR was on track to exceed the target of 47km² of mined areas located in the most affected and poorest provinces are impact-free.⁷⁵

The CMAA has calculated that in order to meet its 2025 land release targets for anti-personnel mined area, an extra 2,000 deminers and 100 support personnel will be needed. The CMAA proposes that these deminers will come from the RCA and that the Cambodian government will cover the salaries, insurance, uniforms, and operational costs with additional funding from the international community. It is estimated that during the first year of deployment the deminers will be able to release 35km², rising to 57km² from the second year.⁷⁶ As at August 2019, two meetings had been held between the CMAA and the Commander of the RCA. It was agreed during the second meeting in June 2019 to establish a Task Force comprising of officials from the CMAA and the RCA and to formulate a Memorandum of Understanding (MoU) which has since been drafted and shared for review.⁷⁷

The CMAA is responsible for quality management and since 2016 has deployed eight quality assurance (QA)/quality control (QC) teams.⁷⁸ In 2017, with UNDP support, it developed the PMS, which will track land use and socio-economic changes after release of mined area/ERW-contaminated land as well as monitor the implementation of NMAS as a management tool for the sector.⁷⁹ The CMAA approved the PMS, which was launched in May 2018 and in 2019 a pilot-test was planned for 122 completed minefields in Banteay Meanchey province. The pilot test will allow the CMAA to finalise the PMS output and outcome matrix, data collection tools, and reporting templates.⁸⁰ It is planned that use of half of the mined areas cleared in 2018 will be tracked by the PMS; these areas were to be selected by the end of 2019.⁸¹

OPERATIONAL TOOLS

In 2018, The HALO trust deployed three mechanical clearance teams and a remote-controlled vegetation cutter for ground preparation.⁸²

MAG used mine detection dogs (MDDs) subcontracted from CMAC to conduct survey and clearance. Mechanical assets were used to conduct both ground preparation and clearance with seven mechanical teams in total. MAG also continues to trial advanced detection systems, provided by the United

States Humanitarian Demining Research and Development programme, and uses drones to conduct non-technical survey, task planning, and post-impact monitoring.⁸³

APOPO provides CMAC with mine detection rats (MDR). In 2018, MDRs were used for clearance in Siem Reap and Preah Vihear provinces working together with vegetation-cutting machines and manual deminers. At the end of 2018, seven teams in total were working in the programme.⁸⁴

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of almost 73.51km² of mined area was released in 2018, of which 41.01km² was cleared, 8.69km² was reduced through technical survey, and 23.81km² was cancelled through non-technical survey. Over the course of the year, however, 39.4km² of previously unrecorded mine contamination across 499 SHAs was added to the database.

SURVEY IN 2018

In 2018, just under 32.5km² was released through survey, of which 23.81km² was cancelled through non-technical survey (see Table 4) and almost 8.69km² through technical survey (see Table 5). This is a 20% drop from the 40.37km² released through survey in 2017.

Overall non-technical survey output decreased by almost 9% from 2017 to 2018 although the figures provided by CMAA differ from the figures provided by operators by 154,150m².⁸⁵ Both CMAC and HALO Trust reported a decrease in non-technical survey output, this reduction was most pronounced for CMAC and was due to a reduction in their non-technical survey capacity.⁸⁶ MAG reported increased output due to increased non-technical capacity, and a greater proportion of polygons that had already been ploughed three times, therefore meeting the cancellation criteria.⁸⁷

Overall technical survey output fell by 39% from 2017 to 2018 although there was a marked difference in the figures provided by the CMAA when compared to the operators.⁸⁸ CMAC reported that it had reduced almost 21.6km² of land in 2018, significantly more than the 14.7km² reported by the CMAA.⁸⁹

Table 4: Cancellation of mined area through non-technical survey in 2018⁹⁰

Province	Operator	Area cancelled (m ²)
Banteay Meanchey	CMAC	1,944,335
Banteay Meanchey	HALO Trust	1,478,095
Battambang	CMAC	1,001,713
Battambang	HALO Trust	670,599
Battambang	MAG	4,839,639
Kampong Chhnang	HALO Trust	204,199
Kampong Speu	HALO Trust	1,671,965
Oddar Meanchey	HALO Trust	7,025,640
Pailin	CMAC	192,281
Pailin	HALO Trust	770,774
Pailin	MAG	764,542
Preah Vihear	HALO Trust	23,150
Pursat	HALO Trust	321,327
Siem Reap	CMAC	580,901
Siem Reap	HALO Trust	2,323,016
Total		23,812,176

Table 5: Reduction by technical survey of anti-personnel mined area in 2018⁹¹

Province	Operator	Area reduced (m ²)
Banteay Meanchey	CMAC	277,406
Banteay Meanchey	HALO Trust	42,083
Battambang	CMAC	6,464,971
Battambang	CSHD	15,162
Battambang	HALO Trust	128,761
Battambang	MAG	1,319,649
Oddar Meanchey	HALO Trust	23,926
Pailin	CMAC	75,084
Pailin	HALO Trust	235,859
Pailin	MAG	53,587
Siem Reap	CSHD	50,502
Total		8,686,990

CLEARANCE IN 2018

Overall technical survey output fell by 39% from 2017 to 2018 although there was a marked difference in the figures provided by the CMAA when compared to the operators.⁹² CMAC reported that it had reduced almost 21.6km² of land in 2018 a massive 14.7km² more than was reported by CMAA.⁹³

In 2018, during EOD spot tasks, a total of 4,301 anti-personnel mines were destroyed: 2,193 by HALO Trust, 1,457 by CMAC, 374 by CSHD, and 277 by MAG.⁹⁴

Table 6: Mine clearance in 2018⁹⁵

Province	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Banteay Meanchey	CMAC	162	5,181,424	1,066	5	603
Banteay Meanchey	HALO Trust	97	3,353,242	1,640	21	27
Battambang	CMAC	299	22,737,788	3,334	29	3,028
Battambang	HALO Trust	23	578,396	269	0	10
Battambang	MAG	88	246,001	343	25	100
Kampong Thom	CMAC	9	1,068,029	35	0	99
Kampong Thom	CSHD	4	31,667	2		4
Oddar Meanchey	CSHD	3	92,782	13		20
Oddar Meanchey	HALO Trust	70	1,761,619	2,187	2	5
Pailin	CMAC	33	2,097,716	319	2	485
Pailin	CSHD	2	11,089	10		11
Pailin	HALO Trust	37	747,655	407	2	10
Pailin	MAG	16	77,157	323		3
Preah Vihear	CMAC	19	1,314,475	1,233	0	217
Preah Vihear	CSHD	1	29,959	59		2
Preah Vihear	HALO Trust	3	127,390	2	6	0
Pursat	CSHD	2	43,539	72		17
Pursat	HALO Trust	13	446,242	302	4	32
Siem Reap	CMAC	22	923,495	80	0	98
Siem Reap	CSHD	3	78,626	22		35
Siem Reap	HALO Trust	25	57,023	0	0	0
Totals		931	41,005,314	11,718	96	4,806

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 7: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m ²)
2018	41,005,314
2017	27,680,000
2016	25,330,000
2015	46,470,000
2014 ⁹⁶	54,380,000
Total	194,865,314

Cambodia has committed to clearing all anti-personnel mine contamination by the end of 2025. It plans to steadily increase annual land release output from 84km² in 2019 to 110km² from 2020 to 2021, when 500 priority villages will be declared mine free, to 146.5km² from 2022 to 2025. Cambodia has released an average of 84km² per year since the 2014 Maputo Conference, so the land release targets it has set itself are very ambitious and require both additional funding and capacity. Cambodia has stated it will require an average of US\$62 million for sector management and clearance of mines, CMR, and other ERW.⁹⁷ From 2010 to 2018, Cambodia was averaging \$42.5 million in funding from the government and donor community, which would mean a 45% annual increase in funding.⁹⁸ While Cambodia expects to increase funding from domestic and private sources in the coming years there will still be a funding shortfall without increased donor support. The CMAA is working with the Convention's Committee on Enhancement of Cooperation and Assistance to seek support from states parties under the individualised approach with the first meeting planned for the Fourth Review Conference in November 2019.⁹⁹ In addition to the increased funding Cambodia has also calculated that it will need an extra 2,000 deminers to complete anti-personnel mine clearance by 2025. It is proposed that these deminers will come from the RCA.¹⁰⁰

Cambodia has made improvements to its planning and prioritisation system and implemented more targeted and efficient land release methodologies.¹⁰¹ However, the significant amounts of previously unrecorded contamination being added to the database hampers land release progress. It is vital that Cambodia ensures through quality management processes that anti-personnel mine contaminated land is only being identified through high-quality evidence-based survey and that land without contamination is not being added to the database.

The high-density K5 minefield lies along the Cambodian-Thai border some of which is not demarcated and where access is limited.¹⁰² Improved relations between Thailand and Cambodia have opened the way for increased border cooperation. The Thailand-Cambodia General Border Committee, chaired by the Deputy Prime Minister and Minister of Defence from both countries, has agreed that CMAC and the Thailand Mine Action Centre (TMAC) can cooperate to conduct demining along the Thai-Cambodian border.¹⁰³ In September 2018, CMAC and TMAC met and agreed to find a task for a pilot project, a small area that could be cleared within a month as a symbolic demonstration of two sides working together. As at April 2019, the task had yet to be decided but CMAC hoped to complete the pilot project by the end of the year.¹⁰⁴

- 1 APMBC Article 7 Report (for 2018), Point 4.
- 2 2019 Article 5 deadline Extension Request, Annex 1.
- 3 APMBC Article 7 Report (for 2018), Point 4; and email from Tep Kallyan, Deputy Secretary General, CMAA, 19 September 2019.
- 4 2019 Article 5 deadline Extension Request, p. 3.
- 5 CMAA, National Mine Action Strategy 2018–2025, p. 1.
- 6 Interviews in Phnom Penh with Prum Sophakmonkol, Secretary General, CMAA, 24 April 2018; and Greg Crowther, MAG, and Matthew Hovell, HALO Trust, 26 April 2018; Su Yeon Yang, Conflict Prevention Officer, and Tong Try, Senior National Project Officer, UNDP, 23 April 2019; and Heng Rattana, Director General, CMAC, 25 April 2019.
- 7 CMAA, National Mine Action Strategy 2018–2025, p. 8.
- 8 2019 Article 5 deadline Extension Request, p. 21.
- 9 Ibid., p. 42; and CMAA, Three-Year Implementation Plan 2018–2020, Phnom Penh, undated but 2018, p. 2.
- 10 CMAA, National Mine Action Strategy 2018–2025, p. 1; and The HALO Trust, "Where we work: Cambodia", accessed 10 July 2019, at: bit.ly/313jTKs.
- 11 Ibid.
- 12 2019 Article 5 deadline Extension Request, p. 21.
- 13 Article 7 Report (for 2018), Form 4.
- 14 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.
- 15 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 2.
- 16 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 17 CMAA, "Legal framework and mandate", at: bit.ly/2W7r3dJ.
- 18 Interviews with Su Yeon Yang, and Tong Try, UNDP, 23 April 2019; and Rebecca Letven, Country Director, MAG, Phnom Penh, 25 April 2019.
- 19 CMAC, "20 Years' Achievement in Mine Action 1998-2018 and Path Ahead", 2018.
- 20 Interview with Heng Rattana, CMAC, Phnom Penh, 25 April 2019.
- 21 GICHD, "Landmines and Land Rights in Cambodia", December 2010, pp. 9 and 13.
- 22 CMAA, National Mine Action Strategy 2018–2025, p. 24; and email from Tong Try, UNDP, 18 June 2019.
- 23 2019 Article 5 deadline Extension Request, pp. 146–50; and emails from Rebecca Letven, MAG, 9 May 2019; and Damian O'Brien, Programme Manager, HALO Trust, 10 April 2019.
- 24 Interview with Heng Rattana, CMAC, 25 April 2019.
- 25 Emails from Zlatko Vezilic, NPA, 4 April 2019; Rebecca Letven, MAG, 9 May and 28 June 2019; and Damian O'Brien, HALO Trust, 10 April 2019.
- 26 Email from Zlatko Vezilic, NPA, 4 April 2019.
- 27 UNDP, "Clearing for Results Phase III project document", 17 December 2015; and interviews with Su Yeon Yang, Conflict Prevention Officer, and Tong Try, Senior National Project Officer, UNDP, 23 April 2019.
- 28 UNDP, "Clearing for Results Phase III Annual Report", 2018.
- 29 GICHD, "Cambodia", at: bit.ly/2W6J1xc.
- 30 Email from Rob White, Advisor, Strategic Management & Residual Contamination, GICHD, 3 July 2019.
- 31 2019 Article 5 deadline Extension Request, p. 12.
- 32 Ibid., p. 6.

- 33 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 34 Ibid.
- 35 Ibid.
- 36 CMAA, Three-Year Implementation Plan 2018–2020, Phnom Penh, undated but 2018, p. 14.
- 37 DFID Capacity Development Report, Activity Detail Extract, 18 September 2018.
- 38 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, Table 18.
- 39 CMAC, "20 Years' Achievement in Mine Action 1998–2018 and Path Ahead", 2018; and interview with Heng Rattana, CMAC, Phnom Penh, 25 April 2019.
- 40 Email from Rebecca Letven, MAG, 9 May 2019.
- 41 Ibid.
- 42 Email from Damian O'Brien, HALO Trust, 10 April 2019.
- 43 CMAA, National Mine Action Strategy 2018–2025, p. 22.
- 44 Email from Rebecca Letven, MAG, 9 May 2019; and interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.
- 45 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019; and email from Prum Suonpraseth, CMAC, 1 July 2019.
- 46 CMAA, National Mine Action Strategy 2018–2025, pp. 14–15.
- 47 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 48 Three-Year Implementation Plan 2018–20, p. 3.
- 49 Article 7 Report (for 2018), Form 4.
- 50 2019 Article 5 deadline Extension Request, p. 8.
- 51 Ibid., p. 5.
- 52 Interview with Prum Sophakmonkol, Secretary General, CMAA, Phnom Penh, 24 April 2018.
- 53 2019 Article 5 deadline Extension Request, pp. 30–31; and email from Damian O'Brien, HALO Trust, 10 April 2019.
- 54 2019 Article 5 deadline Extension Request, p. 9.
- 55 Interview with Lasha Lomidze, Operations Manager, HALO Trust, 3 May 2019.
- 56 Email from Rebecca Letven, MAG, 9 September 2019.
- 57 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 4.
- 58 CMAA, National Mine Action Strategy 2018–2025, p. 14.
- 59 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 5.
- 60 UNDP, "Clearing for Results Phase III Annual Report", 2018.
- 61 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 62 Email from Zlatko Vezilic, NPA, 4 April 2019.
- 63 Ibid.; and email from Rebecca Letven, MAG, 9 May 2019.
- 64 Emails from Rebecca Letven, MAG, 9 May 2019; and Damian O'Brien, HALO Trust, 10 April 2019.
- 65 GICHD, "'Finishing the Job', an independent review of Cambodia's mine action sector", Geneva, 30 April 2016, pp. 41–42.
- 66 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 67 UNDP, "Clearing for Results Phase III Annual Report", 2018.
- 68 2019 Article 5 deadline Extension Request, p. 43.
- 69 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 70 2019 Article 5 deadline Extension Request, p. 48.
- 71 Email from Prum Suonpraseth, CMAC, 21 June 2019.
- 72 Email from Damian O'Brien, HALO Trust, 10 April 2019.
- 73 Emails from Rebecca Letven, MAG, 9 May and 28 June 2019.
- 74 Interview with Edwin Faigmane, Chief Technical Adviser, UNDP, Phnom Penh, 24 April 2018; and email, 18 September 2018.
- 75 Interview with Su Yeon Yang, Conflict Prevention Officer, and Tong Try, Senior National Project Officer, UNDP, 23 April 2019; and UNMAS, "Portfolio of Mine Action Projects: Cambodia", 2019.
- 76 2019 Article 5 deadline Extension Request, p. 41.
- 77 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 2.
- 78 Email from CMAA, 2 May 2017.
- 79 Interview with Edwin Faigmane, UNDP, Phnom Penh, 24 April 2018.
- 80 UNDP, "Clearing for Results Phase III Annual Report", 2018; and email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 81 Interview with Su Yeon Yang, Conflict Prevention Officer, and Tong Try, Senior National Project Officer, UNDP, 23 April 2019.
- 82 Email from Damian O'Brien, HALO Trust, 10 April 2019.
- 83 Emails from Rebecca Letven, MAG, 9 May and 28 June 2019.
- 84 APOPO, Progress Report 2018, p. 1.
- 85 The HALO Trust reported cancellation of 13,339,825m² (-1,148,940m²); MAG reported cancellation of 5,397,859m² (-206,322m²); CMAC reported cancellation of 4,920,342m² (+1,201,112).
- 86 Emails from Damian O'Brien, HALO Trust, 10 April 2019; and Prum Suonpraseth, CMAC, 15 August 2019.
- 87 Email from Rebecca Letven, MAG, 9 May 2019.
- 88 The HALO Trust did not report any reduction by technical survey as they consider it equal to clearance; MAG reported reduction of 353,783m² (-1,019,453m²); CMAC reported reduction of 21,551,407m² (+14,733,946m²).
- 89 Email from Prum Suonpraseth, CMAC, 15 August 2019.
- 90 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 91 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 92 The HALO Trust did not report any reduction by technical survey as they consider it equal to clearance; MAG reported reduction of 353,783m² (-1,019,453m²); CMAC reported reduction of 21,551,407m² (+14,733,946m²).
- 93 Email from Prum Suonpraseth, CMAC, 15 August 2019.
- 94 Ibid.
- 95 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 96 CMAA data reported 50.2km² released by full clearance in 2014.
- 97 2019 Article 5 deadline Extension Request, p. 55.
- 98 Ibid., p. 34.
- 99 Ibid., p. 14.
- 100 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.
- 101 2019 Article 5 deadline Extension Request, p. 41.
- 102 Ibid., p. 38.
- 103 Email from Shushira Chonhenchob, NPA (on behalf of Lt-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 104 Interview with Heng Rattana, CMAC, Phnom Penh, 25 April 2019.

CAMEROON



CLEARING THE MINES 2019

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2013
NEW EXTENDED DEADLINE NEEDED

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

**LOW, UNKNOWN
EXTENT**

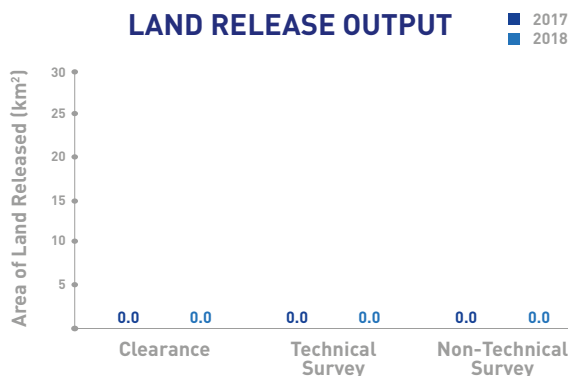
AP MINE
CLEARANCE IN 2018

0 km²

AP MINES
DESTROYED IN 2018

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Mines of an improvised nature continued to claim casualties, particularly in Cameroon's northern districts along the border with Nigeria amid escalating military activity by Boko Haram.

RECOMMENDATIONS FOR ACTION

- Cameroon should inform states parties to the Anti-Personnel Mine Ban Convention (APMBC) of the discovery of any anti-personnel mine contamination, including mines of an improvised nature. It should report on the location of all suspected or confirmed mined areas under its jurisdiction or control and on the status of programmes for their destruction in its Article 7 transparency report.
- Cameroon should request a new APMBC Article 5 deadline.
- As soon as security conditions permit, non-technical survey should start in the Extrême-Nord (Far North) region, which is reportedly the region most affected by conflict.
- Cameroon should try to mobilise and facilitate assistance and expertise from humanitarian demining organisations for survey and clearance.

DEMINING CAPACITY

MANAGEMENT

- No national mine action authority or national mine action centre

NATIONAL OPERATORS

- Army Engineer Corps

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Cameroon faced a continuing threat from mines of an improvised nature and other explosive devices as a result of escalating Boko Haram insurgency spilling over from Nigeria into the Lake Chad region. The threat appears to be concentrated in Cameroon's Far North region between Nigeria and Chad where its armed forces continue to conduct counter-insurgency operations as part of the Multinational Joint Task Force (MNJTF). The extent of contamination is unknown.

One member of Cameroon's elite Rapid Intervention Battalion was killed and 11 others injured in February 2019 when their truck detonated a mine of an improvised nature in the vicinity of Kerawa on the border with Nigeria. The troops were returning from an operation in which soldiers reportedly destroyed four workshops which were producing improvised mines and found to hold hundreds of containers of explosives, batteries, and detonators. Two other detonations in the area in October 2018 involving mines or improvised devices reportedly caused the deaths of three soldiers and injured

six others. Seven soldiers were killed in two separate incidents in the same area in April 2019.¹ Media also reported that two Cameroonian soldiers were killed after their truck drove over a mine near the town of Eyumedjock in an area of the South West region near the border with Nigeria where English-speaking separatists are active.²

A senior army officer commented in 2017 that some roads in areas bordering Nigeria were "riddled with mines."³ A Cameroonian analyst commented that insurgents were using "homemade mines" with increasing frequency on roads, houses and vehicles.⁴ The effect has been to reduce access for humanitarian organisations working in the area. International Organization for Migration (IOM) personnel who visited the Far North region in September 2018 were denied permission to visit a number of towns in Mayo-Tsanaga⁵, a department bordering Nigeria, because of the presence of mines and reports of kidnappings.⁶

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Cameroon does not have a functioning mine action programme. Mine clearance and explosive ordnance disposal (EOD) are the responsibility of the Cameroon Military Engineer Corps.

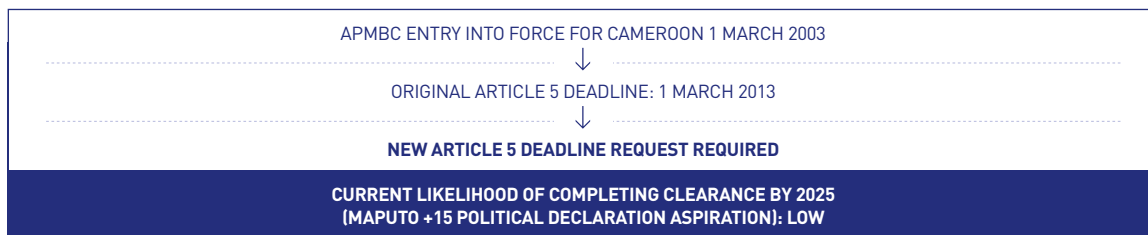
Over the past four years, the Army has received military training in demining and counter-IED [improvised explosive device] measures, mainly from the France and the United States.⁷ Cameroon received demining/EOD equipment from the United States and Russia in 2015, with armoured mine-detection vehicles being provided by the US Army Africa Command.⁸ The US also donated significant quantities of demining equipment, including metal detectors, to Cameroon in 2017.⁹ US Army Africa and the French Army's French Elements in Gabon (EFG) provided further demining and EOD training up to Level 4 EOD in March–April 2018.¹⁰

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

Cameroon did not report results of clearance and EOD conducted by its Army engineers.

ARTICLE 5 DEADLINE AND 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.

Cameroon has previously reported there were no areas of mine contamination under its jurisdiction or control. In view of the casualties reported by Cameroon from mines and/or victim-activated mines of an improvised nature, Cameroon needs to revise its position.

Under the APMBC's agreed framework, Cameroon should immediately inform all states parties of any newly discovered anti-personnel mines following the expiry of its Article 5 deadline in 2013 and ensure their destruction as soon as possible. It should also submit a request for a new Article 5 deadline, which should be as short as possible 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.

-
- 1 "Boko Haram landmines inflict heavy toll on Cameroon", Latin American Herald Tribune, 30 May 2019, at: bit.ly/2XUT4ef; "Cameroon: Boko Haram mine kills four soldiers in Far North region", Journal du Cameroun.com, 13 April 2019, at: bit.ly/2Z50o3u.
 - 2 "Mine blast kills two Cameroon soldiers", News24, 21 April 2018, at: bit.ly/2JRyDoR.
 - 3 P. Kum, "Landmine explosion kills two Cameroon soldiers", Anadolu Agency, 28 September 2017, at: bit.ly/2LxKjQO.
 - 4 "Boko Haram landmines inflict heavy toll on Cameroon", Latin American Herald Tribune, 30 May 2019.
 - 5 The towns were Talla-Katchi, Assighassia, Zéméné and Cherif Moussari.
 - 6 IOM, "Cameroon, Far North Region, Displacement Report, Round 15, 3–15 September 2018", p. 8.
 - 7 "Military Cooperation: mine clearing training (Sept. 19-30th 2016)", French embassy in Yaounde webpage at: bit.ly/2Z3ShnY; M. E. Kindzeka, "Cameroon Vigilantes Hunt for Boko Haram Landmines", Voice of America News, 4 March 2016, at: bit.ly/2XZGxGM.
 - 8 M. E. Kindzeka, "Land Mines Hamper Cameroon, Chad in Fight Against Boko Haram", Voice of America News, 3 March 2015, at: bit.ly/2XXOfkD; and "US Helps Cameroon in Fight Against Boko Haram", Voice of America News, 17 October 2015, at: bit.ly/2y1GeeR.
 - 9 "US donates mine-clearing devices to Cameroon", Journal du Cameroun, 24 April 2017; at: bit.ly/2Z3Hryl.
 - 10 "Génie Militaire – Des démineurs formés", Cameroon Tribune (Yaoundé), 23 April 2018, at: bit.ly/2M2uoJO.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JANUARY 2020
FIVE-YEAR EXTENSION REQUESTED TO 1 JANUARY 2025

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MEDIUM, **20** km²
(ESTIMATED)

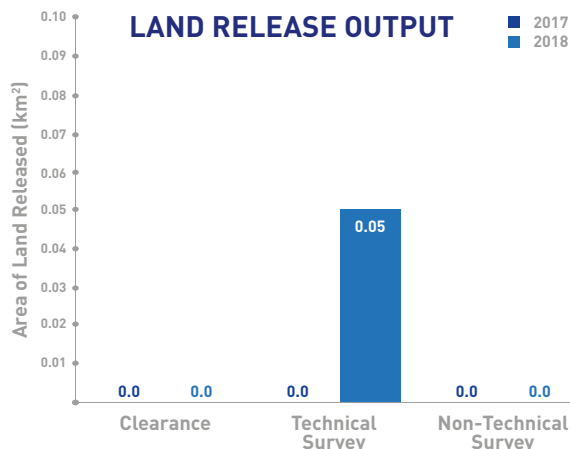
AP MINE
CLEARANCE IN 2018

0 km²

AP MINES
DESTROYED IN 2018

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

For a second consecutive year, Chad did not release any mined area as a result of survey or clearance. Humanity & Inclusion (HI) started demining operations under the European Union (EU)-funded PRODECO project in the Borno region. Strikes by unpaid deminers halted operations and delayed Mine Advisory Group (MAG)'s implementation of the PRODECO project in the most contaminated northern area of Tibesti, forcing it to redeploy teams to the Lac region. Chad has submitted a fourth request to extend its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline, this time for a further five years.

RECOMMENDATIONS FOR ACTION

- The National High Commission for Demining (HCND) needs urgently to facilitate survey and clearance to demonstrate donor support for operators is delivering results.
- 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 (the HCND). It should ensure that demining personnel and resources are fully mobilised and deployed on areas which are confirmed to contain anti-personnel mines.
- The authorities should streamline bureaucratic procedures to facilitate operators' ability to conduct survey and clearance.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	Contamination estimates are based on outdated and incomplete data underscoring the need for resurvey. This did not occur in 2018 but work on the database made some progress consolidating gaps in data, clarifying which areas need resurvey.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	4	Chad's national mine action authority coordinates the sector but lack of funds and deminer discontent over failure to pay salaries crippled progress in the last two years.
GENDER (10% of overall score)	3	Gender is not yet a priority in a programme that has undergone significant downsizing and struggled to mobilise resources to implement survey or clearance. Women find employment mainly in administrative roles, risk education, or victim assistance.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	Under the EU-funded PRODECO programme the Swiss Foundation for Mine Action (FSD) is upgrading the National High Commission for Demining (HCND)'s information management capacity. A key question is whether the improvements in data and data management will be sustained.
PLANNING AND TASKING (10% of overall score)	4	In March 2019, Chad submitted a request for an extension to its Anti-Personnel Mine Ban Convention Article 5 deadline but implementation depends on availability of funding.
LAND RELEASE SYSTEM (20% of overall score)	6	Chad has national standards, which were updated by HI in 2017, that comply with the International Mine Action Standards (IMAS).
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	2	The national mine action authority reported no land was released through survey or clearance in 2018 for the second successive year.
Average Score	3.9	Overall Programme Performance: VERY POOR

DEMINEING CAPACITY

MANAGEMENT

- National High Commission for Demining (HCND)

NATIONAL OPERATORS

- HCND

INTERNATIONAL OPERATORS

- Humanity and Inclusion (HI)
- Mines Advisory Group (MAG)

OTHER ACTORS

- Swiss Foundation for Mine Action (FSD)

UNDERSTANDING OF AP MINE CONTAMINATION

Chad reported that anti-personnel mines covered more than 117km² across 188 areas at the end of 2018 (see Table 1). Of the 10 affected regions, Borkou, Ennedi, and Tibesti in the north alone accounted for 97% of contamination.¹ Although no land was released through survey or clearance in 2018, this represented a 3% drop over the previous year's estimate of 122km².²

The decrease was achieved through a clean-up of data by the Swiss Foundation for Mine Action (FSD).³ However, many survey reports were missing and the HCND also identified suspected mined areas that need to be re-surveyed. The HCND's own operational plan acknowledged that lack of information about mine contamination means the estimate will need continuous revision and updating to take account of the results of further survey.⁴ Survey in 2015–16 continued to locate previously unrecorded mined areas, including a minefield in the Tanoi region of Tibesti said to be around 50km long and another mined area in the south between Sarh and Kyabé.⁵

Mine contamination in Chad's resource-rich northern regions resulted from Libyan support for rebels dating back to the early 1970s and sporadic clashes between the two countries that continued until 1987. The HCND reports the presence of 16 types of anti-personnel mine and 17 types of anti-vehicle mine. The north also has most of the country's unexploded ordnance, reportedly affecting some 5.8km².⁶

Chad contends with a number of security challenges, including rebel group activity in the north and Boko Haram's expanding insurgency in the Lake Chad region. Chad cited insecurity in Tibesti and the probability that mines had been newly laid there as among the reasons for its failure to meet its extended Article 5 deadline.⁷ The Multinational Joint Task Force reported casualties in clashes with Boko Haram fighters in 2018 from mines, including mines of an improvised nature.⁸

Table 1 : Anti-personnel mined area by region (at end 2018)⁹

Province	Confirmed mined areas	Area affected (m ²)
Borkou	51	25,354,623
Chari-baguirmi	1	241
Ennedi	13	16,524,754
Moyen-chari	12	3,139,713
Salamat	6	593
Sila	5	6,005
Tibesti	94	72,729,915
Wadifira	1	662
Lac	5	872
Totals	188	117,757,378

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Chad's mine action programme is coordinated by the National High Commission for Demining (Haut Commissariat National de Déminage, HCND) which comes under the Ministry of Economy and Development Planning.¹⁰ The National Demining Centre (Centre National de Déminage, CND), which earlier conducted clearance operations, appears to have been dissolved. In July 2017, nine years after the government first ordered the HCND to restructure, a new government decree reduced the number of personnel by more than half from 744 to 329. At the end of 2018, it had 324 staff.¹¹

The HCND is responsible for preparing a national demining strategy and annual workplans and proposing a budget to support their implementation.¹² Chad's latest Article 5 deadline extension request, submitted in April 2019,¹³ observed that its mine action programme lacked a strategic vision, operational planning and effective coordination, weakening its credibility nationally and internationally.¹⁴

The European Union is the principal source of international funding for mine action in Chad. A two-year EU-funded project (Projet d'appui au secteur du déminage au Tchad, PADEMIN) involving capacity development for the HCND and survey and clearance of mines and explosive

remnants of war (ERW) in the Borkou, Ennedi, and Tibesti (BET) region ended in 2016.¹⁵ In September 2017, the EU agreed to support a new four-year mine action project, PRODECO, from 2017 to 2021 at a projected cost of €23 million providing for survey and clearance by international operators HI and MAG in the BET region. It also provided for further training and capacity building for the HCND by FSD, including in information management.¹⁶

Government funding for mine action is limited to payment of salaries for national staff.¹⁷ However, the government's persistent non-payment of salaries has badly affected sector performance. A long-running strike by deminers starting halted survey and clearance in 2017. Threats by former deminers over government non-payment of salaries also prevented survey and clearance from proceeding in the Tibesti region in 2018 and forced MAG to redeploy staff to the Lac region.¹⁸ Further delays in payment were reportedly occurring in 2019. Operators also report lengthy delays obtaining the permits required to import equipment as well as in other bureaucratic procedures.

GENDER

Gender is not discussed in Chad's latest Article 5 deadline extension request or the July 2018 operational plan accompanying it. Gender balance and recruitment of female staff is not a priority for the HCND, which has undergone drastic downsizing in the past two years and still faces demands for back pay from staff.

Chad employs women in a variety of mine action roles. A woman underwent EOD [explosive ordnance disposal] Level 3 training for the first time in 2018, but HCND female staff are reported to be mostly in managerial, technical, and support jobs.¹⁹ Operators reported that risk education targeted all members of the community and disaggregated resulting data by gender.²⁰

INFORMATION MANAGEMENT AND REPORTING

The HCND uses the Information Management System for Mine Action (IMSMA) database but many records of past survey have been lost. 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.²¹

Chad submits Article 7 reports annually and in April 2019 submitted a request for a fourth extension to its Article 5 clearance deadline, providing updated estimates of contamination and attaching a July 2018 operational plan.

PLANNING AND TASKING

Chad published an Action Plan 2020–24 in July 2018, which set out contamination estimates, strategy, and priorities that provided a basis for the Article 5 deadline extension request submitted in April 2019. Objectives appeared aspirational rather than realistic. The operational plan provided for survey and clearance in 86 of Tibesti's 89 identified hazardous areas, but Chad's extension request observes that in Tibesti, the most heavily contaminated region, it was realistic to target survey and clearance in only 20% of the 89 hazardous areas.²²

Since September 2017, the main focus of Chad's mine action programme has been on implementing the EU-funded four-year mine action project (PRODECO) conducted by a consortium of four international operators.²³ HI was due to

focus on survey and clearance in the Borkou and Ennedi regions, MAG was to work in the Tibesti and Lake Chad regions, and FSD would provide training and support for information management while Secours Catholique et Développement (SECADEV) would address victim assistance.²⁴

PRODECO's initial targets included conducting non-technical survey in 30 zones in the Lake Chad and Tibesti regions, release of 2.7km² of mined land in BET region, to release 200,000m² of mined land along roads in Tibesti, and, in the Lake Chad and Tibesti regions, to either release 50,000m² of land contaminated with ERW or conduct 100 spot tasks.²⁵ FSD is to provide technical support, training, and capacity building to the HCND, including support for the use of the IMSMA database.²⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Chad's national mine action standards are believed to be consistent with the International Mine Action Standards (IMAS). HI started a review of Chad's standards in 2016 and reported in September 2017 that 11 national mine action standards had been updated and issued, following HCND approval.²⁷

OPERATORS

The HCND had a total staff of 324 at the end of 2018. HI did not provide details of its capacity. MAG employed 47 deminers, survey, and mechanical personnel in its total staff of 97 but conducted no survey or clearance operations in 2018 because of insecurity in its designated operating area.²⁸ FSD did not conduct operations but provided support to information management, training in administration, logistics and procurement, and offered technical advice on QA/QC.²⁹

OPERATIONAL TOOLS

Mine clearance is largely manual. However, HI, working with Mobility Robotics and the HCND, started testing drones for inspection and mapping of hazardous areas. Tests were continuing in 2019 on various categories of drones and sensors, over different sites, at different altitudes. In the process the tests were developing standing operating procedures (SoPs) for drone use and compiling a database of ground signs for analysis of drone-generated imagery.³⁰

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

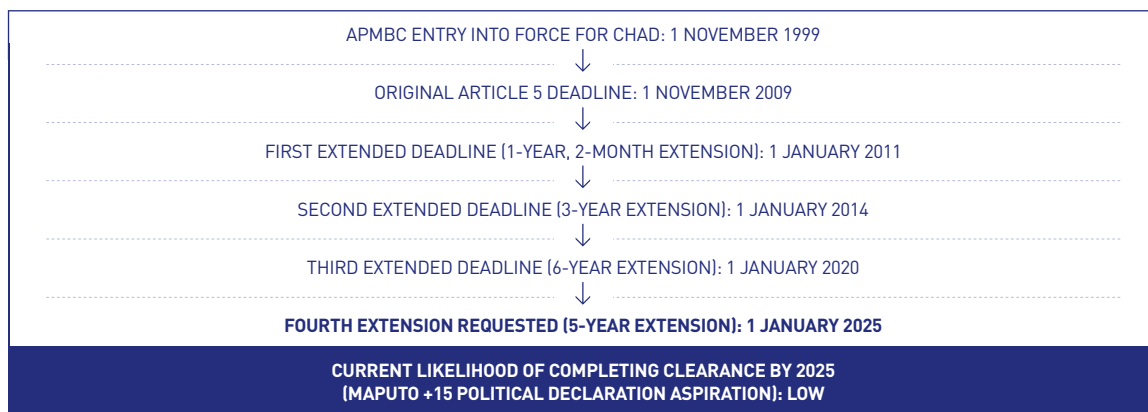
The HCND reported that no land was released as a result of survey or clearance in 2018.³¹

After long delays importing equipment, MAG set up two bases in Tibesti but was unable to start operations because of insecurity. MAG later deployed survey teams to the Lac region and reported conducting non-technical survey in 25 areas without identifying any new hazardous areas. It also conducted technical survey, which reduced 49,000m² of mined area.³²

Under the EU's PRODECO project, MAG had planned to deploy demining teams to the Tibesti region in June 2018 but it was prevented from operating there by security problems.³³

HI did not provide results of its activities in 2018. Chad reported HI started demining in the Borkou region in November 2018.³⁴

ARTICLE 5 DEADLINE AND COMPLIANCE



Chad has made little progress since the Third Review Conference in Maputo in 2014 and prospects remain uncertain. Mine action in Chad has been largely crippled by lack of funding, political inertia, and cumbersome bureaucracy. A variety of mainly local threats to security also obstruct progress. The EU-funded PRODECO project is the main focus of mine action sector activities, but between its launch in September 2017 and the end of 2018 it did not result in any significant release of land.

Table 2: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	0.0
2017	0.0
2016	0.5
2015	0.3
2014	N/R
Total	0.8

- 1 Email from Soultani Moussa, Manager/Administrator, HCND, 14 May 2019.
- 2 It is also less than contamination estimates in Chad's 2020–24 Action Plan and its 2019 Article 5 deadline Extension Request, which reported 137 mined areas covering almost 112km².
- 3 2019 Article 5 deadline Extension Request, April 2019, p. 2; interview with Matt Wilson, Head of Operations, FSD, Geneva, 6 June 2019.
- 4 HCND, "Plan d'action prévisionnel 2020–2024 de mise en œuvre de la composante déminage et dépollution de la Stratégie de l'action contre les mines de Tchad", July 2018, p. 24.
- 5 Statement of Chad, Anti-Personnel Mine Ban Convention (APMBC) 17th Meeting of States Parties, Geneva, 27 November 2018.
- 6 2019 Article 5 deadline Extension Request, April 2019, Annex 3, p. 26.
- 7 Statement of Chad, 17th Meeting of States Parties, Geneva, 27 November 2018.
- 8 Abdulkareem Haruna, "Nigeria: Boko Haram – Military winning the Lake Chad war despite losses – General Irabor", Premium Times, 29 April 2018, at: bit.ly/2Z1LP0g.
- 9 Email from Soultani Moussa, HCND, 14 May 2019.
- 10 2019 Article 5 deadline Extension Request, April 2019, p. 9.
- 11 Emails from Soultani Moussa, HCND, 19 June and 3 July 2018 and 14 May 2019.
- 12 2019 Article 5 deadline Extension Request, April 2019, p. 10.
- 13 Available at: bit.ly/201axNA.
- 14 2019 Article 5 deadline Extension Request, April 2019, p. 26.
- 15 Email from Romain Coupez, MAG, 3 May 2017.
- 16 HI "Country Profile Chad", September 2017, at: bit.ly/2LWNxhP.
- 17 Email from Soultani Moussa, HCND, 14 May 2019.
- 18 Email from Romain Coupez, MAG, 4 March 2019. "Tchad: grève des démineurs restés 10 mois sans salaire", ("Chad: deminers strike after 10 months without pay"), Agence de Presse Africaine, 10 May 2017, at: bit.ly/30Cz25g; and email from Julien Kempeneers, HI, 26 September 2017.
- 19 Email from Soultani Moussa, HCND, 14 May 2019.
- 20 Email from Romain Coupez, Country Director, MAG, 4 March 2019.
- 21 Interview with Matthew Wilson, FSD, in Geneva, 6 June 2019.
- 22 HCND, "Plan d'action prévisionnel 2020–2024 de mise en œuvre de la composante déminage et dépollution de la Stratégie de l'action contre les mines de Tchad", July 2018, p. 23; 2019 Article 5 deadline Extension Request, April 2019, p. 29.
- 23 HI "Country Profile Chad", September 2017, at: bit.ly/2Sri4nx.
- 24 Ibid.
- 25 Email from Soultani Moussa, HCND, 14 September 2018.
- 26 Ibid.
- 27 Email from Julien Kempeneers, HI, 5 September 2017.
- 28 Email from Romain Coupez, MAG, 4 March 2019.
- 29 Interview with Matthew Wilson, FSD, in Geneva, 6 June 2019; and email, 29 August 2019.
- 30 J. Fardoulis, X. Depreytere, E. Sauvage, and P. Gallen, "Drones in the Desert: Augmenting HMA and Socio-Economic Activities in Chad", Journal of Conventional Weapons Destruction, Issue 23.1 (April 2019).
- 31 Email from Soultani Moussa, HCND, 14 May 2019.
- 32 2019 Article 5 deadline Extension Request, April 2019, p. 25; email from Romain Coupez, Country Director, MAG, 4 March 2019; and telephone interview with Nina Seecharan, MAG, 9 July 2019.
- 33 Emails from Romain Coupez, MAG, 13 September 2018 and 4 March 2019.
- 34 Statement of Chad, 17th Meeting of States Parties, Geneva, 27 November 2018.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2020
UNCLEAR WHETHER ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

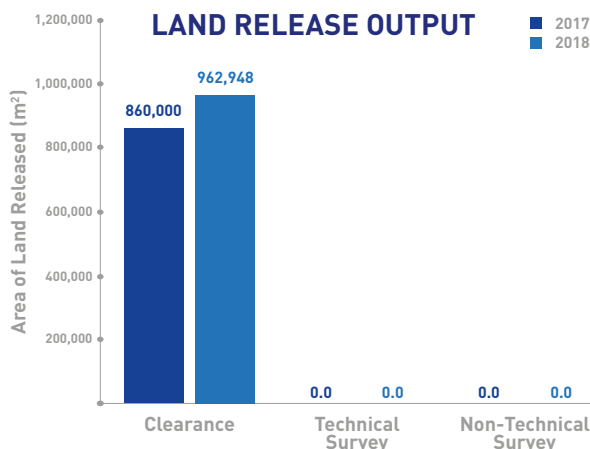
MEDIUM, **2.5KM²**
(ESTIMATED)

AP MINE CLEARANCE IN 2018

962,948M²

AP MINES DESTROYED IN 2018

3,908



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **HIGH**

KEY DEVELOPMENTS

Chile increased clearance output from 2017 to 2018 but still fell short of its planned land release target for the year. Chile has reiterated its commitment to completing clearance of outstanding anti-personnel mine contamination by its Article 5 deadline of March 2020, which makes 2019 a crucial year. Chile has set itself a very ambitious target for the year and will need to significantly increase its clearance output in the face of challenging climatic conditions.

RECOMMENDATIONS FOR ACTION

- Chile should clarify the amount of outstanding contamination in Seilao, Antofagasta, following technical survey of mined area there in 2017.
- Chile should accelerate clearance to ensure it meets its planned targets, increasing operational capacity to offset the challenging climatic conditions and delays to demining.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	Chile is contaminated with both anti-vehicle and anti-personnel mines with the majority of contamination in hard-to-access areas with technical survey planned in Antofagasta to more accurately define outstanding contamination.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	8	There is strong national ownership in Chile with leadership of the programme from the National Demining Commission (Comisión Nacional de Desminado, CNAD) and demining operations being fully funded by the Chilean government.
GENDER (10% of overall score)	6	Chile has taken steps to mainstream gender across the armed forces with women working at all levels of the mine action programme. Chile should take the next steps and formulate a mine action-specific gender and diversity policy.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	6	Chile uses the Information Management System for Mine Action (IMSMA) database, which it updated to Version 6 in 2017. Chile submits timely Article 7 transparency reports and provides regular updates on progress in Article 5 implementation at the annual meetings of states parties. However, there are inconsistent and inaccurate figures within reports and across reporting periods.
PLANNING AND TASKING (10% of overall score)	6	Chile has a National Plan for Humanitarian Demining 2016–2020 and submitted updated clearance plans in 2017 and then again in 2019. Chile failed to meet its land release target in 2018 and has set itself a very ambitious target for 2019.
LAND RELEASE SYSTEM (20% of overall score)	7	Chile is guided by the International Mine Action Standards (IMAS). All survey and clearance is undertaken by the military and both machines and dogs are used during operations.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	It is unclear whether Chile is on track to meet its Article 5 deadline as the small increase in clearance output in 2018 will not be nearly enough to meet its target. Chile faces delays to demining operations from the challenging climate and it is hard to see how it will meet its deadline without a major increase in capacity.
Average Score	6.4	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- National Demining Commission (Comisión Nacional de Desminado, CNAD)

NATIONAL OPERATORS

- Army Corps of Engineers, Navy Peace and Demining Division

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2018, Chile had almost 4.5km² of mined area (see Table 1) down from just over 5.1km² at the end of the previous year.¹

Table 1: Anti-personnel mined area by region (at end 2018)²

Region	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHAs and CHAs	Total area (m ²)
Arica and Parinacota	5	797,357	1	145,297	6	942,654
Antofagasta	4	158,278	2	3,129,888	6	3,288,166
Magallanes and Antártica Chilena	6	157,632	0	0	6	157,632
Tarapacá	3	49,199	0	0	3	49,199
Valparaíso	0	0	1	14,000	1	14,000
Totals	18	1,162,466	4	3,289,185	22	4,451,651

CHA = Confirmed Hazardous Area SHA = Suspected Hazardous Area

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. The regions of Antofagasta, Arica and Parinacota, and Magallanes and Antártica Chilena are contaminated with both anti-vehicle and anti-personnel mines while the regions of Tarapacá and Valparaíso are contaminated only with anti-personnel mines.³ Of the 22 mined areas identified in Table 1 ten contain only anti-personnel mines.⁴ The vast majority of the mines were laid in the northern region, with some minefields located as high as 5,000m above sea level.⁵

In 2017, a technical survey was carried out in Seilao, Antofagasta, identifying contamination estimated to cover 2.28km², an increase from the previous estimate of 1.97km².⁶ Chile had planned to conduct further survey in 2018 of newly identified mined area in San Pedro de Atacama to more accurately determine the extent of contamination.⁷ In May 2019, Chile stated that it planned to reduce the confirmed area of 2.28km² through technical survey and that a geomorphological study of the whole area was needed.⁸

Chile is also contaminated with cluster munition remnants, currently estimated at 97km² although actual contamination is likely to be much lower, and to a limited extent other unexploded ordnance (UXO) (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Chile for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The national mine action programme is managed by the National Demining Commission (CNAD), which is chaired by the Minister of Defence. 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 Anti-Personnel Mine Ban Convention (APMBC).⁹ Its main functions are to advise the President, mobilise resources, coordinate demining with state agencies, and develop plans for implementing the APMBC.

Demining operations are all funded by the Government of Chile. In 2018, some US\$4.25 million was allocated to the demining programme, a drop from the \$4.325 million allocated in 2017. The amount allocated corresponds to the planned budget.¹⁰

GENDER

While there is no specific gender policy within CNAD, Chile's policy of integrating women into the armed forces has been in place since 2000. As at May 2019, 14.4% of total armed forces personnel were female. In 2016, restrictions on the type of military positions a woman could hold were lifted and legislation was adopted to modify the military grading system, allowing women to be promoted in the same way as men. Women have been working in demining in Chile since 2004 across all types of roles, including as deminers and

in managerial/supervisory roles. In 2007, the first woman was appointed as Manual Demining Section Commander in Arica. In May 2018, a woman was appointed as Demining Company Commander in Arica. Chile has made provisions to make it easier for women to work in the sector by, for example, adapting demining equipment to better suit female specifications, providing childcare and eliminating the gender wage gap.¹¹

INFORMATION MANAGEMENT AND REPORTING

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.¹²

Chile has submitted its Article 7 reports almost every year since its accession to the convention in 2002 and makes regular Article 5 statements at meetings of states parties, although there have been some problems with the accuracy of the information presented. In previous years, Chile submitted clearance plans that contained estimates that were more than the amount of area that had been indicated as remaining.¹³

PLANNING AND TASKING

The National Plan for Humanitarian Demining 2016–2020 was formulated in accordance with the request of the Eleventh Meeting of the States Parties (11MSP) that Chile provide updates relative to the timelines presented in its 2011 extension request.¹⁴ The main objective of the plan is to eliminate all existing anti-personnel mines on national territory by the March 2020 deadline.¹⁵

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 (see Table 2).¹⁶ In its statement at the Seventeenth Meeting of States Parties, Chile indicated that by the end of 2018 it planned to clear 13 mined areas, followed by clearance of 14 mined areas in 2019, and clearance of the final mined area, which would be completed in 2020.¹⁷ In fact, Chile fell short of its land release target, clearing six mined areas totalling 962,948m².¹⁸

As at April 2019, Chile had cleared three mined areas totalling 26,603m² since January and planned to clear an additional 18 mined areas by the end of the year, leaving one mined area to clear in 2020 (see Table 3).¹⁹

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.²⁰ 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.²¹

Table 2: Mine clearance plan 2018–20

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

Table 3: Updated Mine clearance plan 2019–20

Year	Mined areas	Planned clearance (m ²)
2019	18	4,374,448
2020	1	50,600
Total	19	4,425,048

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Chile is guided by the international mine action standards (IMAS).²² It first developed a joint demining manual for its armed forces in 2009.²³ As at June 2019, the Armed Forces Manual of Humanitarian Demining and Clearance of Explosive Remnants of War was awaiting final approval.²⁴

OPERATORS

Mine clearance in Chile is conducted by the Army Corps of Engineers and the Navy Peace and Demining Division. In 2017, Chile deployed seven manual demining teams with a total of 207 deminers.²⁵

OPERATIONAL TOOLS

Since 2008, mechanical assets have been used to support manual demining in Chile. During 2018, machines were deployed to conduct clearance in Arica and Parinacota and Antofagasta.²⁶ Chile also used explosive detection dogs for the first time in 2018 to carry out quality control of an area that had been cleared using machines.²⁷

DEMINER SAFETY

In 2018, a deminer working in the Arica and Parinacota region detonated an M-14 anti-personnel mine while conducting clearance, which resulted in serious injuries to his face and hand.²⁸

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

In 2018, a total of 0.96km² was released through clearance in three regions and 3,908 anti-personnel mines and 1,117 anti-vehicle mines were found and destroyed (see Table 4). This was an increase from the 860,000m² cleared in 2017. No mined area was cancelled or reduced through survey in 2018.

Table 4: Mine clearance in 2018²⁹

Province	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed
Arica and Parinacota	2	715,920	2,310	883
Antofagasta	1	91,409	1,157	234
Magallanes and Antártica Chilena	3	155,619	441	0
Totals	6	962,948	3,908	1,117

AP = Anti-personnel AV = Anti-vehicle

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 5: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m ²)
2018	962,948
2017	860,000
2016	3,520,000
2015	1,890,000
2014	2,140,000
Total	9,372,948

Chile reiterated its commitment to fulfil its Article 5 obligations by 2020 in its statements to the Seventeenth Meeting of States Parties and at the 2019 Intersessional Meetings.³⁰ But Chile did not meet its clearance targets for 2017, clearing 0.86km² of its forecast 3.24km², or 2018, clearing 0.96km² of its forecast 1.39km², and has set itself the rather ambitious goal of clearing 3.37km² in 2019. This is a marked increase from the average 1.9km² per year of clearance Chile has achieved since the 2014 Maputo Conference. In a slightly confusing turn of events, Chile has stated that it will reduce 2,279,112m² of the total through technical survey in Seilao, Antofagasta, despite identifying this same area as suspected of having mine contamination through technical survey in 2017.³¹

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.³² Chile has reported that over the past three years these highland areas have been hit with particularly intense winters.³³ In 2018, clearance in Arica and Parinacota and in Antofagasta was interrupted for a number of months due to heavy snowfall.³⁴ While Chile may have taken steps to mitigate this by making changes to the operational plans, redistributing clearance machines, and transferring specialist personnel to provide further support, it has still been unable to meet its annual clearance targets for the past two years.³⁵ With the majority of remaining contamination in Arica and Parinacota and in Antofagasta it is difficult to see how Chile will reach its targets for 2019 without a major increase in demining capacity.

1	Anti-Personnel Mine Ban Convention (APMBC) Article 7 Report (for 2018), Form C.	18	Article 7 Report (for 2018), Form F.
2	Article 7 Report (for 2018), Form C.	19	Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019.
3	Article 7 Report (for 2018), Form C.	20	Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018; and Article 7 Report (for 2018), Form A.
4	Article 7 Report (for 2018), Form F.	21	Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
5	Article 7 Report (for 2009), Form I.	22	Article 7 Report (for 2018), Form F.
6	Article 7 Report (for 2017), Form F.	23	Manual No. MDO-90402. Article 7 Report (for 2015), Form F2.1.
7	Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.	24	Email from Col. Juan José López Demuth, Executive Secretary, CNAD, 27 June 2019.
8	Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019.	25	Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
9	Article 7 Report (for 2017), Form A3.	26	Article 7 Report (for 2018), Form F.
10	Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.	27	CNAD, "Desminado Canino", 27 December 2018, at: bit.ly/2VCpHwb .
11	Statement from Chile during the Thematic Discussion on Integrating Gender into Mine Action, APMBC Intersessional Meetings, 23 May 2019; and emails from Col. Juan José López Demuth, Executive Secretary, CNAD, 22 and 27 June 2019.	28	Article 7 Report (for 2018), Form F.
12	Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.	29	Ibid.
13	Conclusions on the implementation of Article 5, 16 th Meeting of States Parties, 18–21 December 2017.	30	Statements of Chile, Committee on Article 5 Implementation, Geneva, 29 November 2018 and 22 May 2019.
14	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.	31	Article 7 Report (for 2017), Form F; and Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019.
15	Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.	32	Email from Col. Andres Caceres Cuadra, CNAD, 12 July 2018.
16	Article 7 Report (for 2017), Form F2.4.	33	Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019.
17	Statement of Chile, Committee on Article 5 Implementation, Geneva, 29 November 2018.	34	Article 7 Report (for 2018), Form F.
		35	Statement of Chile, Committee on Article 5 implementation, Geneva, 22 May 2019.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2021 NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

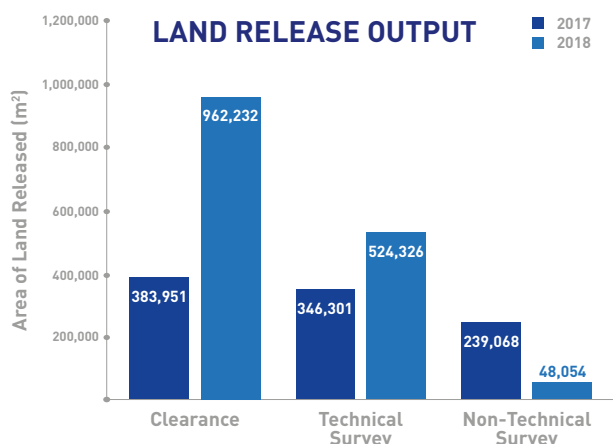
MEDIUM, **10** KM²
(ESTIMATED)

AP MINE CLEARANCE IN 2018

962,232 M²

AP MINES DESTROYED IN 2018

322



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Following the Presidential election in August 2018, Descontamina Colombia was reallocated to the Office of the High Commissioner for Peace and a new leadership appointed. It is expected that changes will be made to the mine action programme in 2019 and beyond with a new mine action strategy being developed and a new prioritisation model being implemented. However, the sector continues to face numerous challenges, not least because of a worsening security situation that restricts access to the most heavily contaminated mined areas and reports of new anti-personnel mines being emplaced.

Colombia is not on track to meet its current Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline and has

stated that it will request a second extension in 2020. Mine Action Review believes that this extension should be only an interim request to better determine the baseline of anti-personnel mine contamination. In order to meet this new date, Descontamina Colombia will need to increase the effectiveness and efficiency of the demining programme by making much needed improvements to information management and reporting, land release methodologies, quality management, and task prioritisation. Colombia continues to be without an accurate baseline of anti-personnel mine contamination, making it difficult to measure progress, not least because its reporting of survey and clearance is inaccurate.

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 APMBC Article 5.
- Colombia should report more accurately and consistently on land released through survey and clearance and rely on survey rather than “events” to understand anti-personnel mine contamination.
- Colombia should elaborate its land release national mine action standard (NMAS) and correctly implement both its technical survey and new quality management NMAS. Operators should be supported to use the full toolbox of land release methodologies to ensure they are conducting efficient survey and clearance.
- Colombia should elaborate a gender policy and implementation plan for mine action.
- Colombia should engage more positively with civilian operators, particularly in its strategic planning processes, tasking them in a manner that ensures the best use of resources and prioritises the highest impact areas in response to humanitarian and community needs.
- Quality management of operations should be enhanced and applied equally to all operators, including the military.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	3	There is no accurate estimate of anti-personnel mine contamination in Colombia. While the security situation makes access to some contaminated areas difficult, there has been no systematic survey undertaken of accessible areas, nor is there a plan to do so. There have also been reports of new mines being emplaced.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	6	Following the election of President Duque, Descontamina Colombia was without a director for six months. Operators have reported that slow decision-making and approval processes at the national level have delayed survey and clearance. In early 2019, Descontamina was reallocated to the Office of the High Commissioner for Peace and a new leadership appointed. However, most decisions related to mine clearance remain with the <i>Instancia de Desminado</i> , led by the Ministry of Defence.
GENDER (10% of overall score)	6	Descontamina does not have gender or diversity policy and implementation plan but certain minority groups do have legal protections. In 2019, a female lead for Descontamina was appointed. In total, women make up 63% of staff in the national authority.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	Poor information management and reporting continues to be a problem. Colombia relies on "events" where more recent survey data is unavailable to determine anti-personnel mine contamination, prioritisation, and planning despite their unreliability. Some capacity and improvement of information management systems has taken place. However, Colombia's Article 7 report for 2018 contained inconsistent land release figures.
PLANNING AND TASKING (10% of overall score)	4	Colombia has a Strategic Plan for Comprehensive Action against Antipersonnel Mines 2016–2021, which categorises mined areas according to impact. Operators outside the military, which are by far the largest operator, are typically assigned high-impact areas, which are often inaccessible due to security issues. Operators have found they are locked into scattered tasks by Descontamina without consideration for efficient resource deployment. The Armed Forces receive more tasks than they can manage, resulting in more than 60% of the assigned municipalities without operations on the ground, but still blocked to other organisations.
LAND RELEASE SYSTEM (20% of overall score)	5	Colombia has 15 national mine action standards (NMAS) in place, but no defined land release concept. The technical survey and new quality management NMAS has yet to be implemented effectively and the land release NMAS is still under development. Colombia has a large demining capacity with nine active operators who use an increasing range of demining assets. Efficiency and effectiveness of survey and clearance could still be improved with a quality management system causing unnecessary delays and mined areas that prove to have no contamination still being cleared.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	It is unclear how much land was released in 2018 due to discrepancies within Colombia's latest Article 7 transparency report. Colombia is not on track to meet its Article 5 deadline and it has already stated that it will request an extension.
Average Score	4.4	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT

- Office of the High Commissioner for Peace (OACP)
– Descontamina Colombia

NATIONAL OPERATORS

- Humanitarian Demining Brigade (Brigada de Desminado Humanitario (BRDEH))
- Marine Corps Explosives and Demining Association (AEDIM)
- Campaña Colombiana Contra Minas (CCCM)
- Asociación Colombiana de Técnicos y Expertos en Explosivos e Investigadores de Incendios y NBQR (ATEXX) (not operational in 2018)
- Humanicemos DH (not operational in 2018)
- Colombia sin Minas (not operational in 2018)

INTERNATIONAL OPERATORS

- Danish Demining Group (DDG)
- The HALO Trust
- Humanity and Inclusion (HI)
- Norwegian People's Aid (NPA)
- Perigeo
- Polus Colombia

OTHER ACTORS

- Swiss Foundation for Mine Action (FSD)
- United Nations Mine Action Service (UNMAS)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Organization of American States (OAS)

UNDERSTANDING OF AP MINE CONTAMINATION

The precise extent of anti-personnel mine contamination in Colombia remains highly uncertain, but as at October 2018 at least 28 of Colombia's 32 departments were suspected to have a mine threat.¹ As at July 2019, Colombia still lacked an accurate understanding of total contamination, which according to its strategic plan for 2016–21 was 52km² across 673 municipalities from a total of 1,122.² 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 5,000m², which generated the baseline contamination figure for the country.³ Historically, the most affected departments are said to be Antioquia, Meta, Caquetá, Arauca, Norte de Santander, Nariño, Cauca, Bolívar, Tolima, and Putumayo.⁴

In May 2019, Colombia provided a revised estimate that 713 municipalities had anti-personnel mine contamination, of which 350 have been declared free of mines, 163 are assigned, and the remaining 200 are awaiting intervention.⁵ However, this figure was not derived from a more systematic survey approach, and as at August 2019, there were no reported plans to conduct a national baseline of contamination. In 2018, Colombia reported that 166 suspected hazardous areas (SHAs) totalling 852,871m² and 199 confirmed hazardous areas (CHAs) totalling 1,133,303m² were added to the database through non-technical survey.⁶ Of this, The HALO Trust reported adding 527,603m², Humanity and Inclusion (HI) 290,000m², Norwegian People's Aid (NPA) 196,201m², and Campaña Colombiana Contra Minas (CCCM) 69,832m² of previously unrecorded anti-personnel mine contamination.⁷ None of this newly recorded contamination corresponds to new or recent use of anti-personnel mines; security still restricts access to areas where new mines are being laid.⁸

All the landmines remaining in Colombia are said to have been laid by non-state armed groups (NSAGs) and are anti-personnel mines of an improvised nature. According to The HALO Trust, mined areas in Colombia are low-density, nuisance minefields that average 4,000m² in size.⁹ Mines were planted in isolated rural areas 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.¹⁰ As there was little, if any, mapping of mined areas by NSAGs and the intended victims were the military or paramilitaries, local communities were often informed that certain areas were mined, though no specifics were given. This has led to a widespread belief that mines are everywhere and local people are afraid to use vast areas of land for fear of mines, despite scant firm evidence of their presence.¹¹

In many areas where the FARC demobilised, the government has yet to arrive in force, with other NSAGs now struggling for power.¹² 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. Mine action operations will only be undertaken with the local community's agreement, often in areas where mistrust of the state is high and community members are sceptical of the operator's intentions due to the perception that operators are linked to the military. This negatively affects the ability of humanitarian demining organisations to conduct survey and clearance and to determine an accurate estimate of contamination in these areas.¹³

NEW CONTAMINATION

In 2018, the amount of land used for coca leaf production reached an all-time high and it has been reported that new mines are being emplaced to protect these plantations. According to Miguel Ceballos, the High Commissioner for Peace, the government is particularly concerned about the resurgence of this practice in the northern Chocó region, an ELN stronghold.¹⁴ There was a dramatic rise in the number of civilian and military victims due to anti-personnel mines in 2018 to 178 from 57 the year before. As at June 2019, there had already been 72 victims of anti-personnel mines and, according to the High Commissioner, at least half of these are related to coca cultivations.¹⁵ HI estimated that of the 290,000m² of previously unrecorded anti-personnel mine contamination they identified in 2018, about 10% was new contamination mostly found in the department of Cauca.¹⁶

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In April 2017, following the adoption of a Presidential Decree, the Directorate for Comprehensive Mine Action (Dirección para la Acción Integral contra minas Antipersonal, DAICMA) became Dirección para la Acción Integral contra Minas Antipersonal – Descontamina Colombia. Descontamina Colombia was ostensibly made Colombia's national mine action authority, with responsibility for formulating the strategic direction of mine action, coordinating and monitoring mine action at national and local level, applying technical guidance and regulating state and non-state operators, and elaborating and implementing national standards. In practice, it also serves as the national mine action centre.¹⁷ In February 2019, responsibility for Descontamina Colombia was reallocated to the Office of the High Commissioner for Peace with a new Director, the Deputy Commissioner for Peace, elevating decision-making to the presidential level.¹⁸ As stipulated in the National Development Plan 2018–2022, the President has overall responsibility for public policy on mine action.¹⁹ However, in this process mine action has been disconnected from the Office of the Presidential Counsellor for Stabilization, limiting access to stabilisation and development funds for the sector.²⁰

In 2011, Decree 3750 created the Instancia Interinstitucional de Desminado Humanitario (IIDH – Interinstitutional Tribunal for Humanitarian Demining) which is composed of a representative from the Ministry of National 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 Defence and, determining and assigning demining tasks.²¹ In addition, Decree 3750 called for the elaboration of National Standards for Humanitarian Demining and regulates the quality management of demining operations.²²

Promulgated in July 2017, Decree 1195 outlines mitigation and correction measures that must be applied by operators when demining in National Parks and other areas of ecological

value.²³ Operators are currently expected to reforest in protected areas after clearance to mitigate environmental impact.²⁴

While roles and responsibilities at a national level are generally clear, operators often experience costly delays due to slow approval and lengthy decision-making processes.²⁵ The HALO Trust has reported that the importing process is often complicated which delays the importing of equipment from overseas.²⁶

The Swiss Foundation for Mine Action (FSD) has been helping Descontamina Colombia to develop and implement national standards and to improve their information management capacities, albeit with mixed success. In July 2019, following the start of FSD's new contract, an additional information management advisor was hired to support Descontamina with data analysis and evidence-based decision making.²⁷

The United Nations Mine Action Service (UNMAS) provides technical assistance to the national authority and provides training and capacity building with a focus on national operators. In 2018–19, UNMAS worked closely with Humanicemos DH to support capacity development with the ultimate aim of it becoming a fully self-sufficient operator.²⁸ Geneva International Centre for Humanitarian Demining (GICHD) provides capacity development support to Descontamina Colombia for information management, operational efficiency including survey, and national standards.

As at August 2019, Colombia had not provided information on how much it contributes to support the cost of the mine action centre and/or demining. It does receive very significant international donor support for mine action and has also secured funding from the Warren Buffet Foundation for demining equipment for the BRDEH. Colombia has estimated it will need \$320 million dollars to complete anti-personnel mine clearance in the country. As at June 2018, it had received almost \$150 million in external funding.²⁹

GENDER

In 2019, Colombia appointed Martha Hurtado as the head of Descontamina Colombia, one of the few female heads of a national mine action authority in the world. In the Office of the High Commissioner for Peace, of the 30 officials dedicated to mine action 19 (63%) are women and of these (63%) are in managerial/supervisory positions.³⁰ In 2017, at the request of the previous Director of Descontamina Colombia, GMAP initiated a consultative process to develop a national gender and diversity policy, but due to a change in management the process stalled.³¹

Operators often conduct non-technical survey in communities that were previously inaccessible due to the security situation. All the operators stressed the importance of community liaison and of working with local people, including by employing “local guides” who have either direct or indirect links with the FARC, as a way of both building relationships with the community and as a source of accurate information about the existence of contamination.³² The HALO Trust, HI, NPA, and the CCCM all reported consulting women and children during non-technical survey and community liaison

and employing women in their non-technical survey teams, but this is not done systematically nor is it required by the non-technical survey NMAS although it is a requirement of the mine risk education NMAS.³³

Colombia does have special constitutional protections for indigenous and Afro-Colombian communities which are taken into account during planning and prioritisation and stipulate that these communities require a different engagement approach.³⁴

The OAS has 55% of women employed in managerial or supervisory positions.³⁵ However, of the 4,076 accredited personnel in the BRDEH only five are women, one of whom leads a demining battalion.³⁶

The HALO Trust has an organisational gender and diversity policy. Open recruitment for jobs such as deminers specifically encourages women to apply because manual labour is often seen as not appropriate for women in some rural regions of Colombia. Women hold senior positions in the organisation, including deputy programme manager, location

manager, demining and non-technical survey supervisors and team leaders. An average of 17% of operations staff employed in 2018 were women. Of the senior management positions available, approximately 38% are occupied by women.³⁷

As at July 2019, NPA Colombia is in the process of developing a gender and diversity policy and has made gender and diversity the focus of one of its key performance indicators (KPIs). NPA is currently working to redress the gender balance in operations and at the managerial level. Women and people from indigenous communities were targeted during a recent recruitment drive where of 32 new staff, 11 were female (34%), 2 were persons with disabilities (6%), and 4 were from indigenous communities (13%). In 2018, 25% of staff at an operational level (37 of 150) and 41% of managerial staff were female (15 of 37). In 2019, NPA is planning to deploy an all-female demining team to challenge gender bias within Colombian society.³⁸

HI has an organisational disability, gender, and age policy which specifies that HI Colombia will need to elaborate an implementation plan. HI actively recruits women and offers gender-appropriate working conditions, such as separate living quarters in the field. Despite receiving fewer job applications from women, overall female representation in demining teams is at about 30%. In 2018, 14 of 48 survey and clearance personnel were women (29%), 2 of 3 Demining Area Managers were women (66%), 6 of 15 supervisors/team leaders were women (40%), and the Demining Manager was a woman.³⁹

CCCM has a gender and diversity policy and implementation plan. All non-technical survey teams are trained in gender sensitivity and inclusivity and CCCM has made gender and diversity part of its project indicators. In 2018, one fifth of operational roles and half of supervisory/managerial roles were filled by women.⁴⁰

INFORMATION MANAGEMENT AND REPORTING

Poor information management has been a feature of Colombia's mine action programme since its inception. Government Decree 1649 of 2014 assigned Descontamina Colombia responsibility for IMSMA database and to "compile, systematise, centralise, and update relevant information" to serve as a basis for programme planning.⁴¹ Descontamina Colombia uses the IMSMA database and its own Periferico database. While there continue to be issues with information management, the GICHD has noted improvements since 2017 in data sharing and data quality following a significant review and correction of IMSMA data.⁴²

Since 1990, Colombia has collected and reported on "events" related to anti-personnel mines, unexploded ordnance (UXO), and improvised explosive devices (IEDs). This data has been the main indicator of contamination and has formed the basis of demining planning and prioritisation.⁴³ In areas where non-technical survey has been carried out, there is a much clearer understanding of contamination. IMSMA "events" are the main source of contamination information in areas that have not yet been surveyed.⁴⁴ As at December 2018, 24,647 of these "events" had been registered in IMSMA across 28 departments.⁴⁵ Operators have reported that these IMSMA events are beset with errors, including duplications and inaccuracies. Despite some improvements to the registration of these events and a clean-up of the database when operators are assigned a task and investigate each event they are still finding that most do not correspond to the presence of either mines or UXO.⁴⁶ For example, HI stated that 76% of areas tasked in 2018 that were reported to contain anti-personnel mines were not linked to recorded IMSMA events.⁴⁷

In March 2018, FSD took over information management support for Descontamina Colombia from NPA. Descontamina Colombia in conjunction with FSD has been training the OAS to use IMSMA and claims that the quality of the database is improving.⁴⁸ Access to data has improved with IMSMA now available online and licences granted to the operators for access to the, separate Descontamina run, Periferico database. Training has also been provided for operators in the management of the online platforms that are required to submit demining outputs. HI has reported that there is a willingness from Descontamina to listen and provide support in solving problems.⁴⁹ Data collection forms for inputting data into Periferico are missing data fields and some information cannot be captured though a number of improvements have been made.⁵⁰ As at July 2019, the new national standard on information management was still under development.⁵¹ In the almost three years since the implementation of the Strategic Plan, Descontamina Colombia has not conducted significant analysis of the newly available data nor have they updated the categorisation of municipalities to prioritise actions on the ground.⁵²

Article 7 reports are submitted on a timely basis but the data is inconsistent and inaccurate. Colombia has stated that the numbers in its Article 7 report for 2018 are provisional, which may account for some of the discrepancies with operators' figures. However, this does not account for the inconsistent land release figures in its Article 7 report, with varying numbers provided for survey and clearance.⁵³ A major issue for Descontamina Colombia in providing timely and accurate land release data is the lengthy approval process which can mean that reports are approved six months after they have been submitted.⁵⁴ Colombia makes regular statements on Article 5 implementation at meetings of states parties but there are inconsistencies in the data reported between statements.⁵⁵

PLANNING AND TASKING

Colombia developed a five-year Strategic Plan for Comprehensive Action against Antipersonnel Mines 2016–2021. The aim is to address anti-personnel mine contamination in 673 municipalities, of which 199 are high-impact municipalities (type I), 291 medium-impact municipalities (type II), and the remaining 183 low-impact municipalities (type III), covering a total estimated area of 51km².⁵⁶ Type I comprise incidents involving casualties from anti-personnel mines or UXO registered on IMSMA since 2010; type II are incidents involving anti-personnel mines and UXO and relate to casualties registered on IMSMA before 2010; and type III are IMSMA “events” without human impact.⁵⁷

In May 2019, Colombia revised the estimated number of municipalities to 713 and reported that the suspicion of mines had been removed in 350 municipalities, though this was only achieved through actual survey or clearance in 174 of these and the majority of these areas have had very low, or even no contamination at all. Descontamina has assigned 163 municipalities to operators for demining operations although access to the most contaminated areas is constrained due to the prevailing security situation. In addition, 200 municipalities suspected to be contaminated with anti-personnel mines have seen no survey or clearance yet.⁵⁸

It is expected that a new strategic plan, directed by the new government and the development of which is being facilitated by the UN Children's Fund (UNICEF), will be elaborated by the end of 2019. In March 2019, a participatory review of the mine action sector began. Operators and other sector stakeholders such as UNMAS and FSD were asked to help redesign the mine action strategy through workshops, but these ceased in June 2019 along with any feedback or progress updates from Descontamina.⁵⁹ As at August 2019, there was no indication that the participatory reviews would continue, raising concerns that the new strategy will not respond to the operational reality on the ground or humanitarian and local community needs.⁶⁰ Additionally, some operators reported concerns that the framework for the strategy lacks specific detail in addressing some key issues, such as prioritisation, technical survey, insecurity, and lack of capacity at the national authority.⁶¹ Descontamina Colombia has also stated that it will work with the local authorities on the inclusion of demining in local development plans.⁶²

Descontamina Colombia had an action plan for 2018, but it did not include any specific targets for land release.⁶³ In its Article 7 transparency report for 2017, Colombia projected that it would release 1,445,971m² of anti-personnel mine, UXO and other IED contamination in 2018.⁶⁴ The reported total for 2018 of 1,535,213m² exceeded the target by 89,242m², but it is likely that the reported land release figure for 2018 is inaccurate. Colombia has projected that it would release 80 municipalities with a total area of 1,616,802m² in 2019.⁶⁵

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.⁶⁶ The Strategic Plan has categorised municipalities in Type (Priority) I, II, and III, which are then proposed for

task allocation to the demining organisations without a given order, hindering a systemic approach to the demining of the territory. Civilian organisations can generally only bid for tasks in assigned type I areas while the armed forces have been assigned more of the type II and III areas, many of which they have been able to cancel and release through discussion with the local community and local security councils.⁶⁷ Type I areas tend to have the highest levels of anti-personnel mine contamination and the most security issues. In these areas contaminated territories are often inaccessible to operators or operators are forced to suspend survey and clearance operations due to security concerns. These suspensions can last anywhere from a few days to indefinitely depending on the situation severely disrupting operations.⁶⁸ For example, as at July 2019, of the ten Type I municipalities currently assigned to NPA, nine were inaccessible due to insecurity.⁶⁹ The impact of this differential approach to task assignment is that it is difficult to directly compare the output and levels of operational efficiency between operators.

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 are often deployed into new areas disconnected from their existing areas of operation and without prior consideration of their capacity. This is not an efficient use of resources.⁷⁰ While an operator can lose an assigned municipality through inactivity, the bar for what constitutes an activity is so low that in reality no municipalities are reassigned. This had led to some operators running out of task sites while other tasks remain dormant.⁷¹ 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.

Within municipalities, operators prioritise tasks in agreement with municipal authorities, local leaders and the national mine action authority.⁷² There are no specific criteria for task prioritisation within municipalities and operators are at liberty to follow their own priorities.⁷³

In May 2019, Descontamina Colombia reported working with the Armed Forces on a new model of prioritisation. This model will integrate IMSMA data with more than 40 indicators that take into account security conditions, public policy, and bids from demining operators.⁷⁴ However, there was no consultation with operators on this new model nor has this model been discussed in the strategic review workshops as was previously agreed.⁷⁵

If an anti-personnel mine is found in an area that has been “declared free of the suspicion of mines” it is expected that the community will inform the national authority or demining operator. This reporting mechanism is communicated during non-technical survey and community liaison activities as stipulated in the non-technical survey and clearance NMAS. If the national authority is informed of any residual contamination then either the operator or the BRDEH will be tasked with carrying out the necessary survey and clearance.⁷⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Colombia now has 15 national mine action standards (NMAS) in place, including a glossary of mine action terms, up from just three when the 2016–21 strategic plan was launched.⁷⁷ In 2018–19, discussions took place on the land release and medical support NMAS and adjustments were made to the non-technical survey, manual demining, and mine detection dog (MDD) NMAS.⁷⁸ A new system of confidence levels has been introduced into the revised quality management standard. Each operator will be assigned a confidence level and 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.⁷⁹ As at July 2019, a pilot phase for this new system was in development.⁸⁰

The non-technical survey NMAS was amended to allow operators to investigate IMSMA events that fall outside their assigned area.⁸¹ The NMAS on technical survey was approved by Descontamina Colombia in December 2017 but is not yet implemented by all operators, as according to the standard if any contamination is found during survey full clearance must be carried out, negating the efficiencies of technical survey.⁸² A revised technical survey NMAS was expected to be approved by the end of 2019.⁸³

Colombia does not yet have a land release NMAS that has been approved and implemented by Descontamina Colombia. This is due mostly to the lack of experience and exposure of the national authority to the concept, despite ongoing technical support to the authority from FSD.⁸⁴ As a result there is an over-reliance on full clearance. The national standard does not allow cancellation of an area being cleared before at least 50% of the clearance is completed, even if all indications are that no explosive items will be found.⁸⁵

From Descontamina Colombia's 2018 figures, of 193 mined areas cleared, in as many as 95 (49%), no explosive device was found. While still extremely high, this is actually an improvement on 2017 when no explosive devices were found in 65% of areas cleared.⁸⁶ In the figures reported by operators for the CCCM, 44% (eight of eighteen) of areas cleared did not contain any anti-personnel mines; for HI it was 21% (three of fourteen), for NPA it was 26% (seven of twenty-seven).⁸⁷ In July 2019, work on the land release NMAS was halted until key staff at Descontamina had been replaced, due to occur by the end of August 2019.⁸⁸

OPERATORS

There are 12 operators accredited for demining in Colombia. The largest clearance operator is the Armed Forces Humanitarian Demining Brigade (Brigada de Desminado Humanitario (BRDEH)). The Marine Corps Explosives and Demining Association (AEDIM), a smaller military operator, conducts clearance and destruction of anti-personnel mines and explosive remnants of war (ERW) in areas under the jurisdiction of the National Navy.⁸⁹ Demining is also conducted by international mine action NGOs. The HALO Trust, NPA and HI are the largest of these operators, while Danish Demining Group (DDG), Perigeo, and Polus Colombia also conduct limited survey and clearance. National NGO the CCCM was also active in 2018. Humanicemos DH, the demining organisation comprised of ex-fighters from the FARC-EP, was accredited in August 2017.⁹⁰ As at July 2019, however, it was still not operational due to the OAS's inability to certify former fighters being reintegrated under the 2016 peace accord (see below).⁹¹ Another national NGO, Colombia sin Minas, has also been accredited but is not yet operational.⁹² As at September 2019, the military had been assigned 57% of the total number of areas tasked for demining.⁹³

BRDEH has been conducting humanitarian demining in Colombia since 2005.⁹⁴ In 2017, there were seven demining battalions operational across the country composed of between one and sixty deminers each.⁹⁵ In 2018, a total of 4,076 personnel had been accredited to conduct demining operations in the BRDEH along with two mechanical assets and 15 MDDs.⁹⁶ AEDIM has been operational since 2014. In 2018, a total of 206 personnel had been accredited to conduct demining operations.⁹⁷

In 2013, The HALO Trust became the first NGO to conduct demining in Colombia.⁹⁸ In 2018, The HALO Trust deployed 102 non-technical survey personnel and 235 clearance personnel.

There was a slight increase in clearance capacity from 2017 and a much larger 35% increase in non-technical survey capacity due to non-technical survey-only contracts funded by international and local donors. The HALO Trust reduced non-technical survey capacity in 2019 due to a lack of newly assigned areas but clearance capacity was expected to remain the same.⁹⁹

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. In 2018, NPA deployed 18 non-technical survey personnel, three community liaison/non-technical survey officers and 146 clearance personnel including 65 deminers. There was an increase in capacity from 2017 and NPA hoped to expand staffing in 2019.¹⁰⁰

HI began humanitarian demining in Colombia in 2017. In 2018, HI deployed 10 non-technical survey personnel and 38 clearance personnel, broadly the same capacity as in 2017. In 2019, HI planned to decrease the number of clearance personnel in favour of non-technical survey and Multi-Task Teams.¹⁰¹

The CCCM began humanitarian demining work in Colombia in 2017. UNMAS have supported the 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 the CCCM for this transition.¹⁰² In 2018, the CCCM deployed 60 non-technical survey personnel across 15 teams and 36 clearance personnel across six teams. The CCCM increased non-technical survey capacity by 115% from 2017 and hoped to increase capacity by another 60% in 2019. Clearance capacity also rose by 20% from 2017 to 2018; CCCM were hoping for a further 32% increase in 2019.¹⁰³

DDG has been active in Colombia since 2011 and received Phase 1 accreditation to conduct demining in 2017.¹⁰⁴ In April 2018, DDG began non-technical survey operations with one team in the department of Caquetá. As at April 2019, DDG was conducting non-technical survey in two municipalities in Caquetá.¹⁰⁵

Humanicemos DH are still not operational despite having 124 former fighters trained in survey and clearance as the United States (US) still recognises the FARC as a terrorist organisation so former fighters cannot be associated with any US-funded projects which means that the OAS is unable to QA/QC such deminers.¹⁰⁶ 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 2019. This has led to delays in Humanicemos DH being able to start clearance operations with personnel sitting idle while they wait for their accreditation.¹⁰⁷

The OAS serves as the body for accreditation and monitoring of humanitarian demining in Colombia. It has been criticised for being too focused on compliance rather than on supporting the operators to run effective demining operations. This has manifested itself in non-critical conformities being determined by rigid application and varied interpretation of national standards and/or SoPs, leading

to delays in operations.¹⁰⁸ At the request of Descontamina Colombia, FSD has been seeking to build capacity in the OAS, including by refocusing monitoring on QA and QC, rather than on minor administrative non-conformities.¹⁰⁹ It is hoped that revising the quality management NMAS and introducing confidence levels will improve these processes. However, the OAS has been without a director since May 2019, reducing the possibility of capacity building.¹¹⁰

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.¹¹¹ 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.¹¹²

Each operator carries out their own internal QC in accordance with the provisions in the Quality Management NMAS and their organisational SoPs. From June 2016 to June 2018, Descontamina Colombia had a team of Quality Managers providing technical assistance to 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.¹¹³

OPERATIONAL TOOLS

According to the national standards MDDs can be used in Colombia to conduct technical survey and clearance while mechanical assets can be used for ground preparation.¹¹⁴

NPA uses a toolbox comprising manual deminers, MDDs, and machines. In 2019, these assets were rebalanced to achieve optimal output, which was found to be a ratio of, three manual teams, three MDD teams, and two mechanical teams. Mechanical teams undertake ground preparation.¹¹⁵ In 2018, NPA had two incidents where mines were found after clearance had been conducted by MDD teams. After thorough investigation it was concluded that it was the way MDDs were used and not the effectiveness of the assets as such that

were the problem. NPA developed detailed plans to correct the problems identified and is confident that MDDs are an effective asset for Colombia when used correctly.¹¹⁶

In 2018, The HALO Trust conducted only manual clearance but carried out field trials of both a newly acquired mechanical asset for vegetation clearance and four MDDs.¹¹⁷ The CCCM conducts clearance using manual techniques only, though it planned to introduce MDDs into its operations in 2019.¹¹⁸ HI conducts clearance using only manual demining but was hoping to start machine-assisted clearance in the course of 2019.¹¹⁹

DEMINER SAFETY

In April 2018, FARC dissidents in La Reforma, San Martín municipality in the department of Meta seized a CCCM vehicle and held it for just over a month before returning it to the CCCM. When non-technical survey had been conducted in the area, the FARC dissidents had felt ignored, but after consultation the CCCM were allowed to conduct operations.¹²⁰ In the same month, BRDEH had a vehicle set alight in the Suarez municipality in Cauca. In addition, in 2018, BRDEH had to suspend operations in Aguazul, Casanare, and Quibdó, Chocó due to ELN presence and lack of community support, respectively.¹²¹

In July 2018, The HALO Trust had a vehicle seized and set on fire in the village of Santander, Uribe municipality, in Meta. An armed group of 15 FARC dissidents detained a team of four 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.¹²²

In February 2019, NPA staff were threatened and had a vehicle set alight in Puerto Lleras, Meta and were informed that they should leave the area. The area where the incident happened was close to coca production and distribution routes.¹²³

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

In 2018, Colombia released¹²⁴ a total of almost 1.54km², of which 0.05km² was cancelled through non-technical survey, 0.52km² reduced through technical survey and 0.96km² was cleared. A total of 322 anti-personnel mines and 104 items of UXO were found and destroyed.

Colombia also stated in its annual Article 7 report that 559,773m² was "released" through data clean-up in 2018.¹²⁵ This occurs in low-impact areas after discussions between the armed forces and the local security councils.¹²⁶

In addition, Colombia reported that 166 suspected hazardous areas (SHAs) totalling 852,871m² and 199 confirmed hazardous areas (CHAs) totalling 1,133,303m² were added to the database through non-technical survey.¹²⁷ As Colombia continues to operate without a land release NMAS, technically land is not "released" but declared free of the suspicion of mines and subsequently handed back to the communities.

SURVEY IN 2018

In 2018, a total of 48,405m² was cancelled through non-technical survey (see Table 1),¹²⁸ a massive 80% reduction from the 239,068m² cancelled in 2017. Operators' figures differ significantly from those reported by Descontamina.¹²⁹ In part, this misreporting may be due to Colombia's national standards which specify that land can also be cancelled through technical survey and clearance.¹³⁰

A total of 524,936m² was reported as reduced by technical survey in 2018 (see Table 2), double the output from the 346,301m² reduced in the previous year. Neither Handicap International nor The HALO reported reducing any mined areas through technical survey, as in 2018 it had not been properly implemented.¹³¹ This would suggest that Colombia is misreporting its survey results.

Table 1: Cancellation of mined area through non-technical survey in 2018¹³²

Department	Operator	Area cancelled (m ²)
Antioquia	BRDEH	373
Antioquia	HALO Trust	6,196
Bolivar	The National Army	6,032
Cauca	HI	1,600
Meta	NPA	26,996
Meta	HI	6,848
Total		48,045

Table 2: Reduction of mined area through technical survey in 2018¹³³

Province	Operator	Area reduced (m ²)
Antioquia	BRDEH	167,385
Caldas	BRDEH	15,221
Caquetá	BRDEH	107,913
Huila	BRDEH	13,299
Meta	BRDEH	12,527
Meta	HI	1,298
Nariño	BRDEH	12,340
Putumayo	BRDEH	57,235
Santander	BRDEH	7,151
Sucre	National Army	1,077
Tolima	BRDEH	66,874
Tolima	HALO Trust	9,822
Valle del Cauca	BRDEH	52,794
Total		524,936

CLEARANCE IN 2018

In 2018, a total of 962,232m² was cleared across 193 mined areas (see Table 3), a 150% increase on the 383,951m² cleared in 2017. Operators figures were again different from those reported by Descontamina.¹³⁴ The increased clearance output from the previous year is due to increase in operator capacity, improvements in operational efficiency, and more targeted deployment of clearance resources.¹³⁵

Table 3: Mine clearance in 2018¹³⁶

Department	Operators	Areas cleared	Area cleared (m ²)	AP mines destroyed	UXO destroyed
Antioquia	BRDEH	19	91,934	39	1
Antioquia	HALO Trust	32	112,206	72	1
Bolívar	National Army	7	55,657	0	1
Caldas	BRDEH	9	39,107	18	0
Caquetá	BRDEH	18	101,997	35	1
Caquetá	HI	2	2,410	1	0
Cauca	HI	3	4,228	0	0
Cauca	HALO Trust	1	490	3	0
Huila	BRDEH	4	15,377	8	1
Huila	CCCM	7	12,861	2	1
Meta	BRDEH	5	69,528	6	0
Meta	CCCM	9	18,415	2	1
Meta	HI	5	26,207	13	0
Meta	HALO Trust	11	99,389	11	2
Nariño	BRDEH	3	18,000	7	1
Putumayo	BRDEH	3	8,535	3	5
Putumayo	CCCM	3	3,845	5	0
Santander	BRDEH	2	712	25	0
Sucre	National Army	3	11,691	1	0
Tolima	BRDEH	20	120,827	62	88
Tolima	HALO Trust	15	81,983	4	1
Valle del Cauca	BRDEH	10	54,564	3	0
Valle del Cauca	HALO Trust	2	12,269	2	0
Totals		193	962,232	322	104

AP = Anti-personnel UXO = Unexploded Ordnance IED = Improvised explosive device

ARTICLE 5 DEADLINE AND COMPLIANCE

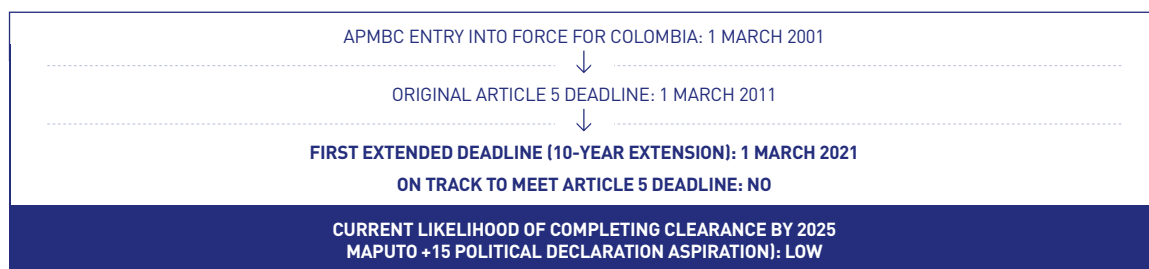


Table 4: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m²)
2018	962,232
2017	380,000
2016	290,000
2015	360,000
2014	540,000
Total	2,532,232

In May 2019, Colombia stated it was planning to request a further extension to its Article 5 deadline as Colombia would not complete clearance by 2021.¹³⁷ It is expected that Colombia will request a new deadline to 2025 but it is unclear whether Colombia will even be able to meet this new date. In order to do so there are numerous challenges that Colombia will have to overcome, some of which are outside of the control of the mine action programme and some which are of its own making.

It is very difficult to conduct an accurate assessment of Colombia's progress to date as it continues to be without a reliable estimate of outstanding anti-personnel mine contamination through evidence-based survey. Its estimate of anti-personnel mine contamination of 52km² across 673 municipalities is based on IMSMA data that operators have found to be consistently unreliable. In May 2019, this was revised to 713 municipalities, of which 350 had been declared free of the suspicion of mines, though in only 174 of these was this achieved through actual survey or clearance.

In 2018, Colombia reported "release" of 1.54km² of mined area, though this figure is likely to be inaccurate. Colombia has projected an increase in land release for 2019, but the areas declared free of mines so far have had very low or even no contamination. Most high-impact areas are inaccessible due to the difficult security situation. The ongoing issues with security, with the rise of FARC dissidents, the ELN, and drug trafficking, means it is unlikely humanitarian demining organisations will be able to access these areas any time soon. Focus for demining operations should remain on the high impact areas that can be accessed while ensuring that these operations are effectively and efficiently planned.

Non-technical and technical survey is 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. As at August 2019, the NMAS for land release was under discussion and the technical survey and new quality management NMAS had still to be implemented effectively. It is vital that operators are facilitated by Descontamina Colombia and the OAS to use the full toolbox of land release methodologies to ensure effective and efficient demining operations.

- 1 Email from Gabriel Vanegas Gómez, Adviser, Descontamina Colombia, 9 October 2018.
- 2 Descontamina Colombia, "Strategic Plan for Comprehensive Action against Antipersonnel Mines 2016–2021", p. 39.
- 3 Ibid.; and email from Gabriel Vanegas Gómez, Descontamina Colombia, 9 October 2018.
- 4 Email from Rupert Leighton, Country Director, NPA, 28 August 2019.
- 5 Statement of Colombia, Committee on Article 5 Implementation, Intersessional Meetings, Geneva, 22 May 2019.
- 6 Email from Martha Hurtado Granada, Deputy Commissioner for Peace, Office of the High Commissioner for Peace – Descontamina Colombia, 20 September 2019.
- 7 Emails from Arturo Bureo, Demining Coordinator, HI, 18 July 2019; and Rupert Leighton, Country Director, NPA, 15 July 2019; and Hector Hernandez Acevedo, CCCM, 5 August 2019.
- 8 Email from Martha Hurtado Granada, Office of the High Commissioner for Peace – Descontamina Colombia, 20 September 2019.
- 9 Email from Oliver Ford, Programme Support Officer, HALO Trust, 17 May 2018.
- 10 Email from Chris Ince, Programme Manager, HALO Trust, 28 May 2016.
- 11 Ibid.
- 12 The New York Times, "Colombia's Peace Deal Promised a New Era. So Why Are These Rebels Rearming?", 17 May 2019, at: nyti.ms/2YRcu1f.
- 13 International Crisis Group, "Risky Business: The Duque Government Approach", 21 June 2018; and interviews with Pauline Boyer and Aderito Ismael, HI, Vista Hermosa, 8 August 2018; Esteban Rueda, and Sergio Mahecha, NPA, Vista Hermosa, 9 August 2018; Hein Bekker, and Emily Chrystie, HALO Trust, San Juan de Arama, 10 August 2018; and John Charles Cagua Zambrano, and Francisco Profeta Cardoso, CCCM, Centro Poblado de Santo Domingo, 11 August 2018.
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- 16 Email from Arturo Bureo, HI, 18 July 2019.
- 17 Presidency of Colombia, Decree 672 of 2017.
- 18 Emails from Arturo Bureo, HI, 18 July 2019; and from Rupert Leighton, NPA, 15 July 2019; Statement of Colombia, Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 19 Email from Martha Hurtado Granada, Office of the High Commissioner for Peace – Descontamina Colombia, 20 September 2019.
- 20 Email from Jan Philip Klever, Programme Manager, UNMAS, 12 September 2019.
- 21 Descontamina Colombia, "Instancia Interinstitucional de Desminado Humanitario – IIDH", accessed 12 September 2018; email from Sergio Bueno Aguirre, Descontamina Colombia, 5 June 2018; and Ministry of National Defence, Decree 3750 of 2011.
- 22 Email from Sergio Bueno Aguirre, Descontamina Colombia, 5 June 2018.
- 23 Presidency of Colombia, Decree 1195 of 2017; and email from Carlos Afonso, FSD, 18 September 2018.
- 24 Email from Rupert Leighton, NPA, 28 August 2019.
- 25 Emails from Arturo Bureo, HI, 18 July 2019; and from Rupert Leighton, NPA, 15 July 2019.
- 26 Email from Oliver Ford, HALO Trust, 9 August 2019.
- 27 Email from Angela de Santis, Country Director, FSD, 20 August 2019.
- 28 Interview with Jan Philip Klever, UNMAS, Bogota, 16 August 2018; and email, 19 September 2018.
- 29 Statement of Colombia, Committee on Article 5 Implementation, Geneva, 7 June 2018.
- 30 Email from Martha Hurtado Granada, Office of the High Commissioner for Peace – Descontamina Colombia, 20 September 2019.
- 31 Email from Marc Bonnet, Head, Risk Management, GICHD, 31 August 2019.
- 32 Interviews with Pauline Boyer, HI, Vista Hermosa, 8 August 2018; Esteban Rueda, and Sergio Mahecha, NPA, Vista Hermosa, 9 August 2018; and Lina Moreno, and Andrés Osorio, HALO Trust, Bogota, 16 August 2018; and John Charles Cagua Zambrano, and Francisco Profeta Cardoso, CCCM, Centro Poblado de Santo Domingo, 11 August 2018.
- 33 Emails from Arturo Bureo, HI, 18 July 2019; and Rupert Leighton, NPA, 15 July 2019; Hector Hernandez Acevedo, CCCM, 5 August 2019; and Martha Hurtado Granada, Office of the High Commissioner for Peace – Descontamina Colombia, 20 September 2019.
- 34 Article 7 Report (for 2018), Form C.
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- 40 Email from Hector Hernandez Acevedo, CCCM, 5 August 2019.
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- 42 Email from Marc Bonnet, GICHD, 31 August 2019.
- 43 Emails from Carlos Afonso, FSD, 18 August 2018; and Gabriel Vanegas Gómez, Descontamina Colombia, 9 October 2018.
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- 45 Article 7 Report (for 2018), Form C.
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- 47 Email from Arturo Bureo, HI, 18 July 2019.
- 48 Email from Carlos Afonso, FSD, 18 August 2018; and Gabriel Vanegas Gómez, Descontamina Colombia, 9 October 2018.
- 49 Email from Arturo Bureo, HI, 18 July 2019.
- 50 Ibid.; and email from Arturo Bureo, HI, 18 July 2019.
- 51 Email from Arturo Bureo, HI, 18 July 2019.
- 52 Email from Jan Philip Klever, UNMAS, 12 September 2019.
- 53 In 2018, Colombia reported different land release figures in its Article 7 report in its land release figures in the table disaggregated by department and municipality, from the totals provided above the table. According to the figures in the table, Colombia released a total of almost 1.44km², of which 0.03km² was cancelled through non-technical survey, 0.52km² was reduced through technical survey, and almost 0.89m² was cleared. In comparison, the totals provided in the report indicate the Colombia released a total of 1,353,902m² in 2018, of which 31,953m² was cancelled through non-technical survey, 478,342m² was reduced through technical survey, and 843,625m² was cleared. A total of 251 anti-personnel mines, 149 items of UXO, and 123 IEDs were reportedly found and destroyed. Article 7 Report (for 2018), Form C, pp. 15–23.
- 54 Email from Marc Bonnet, GICHD, 31 August 2019.
- 55 In Colombia's statement at the 17MSP, as at October 31 2018, 271 municipalities had been cleared of the suspicion of mines, which had risen to 350 municipalities by Colombia's statement at the May 2019 Intersessional meetings. This increase cannot be accounted for by reported land released.
- 56 Descontamina Colombia, Plan Estratégico de Acción Integral contra Minas Antipersonal 2016–2021: "Colombia Libre de Sospecha de Minas Antipersonal a 2021", May 2016.
- 57 Email from Sergio Bueno Aguirre, Descontamina Colombia, 5 June 2018.
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- 130 Email from Martha Hurtado Granada, Office of the High Commissioner for Peace – Descontamina Colombia, 20 September 2019.
- 131 Emails from Rupert Leighton, NPA, 15 July 2019; and Arturo Bureo, HI, 18 July 2019.
- 132 Ibid.
- 133 Email from Martha Hurtado Granada, Office of the High Commissioner for Peace – Descontamina Colombia, 20 September 2019.
- 134 The HALO Trust reported that it cleared 254,345m² (-51,992m²), NPA cleared 101,756 m² (+101,756m²), HI cleared 107,158m² (+74,313m²), and CCCM cleared 36,609m² (+1,488m²).
- 135 Emails from Rupert Leighton, NPA, 15 July 2019; Arturo Bureo, HI, 18 July 2019; and Hector Hernandez Acevedo, CCCM, 5 August 2019; and Martha Hurtado Granada, Office of the High Commissioner for Peace – Descontamina Colombia, 20 September 2019.
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ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2026 UNCLEAR WHETHER ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

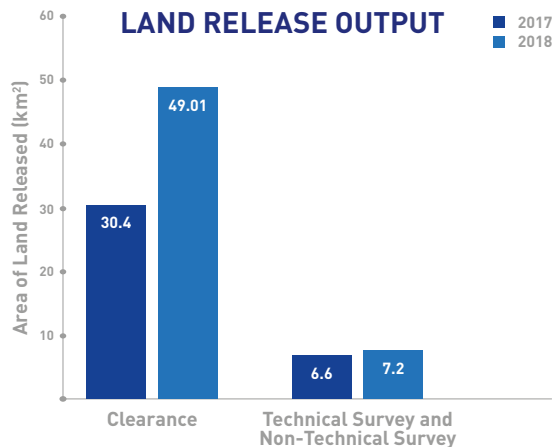
HEAVY, 100km²
(ESTIMATED)

AP MINE CLEARANCE IN 2018

49.01km²

AP MINES DESTROYED IN 2018

1,095 (including 111 destroyed as
part of the "less arms, fewer
tragedies" programme)



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **MEDIUM**

KEY DEVELOPMENTS

In 2018, Croatia released almost 49km² through clearance and 7.2km² through survey – a significant increase on the 30.4km² released through clearance and 6.6km² released through survey the previous year. However, many of the mined areas cleared in 2018 did not contain mines. This calls into question the efficiency of the demining 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". The failure of the Ministry of Defence (MoD) to release mined area, in line with Croatia's Article 5 extension request plans for annual output, is also cause for concern.

RECOMMENDATIONS FOR ACTION

- CROMAC should ensure that it has sufficient survey capacity in place to meet the targets outlined in its 2018 Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request.
- In addition to survey of suspected hazardous areas (SHAs), CROMAC should also review the basis on which confirmed hazardous areas (CHAs) are established.
- The MoD should ensure sufficient capacity is in place and should significantly increase clearance to release mined areas on military land, in line with Croatia's 2018 Article 5 deadline extension request.
- CROMAC should fulfil the pledge in Croatia's 2018 extension request to explore the potential for mine detection dogs (MDDs) to enhance the efficiency of technical survey. The 2015 demining law, which only allows use of MDDs in clearance, should be amended if necessary.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	Large areas of CHA were cleared in 2018 (and previous years) without finding anti-personnel mines. This raises doubt regarding the evidence underpinning CHAs and indicates the need for better survey prior to any clearance.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	8	There is strong national ownership of mine action in Croatia, with political will to implement Article 5. In January 2019, CROMAC and the Office for Mine Action (OMA) were integrated within the Ministry of Interior (MoI), but this is not expected to impact Article 5 implementation.
GENDER (10% of overall score)	5	Gender policies and implementation regarding mine action in Croatia are addressed under the national Gender Equality Act, which includes guidelines of gender equality and regulates against gender-based discrimination. However, it is hard to determine the extent to which this is mainstreamed and implemented in the mine action sector.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	8	Croatia has an information management system that is compliant with the International Mine Action Standards (IMAS) and which allows disaggregation of contamination by type and land release by method. Croatia provides regular updates on its progress in Article 5 implementation at APMBC meetings.
PLANNING AND TASKING (10% of overall score)	7	Croatia has a national mine action strategy which expires in 2019, in addition to annual operational workplans for mine survey and clearance. Elaboration of a new national mine action strategy now falls is the responsibility of MoI.
LAND RELEASE SYSTEM (20% of overall score)	6	The 2015 law on mine action encompasses national mine action standards. Clearance of a significant number of CHAs in 2018 where no contamination was found, highlights the need for robust evidence-based survey prior to any clearance.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	Land release output in 2018 was significantly greater than the previous year, although Croatia is still not reaching the planned survey output. Furthermore, the MoD cleared less than 5% of the 2018 output planned in Croatia's 2018 extension request.
Average Score	6.8	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- Ministry of Interior, in which CROMAC and OMA were integrated at the beginning of January 2019.

NATIONAL OPERATORS

- Forty demining companies are accredited for mine and battle area clearance, of which 26 conducted clearance in 2018.

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

Croatia is affected by mines and, to a much lesser extent, explosive remnants of war (ERW), 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 2018, Croatia had a total of more than 355km² of mined area, excluding military areas.¹ Of this total, 220km² was CHA, while mines were suspected to cover a further 135km² of SHA (see Table 1), collectively containing an estimated 31,862 anti-personnel mines and 6,430 anti-vehicle mines.²

A further 32.5km² of confirmed mined area exists in areas under military control, said to contain 25,276 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.³ The Demining Battalion of the Engineering Regiment is responsible for the clearance of all military facilities.⁴

This represents a decrease compared to the 269km² across 57 CHAs and 142km² across 47 SHAs, as at the end of the previous year.⁵ A total of 49km² was released through clearance and 7.2km² through survey in 2018. In addition, survey in 2018 added 1.4km² of previously unrecorded mined areas to Croatia's information management database.⁶

Eight of Croatia's twenty-one counties are still mine-affected. Sisak-Moslavina and Lika-Senj are the most heavily contaminated with anti-personnel mines, containing an estimated 12,479 and 11,129 mines, respectively, and accounting for 74% of the total number emplaced.⁷

At the end of 2018, 95.7% of mine contamination was on forested land; 4% on agricultural land; and 0.3% on other areas (e.g. water, marshland, and coastal areas).⁸ Of the total 355.5km² combined SHA and CHA, 60.12% is defined as Nature 2000 protected area.⁹ 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.¹⁰

Table 1: Anti-personnel mined area by county (at end 2018)*¹¹

County	CHAs	Area (km ²)	SHAs	Area (km ²)
Karlovac	7	14.99	5	31.07
Lika-Senj	9	86.81	8	31.75
Osijek-Baranja	10	35.19	9	17.63
Požega-Slavonia	2	9.97	2	5.92
Split-Dalmatia	3	16.4	2	3.35
Sisak-Moslavina	10	30.97	9	27.43
Šibenik-Knin	4	13.54	2	4.6
Zadar	7	12.44	8	13.46
Totals	52	220.31	45	135.21

* A further 32.47km² of mined area exists in areas under military control.¹²

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In August 2018, the Croatian government formally concluded that some 54 government agencies, including CROMAC and the OMA, were to be integrated within existing state administration bodies. This was formally concluded through two pieces of legislation enacted in December 2018 and which entered into force on 1 January 2019.¹³ As a consequence of these laws, CROMAC and OMA ceased to exist as separate government entities and have been integrated into the Ministry of Interior (Mol).¹⁴

Prior to 2019, both CROMAC (established in 1998 as the umbrella organisation for mine action coordination),¹⁵ and the OMA (created in 2012 as a government focal point for mine action),¹⁶ had operated as independent entities.

A new law on mine action was adopted by the Croatian Parliament on 21 October 2015.¹⁷ While the 2015 Law, which was initiated by the OMA with the text drafted by the Ministry of Interior, marked an improvement in certain respects (for instance, by permitting land release through technical survey), there were concerns that the new law would impede efficient and effective mine action.¹⁸

Regarding 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 unexploded ordnance (UXO) detection dogs. This replaces the former unified accreditation licence.¹⁹

GENDER

As an integral part of the Mol, the Civil Protection Directorate implements the Gender Equality Act (Official Gazette 82/08 and 69/17), which establishes national guidelines for gender equality, regulates against gender-based discrimination, and creates equal opportunities for men and women, including with regards to employment.²⁰

According to the national authorities, women, men, boys and girls are all effectively consulted during survey and community liaison.²¹

No information was available from the national authorities on the proportion of women employed in operational roles in survey and clearance teams, or on the proportion of women in managerial/supervisory level positions.

INFORMATION MANAGEMENT AND REPORTING

For the purpose of information management, CROMAC established a mine information system (MIS), which is said to be compliant with the IMAS and customised to meet CROMAC's needs. The MIS uses databases and a geographic information system (GIS) to deliver a fully integrated information management system.²² There are ongoing efforts to improve the quality of mine-related data, as a part of the regular activities of CROMAC's survey personnel.²³

Croatia submits annual Article 7 transparency reports and reports on its progress in Article 5 implementation at the APMBC intersessional meetings and meetings of states parties.

PLANNING AND TASKING

Croatia has a national mine action strategy for 2009–19, which was drafted by CROMAC with the agreement of concerned ministries, the OMA, the National Protection and Rescue Directorate, and local administration and self-administration bodies whose responsibility covers regions with hazardous areas.²⁴ The strategy, which was adopted by the Croatian Parliament, includes among its main goals the completion of mine clearance by 2019.²⁵ Elaboration of a new national mine action strategy falls under the jurisdiction of the Mol, which implies it could be a part of a nationwide strategy or the national programme of the Civil Protection Directorate for 2019–26.²⁶

In 2018, Croatia submitted and was granted a seven-year request to extend its APMBC Article 5 deadline from 1 March 2019 to 1 March 2026. In its 2018 Article 5 deadline extension request, Croatia stated it has prioritised the remaining mined areas according to those which affect safety; pose barriers to socio-economic development; and impact the environment in other ways. Priorities at the operative level are elaborated in annual demining action plans.²⁷

Based on approved funding, CROMAC drafts annual workplans, which are submitted to the responsible ministries and other state bodies for comment and approval.²⁸ According to its 2019 annual mine action plan, CROMAC planned to release a total of 54.8km² in 2019.²⁹

The Demining Battalion of the Engineering Regiment is responsible for clearance of all military facilities. The MoD submits its demining plan for military facilities to CROMAC annually.³⁰

In 2018, Croatia discussed the issue of national survey and clearance capacity to address mine and ERW contamination discovered after the release of contaminated areas or post completion (i.e. residual contamination), with the Geneva Centre for Humanitarian Demining (GICHD). CROMAC is working with the GICHD on a case study entitled "national capacities and residual contamination in Croatia", which will document progress that is being made on this issue. The integration of CROMAC within the Mol, which took effect from January 2019, is reported to be one of the first steps to deal with residual risk and liability and will elevate the issue within the Mol.³¹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

A new law on mine action was adopted by the Croatian Parliament on 21 October 2015, incorporating developments from the IMAS agreed upon at that time, and specifically those relating to the use of technical survey to confirm the presence or absence of contamination.³² The 2015 law introduces a new procedure for "supplementary general survey" (a form of non-technical survey) and enables "exclusion" (i.e. reduction) of SHAs through technical survey, which was not possible under the previous law.³³ The 2015 law has eliminated the need for standing operating procedures (SoPs), as all aspects of mine action are now clearly defined.³⁴ National mine action standards are also encompassed within it.³⁵

As clear from Table 3 on page 92, a significant number of CHAs were cleared in 2018 which were found to have no contamination. Furthermore, other large, overly-inflated CHAs were cleared with very few anti-personnel mines discovered. This strongly suggests the need for further evidence-based non-technical and technical survey prior to full clearance, in order to confirm direct evidence of mines and task areas for clearance or else cancel or reduce mined areas where no evidence of contamination exists.

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 European Union (EU) money in accordance with the Law on Public Procurement. The trust fund, "Croatia without Mines", raises money from private sources.³⁶

In 2018, 40 commercial companies were accredited to conduct mine and CMR clearance.³⁷ Of this, 26 companies were engaged in mine clearance operations in 2018 (see Table 3).³⁸ NGOs are barred from competing for commercial tenders as CROMAC views their subsidy by other funds as unfair.³⁹ The Demining Battalion of the Engineering Regiment is responsible for clearing all military facilities.⁴⁰

The state-owned enterprise, MUNGOS, was dissolved and its assets auctioned during the first half of 2018.⁴¹ The Croatian government decided to transfer MUNGOS employees to CROMAC, to help enhance QC activities and increase survey capacity.⁴²

CROMAC undertook all non-technical survey in 2018, deploying nine survey personnel. In 2018, CROMAC had approximately 40 deminers for technical survey, of whom 21 were previously employed by MUNGOS.⁴³

As barriers to entry into the mine clearance market are relatively low, there is considerable fragmentation. Of the 26 companies demining in 2018, 12 cleared less than one square kilometre (see Table 3).⁴⁴

The United Nations Development Programme (UNDP) 2014 needs assessment observed that in the preceding years the number of demining companies in Croatia had grown, but capacity overall had decreased.⁴⁵ 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.⁴⁶ This rise is in part due to deminers leaving employment and starting new firms, with the 2015 Law requiring a minimum of only five deminers per company.⁴⁷ The current number of demining companies is disproportionate to the number of deminers, and according to a representative from CROMAC, it would be better to have half the number of companies, but with each one being properly managed.⁴⁸

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.⁴⁹ A non-governmental organisation (NGO) representative claimed that the quality of demining suffers when the price of demining is low.⁵⁰ 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.⁵¹ 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.⁵² 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 in the mine action sector.⁵³

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.⁵⁴ 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.⁵⁵

However, bigger contracts, some of which covered areas as large as 5km², 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.⁵⁶ 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.⁵⁷ Very large project tenders are also more complicated to draft and demand more time and resources to administer and monitor.⁵⁸

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.⁵⁹ 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 corresponding annual budget had been set.⁶⁰

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.⁶¹ The Humanitarian Demining Association said 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.⁶²

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.⁶³ 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.⁶⁴

OPERATIONAL TOOLS

Clearance operations in Croatia are conducted manually, with mechanical assets, and using MDDs. In accordance with the 2015 Act on Mine Action and its prescribed demining methodologies, MDDs were used only for clearance and not technical survey.⁶⁵

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of 56km² of mined area was released in 2018, of which over 48.8km² was cleared by commercial demining companies and 7.2km² was released by CROMAC through survey (4.9km² reduced through technical survey and 2.3km² cancelled through non-technical survey).⁶⁶ In addition, a further 0.2km² was cleared by the Croatian army on military sites.

During land release operations a total of 1,095 anti-personnel mines were destroyed (968 by CROMAC and 127 by the MoD and Mol); 53 anti-vehicle mines (11 by CROMAC and 42 by the MoD and Mol); 460,406 other items of UXO (1,409 by CROMAC and 458,997 by the MoD and Mol).⁶⁷

SURVEY IN 2018

CROMAC released a total of 7.2km² through survey in 2018,⁶⁸ of which 2.3km² was cancelled through non-technical survey and almost 4.9km² was reduced through technical survey (see Table 2). This is a small increase on the 6.6km² released through survey in 2017.⁶⁹

No data was available on survey activities of the MoD.

In addition, survey in 2018 resulted in the addition of 1.4km² of previously unrecorded mined areas to Croatia's contamination in information management database.⁷⁰

Table 2: Reduction of mined area through technical survey in 2018⁷¹

County	Operator	Area reduced (m ²)
Karlovac	CROMAC	484,228
Požega-Slavonia	CROMAC	1,199,034
Split-Dalmatia	CROMAC	448
Sisak-Moslavina	CROMAC	1,347,716
Zadar	CROMAC	1,865,646
Total		4,897,072

CLEARANCE IN 2018

In 2018, 49km² of mined area was released through clearance (48.8km² by operators working under the direction of CROMAC (see Table 3) and a further 0.2km² by the Croatian army). During land release operations a total of 1,095 anti-personnel mines were destroyed (968 by CROMAC and 127 by the MoD and Mol); 53 anti-vehicle mines (11 by CROMAC and 42 by the MoD and Mol); 460,406 other items of UXO (1,409 by CROMAC and 458,997 by the MoD and Mol).⁷²

The 49km² of total mined area cleared in 2018 is a huge increase on 2017, when 30.4km² of mined area was released through clearance (29.9km² by operators working under the direction of CROMAC and a further 0.2km² by the Croatian army).

The increase in clearance output for 2018, compared to the previous year, is in part because of a change in when Croatia records clearance output, which is now only upon official certification. Consequently, several clearance projects completed in 2017, only received certification in 2018, thereby increasing the 2018 clearance output. In addition, realisation of €5.3 million in forest-related demining funds contracted in 2017 was delayed to 2018 (in addition to realisation of funds already allocated to 2018), thereby increasing funding and resulting clearance output in 2018.⁷³

Table 3: Mine clearance in 2018²⁴

Operator	County	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Alfa	Karlovac	1	70,903	0	0	0
Capsula Interna	BP/Lika-Senj/Sisak-Moslavina	4	3,377,363	21	0	203
Cor	BP/Lika-Senj/Šibenik-Knin	5	1,531,484	46	0	5
Detektor	Lika-Senj	1	1,167,209	35	0	40
Diz-Eko	Šibenik-Knin	1	108,950	0	0	0
Dok-Ing	Karlovac/Lika-Senj/ Sisak-Moslavina/Šibenik-Knin	7	4,815,397	58	0	202
Eksplorator	Lika-Senj	1	1,541,424	40	0	0
Fas	Karlovac/Osijek-Baranja/ Sisak-Moslavina/Split-Dalmatia	4	484,522	19	0	2
Fossio	Lika-Senj	1	266,802	0	0	0
Harpija	Karlovac/Lika-Senj/ Požega-Slavonia	6	1,795,312	201	0	245
Heksogen	Osijek-Baranja/ Požega-Slavonia/Šibenik-Knin/ Sisak-Moslavina	5	4,612,619	116	8	3
Istraživač	Lika-Senj/Osijek-Baranja/ Požega-Slavonia/ Sisak-Moslavina/Osijek-Baranja	6	3,306,913	40	0	323
Istraživač-Benz	Zadar	1	71,610	0	0	0
Kripton	Sisak-Moslavina	1	1,068	0	0	0
Mapper	Lika-Senj/Sisak-Moslavina	2	663,538	0	0	0
MKA demining	Požega-Slavonia	1	199,558	0	0	0
Orkan	Sisak-Moslavina	1	147,605	7	0	0
Piper	Karlovac/Lika-Senj	8	4,131,492	1	0	0
Piper	Sisak-Moslavina	1	10,241	0	0	0
Piton	Lika-Senj/Požega-Slavonia/ Sisak-Moslavina	3	1,263,840	24	3	4
Rumital	Lika-Senj/Sisak-Moslavina/ Zadar	4	3,924,642	78	0	113
Tetrazen	Lika-Senj/Požega-Slavonia	3	1,078,242	86	0	0
Titan	Karlovac/Lika-Senj/ Požega-Slavonia/Sisak Moslavina/ Šibenik-Knin	10	5,089,204	9	0	6
TNT7	Lika-Senj/Split-Dalmatia	3	982,852	0	0	0
Tornado	Lika-Senj/Šibenik-Knin	2	717,842	38	0	3
Zeleni kvadrat	Karlovac/Lika-Senj/ Sisak-Moslavina/ Šibenik-Knin Zadar	10	7,465,555	149	0	260
Totals		92	48,826,187	968	11	1,409

AP = Anti-personnel AV = Anti-vehicle

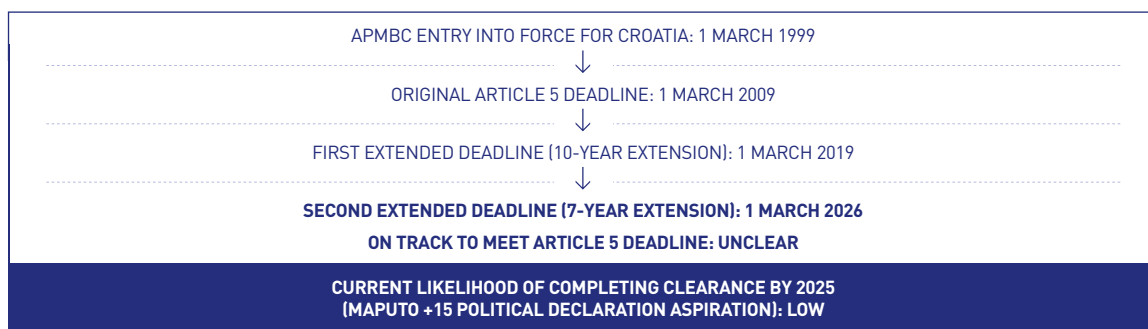
In addition, the Croatian army searched and cleared 185,416m² of military facilities in 2018, during which 16 anti-personnel mines and 12 items of UXO were found and destroyed.⁷⁵ This is a decrease on the 0.48km² of military facilities cleared in 2017.⁷⁶ As part of the continued “less arms, fewer tragedies” programme, the Croatian Police (under the MoI), and in partnership with the UNDP, also collected 111 anti-personnel mines and 42 anti-vehicle mines, which were subsequently transported to Croatian military facilities and destroyed.⁷⁷

According to its 2018 Annual Plan of Mines Action, CROMAC had planned to release a total of 56.5km² in 2018: 39.8km² through clearance and 16.7km² through technical survey and supplementary general survey (during which control samples are taken to determine the absence of mines and UXO).⁷⁸ Actual 2018 output was 56.03km², although was achieved

through conducting more clearance (48.83km²) than planned and less survey (7.2km²). In 2018, the largest proportion of clearance was in areas planned for economic activities, especially agricultural land, which the local and regional governments have stated as their priority.⁷⁹

The first part of the Swiss-funded project “Demining and Socio-Economic Integration”, focused on demining of heavily-mined Kotar forest, started on 6 August 2018 and finished on 17 September. In total, 1.74km² of forest was demined, with more than 3,500 mines and UXO discovered. According to Croatia, this is the highest number of mines/UXO found on a single mined area in the 20 years of Croatia’s mine action programme. At the height of clearance, around 260 deminers from 26 companies were deployed on a daily basis.⁸⁰

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the second extension (of seven years) granted by states parties in 2018), Croatia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2026. It is unclear if Croatia is on track to meet this deadline, as clearance of military facilities appears to be falling behind schedule.

Croatia’s 2018 request for a further seven-year extension to its Article 5 deadline, was submitted on “the basis that this is a realistic but not unambitious amount of time given the extent of the remaining problem and the human, material and financial resources available or expected, and the demining and survey capacities currently available.”⁸¹ 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.”⁸²

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 2026.⁸³

The remaining mined area to be addressed during the period of Croatia’s second extension (1 March 2019 to 1 March 2026) covers 387.3km². Implementing the extension request will require clearance of CHA (with minefield records), totalling 173.9 km² (including 32km² of mined area on MoD land); clearance of CHA (with no minefield records, but for which there is evidence of contamination), totalling 79.5km²; and survey and release of SHA totalling 133.9km² (see Table 4).⁸⁴ Survey will take place between 2019 and 2025, but any resulting clearance required, expected to be completed by the end of 2025.⁸⁵

Table 4: Planned demining output in km² (2019–26)⁸⁶

Area		2019	2020	2021	2022	2023	2024	2025	1 March 2026	Totals
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
Mined area (no records)		6	6	8.2	12.5	16.3	19.5	11	0	79.5
Survey		14	14	14	14	15.5	23.7	38.7	0	133.9
Sum totals		54.4	53.7	55.5	57.2	58.6	58.2	49.7	0	387.3

Given current capacity and the type of terrain and structure of remaining mined area, Croatia expects to be able to release roughly 56km² per year over the next seven years.⁸⁷ For comparison, in the seven-year period 2011–17, a total of 440km² was released: 238km² through clearance and 202km² through survey, which included significant amounts of cancellation between 2011 and 2015.⁸⁸ Considering that most of the remaining mined area is in more challenging terrain, which will significantly reduce the use of demining machinery, the 253.4km² of clearance (and 133.9km² 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.⁸⁹ The 5km² to 6km² per year planned for in the 2018 extension request, is substantially more than what the armed forces have cleared in recent years, and in 2018, the MoD cleared less than 0.2km², which is even less than the previous year.

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.⁹⁰ However, Croatia did not reach its planned survey output in 2018, calling into question whether it yet has sufficient (and sufficiently capable) survey capacity.

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 (e.g. structural and cohesion funds, cross-border cooperation fund), which gives it confidence in financing the implementation of the land release goals set out in the 2018 extension request. Croatia expected to also secure funding from the public company “Croatian Forests” (state budget of forest management positions).⁹¹

Since the APMBC entered into force for Croatia, more than €727 million has been invested in humanitarian demining, of which Croatia’s national budget had accounted for the majority (€417 million) for the Article 5 implementation.⁹² Croatia estimates that the fulfilment of its Article 5 obligations will cost a total of a further €459 million.⁹³ 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%).⁹⁴

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 machines.⁹⁵ Croatia foresees that more use will be made of small, mobile machines that can be efficiently transported and used in affected areas, and that the resulting increase in manual demining will reduce productivity and increase the cost of clearance and technical survey. Use of mechanical assets is also further restricted in the Nature 2000 protected area.⁹⁶ 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.⁹⁷ However, this would require amendment to the 2015 demining law, which does not currently permit use of MDDs for technical survey.

More than 196km² of mined area in Croatia has been cleared over the last five years (see Table 5). However, while annual clearance output exceeds the targets in Croatia’s 2009–19 mine action strategy,⁹⁸ the amount of land released through 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 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 5: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	49.0
2017	30.4
2016	38.8
2015	40.6
2014	37.7
Total	196.5

1 APMBC Article 7 Report (for 2018), Form C.

2 Article 7 Report (for 2018), Form C. The contamination table in Croatia’s Article 7 report contains a very small discrepancy in that the correct sum of the total number of anti-personnel mines is 31,864.

3 Article 7 Report (for 2017), Form C, Table 2 lists the number of anti-personnel mines in military facilities as 25,276, but the sum of the table values totals 25,283. The total number of anti-vehicle mines is listed as 0 on the Article 7 report, but the sum of the table values totals 1,040.

4 2018 Article 5 deadline Extension Request, p. 25.

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

6 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

7 2018 Article 5 deadline Extension Request, p. 33; and Article 7 Report (for 2018), Form C.

8 Article 7 Report (for 2018), Form C.

9 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

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

11 Article 7 Report (for 2018), Form C; and email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.

12 Ibid.

13 Act on Amendments to the Act on Mine Action (OG No. 118/2018) and Act on Amendment to the Act on the Government (OG No. 116/2018).

14 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019; and CCM Article 7 Report (for 2018), Form J.

15 CROMAC, “National Mine Action Strategy of Croatia 2009–2019”, Zagreb, June 2009, p. 2.

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

- 17 OG No. 110/15; and CCM Article 7 Report (for 2017), Form A.
- 18 Interviews with Neven Karas, CROMAC; and Tomislav Ban, Assistant Director and Head of Sector for Operational Planning and Programming, CROMAC, Sisak, 18 May 2017.
- 19 Email from Miljenko Vahtarić, CROMAC, 24 August 2016.
- 20 Article 7 Report (for 2017), Form C; Statement of Croatia, APMBC Intersessional Meetings, Geneva, 7 June 2018; and email from Davor Laura, CROMAC, 6 April 2018.
- 21 Ibid.
- 22 CROMAC website, "CROMAC's Mine Information System", accessed 26 June 2018.
- 23 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 24 2018 Article 5 deadline Extension Request, p. 25.
- 25 Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 2015), Form B.
- 26 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 27 2018 Article 5 deadline Extension Request, pp. 8 and 11.
- 28 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 29 Ibid.
- 30 2018 Article 5 deadline Extension Request, p. 25.
- 31 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 32 National Gazette No. 110/15; and CCM Article 7 Report (for 2017), Form A.
- 33 CCM Article 7 Report (for 2017), Form A; and emails from Miljenko Vahtarić, CROMAC, 13 and 18 May 2016.
- 34 Email from Miljenko Vahtarić, CROMAC, 13 May 2016; and CCM Article 7 Report (for 2015), Form A.
- 35 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.
- 36 Ibid.
- 37 Article 7 Report (for 2018), Form C; 2018 Article 5 deadline Extension Request, p. 43; and email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 38 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 39 Interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014.
- 40 2018 Article 5 deadline Extension Request, p. 25.
- 41 Email from Dejan Rendulić, CROMAC, 11 September 2018.
- 42 Email from Davor Laura, CROMAC, 6 April 2018.
- 43 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 44 Ibid.
- 45 UNDP, "Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia", 2014, p. 16.
- 46 Interview with a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.
- 47 Interviews with Hrvoje Debač, OMA, 17 May 2017, Zagreb; and Tomislav Ban, CROMAC, Sisak, 18 May 2017.
- 48 Interview with Tomislav Ban, CROMAC, Sisak, 18 May 2017.
- 49 Interview with Zeljko Romic, Piper Demining, Zagreb, 17 March 2015.
- 50 Email from Marija Breber, Social Worker, Mine Aid, 25 March 2015.
- 51 Interview with Zeljko Romic, Piper Demining, Zagreb, 17 March 2015.
- 52 Interview with a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.
- 53 Email from Davor Laura, CROMAC, 6 April 2018.
- 54 Interview with Miljenko Vahtarić, CROMAC, in Zagreb, 16 March 2015.
- 55 Ibid.
- 56 Interview with Tomislav Ban, CROMAC, Sisak, 18 May 2017.
- 57 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.
- 58 Interview with Kristina Dorosulić, Head of Public Procurement, CROMAC, Sisak, 18 May 2017.
- 59 UNDP, "Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia", 2014, p. 4.
- 60 Interview with Hrvoje Debač, OMA, 17 May 2017, Zagreb.
- 61 UNDP, "Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia", 2014, p. 4.
- 62 Interview with a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.
- 63 Email from Miljenko Vahtarić, CROMAC, 21 October 2016.
- 64 Email from Davor Laura, CROMAC, 6 April 2018.
- 65 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 66 Article 7 Report (for 2017), Form C; and Statement of Croatia, Intersessional Meetings, Geneva, 31 May 2019.
- 67 Article 7 Report (for 2017), Form C.
- 68 Ibid.
- 69 Email from Davor Laura, CROMAC, 6 April 2018; and Article 7 Report (for 2017), Form C.
- 70 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 71 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019; and Statement of Croatia, Intersessional Meetings, Geneva, 31 May 2019.
- 72 Article 7 Report (for 2017), Form C.
- 73 Email from Slavenka Ivšić, Civil Protection Directorate, 7 August 2019.
- 74 Email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 75 Article 7 Report (for 2017), Form C; and email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 76 Article 7 Report (for 2016), Form C; and CCW Protocol V Article 10 Report (for 2016), Form A.
- 77 Article 7 Report (for 2017), Form C.
- 78 Statement of Croatia, APMBC Intersessional Meetings, Geneva, 7 June 2018.
- 79 Article 7 Report (for 2017), Form C.
- 80 Statement of Croatia, APMBC 17th Meeting of States Parties, Geneva, 27 November 2018.
- 81 2018 Article 5 deadline Extension Request, p. 8.
- 82 2018 Article 5 deadline Extension Request, Additional information submitted 21 June 2018, p. 1.
- 83 Ibid.
- 84 2018 Article 5 deadline Extension Request, p. 39.
- 85 Ibid, pp. 41 and 42.
- 86 Ibid.
- 87 Ibid, pp. 36, 39, and 44.
- 88 See Mine Action Review and Landmine Monitor reports on clearance in Croatia covering 2011–16.
- 89 2018 Article 5 deadline Extension Request, p. 43.
- 90 Ibid., p. 39.
- 91 Ibid., pp. 36 and 39.
- 92 Ibid., p. 8.
- 93 Ibid., p. 44.
- 94 Ibid., p. 45.
- 95 Ibid., p. 43.
- 96 2018 Article 5 deadline Extension Request, p. 45; and email from Slavenka Ivšić, Civil Protection Directorate, 23 May 2019.
- 97 2018 Article 5 deadline Extension Request, pp. 43, 44, and 45; and Additional information submitted 21 June 2018, p. 1.
- 98 National Mine Action Strategy of the Republic of Croatia, 2008, p. 10.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JULY 2022 NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

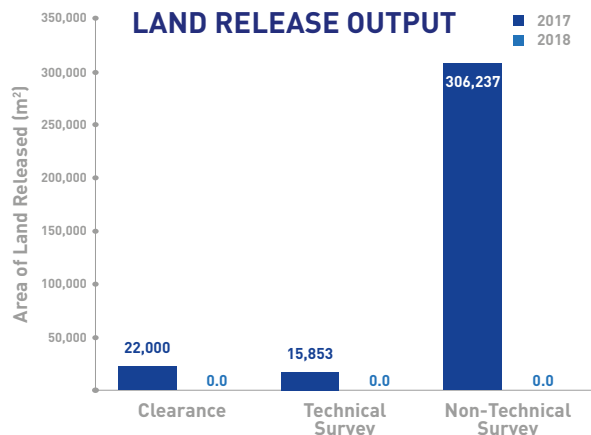
LIGHT, **1.7 KM²**

AP MINE
CLEARANCE IN 2018

0 M²

AP MINES
DESTROYED IN 2018

0



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

No survey and clearance took place in Cyprus in 2018 following a breakdown of settlement talks in July 2017 and a subsequent reduction of the UN demining budget. No anti-personnel mines are believed to remain in minefields on territory under the control of the Republic of Cyprus. Cyprus does not exercise effective control over remaining anti-personnel mine contaminated areas and, as at July 2019, settlement negotiations between the two parties remained in a hiatus. The United Nations (UN) Security Council, most recently in Resolution 2453 in January 2019, 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".

In a positive development, a series of confidence-building measures agreed upon in February 2019 by the President of Cyprus, Nicos Anastasiades, and the Turkish Cypriot leader, Mustafa Akinci, included the survey and clearance of 18 suspected hazardous areas (SHAs), nine on each side of the buffer zone. It is expected that this work will be completed by February 2020.

RECOMMENDATIONS FOR ACTION

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

DEMINING CAPACITY

MANAGEMENT

- No national mine action authority or mine action centre

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- None (Mines Advisory Group (MAG) and DOK-ING were last active in 2017)

OTHER ACTORS

- United Nations (UN)-supported mine action in Cyprus is coordinated by the UN Mine Action Service (UNMAS) on behalf of the UN Peacekeeping Force in Cyprus (UNFICYP)

UNDERSTANDING OF AP MINE CONTAMINATION

As no survey or clearance was conducted in 2018, the estimate from the UN Peacekeeping Force in Cyprus (UNFICYP) data for contamination in Cyprus has not changed since 2017. As at December 2018, 29 SHAs and 18 confirmed hazardous areas (CHAs) remained across Cyprus covering just over 1.7km². 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).²

Cyprus is contaminated by anti-personnel and anti-vehicle mines. The island has been divided geographically and politically since 1974 by what was once a heavily mined, 180km-long buffer zone, following Turkish Forces' operations in the north of the island. Minefields were laid by both the Greek Cypriot National Guard and the Turkish Armed Forces. The exact extent of the remaining mine contamination across the island is not known, and permission for UNFICYP to access areas outside within and outside the buffer zone remains limited.³

Table 1: Mined area (at December 2018)⁴

Location	CHAs	Contamination	Area (m ²)	SHAs	Contamination	Area (m ²)	Total SHA/CHA	Total area (m ²)
South of the buffer zone (territory controlled by Cyprus)	13	AV mines	418,543	15	AV mines	299,898	28	718,441
Buffer Zone	4	AV mines (3 areas) Unknown (1 area)	703,581	0	N/A	N/A	4	703,581
North of the buffer zone (territory controlled by Turkish Cypriot authorities)	1	Mixed	170,493	14	Unknown	130,784	15	301,277
Totals	18		1,292,617	29		430,682	47	1,723,299

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 in territory under its effective control.⁵ 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.⁶

BUFFER ZONE

UNFICYP reported that, as at December 2018, three of the mined areas in the buffer zone were contaminated with anti-vehicle mines and the type of contamination in the fourth mined area was unknown.⁷ In July 2018, the UN Secretary-General's report on the UN operation in Cyprus stated 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."⁸ The Government of Cyprus considers the three minefields contaminated with anti-vehicle mines to be under its control and not within the buffer zone.⁹

TURKISH CYPRIOT-CONTROLLED TERRITORY IN NORTHERN CYPRUS

The extent of mine contamination in areas controlled by Turkish Forces is not known. However, Cyprus claimed in its latest Article 7 transparency report (for 2018) that at least 20 minefields laid and maintained in the occupied areas by Turkish Forces are yet to be cleared of anti-personnel mines, of which one is situated within the buffer zone.¹⁰ According to the UN, some military mine clearance appears to have been conducted over most locations that are still recorded as minefields.¹¹

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.¹² In 2017, a small area of the Mammari minefield was cleared by a Croatian commercial operator contracted by the Turkish Armed Forces.¹³

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

UN-supported mine action operations in Cyprus are coordinated by UNMAS on behalf of UNFICYP.¹⁴ In July 2016, UNMAS became an integral component of UNFICYP, providing its expertise in mine action planning and coordination, quality assurance (QA) oversight, and management of mine action information.¹⁵ 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.¹⁶

UN-facilitated settlement talks between the two sides in Crans-Montana, Switzerland, in July 2017, came to an abrupt halt after 10 days, and, as at July 2019, the negotiations remain in hiatus. Since the breakdown of these talks a budget reduction 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.¹⁷ For the 2018–19 fiscal year, UNMAS was funded by the UN Nations peacekeeping assessed budget for UNFICYP. The budget covers technical capacity for planning and coordination; awareness training for UNFICYP personnel; advocacy activities; and data management of mine action information.¹⁸

GENDER

UNMAS is guided by the UN Gender Guidelines for Mine Action Programmes and maintains gender parity in its staffing positions within the team deployed in Cyprus. Within UNFICYP, a dedicated Gender Advisor provides guidance on mainstreaming gender in the Mission's policies and activities. It is not known whether gender and diversity feature in the mine action policies or strategies in territory controlled by Cyprus or in Turkish Cypriot-controlled territory in northern Cyprus.¹⁹

INFORMATION MANAGEMENT AND REPORTING

UNFICYP uses the IMSMA database. In 2017, a review and reconciliation of all electronic and hard-copy minefield database documentation revealed that a number of SHAs had already been cleared and/or cancelled. However, due to capacity limitations between 2011 and 2016, the information had not been removed from the database. The review resulted in the removal of seven SHAs (totalling more than 950,000m²) from the database.²⁰

Cyprus submits annual Article 7 reports and has done since acceding to the APMBC in July 2003. Cyprus has submitted three Article 5 deadline extension requests: in 2012, 2015, and 2018. Cyprus submitted the reports and extension requests in a timely manner but the information provided is limited due to it not having effective control over the remaining anti-personnel mined areas.

PLANNING AND TASKING

As at July 2019, it is not known if Cyprus or Turkish Cypriot-controlled northern Cyprus has a strategic plan for survey and clearance of mined areas.

In February 2019, the Turkish Republic of Northern Cyprus (TRNC) President Mustafa Akıncı and President of Cyprus, Nicos Anastasiades, announced their commitment to follow through with various confidence-building measures including the survey and cancellation and/or reduction of 18 SHAs, nine on each side of the island, with a view to working towards a mine-free Cyprus.²¹ With support from UNFICYP and UNMAS work began in May 2019 with an expected completion date of February 2020.²² No mine or other ERW contamination

is expected to be found in these SHAs but to ensure due diligence they will be subject to non-technical survey and, where necessary, technical survey. The non-technical survey will be conducted by UNMAS staff, and a representative from UNFICYP and from either the Turkish Cypriot Security Force (TCSF) or the Greek Cypriot National Guard (NG). It is expected that technical survey will only be necessary in the southern SHAs and will be conducted by the NG with site visits by the UNMAS Chief of Operations.²³

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

All UN-supported mine action operations in Cyprus are said to be conducted in accordance with the International Mine Action Standards (IMAS).²⁴ 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.²⁵

OPERATORS

No operators were active in 2018. In previous years, survey and clearance in the buffer zone has been carried out by Mines Advisory Group (MAG) on behalf of UNMAS and UNFICYP.²⁶ In 2017, the Turkish Armed Forces contracted DOK-ING to conduct clearance, and MAG, to conduct quality assurance of demining in the Mammari minefield.²⁷ No further clearance was conducted in 2018, nor was any planned for 2019 as the TCSF has not agreed to any further survey or clearance on this minefield.²⁸

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

No survey or clearance took place in Cyprus in 2018.

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 2: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m ²)
2018	0
2017	22,000
2016	6,772
2015	18,538
2014	7,032
Total	54,342

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. In 2012, Cyprus submitted the first of its three Article 5 deadline extension requests, the reason for which has remained the same throughout, namely that Cyprus does not have effective control over remaining contaminated areas.²⁹ 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."³⁰

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.³¹ The last settlement talks between the two sides were held in June and July 2017 in Switzerland but broke down after ten days.³² As at July 2019, the settlement talks had not resumed, although in February 2019 a number of confidence-building measures were agreed between the two sides, one of which was the clearance of 18 SHAs which is due to be completed by February 2020.³³

The UN Security Council, most recently in January 2019, has called on both sides to facilitate clearance of all remaining mined areas on the island.³⁴ 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".³⁵ 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".³⁶

- 1 UN Security Council Resolution 2453 (2019), para. 17.
- 2 Emails from Julie Myers, Programme Officer, UNMAS (based on information provided by Stefan De Coninck, Chief of Operations, UNMAS, and Maj. Rich Pearce, UN Joint Operations Centre Manager, UNFICYP), 10 September 2018; and Mark Connelly, Chief of Operations, UNMAS, 17 July 2019.
- 3 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 26 September 2017.
- 4 Ibid.
- 5 Article 7 Report (for 2018), Form C.
- 6 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.
- 7 Emails from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018; and Mark Connelly, UNMAS, 17 July 2019.
- 8 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/676, 6 July 2018, para. 44.
- 9 Interview with Demetris Samuel, Deputy Permanent Representative, Cyprus Permanent Mission to the UN in Geneva, Geneva, 19 May 2016.
- 10 Article 7 Report (for 2018), Form C.
- 11 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Mike Holgate, Mine Action Officer, UNFICYP), 6 October 2016.
- 12 Ibid.; and email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.
- 13 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 14 Ibid.
- 15 UNMAS, "Cyprus" webpage, accessed 27 July 2017, at: bit.ly/2GtTXje.
- 16 Report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2018/25, 9 January 2018, para. 12.
- 17 Reports of the Secretary-General on the UN operation in Cyprus, UN doc. S/2018/25, 9 January 2018, para. 14; and UN doc. S/2019/562, 10 July 2019, para. 3; and email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 18 UNFICYP, "Mine Action", accessed 25 June 2019, at: bit.ly/32T14wT.
- 19 Email from Julie Myers, UNMAS (based on information provided by Stefan De Coninck, UNMAS, and Maj. Rich Pearce, UNFICYP), 10 September 2018.
- 20 Ibid.
- 21 Security Council Press Statement on Cyprus, 27 February 2019, SC/13722, at: bit.ly/2JKyYus.
- 22 Email from Mark Connelly, UNMAS, 17 July 2019; and Report of the Secretary-General on the UN operation in Cyprus, UN doc. S/2019/562, 10 July 2019, para. 4.
- 23 Email from Mark Connelly, UNMAS, 26 July 2019.
- 24 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.
- 25 Ibid.
- 26 Ibid.
- 27 Ibid.
- 28 Email from Mark Connelly, UNMAS, 26 July 2019.
- 29 2012 Article 5 deadline Extension Request.
- 30 Permanent Mission of Cyprus in Geneva, "Disarmament and Non-proliferation" webpage, accessed 22 July 2019, at: bit.ly/2SAhPGP.
- 31 Turkey's Article 5 deadline Extension Request, 29 March 2013. On the issue of Turkish jurisdiction, see, e.g., European Court of Human Rights, *Güzelyurtlu and others v. Cyprus and Turkey*, Judgment (Grand Chamber), 29 January 2019.
- 32 "Cyprus reunification talks collapse amid angry scenes", *The Guardian*, 7 July 2017, at: bit.ly/2Z6GR2K.
- 33 Security Council Press Statement on Cyprus, 27 February 2019, SC/13722, at: bit.ly/2JKyYus.
- 34 UN Security Council Resolutions 2026 (2011), 2197 (2015), 2234 (2015), 2263 (2016), 2300 (2016), 2338 (2017), 2430 (2018), and 2453 (2019).
- 35 UN Security Council Resolution 2453 (2019), fourteenth preambular para.
- 36 Ibid, para. 17.

DEMOCRATIC REPUBLIC OF CONGO



CLEARING THE MINES 2019

**ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JANUARY 2021
ON TRACK TO MEET DEADLINE**

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

LIGHT,
(ESTIMATED) **0.5 km²**

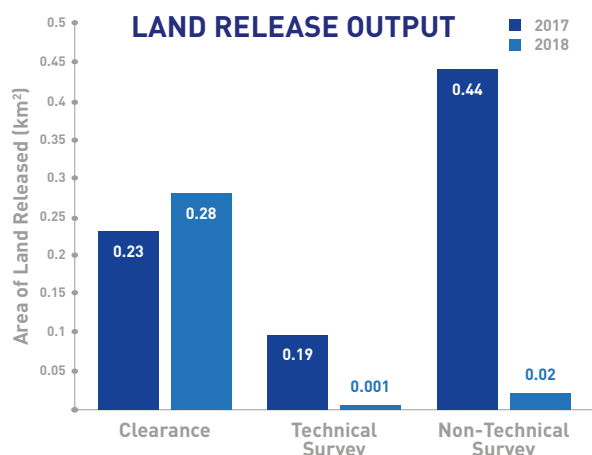
AP MINE
CLEARANCE IN 2018

0.28 km²

AP MINES
DESTROYED IN 2018

5

(including 90 destroyed
during spot tasks)



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **HIGH**

KEY DEVELOPMENTS

The Democratic Republic of Congo (DRC)'s mine action programme's land release output remained relatively static in 2018, though with a significant decrease in the number of anti-personnel mines found and destroyed compared to the previous year. It remains on track to meet its Anti-Personnel Mine Ban Convention (APMBC) Article 5 clearance deadline by 2021. The United Nations Mine Action Service (UNMAS) and international mine action operators believe that the DRC could complete clearance by end 2020 with existing capacity and sufficient funding, as projected in its latest strategic plan. This is, though, considerably after the 2016 deadline set out in its 2012–16 national mine action strategy.¹

The national mine action programme continued to be hampered by a range of information management challenges in 2018, and the ability of the authorities to produce a clear and accurate estimate of remaining mine contamination remained questionable. The inexperience of many national survey teams, the incorrect recording of items of unexploded ordnance (UXO) as mined areas, and a lack of rigorous quality assurance of survey reports, give cause for concern. Greater scrutiny and support from international operators to ensure the DRC successfully meets its Article 5 obligations are needed at this critical time, when the end is nearly in sight after almost two decades of mine action in the country.

RECOMMENDATIONS FOR ACTION

- The DRC should establish a realistic and accurate understanding of the remaining mine contamination, including through re-survey of all remaining suspected hazardous areas (SHAs), many of which are thought to be inaccurate or outdated.
- Survey in Aru and Dungu territories should be prioritised as soon as security permits in order to gain a fully comprehensive picture of the remaining challenge.
- The DRC should detail how it will meet its clearance obligations by its extended Article 5 deadline of 1 January 2021.
- Significant efforts should be made to ensure the national mine action database is accurate 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.
- The Centre Congolais de Lutte Antimines (CCLAM), should enhance collaboration with, and support the work of, international mine action organisations.
- Focus should also be placed on building national capacity to address contamination following the exit of international operators.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	The latest estimate of contamination almost certainly exaggerates the true extent of the mine problem. It is nonetheless a very light problem.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	6	The United Nations Mine Action Service (UNMAS) had provided capacity-building support to the Congolese Mine Action Centre (CCLAM) for its operations for several years. The transfer of responsibility for coordinating mine action activities was, in theory, completed in early 2016. In 2018, however, UNMAS continued to provide guidance and operational support to CCLAM.
GENDER (10% of overall score)	6	The DRC's national mine action strategy for 2018–19 includes a section on gender. It stipulates that all activities of the mine action programme, particularly those related to risk education and victim assistance, must reflect the different needs of individuals according to age and gender groups, in a non-discriminatory manner.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	CCLAM assumed responsibility from UNMAS for information management in January 2016. Despite many years of capacity-building support from UNMAS, and again from Norwegian People's Aid (NPA) in 2018, serious concerns persisted over the quality of the database and CCLAM's capacity and resources to manage it. Gaps in data, a lack of maintenance, a lack of capacity to extract and share information from the database, and the lack of frequent coordination meetings with operators, all remained evident in 2018.
PLANNING AND TASKING (10% of overall score)	5	The DRC's national mine action strategy for 2018–19 focuses on fulfilling the DRC's APMBC Article 5 obligations by 2020, one year ahead of its extended 2021 deadline. Despite this, the DRC has not submitted an operational workplan containing clear milestones for completion of survey and clearance obligations under its extended Article 5 deadline.
LAND RELEASE SYSTEM (20% of overall score)	5	National Technical Standards and Guidelines were revised during 2018, with the main areas of revisions made to standards on demining techniques and the occupational safety of deminers.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	UNMAS and international operators believe that the DRC could complete clearance by end 2020 with existing capacity and sufficient funding. This is, though, considerably after the 2016 deadline set out in its 2012–16 national mine action strategy.
Average Score	4.9	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT

- Centre Congolais de Lutte Antimines (CCLAM)

NATIONAL OPERATORS

- National NGOs conduct non-technical survey and mine risk education

INTERNATIONAL OPERATORS

- DanChurchAid (DCA)
- Mines Advisory Group (MAG) (operations ended in 2018)
- Norwegian People's Aid (NPA)
- The Development Initiative (TDI)

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

The DRC is affected by anti-personnel mines and explosive remnants of war (ERW), a result of armed conflict involving neighbouring states, militias, and armed opposition groups, which have increased since the late 1990s. Its remaining contamination challenge is primarily that of ERW; mine contamination appears limited with anti-personnel mines no longer found in significant numbers. Areas suspected to contain anti-personnel mines often proved instead to contain UXO, abandoned ordnance (AXO), or small arms ammunition.²

Throughout 2018, the DRC's national mine action programme continued to suffer from a lack of coordination between stakeholders and critical information management issues. Its ability to produce a clear and accurate estimate of remaining mine contamination from the national database remained open to question. According to CCLAM, as at 31 March 2019, a total of 53 mined areas with a total size of 741,559m² remained to be addressed across Bas-Uele, Ituri, Kasai, Lomami, Maniema, North Kivu, South Kivu, North Ubangi, South Ubangi, Tanganyika, Tshopo, and Tshuapa provinces.³

Previously, according to figures provided by UNMAS, at the end of 2017, a total of 36 confirmed hazardous areas (CHAs) and SHAs with a total size of 502,591m² remained to be released.⁴ According to CCLAM, nine additional mined areas with a size of close to 170,000m² were identified in 2018 in North Ubangi, South Ubangi, Tanganyika, Kasai, Maniema, and Tshopo provinces.⁵

On request of the CCLAM, Norwegian People's Aid (NPA) agreed to assist with a re-survey of areas remaining in the national database.⁶ In 2018, NPA discussed with Mines Advisory Group (MAG) and DanChurchAid (DCA) the possibility of a joint national resurvey of the SHAs remaining in the country as reported by CCLAM. In May 2019, NPA reported that it had started the re-survey on its own, and that, as at mid June, a total of 115,000m² had been cancelled in South Ubangi province. It considered this to be evidence that many of the remaining SHAs will be either discredited or at least significantly reduced in size.⁷

However, NPA reported that it was likely that more explosive ordnance, potentially including landmines, would be found in the eastern parts of the country (including Bas Uele, Haut Uele, Ituri, Lubero, and North Kivu provinces) due to the intensity and duration of armed conflicts affecting those regions. NPA said these areas would be priorities for operations on the basis of humanitarian impact, and was still attempting to secure resources for expanding the re-survey activities as at June 2019.⁸

The DRC's most recent National Mine Action Strategy 2018–2019 set out among its objectives completion of survey of mine and ERW contamination in Aru and Dungu territories by the middle of 2018. While this objective was not met, as at mid 2019, survey was finally underway in Aru territory in Ituri province.⁹ CCLAM informed Mine Action Review in July 2019 that lack of funding was the only obstacle to commencing survey in Dungu territory; it reported that there was no evidence of mines having been used in recent conflicts in the territory.¹⁰

CCLAM likewise confirmed that there were no reports of new use of anti-personnel mines in 2018, including mines of an improvised nature, but said there were reports of use of other improvised explosive devices by non-state armed actors in the north-east of the country, in Goma and Beni in North Kivu province.¹¹

EXPLOSIVE REMNANTS OF WAR AND CLUSTER MUNITION REMNANTS

Of the DRC's considerable contamination from ERW as a result of years of conflict involving neighbouring states, militias, and rebel groups, a small amount of cluster munition remnant contamination remained to be addressed as at July 2019 (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on the DRC for further information). Successive conflicts have also left the country with significant quantities of AXO.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

CCLAM was established in 2012 with support from the UN Mine Action Coordination Centre (UNMACC) and UNMAS.¹² 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 2016.¹³ In 2018, however, UNMAS continued to provide guidance and operational support to CCLAM.¹⁴ Law 11/007 of 9 July 2011 underpins the national mine action programme.¹⁵

Previously, UNMACC, established in 2002 by UNMAS, coordinated mine action operations through offices in the capital, Kinshasa, and in Goma, Kalemie, Kananga, Kisangani, and Mbandaka. UNMACC was part of the UN Stabilization Mission in the DR Congo (MONUSCO). In accordance with Security Council Resolution 2147 (2014), humanitarian mine action was removed from MONUSCO's mandate.¹⁶ In 2018, UNMAS was assisting MONUSCO operations under the Mission's protection of civilians' mandate.¹⁷

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 remained very limited in 2018. 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.¹⁸ In 2018, NPA continued its support to develop CCLAM's capacity through training and in-kind assistance.¹⁹

CCLAM reported that in 2018, as in previous years, the Government of the DRC provided more than US\$530,000 for its operating expenses. The government did not, though, provide any funding for mine action operations. CCLAM reported that priorities for the national programme in 2019 were improving the national database, conducting a new national contamination survey, organising a workshop to develop an annual workplan, and capacity building of operational staff.²⁰ Key challenges, it said, included a

lack of funding; the withdrawal of mine action operators; the availability of good training of CCLAM staff to ensure coordination and quality management; a lack of adequate training for surveyors; and the absence of state budget to cover salaries of CCLAM staff.²¹

In 2018, operators and UNMAS reiterated concerns over a continuing decline in funding for mine action in the DRC.

They reported that with the deteriorating political climate in the country, donors were reluctant to support mine action, prioritising instead support to address other higher-impact humanitarian crises such as cholera and yellow fever, flooding, and internally displaced persons.²² In 2019, this was compounded by new humanitarian crises from Ebola and ongoing armed conflicts.

GENDER

The DRC's national mine action strategy for 2018–19 includes a section on gender. It stipulates that all activities of the mine action programme, particularly those related to risk education and victim assistance, must reflect the different needs of individuals according to age and gender groups, in a non-discriminatory manner. It also states that the principles of non-discrimination against women as set out in the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and UN Security Council Resolution 1325 (2000) are to be respected, ensuring that women are involved in all essential stages of mine action (planning, implementation, monitoring, and evaluation), and that activities take into account the special needs of women and girls.²³

According to CCLAM, mine action survey teams in 2018 were gender balanced, and efforts were undertaken to ensure that all community groups, including women and children, were consulted. It also noted, however, the ongoing need for awareness-raising within certain communities on gender

equality as local customs can discriminate against women undertaking certain categories of work. CCLAM reported that approximately 30% of operational staff in survey and clearance teams were female in 2019, but only around 7% of managerial or supervisory positions were held by women, reportedly due in part to barriers presented by local customs about women's employment roles.²⁴

NPA's demining staff were 50% female in 2018. It reported that it was able to hire five women in operational roles (four deminers and one medic) during the year, following an awareness-raising seminar on women's opportunities in mine action and demining training. It offered flexible working hours for parents (especially women) and encouraged women to enrol in training programmes aimed at improving their chances for managerial positions. An internal women's network was formed as a subset of the programme's staff union.²⁵

INFORMATION MANAGEMENT AND REPORTING

CCLAM assumed responsibility from UNMAS for information management in January 2016. Subsequently, despite many years of capacity-building support from UNMAS, and again from NPA in 2018, serious concerns 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 2018.²⁶

In 2019, NPA elaborated that ongoing information management issues included a lack of reporting according to land release terminology, the misreporting of items of UXO as mines (resulting in new areas of contamination being incorrectly added to the database as mined areas), and a lack of verification of incoming reports.²⁷

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 2018. 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.²⁸

In 2018 and the first half of 2019, UNMAS reported that, through extra budgetary funds, it provided assistance to CCLAM to develop a workplan on information management, including provision of IT equipment and support in assessing needs based on the DRC's mine action strategic priorities.²⁹

In July 2019, the CCLAM informed Mine Action Review that progress had been made in 2018 to separate recording and reporting of mines from ERW in the national database. It said that improvements to information management could be made by standardising reporting forms with operators and through the use of better software.³⁰ It also said that further capacity-building support for managing the national database would be welcomed, along with support to improve communication with operators and coordination meetings.³¹

PLANNING AND TASKING

The DRC's national mine action strategy for 2018–19 focuses on fulfilling the DRC's APMBC Article 5 obligations by 2020, one year ahead of its extended 2021 deadline.³² The strategy contains the following three strategic pillars: effective and efficient management of the explosive threat; ensuring the national programme has the capacity to manage residual contamination in a sustainable manner; and that the legal framework of the mine action programme is strengthened through the adoption of national laws and other implementing measures and adherence to relevant treaties.³³

The DRC's previous national mine action strategy for 2012–16 had set the goal of clearing all areas contaminated with anti-personnel mines or unexploded submunitions by the end of 2016.³⁴ The DRC failed to meet these goals.

Despite the positive development of the development and adoption of the DRC's 2018–19 national mine action strategy, the DRC has not submitted an operational workplan

containing clear milestones for completion of survey and clearance obligations under its extended Article 5 deadline of 1 January 2021. The DRC was requested to provide such a workplan by 30 April 2015, as part of the states parties' decision to approve the DRC's latest (third) Article 5 deadline extension; however, as at July 2019, it had yet to do so.³⁵

NPA informed Mine Action Review that it operates on a province-by-province approach to tasks, rather than prioritising clearance of one type of contamination over another, as remaining hazardous areas are sparsely located and more efficiently addressed by geographic location.³⁶ As noted above, it raised concerns, however, about wasting resources in non-contaminated areas due to misreporting in the database, particularly the addition of new mined areas without robust evidence of the presence of anti-personnel mines, and a lack of an accurate overview of the remaining contaminated areas to be addressed.³⁷

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In June 2019, CCLAM reported that the DRC's National Technical Standards and Guidelines (NTSGs) had been revised during 2018, with the main areas of revisions made to standards on demining techniques and safety of deminers in the workplace.³⁸

In 2018 and the first half of 2019, UNMAS reported providing technical and logistical support to CCLAM on monitoring, coordinating, and assessing quality of activities conducted by mine action implementing partners.³⁹

OPERATORS

Four international operators carried out mine action operations in the DRC in 2018: non-governmental organisations (NGOs) DCA, MAG, and NPA, and commercial operator, The Development Institute (TDI).⁴⁰ A number of national operators also carried out non-technical survey and risk education activities during the year.

In 2018, NPA's teams focused on manual clearance, explosive ordnance disposal (EOD) spot tasks, non-technical survey, and risk education in partnership with a local organisation APPEI, and impact assessment in the north-west of the DRC in North and South Ubangi provinces. It deployed three operational teams, which carried out clearance and EOD spot tasks.⁴¹

MAG ended its demining in the DRC in August 2018 following completion of a Netherlands-funded clearance project under which it deployed two multi-task teams (MTTs) and two community liaison teams in North and South Ubangi

provinces. MAG reported that while the clearance project had been successful, overcoming the many challenges and complexities of working in the DRC, combined with the lack of anti-personnel mines being discovered, contributed to making further demining operations in the DRC a lower priority for the allocation of global resources. Following discussions with NPA and DCA, it was agreed that MAG would cease its demining operations, but that NPA would continue survey and clearance in the north and north-west of the country, while DCA would continue to operate in the central-eastern areas.⁴² MAG has also pledged to continue to work together with CCLAM, NPA, DCA, and UNMAS to develop a strategy to address residual contamination in the DRC, and said it was committed to working closely with CCLAM and to finding resources to carry out necessary activities in the future.⁴³

UNMAS continued to contract TDI in support of MONUSCO operations in 2018. It deployed three six-person MTTs to conduct EOD spot tasks in areas where MONUSCO was operational and also to carry out destruction of obsolete weapons and ammunition held by the DRC armed forces. In 2018, through extra budgetary funds, UNMAS also contracted national organisations to conduct risk education to complement TDI's activities.⁴⁴

Humanity and Inclusion (formerly Handicap International, HI) and its local partner AFRILAM, ceased mine action operations in 2017.⁴⁵

OPERATIONAL TOOLS

Only manual mine clearance is conducted in the DRC.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

According to the CCLAM, in January 2018 to end March 2019, a total of 422,461m² of contaminated area was cleared (275,700m² in 2018 and a further 146,761m² in the first quarter of 2019), along with a total of 457 spot tasks. It reported that as a result, a total of 13 mines were destroyed (11 PMA2 anti-personnel mines and 2 anti-vehicle mines), along with a total of 7,295 items of ERW.⁴⁴ Clearance operations only involved the destruction of five anti-personnel mines but there may have been others destroyed in spot tasks.

SURVEY IN 2018

According to CCLAM, a total of 16,936m² was released through survey in 2018, all by DCA in Tshopo province. This included a total of 15,416m² cancelled through non-technical survey and 1,520m² reduced through technical survey.⁴⁷ As noted above, according to CCLAM, nine additional mined areas with a size of close to 170,000m² were also discovered in 2018 in North Ubangi, South Ubangi, Tanganyika, Kasai, Maniema, and Tshopo provinces.⁴⁸

This compared to 2017, when operators cancelled a total of nearly 444,300m² through non-technical survey and reduced a further 192,500m² of anti-personnel mined area through technical survey, while confirming just under 264,500m² as mined.⁴⁹ CCLAM reported that the reason for the significant decrease in survey output in 2018 was the reduction in the number of operators and operational capacity.⁵⁰

According to CCLAM, TDI carried out non-technical survey in Ituri province in 2018, which, as at June 2019, was still underway with results yet to be reported.⁵¹ CCLAM also reported that a series of targeted surveys were conducted in Shabunda territory, South Kivu province. CCLAM said it had become clear that the initial survey of mine and ERW contamination in the DRC had "had many flaws and underestimated the size of certain areas".⁵² UNMAS has reported it conducted surveys in Aru territory in March and April 2019 with survey reports submitted to CCLAM in early May 2019.⁵³

As reported above, in the first half of 2019, NPA initiated re-survey activities on its own, and as at mid June, had cancelled a total of 115,000m² in South Ubangi province, in the north-west of the DRC. It expects that many remaining SHAs will be discredited or significantly reduced in size following new survey.⁵⁴

CLEARANCE IN 2018

A total of 275,700m² was reportedly released through clearance in 2018, with the destruction of 5 anti-personnel mines and 1 anti-vehicle mine, along with 6,117 items of UXO/AXO.⁵⁵

Despite the area released through clearance remaining comparable with that in 2017, there was a considerable drop in the number of anti-personnel mines found and destroyed in 2018, compared to 2017 when a total of just over 226,000m² was reportedly released through clearance, with the destruction of 32 anti-personnel mines and 3,173 items of UXO.⁵⁶

Table 1: Mine clearance in 2018⁵⁷

Province	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed
North Ubangi	NPA	4	7,718	0	0
South Ubangi	NPA	1	750	0	0
South Ubangi	MAG	1	69,900	0	0
Tshopo	DCA	2	197,332	5	1
Totals		8	275,700	5	1

AP = Anti-personnel AV = Anti-vehicle

ARTICLE 5 DEADLINE AND COMPLIANCE

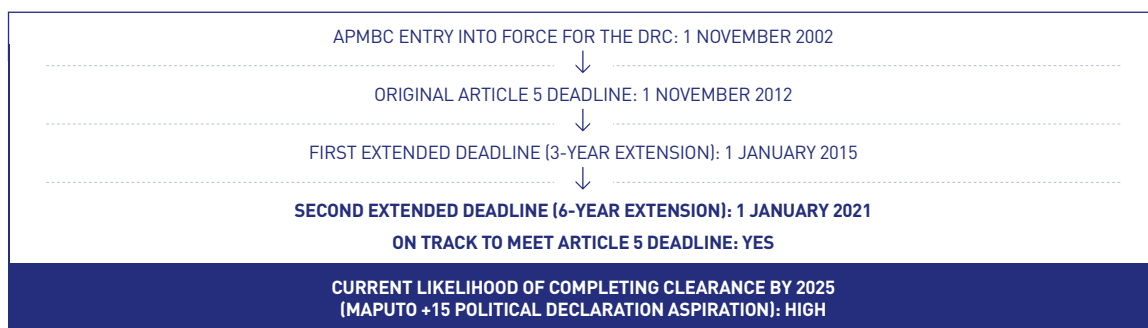


Table 2: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m²)
2018	275,700
2017	226,025
2016	211,293
2015	314,562
2014	225,484
Total	1,253,064

Under Article 5 of the APMBC (and in accordance with the six-year extension 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 appears to be 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 Article 5 obligations by 2020, one year ahead of its 2021 deadline.

Optimistically, in July 2019, CCLAM informed Mine Action Review that it was possible that the DRC could complete mine clearance even during 2019, with sufficient funding.⁵⁸ In 2018, operators and UNMAS confirmed that it is likely that the DRC can clear all mined areas on its territory, with existing mine action capacity and the maintenance of sufficient funding, before its extended Article 5 deadline of 1 January 2021.⁵⁹

The 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.⁶⁰ In April 2014, the DRC submitted a second request to extend its Article 5 deadline starting in January 2015.⁶¹ 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".⁶² The extension request estimated that on average 0.21km² would be cleared each year.⁶³

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.⁶⁴ Operators attributed the DRC's inability to finish clearance by the end of 2016, as originally planned, 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.

- 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 Email from Pehr Lodhammar, UNMAS, 5 April 2017.
- 3 Article 7 Report (for 2018), pp. 2–6.
- 4 Email from Steven Harrop, UNMAS, 23 April 2018.
- 5 Email from Maître Sudi Alimasi Kimputu, Coordinator, CCLAM, 10 July 2019; and Article 7 Report (for 2018), p. 8.
- 6 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 535,359m² 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 286,640m² and 15 areas with a size yet to be determined.
- 7 Skype interview with Jean-Denis Larsen, NPA, 24 April 2019; and emails, 24 May and 26 June 2019.
- 8 Ibid.
- 9 Emails from Maître Sudi Alimasi Kimputu, CCLAM, 3 June and 10 July 2019.
- 10 Email from Maître Sudi Alimasi Kimputu, CCLAM, 10 July 2019.
- 11 Ibid.
- 12 Response to Cluster Munition Monitor questionnaire by Michelle Healy, UNMACC, 29 April 2013.
- 13 UNMAS, "About UNMAS Support of One UN and the GODRC", March 2016, at: bit.ly/2Wtyl0A.
- 14 UNMAS, "Portfolio of Mine Action Projects, Democratic Republic of Congo, 2019", at: bit.ly/2wHkvlt.
- 15 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.
- 16 UN Security Council Resolution 2147, 28 March 2014; and UNMAS, "DRC Overview", updated April 2014, at: bit.ly/31d6lYm.
- 17 UNMAS, "Support to one UN and the GO of DRC", March 2018, at: bit.ly/31d6lYm; and email from Aurelie Fabry, UNMAS, 20 June 2019.
- 18 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Bill Marsden, MAG, 11 May 2018; and Guillaume Zerr, Humanity and Inclusion, 24 May 2018.
- 19 Skype interview with Jean-Denis Larsen, NPA, 24 April 2019; and email, 24 May 2019.
- 20 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.
- 21 Email from Maître Sudi Alimasi Kimputu, CCLAM, 10 July 2019.
- 22 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Bill Marsden, MAG, 11 May 2018; Guillaume Zerr, HI, 24 May 2018; and Pehr Lodhammar, UNMAS, 5 April 2017.
- 23 CCLAM, "Stratégie Nationale de Lutte Antimines en République Démocratique du Congo 2018–2019" ("National Mine Action Strategic Plan in DRC, 2018–2019"), November 2017, pp. 15–16.
- 24 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.
- 25 Skype interview with Jean-Denis Larsen, NPA, 24 April 2019; and email, 24 May 2019.
- 26 Ibid.
- 27 Ibid.
- 28 Email from Jean-Denis Larsen, NPA, 18 April 2017.
- 29 Email from Aurelie Fabry, UNMAS, 20 June 2019.
- 30 Email from Maître Sudi Alimasi Kimputu, CCLAM, 10 July 2019.
- 31 Email from Maître Sudi Alimasi Kimputu, CCLAM, 3 June 2019.
- 32 CCLAM, "Stratégie Nationale de Lutte Antimines en République Démocratique du Congo 2018–2019".
- 33 Ibid., p. 5.
- 34 "Plan Stratégique National de Lutte Antimines en République Démocratique du Congo, 2012–2016" Kinshasa, November 2011, p. 28.
- 35 Committee on Article 5 Implementation, "Preliminary Observations on the Implementation of Article 5 by the Democratic Republic of Congo", Intersessional Meetings, 22–24 May 2019.
- 36 Skype interview with Jean-Denis Larsen, NPA, 24 April 2019; and email, 24 May 2019.
- 37 Ibid.
- 38 Ibid.
- 39 Email from Aurelie Fabry, UNMAS, 20 June 2019.
- 40 Email from Julien Kempeneers, Deputy Desk Officer, Mine Action Department, HI, 14 April 2016.
- 41 Skype interview with Jean-Denis Larsen, NPA, 24 April 2019; and email, 24 May 2019.
- 42 Email from Bill Marsden, MAG, 20 May 2019. MAG reported that its arms management and destruction operations continued in the DRC.
- 43 Email from Bill Marsden, MAG, 20 May 2019.
- 44 Emails from Philippe Renard, Head of Programme, UNMAS, 20 May 2019; and Aurelie Fabry, UNMAS, 20 June 2019.
- 45 Email from Guillaume Zerr, HI, 24 May 2018.
- 46 Article 7 Report (for 2018), pp. 6–7 and 18.
- 47 Email from Maître Sudi Alimasi Kimputu, CCLAM, 10 July 2019.
- 48 Email from Maître Sudi Alimasi Kimputu, Coordinator, CCLAM, 10 July 2019; and Article 7 Report (for 2018), p. 8.
- 49 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.
- 50 Email from Maître Sudi Alimasi Kimputu, CCLAM, 10 July 2019.
- 51 Ibid.
- 52 Ibid.
- 53 Email from Daniella Marelli, UNMAS, 10 September 2019.
- 54 Email from Maître Sudi Alimasi Kimputu, CCLAM, 10 July 2019.
- 55 Article 7 Report (for 2018), pp. 6–7 and 18.
- 56 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.
- 57 Email from Maître Sudi Alimasi Kimputu, CCLAM, 10 July 2019; and Article 7 Report (for 2018), pp. 6–7, and 18. Different figures were provided by the operators: MAG reported clearing 130,285m² and destroying 1 AV mine and 71 ERW in 8 months of 2018 before closing operations. NPA reported clearing 1 area in North Ubangi province with a size of 1,618m² and destroying 1 AP Mine and 1AV Mine during the year
- 58 Email from Maître Sudi Alimasi Kimputu, CCLAM, 10 July 2019.
- 59 Emails from Jean-Denis Larsen, NPA, 5 March 2018; Bill Marsden, MAG, 11 May 2018; and Guillaume Zerr, HI, 24 May 2018.
- 60 2011 Article 5 deadline Extension Request, pp. 3 and 49.
- 61 2014 Article 5 deadline Extension Request, p. 48.
- 62 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.
- 63 Second Article 5 deadline Extension Request, 7 April 2014, 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.
- 64 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.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 31 DECEMBER 2022
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

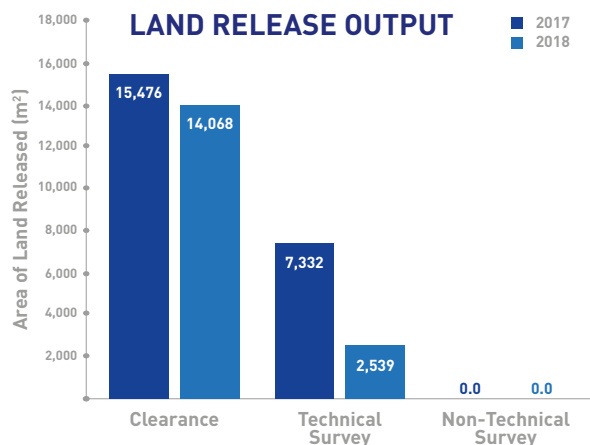
LIGHT,
[GOVERNMENT
ESTIMATE] **80,238KM²**

AP MINE CLEARANCE IN 2018

14,068M²

AP MINES DESTROYED IN 2018

263



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **MEDIUM**

KEY DEVELOPMENTS

In 2018, Ecuador submitted an updated Action Plan 2019–2022 and the joint Ecuador-Peru Binational Humanitarian Demining Unit completed clearance of the Tiwinza square kilometre. Ecuador continues to provide contradictory figures for outstanding mine contamination, survey, and clearance across its reports and statements.

In 2018, it cleared only 14,068m², a small decline from the previous year's output. Ecuador did not meet its land release targets for 2018 and, as at April 2019, was not on track to meet its targets for 2019. Ecuador is at risk of not completing mine clearance by its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline.

RECOMMENDATIONS FOR ACTION

- Ecuador should ensure it is deploying its limited resources in the most efficient manner and that it conducts non-technical and technical survey, as necessary, before full clearance.
- Ecuador should further assess whether dogs could also be deployed for survey and clearance.
- Ecuador should make the necessary improvements to its information management systems to ensure it reports accurately on mine contamination, survey, and clearance.
- In seeking international support, Ecuador should provide a more detailed breakdown of its financial requirements, including any national contributions from the government.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	In 2018, Ecuador reported 80,230m ² of outstanding mine contamination, a figure established through non-technical and technical survey. Lack of consistency across reporting periods, though, calls into question its accuracy.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	5	There is clarity of roles and responsibilities at a national level and Ecuador has necessary demining infrastructure in place. A decrease in national funding has left the national programme without sufficient resources to conduct operations.
GENDER (10% of overall score)	4	Ecuador has a small proportion of women employed in demining but the approach to gender mainstreaming seems superficial. All community members are consulted during liaison activities, but it is unclear how this features in planning, tasking, and prioritisation.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	Information management continues to be problematic with inconsistent and inaccurate figures for mine contamination, survey and clearance within reports and across reporting periods.
PLANNING AND TASKING (10% of overall score)	6	Ecuador submitted an Action Plan for 2019–22 with annual land release targets that it should be able to reach but which are resource dependent. It did not meet the land release targets set in its annual workplan for 2018 and is not on track to meet its targets for 2019.
LAND RELEASE SYSTEM (20% of overall score)	6	Ecuador claims it conducts survey and clearance according to the International Mine Action Standards (IMAS). All clearance is conducted by manual deminers as the terrain is deemed unsuitable for machines while dogs are used only for quality control.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	3	Ecuador's land release outputs fell in 2018 and it is on track to fall again in 2019. It is unclear whether Ecuador will meet its long extended Article 5 deadline despite having only a small amount of contamination.
Average Score	4.9	Overall Programme Performance: POOR

DEMINEING CAPACITY

MANAGEMENT

- National Centre for Humanitarian Demining (CENDESMI)
- Army Corps of Engineers (CEE)

NATIONAL OPERATORS

- CEE Battalion No. 68 "COTOPAXI"
- General Command for Demining and EOD (CGDEOD)
- Joint Ecuador-Peru Binational Humanitarian Demining Unit

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

In its latest Article 7 report, Ecuador reported that, as at December 2018, it had 80,230m² of anti-personnel mine contamination across 34 confirmed hazardous areas (CHAs) and 26 suspected hazardous areas (SHAs) in the province of Zamora Chinchipe (see Table 1). Contamination is believed to comprise a total of 3,260 mines.¹ Ecuador has stated that it applies non-technical survey and, if necessary, technical survey to mined areas that have been identified through, for example, an emergency survey, military archives, or information from the local population.²

Ecuador's reporting of contamination has often been inconsistent. For instance, the figure given for anti-personnel mine contamination in Zamora Chinchipe province in its 2017 Article 5 deadline extension request was 65,006m², but this rose without explanation to 89,874m² in its Article 7 transparency report for 2017.³

Ecuador's contamination results from its 1995 border conflict with Peru. The most heavily mined section of the border is the Condor mountain range (Cordillera del Condor) which was at the centre of the dispute.

Table 1: Anti-personnel mined area by province and district (at December 2018)⁴

Province	District	CHAs	Area (m ²)	SHAs	Area (m ²)	Total CHA/SHA	Total area (m ²)
Zamora Chinchipe	Chinchipe	1	7,009	0	0	1	7,009
	Yanzatza	3	6,565	0	0	3	6,565
	Centinela del Condor	2	130	0	0	2	130
	Nangaritza	16	4,827	0	0	16	4,827
	El Pangui	12	54,186	26	7,521	38	61,707
Totals		34	72,717	26	7,521	60	80,238

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The national mine action programme is managed by the National Centre for Humanitarian Demining (CENDESMI). The Ecuadorian government created CENDESMI by an Executive Decree in 1999.⁵ It is an interministerial body chaired by the Ministry of Foreign Affairs and Human Mobility and is made up of the Ministry of National Defence, the Ministry of Public Health, and the Army Corps of Engineers (CEE) through the Engineers Battalion No. 68 "COTOPAXI" and the General Command for Demining and EOD (CGDEOD).⁶ CENDESMI is responsible for overseeing compliance with the APMBC, while the CEE is responsible for coordinating the planning of demining and COTOPAXI is tasked with conducting land release operations.⁷

Ecuador currently funds all of its demining operations. It has allocated almost US\$21 million for demining personnel, materials and equipment for 2014–22.⁸ This amounts to around \$2 million per year from 2019 to 2022. However, only \$821,953 was actually provided to the demining programme in 2019 and Ecuador has called on the international community for financial support to complete demining by its Article 5 deadline.⁹ Ecuador has claimed that it requires just over \$8 million dollars to complete clearance. This will be used to replace personal protective equipment and other demining tools which are no longer usable, as well as for vehicles, training, food and shelter for the deminers.¹⁰

GENDER

Ecuador has trained women in both demining and the Information Management System for Mine Action (IMSMA) database.¹¹ Since 2014, Ecuador has employed three female deminers, 3% of the total trained.¹² Ecuador has reported that it will continue to include and train female personnel according to their availability.¹³

Ecuador has stated that it considers all populations affected by mines, without discrimination, in the planning and execution of demining operations.¹⁴

INFORMATION MANAGEMENT AND REPORTING

Ecuador uses the IMSMA database.¹⁵

Ecuador submits its Article 7 reports on a timely basis and reports on its progress in Article 5 implementation at APMBC intersessional meetings and Meetings of States Parties. Often, however, these reports and statements contain inconsistencies and inaccuracies. For instance, Ecuador's clearance plan for 2018–22, included in its Article 7 report for 2017, sought to clear a total of 65,006m² in Zamora Chinchipe. But in the same report it stated that 89,874m² of area remained to be cleared. Ecuador is now on its third extension request and while they are submitted in a timely manner there are similar problems with clarity and accuracy.

PLANNING AND TASKING

Ecuador submitted an updated work plan for implementation of Article 5 in May 2019, as requested by the Sixteenth Meeting of the States Parties.¹⁶ This included planned mine clearance in the last remaining contaminated province of Zamora Chinchipe for 2019 to 2022 (see Table 2).

Ecuador submitted annual workplans for 2018 and 2019 in its Article 7 reports. Its workplan for 2018 sought release of 26,159m² with 12 demining teams working from May to December.¹⁷ This target was not reached, with only 16,607m² of mined area being released in 2018.

In 2019, Ecuador planned to clear 23,383m² of contamination from the El Pangui and expected to find and destroy 478 anti-personnel mines. Clearance was expected to take place in August and September with 12 demining teams. Astonishingly, however, due to the lack of budget for demining operations for the year, only two days of clearance operations were planned for the whole of 2019 as of writing.¹⁸

Ecuador prioritises contaminated areas for clearance according to the proximity of the local population and the impact on socio-economic development.¹⁹

Table 2: Planned mine clearance in Zamora Chinchipe in 2019–22 (Action Plan)²⁰

Year	District	Mined areas	Area (m ²)
2019	El Pangui	12	23,383
2020	Yanzatza; Centinela del Condor, Nangaritza	12	18,299
2021	Chinchipe; Nangaritza	10	20,688
2022	El Pangui	26	17,868
Totals		60	80,238

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The process of humanitarian demining in Ecuador is carried out in accordance with the Binational Manual for Humanitarian Demining (Manual Binacional de Desminado Humanitario), developed under the Binational Cooperation Programme with Peru, and the Manual of Humanitarian Demining Procedures of Ecuador, based on the International Mine Action Standards (IMAS), which were adapted to the Ecuadorian context.²¹ Ecuador has adopted the IMAS for land release, non-technical survey, technical survey, clearance requirements, and explosive ordnance disposal.²²

In granting Ecuador’s 2017 Article 5 deadline extension request, the Sixteenth Meeting of States Parties noted that Ecuador should use the most relevant land release standards, policies, and methodologies, in line with IMAS, and encouraged it to continue seeking improved land release and certification techniques which could lead to Ecuador fulfilling its obligations more quickly.²³ Ecuador stated in its 2017 extension request that non-technical and technical survey would be carried out to determine the location, size, and other characteristic of the mined areas before operations begin using records of mined areas.²⁴ No non-technical survey and very limited technical survey was reported in 2018.

OPERATORS

Demining is conducted by COTOPAXI and the CGDEOD with a combined total of 140 trained deminers.²⁵ In 2018, COTOPAXI conducted clearance in Zamora Chinchipe province.²⁶

The joint Ecuador-Peru Binational Humanitarian Demining Unit is deployed to areas that were at the centre of the conflict between the two nations. In October 2015, the unit began operations in a mined area estimated to extend over 43,500m² within the Tiwinza square kilometre.²⁷ In 2018, clearance of the Tiwinza square kilometre was completed.²⁸

CENDESMI is responsible for observing and monitoring compliance of the demining, including quality control and certification of clearance operations.²⁹ In 2018, quality control was carried out in El Oro and Loja provinces.³⁰

OPERATIONAL TOOLS

In 2018, clearance was conducted only manually. Mechanical assets are only deployed in favourable weather conditions and where there is not too steep an incline.³¹ In the additional information provided alongside its 2017 extension request, Ecuador stated that the remaining clearance will only be carried out by manual deminers, due to the unsuitability of terrain for the machine.³² Mine detection dogs (MDDs) are used only for quality control following clearance.³³

DEMINER SAFETY

Ecuador has reported that no demining accidents occurred over the past 18 years.³⁴

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of 16,607m² of mined area was released in 2018, of which 14,068m² was cleared and 2,359m² was released through technical survey. A total of 247 anti-personnel mines and 3 items of unexploded ordnance (UXO) were found and destroyed. An additional 16 mines were found outside the survey area.³⁵

SURVEY IN 2018

No non-technical survey took place in 2018. A total of 2,539m² was reduced through technical survey in the Tiwinza square kilometre by the Binational Humanitarian Demining Unit. This is a reduction from survey output in 2017 when 7,332m² was reduced through technical survey and 10,919m² cancelled through non-technical survey in the square kilometre, covering a total of 18,251m².³⁶

Table 3: Reduction of mined area through technical survey in 2018³⁷

Province	Area reduced (m ²)
Tiwinza	2,539
Total	2,539

CLEARANCE IN 2018

In 2018, clearance of 5,056m² remaining in the Tiwinza province was completed by the Binational Humanitarian Demining Unit. In total, 14,068m² was cleared in 2018 along with the destruction of 247 anti-personnel mines, a reduction from the 15,476m² cleared and 453 anti-personnel mines destroyed in 2017. An additional 16 mines were found outside the area recorded as mined.

Table 4: Mine clearance in 2018³⁸

Province	Areas cleared	Area cleared (m ²)	AP mines destroyed
Tiwinza	3	5,056	188
Zamora Chinchipe	4	9,012	59
Totals	7	14,068	247

ARTICLE 5 DEADLINE AND COMPLIANCE

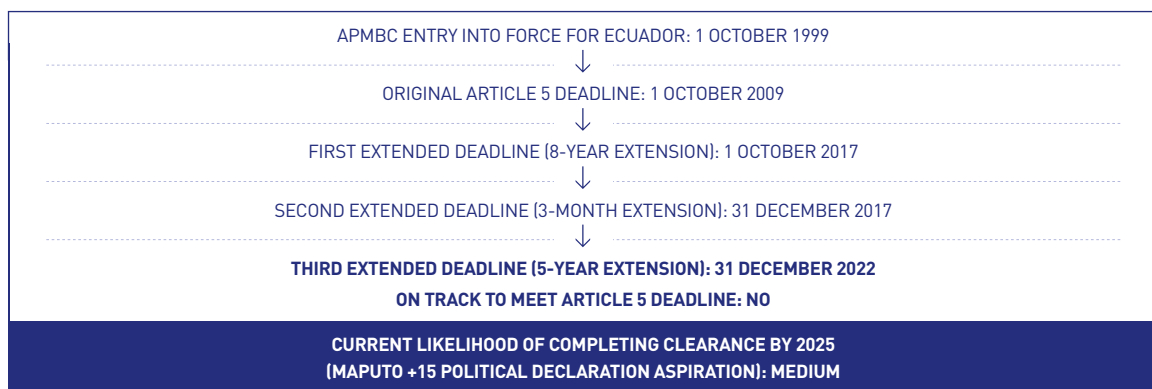


Table 5: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m ²)
2018	14,068
2017	15,476
2016	1,410
2015	66,414
2014	39,660
Total	137,028

Ecuador has submitted three extension requests since the 2014 Maputo Review Conference. In May 2016, Ecuador announced that, of the remaining 0.13km² of contamination, 0.08km² would be cleared in 2016 and the remaining 0.05km² in 2017 prior to its October 2017 deadline.³⁹ This did not happen. Instead, on 28 November 2016, Ecuador unexpectedly submitted a request to extend its mine clearance deadline to 31 December 2017. At the time of the request, Ecuador stated that “the technical survey and clearance 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." Ecuador explained that the failure to meet the 1 October 2017 deadline was due to a serious earthquake on 16 April 2016, which required the diversion of the armed forces away from demining, as well as to the physical characteristics of the land and climate conditions in the areas requiring clearance.⁴⁰ In its Article 7 report for 2016, Ecuador suddenly and without explanation determined that it would need a further five years to fulfil its Article 5 obligations. It submitted another Article 5 deadline extension request in March 2017 and was granted a deadline extension to 31 December 2022.

Although Ecuador's survey and clearance output has fallen considerably since 2015, it could still meet its Article 5 deadline of 31 December 2022 if it were so minded. Annual targets it has set are unambitious but require capacity to be maintained. Due to a decline in the demining budget, Ecuador is not doing so. In 2015, Ecuador significantly increased clearance output by incorporating an MV-4 remotely controlled flail into operations. However, Ecuador then determined that the remaining mines were in areas inaccessible to the machine and that clearance would only be conducted with manual deminers.⁴¹

Survey and clearance outputs fell from 33,000m² in 2017 to 16,607m² in 2018, with just under half of output in 2018 from the Binational Humanitarian Demining Unit that has now completed operations in the Tiwinza square kilometre. At the time of the 2017 extension request, Ecuador had a total of 140 trained deminers, but in its latest Article 7 report Ecuador stated that only two days of clearance were planned for 2019.⁴² This means it is highly unlikely to meet the land release target for the year as set out in its Action Plan for 2019 to 2022 (see Table 2) and is at risk of not meeting its Article 5 deadline.

Despite allocating more than \$20 million for demining in 2014–22, enough to complete operations, the annual budget was reduced in 2019 and operations were limited. Ecuador is requesting financial support from the international community and, in 2019, is participating in the APMBC's "Individualised approach". It is unclear how much Ecuador is willing to fund itself or how much of this support could be in the form of equipment or personnel rather than direct funding.

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| <p>1 APMBC Article 7 Report (for 2018), Form D.</p> <p>2 Ecuador Demining Action Plan 2019–2022, p. 5.</p> <p>3 2017 Article 5 deadline Extension Request, p. 45.</p> <p>4 Ibid., Annex I.</p> <p>5 Executive Decree No. 1297, issued on 22 September 1999.</p> <p>6 2017 Article 5 deadline Extension request, Annex I.</p> <p>7 Ibid., pp. 39 and 40.</p> <p>8 Ecuador Demining Action Plan 2019–2022, p. 20.</p> <p>9 Ibid.; and Statement of Ecuador, Committee on Article 5 implementation, Geneva, 22 May 2019.</p> <p>10 APMBC Individualised Approach Meeting at Intersessionals, "Mine Action Program of Ecuador Status and Challenges in Implementation", Geneva, 23 May 2019; and Ecuador Demining Action Plan 2019–2022, p. 21.</p> <p>11 Ecuador Demining Action Plan 2019–2022, p. 17.</p> <p>12 2017 Article 5 deadline Extension Request, pp. 39 and 41.</p> <p>13 Ecuador Demining Action Plan 2019–2022, p. 20.</p> <p>14 Ibid., p. 23.</p> <p>15 2017 Article 5 deadline Extension Request, p. 25.</p> <p>16 Decisions on the request by Ecuador for an extension of its Article 5 deadline, 16MSP, 21 December 2017.</p> <p>17 Article 7 Report (for 2017), Form D.</p> <p>18 Article 7 Report (for 2018), Form D.</p> <p>19 Demining Action Plan 2019–2022, p. 17.</p> <p>20 Ecuador Demining Action Plan 2019–2022, pp. 19–20.</p> <p>21 Ibid., p. 5.</p> <p>22 Ibid., p. 17.</p> <p>23 Decisions on the request by Ecuador for an extension of its Article 5 deadline, 16MSP, 21 December 2017.</p> | <p>24 2017 Article 5 deadline Extension Request, p. 15.</p> <p>25 Ibid., pp. 39–40.</p> <p>26 Article 7 Report (for 2018), Form D.</p> <p>27 2017 Article 5 deadline Extension Request, Additional Information provided on 8 September 2017, p. 1.</p> <p>28 Article 7 Report (for 2018), Form D.</p> <p>29 2017 Article 5 deadline Extension Request, p. 39.</p> <p>30 Article 7 Report (for 2018), Form D.</p> <p>31 APMBC Individualised Approach Meeting at Intersessionals, "Mine Action Program of Ecuador Status and Challenges in Implementation", Geneva, 23 May 2019.</p> <p>32 2017 Article 5 deadline Extension Request, Additional Information provided on 8 September 2017, p. 1.</p> <p>33 Ecuador Demining Action Plan 2019–2022, p. 18.</p> <p>34 Ibid., p. 21.</p> <p>35 Article 7 Report (for 2018), Form D.</p> <p>36 Ibid.</p> <p>37 Ibid.</p> <p>38 Ibid.</p> <p>39 Statement of Ecuador, Committee on Article 5 Implementation, Geneva, 19 May 2016.</p> <p>40 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 Centre 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.</p> <p>41 2017 Article 5 deadline Extension Request, Additional Information provided on 8 September 2017, p. 1.</p> <p>42 2017 Article 5 deadline Extension Request, p. 39.</p> |
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ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 FEBRUARY 2020 NOT ON TRACK TO MEET DEADLINE AND IN VIOLATION OF THE CONVENTION

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MEDIUM, **20** km²
(ESTIMATED)

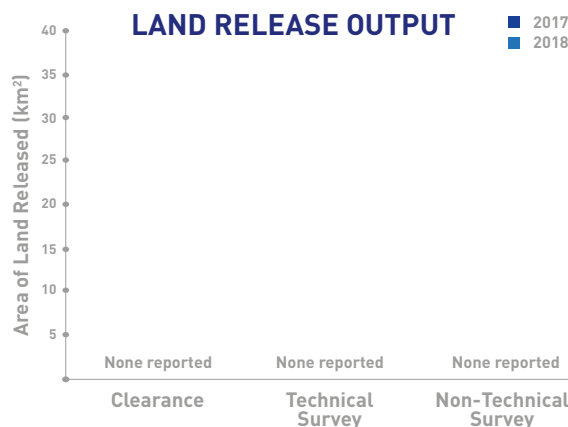
AP MINE
CLEARANCE IN 2018

**NONE
REPORTED**

AP MINES
DESTROYED IN 2018

**NONE
REPORTED**

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Eritrea's Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline expires on 1 February 2020. As at July 2019, it had not indicated whether it would submit a request to again extend its Article 5 deadline. It was the only state party with a deadline in 2020 which failed to acknowledge its upcoming deadline or report on plans for an extension.

Eritrea is failing to comply with its obligation under Article 5 of the APMBC to complete clearance as soon as possible. There is no indication of any progress in mine action since the end of 2013. 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 2019. 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 mine survey and clearance are undertaken for humanitarian and developmental purposes as a matter of urgency.
- Eritrea should urgently submit an extension request for its Article 5 deadline, which includes an up-to-date list of all known or suspected areas with anti-personnel mines and a detailed timeline of activities planned for the extension period sought.
- Eritrea must urgently submit its outstanding annual Article 7 transparency reports, the latest of which was due by 30 April 2019.
- Eritrea should reconsider its policy of excluding international technical assistance in mine action, which would support efficient land release and re-open international funding paths.
- Eritrea should cooperate in cross-border mine action activities with Ethiopia, including as part of recent efforts towards a peace agreement with its neighbour.
- Eritrea should develop and make public a resource mobilisation strategy on the basis of a clear understanding of remaining contamination.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	The last estimate of mine contamination in Eritrea dates back to the end of 2013, when Eritrea reported that 434 mined areas remained with a size of 33.4km ² . All area is reportedly suspected hazardous area. Mine Action Review is unaware of any indication of progress in land release or updated information on the extent of contamination since this time.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	4	Eritrea's mine action programme is entirely nationally managed. The Eritrean Demining Agency (EDA) is responsible for mine clearance.
GENDER (10% of overall score)	3	It is not known if Eritrea has policies in place relating to gender and mine action.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	1	Details on Eritrea's current information management system are not known. However, its lack of submissions of Article 7 reports over the past five years is a violation of the Convention. It has failed to provide any updates on the status of its mine action obligations in recent years.
PLANNING AND TASKING (10% of overall score)	1	Recent details on Eritrea's planning and tasking system are not available.
LAND RELEASE SYSTEM (20% of overall score)	4	Eritrea is reported to have National Mine Action Standards dating back to 2012. The EDA was responsible for the implementation of quality management activities.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	1	Eritrea has made little, if any, progress at all in land release to meet its obligations under its second Article 5 extension request. In 2014, Eritrea reported that it expected to require a third extension, but, as at July 2019, it had taken no apparent steps towards requesting one. It remains in violation of the Convention for failing to complete mine survey and clearance as soon as possible, and for not respecting other procedural provisions of the Convention.
Average Score	2.7	Overall Programme Performance: VERY POOR

DEMINING CAPACITY

MANAGEMENT

- Eritrea Demining Agency (EDA)

NATIONAL OPERATORS

- Engineering units of the Eritrean Armed Forces

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Eritrea is affected by mines and explosive remnants of war (ERW) dating back to World War II, but largely as the result of the struggle for independence in 1962–91 and its armed conflict with Ethiopia in 1998–2000.

In May 2015, in response to Mine Action Review's request for updated information on the state of contamination and mine action activities in Eritrea, the Deputy General Manager of the Eritrea Demining Agency (EDA) reported "no significant progress registered by the EDA currently". He claimed, though, that the EDA was being reorganised in an effort to make "better progress".¹ Since 2015, the EDA has not responded to repeated requests from Mine Action Review for further information, most recently in the first half of 2019.

The last estimate of mine contamination in Eritrea dates back to the end of 2013, when Eritrea reported 434 mined areas covering an estimated 33.4km.² This was a two-thirds reduction on the earlier estimate of 99km² of June 2011,³ and significantly lower than the 129km² identified by the 2004 landmine impact survey.⁴

Table 1: Mined area by region (at end 2013)⁵

Zoba (region)	SHAs	Estimated area (m ²)
Semienawi Keih Bahri	166	9,462,537
Anseba	144	10,230,940
Gash Barka	63	6,252,951
Debub	29	3,894,036
Maakel	24	2,423,325
Debubawi Keih Bahri	8	1,169,029
Totals	434	33,432,818

SHA = suspected hazardous area

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Eritrea mine action programme is entirely nationally managed. The EDA, established in July 2002, is responsible for policy development, regulation of mine action, and the conduct of mine clearance operations. The EDA reports directly to the Office of the President.

Eritrea projected that costs for its current Article 5 extension period would amount to more than US\$7 million, all to be raised nationally.⁶ In 2011–13, Eritrea managed to raise only \$257,000 annually. Eritrea acknowledged at the time that its progress in clearing mines would be slow due to its lack of resources, but it has never been clear how Eritrea intended to secure the funding necessary for its survey and clearance activities, particularly in light of its regrettable policy not to accept international technical assistance.⁷

GENDER

Eritrea did not respond to Mine Action Review's inquiries in 2019 about the national mine action programme's policies relating to gender.

INFORMATION MANAGEMENT AND REPORTING

Details on Eritrea's current information management system are not known. However, its lack of submissions of Article 7 reporting over the past five years is a violation of the Convention. It has also failed to provide an updated Article 5 workplan or any updates on the status of demining in recent years.

PLANNING AND TASKING

There is no apparent recent information on how Eritrea plans its demining operations. Re-survey during the second extension period was planned to involve both technical and non-technical survey of all remaining mined areas across six regions, and to run concurrently with clearance in priority areas in the Anseba, Maakel, and Semienawi Keih Bahri regions.⁸

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Eritrea reportedly has National Mine Action Standards that date back at least to 2012. It is not known if any updates to the standards have been made in the seven years since. It was reported that the EDA was responsible for the implementation of quality assurance (QA) and quality control (QC) activities.⁹

OPERATORS

In the past, demining has been primarily conducted by the engineering units of the Eritrean defence forces under the supervision of the EDA.¹⁰ According to its second Article 5 deadline extension request, Eritrea planned to deploy “at least” five demining teams during its second extension period.¹¹

Following expulsion of international non-governmental organisations (NGOs) in 2005, the authorities do not allow international operators to conduct survey or clearance in Eritrea.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Under its 2014 extension request, Eritrea projected that up to 15.4km² of mined area could be cleared within five years. It reported that 67.3km² of contaminated area had been cancelled through non-technical survey and that 5.7km² was cleared over 38 mined areas in 2011–13.¹²

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. In 2013, Eritrea had reported release of 157 SHAs totalling 33.5km², leaving 385 mined areas of close to 24.5km² to be surveyed.¹³ Forty-nine new

mined areas with a total size of 9km² were discovered in five of the country's six regions during non-technical survey in 2013: Anseba, Debub, Gash Barka, Maakel, and Semienawi Keih Bahri.¹⁴

Likewise, Eritrea has not made public any information on any mine clearance undertaken in 2018 or recent years. In 2013, Eritrea seemingly cleared approx. 2.26km² of mined area, almost twice the amount cleared in 2012 (1.2km²).¹⁵ The number of anti-personnel and anti-vehicle mines destroyed in 2013 was not reported.

LAND RELEASE OUTPUTS IN 2018

As stated, no land release output, including survey or clearance, was reported in 2018.

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 2: Five-year summary of AP mine clearance (2014–18)*

Year	Area cleared (m²)
2018	N/R
2017	N/R
2016	N/R
2015	N/R
2014	N/R
Total	N/R

* N/R = Not Reported

Under Article 5 of the APMBC (and in accordance with the three-year extension granted by states parties in 2011 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, is failing to comply with its Article 5 obligations, and as at August 2019 had not submitted a request for an extension to its Article 5 deadline. If Eritrea fails to submit an Article 5 extension for consideration and approval by states parties at the Fourth APMBC Review Conference in November 2019, it will be in serious violation of Article 5 as of its Article 5 deadline of 1 February 2020.

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. 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".¹⁶

Based on a predicted clearance rate of 0.384km² per team per year and 1.92km² per five teams per year, Eritrea estimated that five teams operating at this pace could clear almost 15.4km² in the five-year period.¹⁷ It acknowledged, though, that this was "ambitious" and the amount projected still accounted for less than half of the total area Eritrea estimated as requiring either clearance or re-survey (33.5km²), leaving some 18km² unaccounted for.¹⁸

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".¹⁹ It was further stated that Eritrea "won't complete clearance in the next five years", and will likely require a third extension.²⁰ 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 2018 or the first half of 2019. As at August 2019, Eritrea was in clear violation of the Convention, both substantively and procedurally, and had yet to submit an extension request to its Article 5 deadline of 1 February 2020.

1 Email from Habtom Seghid, Deputy General Manager, EDA, 6 May 2015.

2 2014 Article 5 deadline Extension Request, p. 7. This was despite finding 49 previously unrecorded suspected hazardous areas (SHAs) in five regions across an estimated area of 9km² during non-technical survey in 2013. Analysis of Eritrea's Second Article 5 deadline Extension Request, submitted by the President of the 13th Meeting of the States Parties on behalf of the States Parties mandated to analyse requests for extensions, 20 June 2014, p. 2.

3 Eritrea's reply to questions from the Article 5 Analysing Group about its Article 5 deadline Extension Request, 7 June 2011, p. 2.

4 Survey Action Center (SAC), "Landmine Impact Survey, Eritrea, Final Report", May 2005, p. 7.

5 2014 Article 5 deadline Extension Request, p. 8.

6 Ibid., p. 11.

7 Statement of Eritrea, 13th Meeting of States Parties, Geneva, 6 December 2013.

8 Statement of Eritrea, Standing Committee on Mine Clearance, Geneva, 9 April 2014.

9 Article 7 Report (for 2012), Form F, p. 5.

10 Ibid.

11 Ibid., p. 10.

12 Analysis of Eritrea's Second Article 5 deadline Extension Request, 20 June 2014, p. 2.

13 Second Article 5 deadline Extension Request, 23 January 2014, p. 7.

14 Analysis of Eritrea's Second Article 5 deadline Extension Request, 20 June 2014, p. 2.

15 Article 7 Report (for 2012), Form F, p. 10.

16 Decision on Eritrea's Second Article 5 deadline Extension Request, Third APMBC Review Conference, Maputo, 26 June 2014.

17 Second Article 5 deadline Extension Request, 23 January 2014, p. 10.

18 ICBL Comments on Eritrea's Article 5 Extension Request, March 2014.

19 Statement of Eritrea, Standing Committee on Mine Action, Geneva, 9 April 2014. Notes by ICBL.

20 Ibid.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JUNE 2020
EXTENSION REQUESTED TO 31 DECEMBER 2025

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

HEAVY, 27 km²
(ESTIMATED)

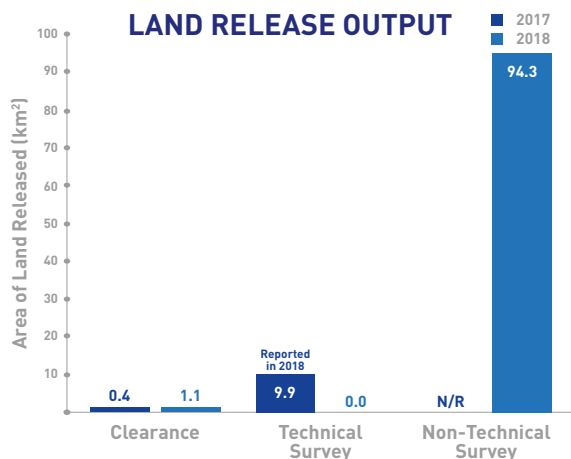
AP MINE
CLEARANCE IN 2018

1.1 km²

AP MINES
DESTROYED IN 2018

582

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

In March 2019, certain that it would fail to meet its Article 5 extended deadline of 1 June 2020 owing to insufficient progress in land release, Ethiopia submitted a second extension request to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline, this time for a period of five years until 31 December 2025. This second extension request indicates a number of positive developments have occurred, including the restarting of demining and land release, which is welcome after years of little or no progress. The request states there is increasing access for mine action operations in the previously inaccessible contested border area with Eritrea, owing to recent progress in peace negotiations with its neighbour. Also positive is the news that responsibility for the

national mine action programme will be moved directly under the Ministry of Defence's Head Office, which may increase efficiency and the implementation of mine action operations, as well as enhance access to government resources.

A number of reported challenges remain unchanged, however, including the remoteness of certain areas of contamination, technical and logistical challenges, a lack of basic infrastructure, and a critical lack of funding. Significant questions also remain as to the feasibility of the extension request's land release targets and the demining capacity and resources required to meet them. Ethiopia's second extension period must not be another lengthy period of inactivity.

RECOMMENDATIONS FOR ACTION

- If granted the second Article 5 extension by States Parties, Ethiopia should act immediately to carry out demining operations, seek additional capacity and resources, and renew its commitment to meet its treaty obligations.
- Ethiopia should ensure the re-established national mine action authority has sufficient resources to establish and sustain an effective mine action programme, as well as to develop a robust resource mobilisation plan to address the wide gap in funding projected under its extension request.
- Ethiopia should clarify its ability to meet the annual land release targets in its extension request and the capacity of the demining companies to be deployed to address the remaining challenge.
- Ethiopia should cooperate in cross-border mine action activities with Eritrea, including as part of recent efforts towards a peace agreement with its neighbour.

- Ethiopia should report on plans to carry out survey on the border with Eritrea as well as on any changes to the security situation that could affect mine action operations.
- All mine action data should be reported and recorded according to the International Mine Action Standards (IMAS) land release terminology. Ethiopia should report regularly with updates on the number and extent of all mined areas and disaggregated land release output.
- Ethiopia should reconsider use of additional mine action tools, including mine detection dogs, given the vast amount of suspected hazardous area (SHA) that is projected to be released through survey.
- Ethiopia should re-establish conditions that would allow for the re-entry of international demining organisations.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	Ethiopia has a baseline estimate of remaining contamination, largely on the results of an inflated and inaccurate landmine impact survey concluded in 2004. The estimate of contamination reported as at April 2019 includes a vast amount of suspected hazardous area, of which only 2% is expected to contain mines.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	5	In 2019, it was reported that Ethiopia's national mine action programme would be moved to report directly to the Head Office of the Ministry of Defence, which is hoped will raise the profile of mine action, and improve the efficiency of operations and availability of national resources.
GENDER (10% of overall score)	3	Ethiopia claimed to have a gender policy in place for its mine action centre and reflected in its national mine action standards. It reported that according to the policy, there is equal access for employment for qualified men and women in survey and clearance teams, including for managerial positions, but, in practice no women were involved in any survey or clearance activities in 2018.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	Some improvement in Ethiopia's reporting capacity was evident in its 2019 Article 5 deadline extension request and Article 7 report, but data discrepancies remained, along with a lack of detail and inconsistencies in the use of land release methodology.
PLANNING AND TASKING (10% of overall score)	5	The second Article 5 extension request contains new annual targets for survey and clearance for the extension request period, but whether they are realistic and achievable, based on the demining capacity and rates of clearance projected, deserves careful scrutiny.
LAND RELEASE SYSTEM (20% of overall score)	6	The extension request details the land release methodology and quality management measures to be employed during the extension period.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	In 2019, Ethiopia requested a second Article 5 deadline extension of five years until end 2025. On the basis of the request, it is not impossible that Ethiopia could meet this new deadline. But given its poor track record, key questions about assumptions in land release productivity, and lack of current funding, meeting even this extended deadline seems questionable. It is encouraging, however, to see a substantial increase in the amount of land released in 2018, of over 95km ² , primarily through non-technical survey.
Average Score	4.9	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT

- Head Office of the Ministry of Defence
- Ethiopia Mine Action Office (EMAO)

NATIONAL OPERATORS

- National Demining Companies (Ethiopian Armed Forces)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- International Committee of the Red Cross (ICRC)

UNDERSTANDING OF AP MINE CONTAMINATION

As at 30 April 2019, and according to Ethiopia's Article 5 deadline extension request submitted in March 2019, a total of 261 suspected and confirmed hazardous areas with a size of 1,056km² remained.¹ The request, however, contains a number of discrepancies in reporting, possibly due in part to previous inconsistencies in reporting on area remaining in its 2017 updated workplan and previous first Article 5 extension request.²

Of the total contamination remaining in 2019, Ethiopia reported that 35 areas with a size of just over 6.3km² were confirmed hazardous areas (CHAs) and 226 areas with a size of 1,050km² were suspected hazardous areas (SHAs). In keeping with previous reporting, the request states that only 2% of the suspected hazardous area is expected to actually contain mines.³ As such, the request projects a total of 27.3km² (6.3km² of existing CHA and 21km² of the SHA reported) will require clearance, while 1,029km² will be cancelled or reduced.⁴

There appears to be a relatively consistent and coherent narrative in the second extension request of progress made since Ethiopia's original Article 5 deadline expired in 2015. At that time, Ethiopia reported that a total of 314 CHA and SHA with a size of 1,193km² remained to be addressed. During 2015-18, 53 areas covering 136.8km² were reportedly released.⁵

Positively, the second extension request claims increasing potential for mine action operations to take place in the contested border areas with Eritrea due to ongoing efforts towards a peace agreement in 2019, and that negotiations

through a joint border commission will allow mine action in previously inaccessible areas to begin. Specifically, new "military humanitarian demining" operations are to start in the Tigray border minefield.⁶

At the same time, the extension request also states that access to mined areas in Afar and Somali regions continued to present a challenge for operations due to insecurity and their remoteness, while technical and logistical challenges and a lack of infrastructure continued to hamper access to Gambela and Benishangul regions.⁷

As at April 2019, 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.

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 2,000km² impacting more than 1,492 communities.⁸ The Ethiopian Mine Action Office (EMAO) stated that the LIS overestimated the number of both SHAs and impacted communities, citing lack of military expertise among the survey teams as the major reason for the overestimate.⁹

Table 1: Mined area by region (at 30 April 2019)¹⁰

Region	CHAs	Area (km ²)	SHAs	Area (km ²)	Total SHA/CHA	Total area (km ²)
Afar	6	1.76	8	1.92	14	3.67
Benishangul	2	0.05	0	0	2	0.05
Gambela	0	0	20	0.84	20	0.84
Oromia	0	0	13	1.03	13	1.03
Somali	24	3.81	185	1,046.27	209	1,050.08
Tigray	3	0.69	0	0	3	0.69
Totals	35	6.31	226	1050.06	261	1,056.36

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In 2001, following the end of the conflict with Eritrea, Ethiopia's Council of Ministers established EMAO as an autonomous civilian body responsible for mine clearance and mine risk education.¹¹ 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).¹² 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 APMBBC 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.¹³

In response to the decision to close EMAO and transfer demining responsibility to the army's Combat Engineers Division, NPA ended its direct funding support and had completed the transfer of its remaining 49 mine detection dogs (MDDs) to EMAO and the federal police by the end of April 2012. The Combat Engineers Division took over management of the MDD Training Centre at Entoto where it conducted training in demining in early 2012.

The transition of EMAO to the Ministry of National Defence appeared to be in limbo until September 2015, when Ethiopia reported that oversight of national mine action activities had been re-established as "one Independent Mine Action Office" under the Combat Engineers Main Department.¹⁴ In 2017, 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.¹⁵

In 2019, however, Ethiopia reported that the responsibility for the national mine action programme had been transferred back to the Head Office of the Ministry of Defence. It said this was done to enable the Ministry of Defence to directly manage resources and mine action activities; to improve access to remaining CHAs, which it stated are more "easily reachable" by the Ministry of Defence; and to raise the profile of mine action operations at a time when resources for demining are increasingly limited, as the Ministry of Defence is said to be better placed to communicate with donors and secure government resources for demining.¹⁶

According to Ethiopia's second extension request, just under US\$41 million is required to fulfil its Article 5 obligations by 2025, a decrease from \$46 million reported in its 2017–20 workplan, which it said was due to progress made in land release in 2016–18. The request includes a breakdown of the budget required (\$28.7 million for demining, \$6.1 million for coordination and administration, \$4.1 million for training and equipment to manage "residual issues"; and \$2 million

for quality assurance and information management).¹⁷ In 2018, the Ethiopian government was the sole funder of mine action operations.¹⁸ Of the \$41 million projected in the second extension request, the government is projected to cover 20% of required remaining funding, or \$8.2million.¹⁹

Ethiopia's 2019 Article 5 deadline extension request notes the positive contribution of the availability of trained and highly experienced demining teams ready to be deployed. Ethiopia has also made numerous requests for international assistance, most recently, to complete the capacity building of its demining training centre, and training for deminers to be better equipped to conduct battle area clearance and disposal of ERW.²⁰

In 2018, EMAO reported that all administrative costs of the EMAO were covered by the Government of Ethiopia, along with all costs for survey and clearance activities.

EMAO informed Mine Action Review that the transfer of responsibility for the mine action office to be directly accountable to the Ministry of Defence would help allocate funding and a budget directly from the head office of the Ministry of Defence. Positively, EMAO reported it expected to receive increased funding in 2019 as a result.

GENDER

In August 2019, EMAO claimed to have a gender and diversity plan in place and to have mainstreamed gender in the national mine action standards. It stated that all groups affected by anti-personnel mine contamination are consulted during survey and community liaison activities through face-to-face interviews and using elders to disseminate information to local communities, assisted by mine risk education officers. It also noted, though, that no female deminers were employed in the operational demining companies. It claimed that, according to EMAO's policy, there is equal access for employment for qualified men and women in survey and clearance teams, including for managerial positions, but, in practice no women were currently involved in survey or clearance activities in 2018.²¹

INFORMATION MANAGEMENT AND REPORTING

Although a version of the Information Management System for Mine Action (IMSMA) database software was installed and customised by EMAO prior to 2015, in 2019, Ethiopia continued to report it was still using an "alternative data processing package" alongside the IMSMA database, due to a "gap" in the IMSMA system's installation. It reported that efforts to upgrade capacity and data processing had been ongoing under EMAO, but again requested additional IMSMA training and assistance from the Geneva International Centre for Humanitarian Demining (GICHD) to finalise the transfer of the database.²²

While a number of inconsistencies, a lack of detail, and errors in data calculations persisted in Ethiopia's Article 5 extension request and subsequent Article 7 report, both are evidence of improvements in reporting from previous years, when reporting was of especially poor quality.

PLANNING AND TASKING

Ethiopia's second Article 5 extension request for the period 2020–25 is to achieve the following:

- Address the remaining 1,065km² of mine contamination
- Complete the survey of the buffer zone areas between Ethiopia and Eritrea once demarcation is completed
- Obtain the support of donors and international advisors
- Fully equip and train the demining companies, Rapid Response Teams (RRT), and explosive ordnance disposal (EOD) teams
- Implement risk education in affected communities and mark SHAs
- Finish the building of the demining training centre.²³

The extension request contains annual targets and a workplan, which foresee a total land release of some 175km² per year in 2020–24, and 3.9km² in the final year (2025). Despite some data discrepancies, this would appear to include a breakdown of 171.5km² released through survey annually from 2019–24, along with 1.9km² released through clearance in 2019, 4.3km² released through clearance each year in 2020–24, and a final 3.9km² cleared in 2025.²⁴

Ethiopia's second Article 5 deadline extension request sets new annual targets for the five-year completion period.²⁵ The workplan, however, raises a number of critical questions as to whether it is realistic and achievable. For example, Ethiopia does not provide detail on how the significant jump in projections for clearance from 1.9km² in 2019 to 4.3km² in 2020 is to be realised. The request indicates that one additional "demining company" will be added during the extension period, but does not specify at what time this will occur or the number of deminers who will form the company. EMAO later informed Mine Action Review that 90 deminers formed a demining company.²⁶ The request also foresees that one deminer will clear on average 40–50 square metres per day, 22 days a month, 10 months a year; projections which would seem potentially improbably high.²⁷

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Ethiopia's second extension request elaborates in detail the land release methodology intended to be employed in demining operations.²⁸ The request claims that manual demining is the most efficient and least costly method of clearance, and states that machines cannot be used due to the terrain of the remaining contaminated areas.²⁹ However, with such large projections for cancellation and reduction of SHA, Ethiopia could consider other options in the mine action tool box beyond manual clearance, such as the use of MDDs in technical survey.

Ethiopia previously reported in 2107 that 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 revised according to the current IMAS. It had also reported that this would happen in 2015, according to its extension request targets.³⁰ As at 2019, Ethiopia had not, however, reported that the revisions have been completed.

OPERATORS

According to EMAO, two companies were deployed for clearance in 2018, along with two technical survey teams, and one EOD team.³¹

Ethiopia's second extension request foresees that following a "rearrangement" of its four demining companies and four RRTs, which include two technical survey/RRTs and two specialist EOD teams in 2019, these four demining companies and four RRTs are to be deployed each year through to the completion of its Article 5 extension request in 2025.³²

The request claims that the manual clearance, technical survey, and EOD teams have carried out extensive trainings and "are enough capable to implement the activities mentioned in the detailed workplan".³³ At the same time, the request anticipates the deployment of an additional demining company, though it does not specify the number of deminers which comprise a company, nor when it would be operational.³⁴ As noted above, EMAO informed Mine Action Review that 90 deminers form a demining company.³⁵

OPERATIONAL TOOLS

Ethiopia has reported that only manual clearance has been used in recent years. While its national mine action programme is in possession of six ground preparation machines, it reported that these were not in use as all remaining hazardous areas are located in remote areas, which it claims are only suitable for manual clearance.³⁶

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2016–18

According to EMAO, a total of more than 95.4km² of anti-personnel mined area was released in 2018: nearly 94.3km² through survey and 1.1km² through clearance.

In its 2019 Article 5 deadline extension request and Article 7 report, Ethiopia detailed its land release activities for the first time in recent years. According to the 2019 extension request, over the previous extension period, a total of 53 areas with a size of 136.8km² were released with the destruction of 582 anti-personnel mines, 70 anti-vehicle mines, and 7,286 items of unexploded ordnance (UXO).³⁷

Ethiopia's extension request reports that in total, 0.1km² was released in 2016 with the destruction of 30 anti-vehicle mines; just over 41.4km² was released in 2017 with the destruction of 37 anti-vehicle mines and 21 items of UXO; and just over 95.3km² was released in 2018, with the destruction of 582 anti-personnel mines, 3 anti-vehicle mines, and 7,265 items of UXO.³⁸ The extension request underlines that this doubling in land release output from 2017 to 2018 was due to an increase in resources and government commitment.³⁹

SURVEY IN 2018

According to EMAO, a total of over 94.3km² was cancelled by non-technical survey by the Engineering Main Department in 2018, all in Somali region. No area was reported reduced by technical survey in 2018.

This is a significant increase in overall survey output compared to 2017, when EMAO informed Mine Action Review that in 2017, a total of just over 9.9km² was reduced by technical survey, also all by the Engineering Main Department in Somali region.⁴⁰ No cancellation through non-technical survey was reported during that year.

In 2016–18, EMAO reported that in total, 53 areas with a size of 136km² was released in Fik, Misrak Gashamo, and Degehabur districts in the Somali region, of which a total of 125km² was reportedly cancelled and almost 10km² reduced through technical survey.⁴¹

CLEARANCE IN 2018

According to EMAO, a total of five areas with a size of just under 1.1km² were cleared in 2018, with the destruction of 582 anti-personnel mines, 3 anti-vehicle mines, and 7,265 items of UXO.⁴² It reported that the increase from the 0.4km² cleared in 2017 was due to an increase in budget and trainings previously carried out.⁴³

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 2: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	1.1
2017	0.40
2016	*0.50
2015	N/R
2014	N/R
Total	2.0*

* Estimated clearance based on report for 2016–18

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 will not meet this deadline and submitted a request for a second extension of its Article 5 deadline in March 2019, for a period of five years, until 31 December 2025.⁴⁴

Ethiopia has listed the following reasons for its inability to comply with its Article 5 obligations: insecurity in and around some mined areas; the lack of basic social services and infrastructure necessary for operations in rural areas; continuous redeployment of demining teams in scattered mined areas; lack of funding; the identification of additional hazardous areas; climate (such as a three-month rainy season); and a lack of precise information on the number and location of mined areas.⁴⁵

Ethiopia has been at best, overly ambitious, or at worst, misrepresentative in its projections and estimations for completion of survey and clearance in recent years. Its 2017–20 workplan, submitted in October 2017, stated that it was “realistic” that all 314 areas then remaining could be addressed using “all available demining assets in Ethiopia” within the extension time period, and that donor funding will enable it “successfully to complete the clearance of contaminated areas from land mines and fulfil the legal obligations of the Anti-Personnel Mine Ban Convention by 2020”.⁴⁶ This was not the case.

The second extension request clearly sets out primary assumptions and risk factors in implementing its targets: that donor funding will increase steadily; that old demining equipment is replaced by "licensed" demining equipment; that one deminer will clear on average as much as 50 square metres per day, 22 days a month, and 10 months a year; and that one additional demining company will be added, for a total of five deployed. As noted, however, the average clearance average per deminer would appear unrealistically high.⁴⁷

While these concerns deserve greater scrutiny and clarifications from Ethiopia, its increased engagement to fulfil its Article 5 obligations evidenced in its second extension request, the reported improvements in border security and greater access for mine action operations, the increase in government resources for mine action in 2017–18, and the new political reporting lines of the national mine action programme office, are welcome signs of progress. Building on these positive developments, Ethiopia's efforts to reach its goal of Article 5 completion by 2025 should be fully encouraged and supported by the international community.

- 1 Article 7 Report (for 2018), Form D.
- 2 Ethiopia's reporting on the number and size of areas suspected or confirmed to be mined has been plagued with inconsistencies, including the figures contained within its 2015 Article 5 extension request, its response to subsequent requests for clarification, statements at APMBC meetings, and its last Article 7 transparency report on the status of contamination as at 30 April 2017. Ethiopia has been asked by states parties to the APMBC on numerous occasions to clarify its estimates of contamination and to present accurate information on the number and estimated size of CHAs and SHAs. "Response to Committee on Article 5 Implementation request for additional information on its Article 5 deadline Extension Request", submitted on 26 September 2015; and Analysis of Ethiopia's Article 5 deadline Extension Request, 19 November 2015, p. 3.
- 3 2019 Article 5 deadline Extension Request, p. 8; and Article 7 Report (for 2018), Form D.
- 4 2019 Article 5 deadline Extension Request, p. 11.
- 5 Ibid., p. 7.
- 6 2019 Article 5 deadline Extension Request, pp. 9 and 35. Ethiopia said it was difficult to determine which areas were under the responsibility of Ethiopia or Eritrea. The area was previously under the control of the United Nations Mission in Ethiopia and Eritrea (UNMEE). Ethiopia reported in 2015 it had conducted clearance behind its own defensive lines, but said it was not possible to enter the area between the two countries' defensive lines due to security concerns, and clearance would have to wait for demarcation to be completed.
- 7 2019 Article 5 deadline Extension Request, 31 March 2019, p. 35.
- 8 Norwegian People's Aid (NPA), "Landmine Impact Survey Report, Federal Democratic Republic of Ethiopia", May 2004.
- 9 In 2012 Ethiopia reported that subsequent technical survey and non-technical (re-)survey of SHAs identified during the LIS had confirmed mine contamination in only 136 areas. However, 60 previously unrecorded hazardous areas were also identified, which were confirmed as mined through technical survey, resulting in a total of 196 areas confirmed as mined. Also in 2012, Ethiopia reported that 358 SHAs across an area of 1,200km² from the LIS data needed to be re-surveyed.
- 10 Article 7 Report (for 2018), Form D. It would appear that a number of areas reported as suspected hazardous areas in Ethiopia's October 2017 workplan are reported as CHAs, as well as eight areas reported as confirmed in 2017, reclassified as SHA in 2019. It is not possible on the basis of information reported in Ethiopia's second extension request and Article 7 report to explain these changes.
- 11 Council of Ministers, Regulation No. 70/2001, 5 February 2001.
- 12 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.
- 13 Statements of Ethiopia, Committee on Article 5 Implementation, Geneva, 25 June 2015, April 2014, and 24 May 2012.
- 14 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.
- 15 Revised National Mine Action Plan for 2017–20, October 2017, pp. 2 and 32.
- 16 2019 Article 5 deadline Extension Request, p. 9.
- 17 Ibid., p. 51.
- 18 Ibid., p. 21.
- 19 Ibid., p. 11.
- 20 Ibid., p. 10.
- 21 Email from Col. Tadege Yohala, EMAO, 5 August 2019.
- 22 2019 Article 5 deadline Extension Request, pp. 30–31.
- 23 Ibid., pp. 10–11.
- 24 Inconsistencies include reporting that an average of 4,790,427m² will be cleared per year, compared to figures which appear to indicate that an average of 3,533,973.17m² would need to be addressed each year. 2019 Article 5 deadline Extension Request, pp. 11 and 46–49; and Article 7 Report (for 2018), Form D.
- 25 2019 Article 5 deadline Extension Request, pp. 47–48.
- 26 Email from Col. Tadege Yohala, EMAO, 5 August 2019.
- 27 2019 Article 5 deadline Extension Request, p. 42.
- 28 Ibid., pp. 24–25 and 27–29.
- 29 Ibid., p. 51.
- 30 Revised National Mine Action Plan for 2017–20, October 2017, p. 12; and 2015 Article 5 deadline Extension Request, p. 11.
- 31 Email from Col. Tadege Yohala, EMAO, 5 August 2019.
- 32 2019 Article 5 deadline Extension Request, pp. 46–48.
- 33 Ibid., p. 50.
- 34 Ibid., p. 42.
- 35 Email from Col. Tadege Yohala, EMAO, 5 August 2019.
- 36 2019 Article 5 deadline Extension Request, p. 50.
- 37 Ibid., p. 7.
- 38 Ibid., p. 13.
- 39 Ibid., p. 14.
- 40 Email from Col. Tadege Yohala, EMAO, 5 August 2019.
- 41 2019 Article 5 deadline Extension Request, p. 13.
- 42 Email from Col. Tadege Yohala, EMAO, 5 August 2019.
- 43 Ibid.
- 44 Ethiopia's original Article 5 deadline expired on 1 June 2015. In March 2015, Ethiopia submitted a request for an extension of five years until 1 June 2020 to complete survey and clearance of all remaining mined areas. It failed, however, to submit an extension request with sufficient time to allow states parties to consider extending the deadline prior to its expiry, thus placing Ethiopia in violation of the convention until the approval of the late request by the Fourteenth Meeting of States Parties on 4 December 2015.
- 45 2015 Article 5 deadline Extension Request, pp. 40–41; and 2019 Article 5 deadline Extension Request, pp. 14–15.
- 46 Ibid., pp. 9 and 27. For example, in just one year, 2018, the workplan stated that more than 518.5km² would be addressed 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 8km².
- 47 2019 Article 5 deadline Extension Request, p. 42.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 FEBRUARY 2028 NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MASSIVE, extent unclear but certainly

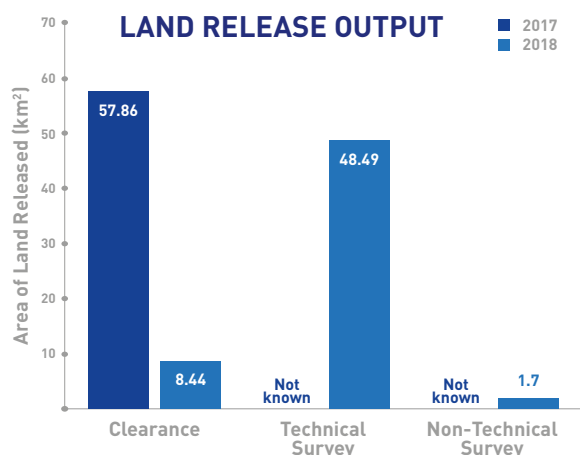
at least **500 km²** (ESTIMATED)

AP MINE
CLEARANCE IN 2018

At least
8.44 km²
and likely much higher

AP MINES
DESTROYED IN 2018

Unclear, but at least
9,112



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Iraq reported a sharp rise in clearance of areas liberated from Islamic State in 2018. The areas were heavily contaminated with mines of an improvised nature. The Directorate of Mine Action (DMA) issued operational accreditation to six international demining non-governmental organisations (NGOs). A new director general of the DMA was appointed *ad interim* in February 2019 and in June 2019 the office was allocated to a former DMA director.

RECOMMENDATIONS FOR ACTION

- The Iraqi government should provide the DMA with the legal authority, funding, equipment, and training for staff to enable it to discharge its responsibilities.
- International donors also should address the severely limited capacity and resources in the national mine action structures.
- The government, the DMA, the United Nations and mine action stakeholders should address the lack of transparency that continues to prevent a clear, credible determination of operating results in one of the world's largest mine action programmes.
- The DMA should develop and consistently apply a standard procedure for tasking and reporting non-technical survey, technical survey, clearance, and land release, preferably in consultation with implementing partners.
- The DMA should ensure that victim-activated improvised explosive devices (IEDs) that meet the definition of an anti-personnel mine are reported as such in accordance with the Anti-Personnel Mine Ban Convention (APMBC).
- Iraq should update its Article 5 extension request to provide more detail and clarity on plans for meeting its Convention obligations.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	Iraq has a good understanding of the location of legacy mined areas but estimates of the extent need to be refined through further survey. Contamination by mines of an improvised nature in areas liberated from Islamic State has not been comprehensively surveyed but intensive demining operations have improved understanding of the scope of the challenge.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	4	Iraq's mine action authorities have responsibility for planning and coordination but their work is overshadowed by the powerful ministries of defence, interior, and oil and lack funding at a time when most international donor support has been channelled through the United Nations Mine Action Service (UNMAS).
GENDER (10% of overall score)	4	The Iraq National Strategic Plan mentions gender equality and gender mainstreaming within mine action activities. Some international operators and their national partners employ women in a wide range of roles, subject to cultural sensitivities in different areas of the country.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	Iraq has submitted its Article 7 transparency reports annually and in 2019 made them accessible to a wider audience by reporting in English. Mine action data accuracy and timeliness, however, remained a critical challenge in 2018, and persistent inconsistencies in official data prevent a precise determination of progress.
PLANNING AND TASKING (10% of overall score)	3	Iraq's strategic plan sets general goals but implementation depends on the level of donor support. Cumbersome tasking procedures slowed progress and proved a source of tension between the DMA, UNMAS, and implementing partners in 2018.
LAND RELEASE SYSTEM (20% of overall score)	5	National standards need to be strengthened and updated. Iraq lacks any national standard for survey and clearance of mines of an improvised nature – its mine action priority in the last three years – and operators work according to their own standing operating procedures. UNMAS reports standards are being developed.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	Outputs appear to have risen sharply in a difficult context but lack of consistent, comprehensive data prevents a precise determination of progress in survey and clearance.
Average Score	4.9	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT

- Federal Iraq: Ministry of Health and Environment Directorate of Mine Action (DMA)
- Kurdish region of Iraq (KRI): Iraq Kurdistan Mine Action Agency (IKMAA)

NATIONAL OPERATORS

- Ministry of Defence
- Ministry of Interior: Civil Defence, EOD Directorate
- IKMAA
- Akad International Co. for Mines
- Al Danube
- Al Fahad Co. for Demining
- Al Khebra Co. for Demining
- Al Safsafa
- Alsiraj Almudhia for Mine Removal
- Arabian Gulf Mine Action Co.
- Al Waha
- Eagle Eye
- Ta'az Demining

INTERNATIONAL OPERATORS

- Danish Demining Group (DDG)
- The HALO Trust
- Humanity & Inclusion (HI, formerly Handicap International)
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)
- Swiss Foundation for Mine Action (FSD)
- G4S
- Janus
- Optima

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

Iraq is the world's most contaminated country by extent of mined area. Total contamination by anti-personnel mines, including those of an improvised nature, was estimated at the end of 2018 to amount to 1,818km². In Federal Iraq, the DMA estimated total contamination at 1,636 km² (see Tables 1 and 2).¹ The Kurdish Region of Iraq (KRI) reported anti-personnel mined area of 182km².²

Federal Iraq

In Federal Iraq, legacy mined areas amounted to 1,025km², including contamination resulting from the 1980–88 war with Iran, the 1991 Gulf War, and the 2003 invasion by the United States (US)-led coalition. Basrah governorate alone

accounted for 86% of these mined areas, including many of the barrier minefields along its borders with Iran which also stretch into Missan and Wasit.

In addition, large areas occupied by Islamic State after 2014 added extensive contamination with mines of an improvised nature and other explosive devices. The DMA reported 611km² were affected by improvised explosive devices.³ This includes significant but unspecified contamination by victim-activated devices of an improvised nature prohibited by the APMBC because they fall within the definition of anti-personnel mines. Anbar and Nineveh governorates appear to be the most affected, accounting for more than 40% of the total recorded improvised mine contamination.

Table 1: Federal Iraq mined area (at end 2018)^a

Contamination	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Anti-personnel mines	107	206,848,260	14	13,625,700	220,473,960
Anti-vehicle mines	6	176,732	0	0	176,732
Mixed AP/AV mines	180	801,993,129	6	2,539,672	804,532,801
Improvised devices, including improvised mines ^a	200	282,785,643	219	328,468,957	611,254,600
Totals	493	1,291,803,764	239	344,634,329	1,636,438,093

^aThe area attributed to improvised mine CHAs and SHAs in this table exceeds the area reported in Table 3.

Table 2: Mined area by province (at end 2018)^a

Province	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Anbar	22	7,558,635	23	123,620,173	131,178,808
Baghdad	0	0	4	63,347,436	63,347,436
Basrah	55	886,234,437	0	0	886,234,437
Diyala	4	206,537,237	20	62,486,389	269,023,626
Kirkuk	65	32,281,006	6	757,473	33,038,479
Missan	200	45,192,914	3	400,183	45,593,097
Muthanna	2	37,845,692	0	0	37,845,692
Nineveh	113	33,652,129	182	93,922,948	127,575,077
Salah al-Din	2	2,918,535	0	0	2,918,535
Thi-Qar	0	0	1	99,728	99,728
Wassit	30	39,583,178	0	0	39,583,178
Totals	493	1,291,803,763	239	344,634,330	1,636,438,093

Table 3: IED/Improvised mine contamination (at end 2018)

Province	CHAs	Area (m ²)	SHAs	Area (m ²)	Total area (m ²)
Anbar	17	5,459,666	23	123,620,173	129,079,839
Baghdad	0	0	4	63,347,436	63,347,436
Diyala	3	206,537,237	5	46,880,927	253,418,164
Kirkuk	61	31,992,611	6	757,473	32,750,084
Nineveh	98	32,794,261	175	93,564,110	126,358,371
Salah al Din	2	2,918,535	0	0	2,918,535
Totals	181	279,702,310	213	328,170,119	607,872,429

Kurdistan Region of Iraq (KRI)

The KRI recorded mine contamination of 181km² at the end of 2018, 14% less than a year earlier.⁷ KRI data did not include areas on the border with Turkey which have never been surveyed because of continuing fighting and Turkish airstrikes.⁸ The Iraq Kurdistan Mine Action Agency (IKMAA) declined to provide any mine action data because of unspecified differences with the DMA, preventing further assessment.⁹

Table 4: KRI mine contamination (at end 2018)¹⁰

Governorate	Area (m ²)
Dohuk	20,793,723
Erbil	49,369,166
Halabja	12,127,439
Slemani	99,664,679
Total	181,955,007

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The mine action programme in Iraq is managed along regional lines. The Directorate of Mine Action (DMA) represents Iraq internationally and oversees mine action for humanitarian purposes in 15 of Iraq's 19 governorates.¹¹ Mine action in the KRI's four governorates is overseen by IKMAA, which reports to the Council of Ministers and is led by a director general who has ministerial rank.

Federal Iraq

The inter-ministerial Higher Council of Mine Action,¹² which reports to the Prime Minister, oversees and approves mine action strategy, policies, and plans. The DMA "plans, coordinates, supervises, monitors and follows up all the activities of mine action." The DMA draws up the national strategy and is responsible for setting national standards, accrediting, and approving the standing operating procedures (SoPs) of demining organisations and certifying completion of clearance tasks.¹³

Coordinating the planning, tasking and information management among all the actors remained a significant challenge. As a department of the Ministry of Health and Environment, the DMA has less authority than the politically powerful Ministries of Defence and Interior, which manage significant explosive ordnance disposal (EOD) and mine clearance capacity, as well as the Ministry of Oil. Additionally, the DMA's status is not formally established by law.¹⁴

Rapid turnover of directors has also hampered management and policy continuity. Essa al-Fayadh, who was at least the tenth director since 2003, was transferred to a different office in February 2019. Deputy Minister of Health and Environment Kamran Ali took over as acting director of the DMA until June 2019 when Khaled Rashad Jabar al-Khaqani, a former DMA director, was reappointed to the position.

The DMA oversees three Regional Mine Action Centres (RMACs):

- North: covering the governorates of Anbar, Diyala, Kirkuk, Nineveh, and Salah ad-Din;
- Middle Euphrates (MEU): Babylon, Baghdad, Karbala, Najaf, Qadisiyah, and Wassit;
- South: Basrah, Missan, Muthanna, and Thi-Qar.

RMAC South, located in Basra City, operated its own database and was responsible for tasking operators. RMAC North and MEU were located in Baghdad. The DMA was preparing to locate RMAC North in Mosul as at August 2019.¹⁵

Federal Iraq's spending on the DMA and mine action is not known. The sector remains heavily dependent on international donor funding, most of it channelled through

UNMAS and significant bilateral funding to clearance operators. In the past two years, Iraqi government and donors have given priority to tackling massive contamination by mines of an improvised nature in areas liberated from Islamic State, leaving scant resources for tackling contamination by explosive remnants of war (ERW) in others areas of Iraq, including the substantial cluster munition remnant threat concentrated in the south.

The DMA accredits operators after they have first registered with the NGO Directorate or the Ministry of Trade, a process that previously could drag on for years. In the past year, Iraq has taken steps to accelerate the process enabling a significant shift of mine clearance capacity from the KRI to Federal Iraq. Operators reported that cumbersome and frequently changing bureaucratic procedures governing tasking, reporting, team deployments, and residency consumed considerable time and energy, significantly hampering productivity in 2018. DMA management changes in 2019 reportedly smoothed relations between the DMA and UNMAS and appeared to pave the way for some internal restructuring within the DMA.¹⁶

KRI

IKMAA functions as a regulator and operator in the KRI. It reports directly to the Kurdish Regional Government's Council of Ministers and coordinates four directorates in Dohuk, Erbil, Garmian, and Sulimaniya (Slemani). Financial constraints halved salaries for all staff for the last three years and resulted in a number of posts being left vacant, but in 2019 payment of salaries resumed and IKMAA planned to fill vacant posts.¹⁷

Capacity at the start of 2018 included 37 12-strong manual demining teams, 7 mechanical teams, 5 survey teams, 3 EOD teams, 10 risk education teams, and 37 quality assurance (QA) teams responsible for accreditation and monitoring the work of all operators.¹⁸ IKMAA declined to provide details of any changes in capacity or results of their activities.¹⁹

IKMAA's priorities for areas affected by minefields remained unchanged and included clearing agricultural land and infrastructure, tackling confirmed hazardous areas (CHAs) close to populated areas and areas reporting most mine incidents and casualties.²⁰

Operators identified areas affected by improvised mines 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.

Other actors

UNMAS established a presence in Iraq in mid-2015 to assess the explosive ordnance hazard threat in liberated areas and set three priorities: explosive threat management to support stabilisation and recovery, including the return of people displaced by conflict; deliver risk education, nationally and locally; and build capacity of government entities to manage, regulate and coordinate Iraq's response to explosive contamination. UNMAS had a staff of 100 people in Iraq as of late April 2019, of which 48 were international.²¹

Among other roles, UNMAS has functioned as the main channel for international donor funding for mine action in Iraq. In 2018, UNMAS received US\$76.9 million, some of it for activities in 2019–20, and by the end of April 2019 had received pledges of an additional \$10.9 million. UNMAS reported spending approximately \$39 million on clearance

operations in 2018 with the balance of programme spending going on a range of activities including risk education and capacity building activities such as improvised explosive device disposal (IEDD) training for Civil Defence and police and explosive hazard first responder training courses.²²

UNMAS contracted and issued grants to implementing partners and tasked them to conduct assessment, survey, "high-risk" search, and clearance in liberated areas on tasks prioritised by a government-UNDP Funding Facility for Stabilisation, along with other government priorities. Focus was on critical infrastructure as well on tasks in other locations identified by local authorities. UNMAS said tasks were agreed with the DMA.²³ UNMAS's role, however, faced criticism in the DMA in 2018 under its previous director. Relations reportedly improved after the change in DMA leadership in early 2019.²⁴

GENDER

The Iraq National Strategic Mine Action Plan specifically mentions gender equality and gender mainstreaming within mine action activities, and as objectives of an effective programmatic response.²⁵ International operators and their national partners individually recruit women for a variety of roles, subject to cultural sensitivities that vary in different parts of the country. Most operators employ women in administrative office roles, many also have a significant representation of women in community liaison and risk education functions, while some also employ women in clearance teams, including as team leaders. The possibilities for employing women depended on cultural sensitivities that varied between regions.²⁶

Danish Demining Group (DDG) engaged women in management and administrative roles and similarly employed women in mixed risk education/non-technical survey teams but did not deploy them in clearance.²⁷ The Swiss Foundation for Mine Action (FSD) employed women in community liaison and administrative roles in 2018 and planned to stand up an all-women clearance team to work in Mosul district in 2019.²⁸ G4S in Mosul employed mainly women community liaison officers and in Sinjar mobilised two mixed female-male clearance teams, with half of the high-risk searchers being Yazidi females.²⁹

MAG's staff of 1,067 people included 111 women employed across its programme – 88 in operational roles and the other 23 in support functions. Clearance teams with a total capacity of 786 staff employed 48 women, including 26 deminers, four of whom are team leaders and four deputy team leaders. MAG's community liaison/survey teams are all two-person, mixed gender teams. Among the Yazidi community in northern Sinjar district, MAG was able to employ women for manual clearance, as mine detection dog (MDD) handlers, and in mechanical teams.³⁰

NPA's Iraq operation employed women in survey and clearance roles, including as team leaders, as well as in most administrative departments and in senior management. It employed mixed teams of men and women for risk education and community liaison in Nineveh in 2018, with at least one woman per team conducting non-technical survey, and with women as team leaders in Ramadi and Mosul districts. Recruitment of women for non-office jobs was more difficult in culturally more conservative governorates in southern Iraq but NPA's survey teams there also included at least one woman.³¹

UNMAS Iraq appointed a dedicated Senior Gender Adviser in 2019, the first UNMAS programme to create such a post. It required implementing partners to apply Gender in Mine Action guidelines and developed Standard Working Practices to provide guidelines for implementing partners with a focus on recruitment and activities in explosive threat management, risk education, and building capacity.³²

There also exists a fully staffed Gender Unit at the DMA that UNMAS is supporting. UNMAS implementing partners use mixed gender teams in their community liaison/risk education work, such as the mixed-gender Yazidi team in Sinjar operating under G4S, and communications and advocacy work is being done to promote women's empowerment within mine action.³³

INFORMATION MANAGEMENT AND REPORTING

Information management and access to reliable data remain a major challenge for mine action in Iraq but appeared poised for improvement in 2019.

The DMA and IKMAA maintain Information Management System for Mine Action (IMSMA) New Generation databases with technical support from iMMAP, a commercial service provider working under contract to the US Department of State's Office of Weapons Removal and Abatement (WRA). Operators complain about a marked reluctance on the part of iMMAP to share data with them.

The national mine action database is located at the DMA's Baghdad headquarters. RMAC South (RMAC-S) maintains a database in Basrah, receiving reports from demining organisations in its area of operations, which is synchronised with Baghdad's at intervals determined by the volume of data to be uploaded. Operators working on projects funded through UNMAS report directly to UNMAS, which in turn forwards the data to the DMA. Although iMMAP coordinates data on behalf of the DMA and IKMAA, operators report the extent to which information was shared by all national actors is unclear.³⁴

Operators are required to submit results in hard copy delivered by hand every month to the DMA, which then uploads results into the database. The procedure meets Iraqi legal requirements, which do not recognise electronic copies, but can cause long delays in uploading results of survey and clearance. As a result, operators say task orders issued by the DMA have often lacked the most up-to-date information.³⁵

In March 2019, RMAC-S started receiving data reports electronically as well as in hard copy. Improvements in cluster munitions survey are strengthening the quality of available data through the RMAC-S database. But in the mine action sector in general, operators report limited access to data and expressed concern about the limited quantity and quality of data available with task orders.³⁶

All mine action stakeholders identified challenges to the sector's information management. The DMA and iMMAP reported problems with the timeliness and accuracy of reporting by implementing partners.³⁷ The DMA said it did not receive any reports from UNMAS until May 2018,³⁸ a situation that UNMAS said was attributable to its agreement with the DMA at the time.³⁹ Operators voiced frustration with the lack of consistency in DMA tasking and reporting requirements, difficulties gaining access to data, and expressed a lack of confidence in its quality.⁴⁰ As at May 2019, the DMA was preparing to roll out an Online Task Management System (OTMS) prepared by iMMAP and designed to facilitate investigation of data and streamline tasking.⁴¹

In 2018, UNMAS set up an online tasking request form for UN agencies and humanitarian NGOs to expedite explosive threat management and to report potential explosive threats in areas where they worked or intend to work in liberated areas. Once a request had been validated, and where UNMAS had capacity to respond, an implementing partner would be tasked after the DMA was informed. Alternatively, UNMAS would submit a suspected hazardous area (SHA) report to the DMA.⁴²

PLANNING AND TASKING

Iraq's APMB Article 5 deadline extension request, submitted in April 2017, laid out a general direction for mine action, but its proposed actions were overtaken by the emergency response launched for clearance of areas liberated from Islamic State. Iraq's mine action priority in 2018 remained 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.⁴³

Tasking and reporting proved a contentious issue in relations between the DMA, UNMAS, and international operators in 2018, aggravated by weak coordination and the absence of an agreed mechanism and frequent policy shifts. Operators identify potential task sites and request task orders from the DMA. Task orders were issued by the DMA's Operations Department and by the RMACs until the last quarter of 2018, when responsibility for issuing task orders was centralised in Operations in Baghdad. The DMA reported that operators requested task orders for survey or clearance of areas that had already been surveyed or cleared and failed to follow up some task orders issued by the DMA.⁴⁴ International actors reported multiple concerns, including long delays in receiving DMA responses to task order requests, holding back productive use of survey and clearance assets, the poor quality of data accompanying task orders, and lack of clarity or consistency in reporting requirements.⁴⁵

In the KRI, IKMAA started work on a five-year strategy in the last quarter of 2017, which focused on clearance of legacy minefields. This followed the KRI'S independence referendum and subsequent loss of control over much of the disputed Grey Area heavily affected by mines of an improvised nature and IEDs. IKMAA's priorities remain unchanged and include clearing agricultural land, infrastructure, tackling CHAs close to populated areas as well as areas reporting most mine incidents and casualties.⁴⁶ Population return from cities and big towns to rural areas as a result of changing socio-economic conditions has increased pressure for rural area clearance.⁴⁷ 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.⁴⁸

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Iraq has national mine action standards for mine and battle area clearance, non-technical survey and technical survey that were written in 2004–05, and some have been updated, but standards on land release reportedly have not kept up with amendments to the International Mine Action Standards (IMAS).⁴⁹ National standards for IEDDs were under development as of September 2019.⁵⁰ International operators conducted area clearance of mines of an improvised nature and other devices according to their own SoPs which were reviewed and approved by the DMA in the process of accreditation. Operators conducted little clearance of residential buildings in 2018, but with strong demand from people displaced by conflict to return to their houses the issue drew increasing attention in 2019, highlighting the need for international and national standards and Iraqi government policy decisions on issues relating to liability for compensation claims in the event of damage to private residences.⁵¹

Iraq's National Mine Action Standards (NMAS) exist in Arabic but there is no official English translation and international operators have found it difficult to get access to the Arabic version. The DMA was discussing with Norwegian People's Aid (NPA) in mid-2019 a plan for updating standards in consultation with other mine action stakeholders and also had discussions with the Geneva International Centre for Humanitarian Demining (GICHD) on the possibility of setting up a programme of capacity development, including updating standards and providing training.⁵²

The rapid expansion of mine action since 2017 and pressure to accredit operators imposed acute strain on DMA's quality assurance (QA)/quality control (QC) capacity and left it with limited ability to conduct effective QC. The DMA reported it had six two-person QA teams in 2018, insufficient for the size of the sector. To keep up with the growth of the sector it accredited five commercial companies and six NGOs for QA.⁵³ UNMAS had limited capacity to QA work by organisations it contracted early in 2018, but in the course of the year hired additional QA staff.⁵⁴

OPERATORS

The DMA identified a total of 61 organisations accredited for some aspect of mine action of which at least 14 national and 9 international organisations are believed to have conducted survey or clearance in 2018.⁵⁵

The Ministry of Defence reported it had 12 600-man engineer battalions conducting EOD and clearance of mines of an improvised nature in which approximately half the personnel were operators. Army engineers worked on tasks identified as priorities by local government authorities.⁵⁶ In Federal Iraq, cleared items are the property of the Army which is the only organisation authorised to conduct demolitions.⁵⁷ The Ministry of Interior's Civil Defence units employ 494 personnel divided into teams deployed in every governorate tackling unexploded ordnance and other ERW but not clearing IEDs or mines of an improvised nature.⁵⁸

In the KRI, IKMAA reported in May 2018 that it had maintained capacity 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.⁵⁹ IKMAA declined to provide additional information in 2019.⁶⁰

Major national commercial operators included Arabian Gulf and Ta'az Demining, both of which were active in the oil sector. Other commercial companies identified by the DMA as conducting mostly small amounts of survey or clearance in 2018 included Al-Waha, Al-Danube, Al-Fahad Co. for Demining, Alsiraj Almudhia, AKAD, Al-Khebra Company for Demining and Eagle Eye.⁶¹ International commercial operators active in 2018 included Janus Global Operations, working in partnership with Al-Fahad in Anbar, Kirkuk, and Nineveh governorates and Optima working with Al-Danube teams under contract to UNMAS in Anbar. G4S, also under contract to UNMAS, was operational in 2018 and 2019 conducting clearance in Nineveh governorate, including Mosul and Sinjar, and in Kirkuk.⁶²

Among international humanitarian organisations, MAG, the longest serving operator which has been present 27 years, also remained the biggest. It had a total staff of 1,067 at the end of 2018, up by more than 20% on its capacity a year earlier. MAG continued to work in the KRI, operating in 2018 with 24 teams (14 demining teams, 2 MDD teams, 1 mechanical team, and 7 risk education teams). The shift in control of the former Grey Area from the KRI to Federal Iraq at the end of 2017 saw most of MAG's area of operations, concentrated in Nineveh governorate, come under the authority of the DMA. By the end of 2018, MAG had 89 teams active in Federal Iraq, including 49 teams of deminers, 5 survey teams, 5 mechanical teams, 3 MDD teams and 27 risk education teams. MAG also operated with 14 demining teams in the KRI, as well as 1 mechanical team, 2 MDD teams, and 7 risk education teams.⁶³

Iraqi authorities and the DMA took steps in 2018 to accelerate registration and accreditation of demining organisations but continuing delays experienced by MAG in 2018 exemplified procedural and regulatory issues suffered to varying degrees by all international operators. MAG lost the right of access to Nineveh governorate for most of the first half of 2018. Three years after applying, it received registration from the NGO Directorate in January 2018, temporary accreditation from the DMA in March 2018, permission to deploy teams in May and visas for Federal Iraq in June and it resumed operations in five districts of Nineveh governorate between May and July. In September, MAG received full accreditation for two years for technical survey, manual clearance, mechanical survey and clearance and IED disposal but not for non-technical survey, risk education, and MDDs, which continued with temporary accreditation extended until the end of the year. In October, MAG lost permission for movement of teams between the KRI and Federal Iraq because of an incident at a border checkpoint. The permissions were reinstated in November allowing full operations to resume. In the interim, MAG redeployed many of the affected teams to support operations in the KRI's Dohuk and Slemani governorates.⁶⁴

DDG reduced its capacity in the KRI from six teams at the end of 2017 to one four-person EOD team a year later but expanded capacity in Federal Iraq from 20 to 29 teams. These included two clearance and two risk education/non-technical survey teams in Basra with the remainder divided between Kirkuk, Mosul, and Salah al-Din, where DDG opened an office in September 2018 to support teams in Tikrit and Baiji districts. Among issues DDG confronted was a demand from local authorities in Kirkuk that its staff in that governorate include 32% Arabs, 32% Turkmen, 32% Kurds, and 4% Christians. Its inability to comply with this condition meant that teams were denied access to operational sites for extended periods of time and it regained access only after the intervention of the UN Office for the Coordination of Humanitarian Affairs.⁶⁵

FSD started 2018 with four demining teams based in the KRI who conducted some clearance of minefields in areas under IKMAA's control but after receiving temporary accreditation from the DMA in April it added two teams in July and conducted survey and clearance of mines of an improvised nature in Nineveh. FSD received full, two-year operational accreditation from the DMA in October 2018 and was able to add two more clearance teams to finish the year with eight teams and sixty-one deminers. It expected to add additional capacity in 2019, recruiting deminers from minorities and deploying them on clearing improvised mine belts around minority villages.⁶⁶ Humanity & Inclusion (HI, previously Handicap International), also based in Erbil, operated one team and six deminers in the KRI and three teams (one survey, two demining) with 10 personnel in DMA-run areas of Kirkuk. After long delays, HI received operational accreditation from the DMA in May 2018 and expected to receive additional funding to expand capacity in 2019.⁶⁷

The HALO Trust, after setting up a Baghdad office to complete formalities establishing a programme at the end of 2017, received six-month provisional accreditation in May 2018 and was able to start operations in Fallujah with one survey and one mechanical team in 2018. HALO Trust operations experienced delays when its provisional accreditation expired in November before DMA conducted the operational audit for full accreditation. HALO Trust later opened a sub-office in Tikrit with four manual clearance teams, two mechanical teams and two survey teams, and a second sub-office in Ramadi for a total capacity of just over 100 staff.⁶⁸

NPA, which moved its management office from Erbil to Baghdad in December 2017, opened a project office in Ramadi in 2018 which covered Anbar governorate, where NPA also opened a forward operating base in Haditha and an office in Ana. NPA also deployed non-technical survey teams to Diyala governorate which were managed from Baghdad. After shifting operations in the north from Erbil to Mosul, it closed its Erbil office in December 2018. With additional capacity in Basra focusing on cluster munitions survey and clearance, NPA finished 2018 with 108 operations staff in six manual clearance teams, two mechanical teams, and thirteen survey teams.⁶⁹

OPERATIONAL TOOLS

For area clearance of mines of an improvised nature (the main focus of Iraq's mine action in 2018), operators mostly employed a combination of manual and mechanical assets. Operators early on identified that mechanical assets rapidly accelerated search and clearance of improvised mine belts and employed a variety of assets, including armoured Backhoes fitted with a boom and rake for lifting the main charge. Commercial operators conducting post-conflict clearance of urban sites have employed front-end loaders and sifters to tackle sometimes huge quantities of rubble.⁷⁰ MAG also worked with MDDs engaged in the clearance of medium-and low-risk conventional minefields in the KRI's Sulimaniya governorate.⁷¹

DEMINER SAFETY

The army acknowledged it had "sacrificed a lot of people" in clearance operations but did not give details of casualties and it was not apparent if engineer units had sustained casualties in 2018.⁷² A MAG deminer was killed by detonation of an improvised mine in October 2018. Investigations did not produce a definitive finding as to what had caused the detonation but pointed to the possibilities of it either being while excavating in response to a signal or in the course of marking a new lane.⁷³

An NPA staff member working in an armoured Backhoe was injured by the blast from an improvised mine as it was being lifted from the ground. Part of the machine's lifting arm sheared off and hit the armoured glass, shattering but not penetrating it. NPA replaced the glass and added a wire grill placed over the glass which withstood subsequent test detonations.⁷⁴

More than a year after the military defeat of the Islamic State, insecurity continued in certain localities, notably parts of western Anbar governorate, Diyala, Salah al-Din, and Kirkuk. Two HALO Trust national staff were killed in Anbar in an attack by insurgents on a social gathering unrelated to mine action in November 2018.⁷⁵ In addition, insurgents continued to carry out sporadic attacks with remote controlled and vehicle-born IEDs.⁷⁶ UNMAS reported one attack with small arms fire directed at a task site from multiple directions prompting its evacuation.⁷⁷ The United Nations reported in July 2019 that Islamic State was expanding as a covert network with large numbers of fighters and supporters in Iraq and Syria, operating freely in many locations and creating conditions for an eventual resurgence.⁷⁸

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Iraq continued to give top priority in 2018 to 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. The concentration of resources in these areas left little capacity for tackling earlier, so-called legacy minefields, though some clearance continued of northern mined areas in the KRI and in southern oilfields.

LAND RELEASE OUTPUTS IN 2018

Productivity appears to have risen sharply in 2018 but gaps and inconsistencies in data prevented a clear determination of progress. In Federal Iraq, the DMA reported release of a total of 135.1km², including clearance of 83.3km² of areas contaminated by improvised devices, thought to consist mainly of mines of an improvised nature (however, the DMA did not provide details of clearance by operator or identify device types, making it difficult to determine the basis or reliability of the data, and Mine Action Review has not

included the clearance in its national total for Iraq); clearance of 1.6km² of areas affected by anti-personnel mines; cancellation of 1.7km² through non-technical survey, and area reduction through technical survey of 48.5km².⁷⁹

IKMAA declined to provide details of mine action results in the KRI.⁸⁰ In Iraq's Article 7 report for 2018, IKMAA recorded 3,484 anti-personnel mines destroyed during the year but provided no details of land released.⁸¹

SURVEY IN 2018

Iraq reported little cancellation through non-technical survey in 2018 but considerable area reduction through technical survey. The unusual balance underscored lack of clarity in requirements for reporting cancellation and area reduction.⁸² Iraq's Civil Defence and the Ministry of Defence accounted for a little over half the total area reduced and commercial companies for 40%. The basis for this data was unclear.⁸³ Land release data reported by international humanitarian NGOs did not match the area reduction that the DMA attributed to them.

MAG reported reducing 739,870m² through technical survey, 80% of which was in Nineveh governorate, with a small amount in Kirkuk, and a total of 70,882m² in the KRI governorates of Dohuk and Sulimaniya.⁸⁴

NPA assessed a total of 94,243,575m² in 2018, of which 95% was in Anbar province, including 65.7km² in Haditha district, 12.5km² in Ana district and 11.1km² in Ramadi. The other areas assessed were Hamdaniya district of Nineveh (2.7km²) and four districts of Diyala governorate (2.3km²). NPA said it cancelled or reduced 1.82km².⁸⁵

Table 5: Cancellation of mined area through non-technical survey in 2018⁸⁶

Operator	SHAs cancelled	Area cancelled (m ²)
Civil Defence	2	857,509
Ministry of Defence	2	254,919
Handicap International	17	596,549
Total	21	1,708,977

Table 6: Reduction of mined area through technical survey in 2018⁸⁷

Operator	Area reduced (m ²)
Civil Defence	13,447,963
Ministry of Defence	12,486,340
RMAC South	3,150
Al-Waha	6,881,831
Al-Danube	90,888
Al-Fahad	2,445,140
Alsiraj Almudhia	981,327
Arabian Gulf	7,867,967
Nabaa Al-Hurya	12,116
Ta'az	1,995,169
Wtorplast Demining	900
DDG	27,607
FSD	296,778
Handicap	161,392
HALO	179,291
MAG	58,685
NPA	1,552,168
Total	48,488,712

CLEARANCE IN 2018

Federal Iraq reported release of 83.3km² of areas affected by IEDs and improvised mines and 63,596 devices, a 50% increase in area cleared compared with results reported by the DMA the previous year and a more than fourfold increase in the number of devices cleared. The DMA did not provide details of clearance by operator or identify device types, making it difficult to determine the basis or reliability of the data.⁸⁸ Given this, Mine Action Review has not included the

clearance in its national total for Iraq. The total clearance recorded for Iraq (8.44km²) comprises clearance of anti-personnel mines of an improvised nature by humanitarian demining organisations in Federal Iraq (5.65km²; see Table 8); clearance reported by the Ministry of Defence (1.59km²; see Table 9); and clearance in northern Iraq by (1.2km²; see Table 10).⁸⁹

Clearance results underscored the focus on Nineveh governorate, including the heavily contaminated districts of Mosul, al-Hamdaniya, Sinjar and Telafar, which apparently accounted for 90% of the area cleared and 94% of devices (see Table 7). Mosul city, occupied for three years by Islamic State and saturated with improvised devices, was a priority for clearance by the military and international commercial operators who were the only operators conducting systematic building clearance in 2018. Mosul district, including the city, accounted for 0.01% of the area that the DMA reported cleared in Nineveh governorate but for 81% of devices destroyed.⁹⁰ In 2018, operators in the city dealt with 782 suicide belts, many of them still attached to corpses of Islamic State fighters, and shifted 7.6 million tons of rubble.⁹¹ Janus reported releasing 1,462,301m² in Anbar province, more than recorded by the DMA in that governorate, and 1,716,436m² in Nineveh and Kirkuk governorates.⁹²

Table 7: Clearance of areas affected by IEDs and improvised mines in 2018⁹³

Governorate	Areas cleared	Area cleared (m ²)	Devices destroyed
Anbar	29	1,380,180	3,483
Kirkuk	1	7,020	10
Nineveh	438	75,404,782	59,881
Salah al-Din	6	6,546,255	222
Totals	474	83,338,237	63,596

International humanitarian operators reported more modest results with clearance of areas affected by improvised mines, mostly pressure-plate mines, amounting to 5.6km² (see Table 8), about 18% less than the 6.9km² of this contamination cleared the previous year. Most of the clearance in both years was conducted by MAG, much the biggest operator, and the downturn appears to reflect its inability to deploy teams for most of the first half of the year pending receipt of its DMA accreditation.⁹⁴

Table 9: Mine clearance in 2018⁹⁵

Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	ERW destroyed
Ministry of Defence	64	1,064,339	2,122	461	3,759
AKAD	4	124,522	15	0	24
Al-Khebra	107	336,261	1,370	10	1,594
Eagle Eye	7	63,603	17	0	26
Totals	182	1,588,725	3,524	471	5,403

Table 10: INGO mine clearance in the KRI and Federal Iraq in 2018⁹⁶

Province	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	UXO destroyed
Federal Iraq					
Kirkuk	MAG	24	736,135	290	56
Diyala	HI	3	41,751	20	38
Nineva	MAG ¹⁰⁰	123	4,386,484	1	2,358
Federal Iraq totals		150	5,164,370	311	2,452
Dohuk	MAG	16	203,265	160	41
Erbil	FSD	3	16,955	17	3
Sulimaniya	MAG	11	125,385	415	40
Sulimaniya	FSD	2	76,624	2	91
KRI totals		32	422,229	594	175
Overall totals		182	5,586,599	905	2,627

Table 8: Clearance of improvised mines by humanitarian demining organisations in 2018⁹⁵

Operator	Area cleared (m ²)	Mines destroyed
DDG	24,086	3
FSD	1,165,775	2,743
HALO Trust	13,216	125
HI	11,077	48
MAG	4,281,620	1,494
NPA	149,840	268
Totals	5,645,614	4,681

UNMAS reported that the operators it funded cleared 1,158 hazardous areas and 847,004m², but it also did not disaggregate results by operator. Organisations working for UNMAS cleared 1,117 structures and 17,956 explosive devices. UNMAS reported clearance of two anti-personnel mines, two anti-vehicle mines, and 14,443 ERW.⁹⁶

The intensive effort to clear areas liberated from Islamic State left little capacity available to tackle Iraq's extensive legacy minefields. The DMA reported clearance of a total of 1.59km², two-thirds of it apparently conducted by the Ministry of Defence and the rest by national commercial companies (see Table 9).

International NGOs reported additional clearance of legacy mined areas in 2018 (see Table 10). MAG and FSD both conducted clearance in areas of the KRI coordinated by IKMAA, which declined to report any details of operations by its own clearance teams. Nearly two-thirds of the additional clearance was conducted by MAG in Kirkuk governorate.⁹⁷

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the ten-year extension granted by states parties in 2017), Iraq is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 February 2028.

The scale of mine contamination in Federal Iraq and the KRI makes it highly unlikely that Iraq will meet its Article 5 deadline. On current contamination estimates it would require release of more than 200km² a year to meet its 2028 deadline, significantly more than present levels. Moreover, the data on area contamination does not capture the extent and complexity of clearing a major city such as Mosul, devastated by conflict, or the thousands of residential buildings in towns and villages across liberated areas that were seeded by Islamic State with explosive devices and require systematic search.¹⁰¹

Iraq has not taken a clear official position acknowledging victim-activated explosive devices as part of its Article 5 obligation and debate continues on which of the wide range of improvised devices, such as booby-traps encountered in buildings come under the APMBC. Irrespective, devices encountered in structures represent a humanitarian imperative that in any event will consume significant time, capacity, and resources of the mine action sector.

Iraq's Article 5 deadline extension request, submitted in April 2017 at a point it was still gearing up a response to contamination in liberated areas, provided few details of its plans, priorities, or timelines for clearance. It also did not include contamination by mines of an improvised nature as part of its treaty obligation. Iraq is due to present an update to the request in 2019 which should provide more clarity on its prospects for addressing its treaty obligations.

Accelerating clearance reported by the DMA in 2018, if validated, shows the potential for Iraq sharply reducing contamination by 2028, even if clearance is not completed.

Additionally, Iraq is confident that re-survey of legacy mined will lead to significant reduction in estimates of contamination.¹⁰² Iraq, however, faces challenges that leave prospects for progress uncertain. The difficulty obtaining quality data on either contamination or clearance points to deep rooted structural issues in Iraq's mine action programme that hold back efficient use of available assets. They include institutional relationships between Iraqi government entities and between the DMA, UNMAS, and international operators and the need to build capacity in the national mine action authority.

Continued progress will depend heavily on sustained international donor support. 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. 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.¹⁰³ Most funding in 2018 continued to be channelled through UNMAS and bilaterally to mine action NGO operators and the DMA was unable to give details of government funding available to mine action in 2017, 2018 or 2019.¹⁰⁴

Table 11: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	8.4
2017	23.3
2016	16.4
2015	5.2
2014	8.6
Total	61.9

1 Email from Ahmed Aljasim, Manager, Information Department, DMA, 7 May 2019.

2 Convention on Cluster Munitions (CCM) Article 7 Report (for 2018), p. 21.

3 Ibid.

4 Email from Ahmed Aljasim, DMA, 7 May 2019.

5 Iraq does not use the term improvised mines or mines of an improvised nature. The DMA reports improvised explosive devices and available data do not disaggregate items that qualify as mines of an improvised nature, even though this is what the APMBC requires.

6 Email from Ahmed Aljasim, DMA, 7 May 2019.

7 CCM Article 7 Report (for 2018), p. 21.

8 Email from Khatib Omer Ahmed, IKMAA, 8 May 2018.

9 Email from Khatib Omer Ahmed, IKMAA, 1 July 2019.

10 CCM Article 7 Report (for 2018), p. 21.

11 DMA presentation to 2015 Mine Action Country Planning Workshop for Iraq, Istanbul, 13 May 2015; Geneva International Centre for Humanitarian Demining, "Capacity Development Support to National Mine Action Authorities in Iraq, Phase 1: Initial Assessment Mission", February 2012.

12 The council is led by the Prime Minister and includes representatives of the ministries of Defence, Interior, Oil, Environment, the National Security Adviser and the head of IKMAA.

13 "Document of roles and responsibilities", undated but 2019, received by email from the DMA, 13 May 2019.

14 Interviews with the DMA, Baghdad, 3 and 5 May 2019.

15 Interview with Hassanain Hashim, Assistant Head of RMAC North, Baghdad, 5 May 2019.

16 Interviews with mine action stakeholders in Iraq, 29 April–6 May 2019.

17 Interview with Siraj Barzani, IKMAA, Erbil, 9 May 2019.

18 Email from Khatib Omer Ahmad, IKMAA, 8 May 2018.

- 19 Email from Khatab Omer Ahmed, IKMAA, 1 July 2019.
- 20 Interview with Siraj Barzani, IKMAA, Erbil, 9 May 2019.
- 21 Email from Shinobu Mashima, Programme Officer, UNMAS, 4 May 2019.
- 22 Email from Shinobu Mashima, UNMAS, 4 May 2019; interview with Pehr Lodhammar, Senior Programme Adviser, UNMAS, Baghdad, 6 May 2019.
- 23 Email from Shinobu Mashima, UNMAS, 4 May 2019.
- 24 Interviews with mine action stakeholders in Iraq, 28 April–6 May 2019.
- 25 National Strategic Mine Action Plan, pp. 12, 18, 20, and 30.
- 26 Interviews with mine action stakeholders in Iraq, 28 April–6 May 2019.
- 27 Email from Fatmire Uka, Interim Head of Programme, DDG Iraq, 23 May 2019.
- 28 Email from Peter Smethers, Programme Manager/Country Director, FSD, 27 March 2019.
- 29 Interview with Simon Woodbridge, Operations Manager (Mosul), G4S, Mosul, 8 May 2019; and email from Fran O'Grady, Head of Operations, UNMAS Iraq, 16 August 2019.
- 30 Email from Portia Stratton, Country Director, MAG, 13 May 2019.
- 31 Interview with Gus Guthrie, NPA, Baghdad, 3 May 2019; and email, 26 May 2019; and interview with Mats Hektor, Project Manager, NPA South Iraq, Basrah, 28 April 2019.
- 32 Email from Shinobu Mashima, UNMAS, 4 May 2019.
- 33 Email from Daniella Marelli, UNMAS, 10 September 2019.
- 34 Interviews with operators in Iraq, 28 April–6 May 2019.
- 35 Ibid.
- 36 Ibid.
- 37 Interviews with Shawket Tayeh Massod, Head of Operations, DMA, Baghdad, 5 May 2019; Isam Ghareeb, Country Representative and Senior Technical Adviser, iMMAP, Erbil, 7 May 2019.
- 38 Interview with Kamran Ali, Director General, DMA, and Ahmed Aljasim, DMA, in Geneva, 23 May 2019.
- 39 Email from Fran O'Grady, UNMAS Iraq, 16 August 2019.
- 40 Interviews with operators in Iraq, 28 April–6 May 2019.
- 41 Interviews with Ahmed Aljasim, Head of Planning and Information, DMA, Erbil, 9 May 2019; and Karzan Hamad, Senior Information Officer and Web Developer, iMMAP, Erbil, 9 May 2019.
- 42 Email from Shinobu Mashima, UNMAS, 4 May 2019.
- 43 Interview with Baker Saheb Ahmed, DMA, Baghdad, 5 September 2018.
- 44 Interview with Shawket Tayeh Massod, DMA, 5 May 2019.
- 45 Emails from and interviews with operators in Iraq, 28 April–6 May 2019.
- 46 Interview with Siraj Barzani, IKMAA, Erbil, 9 May 2019.
- 47 Email from Portia Stratton, MAG, 13 August 2019.
- 48 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 49 Interviews with operators in Iraq, 28 April–6 May 2019.
- 50 Email from Daniella Marelli, UNMAS, 10 September 2019.
- 51 Ibid.; and email from Shinobu Mashima, UNMAS, 4 May 2019.
- 52 Interview with Nick Bray, Adviser, Quality Management Systems and Standards, GICHD, 5 August 2019; and email from Chris Tierney, Capacity Development Adviser – Iraq, NPA, 5 August 2019.
- 53 Interview with Shawket Tayeh Massod, DMA, Baghdad, 5 May 2019.
- 54 Email from Shinobu Mashima, UNMAS, 4 May 2019.
- 55 Email from Ahmed Aljasim, DMA, 7 May 2019.
- 56 Interview with Brigadier-General Hassan, Ministry of Defence, Baghdad, 3 May 2019.
- 57 "Document of roles and responsibilities", undated but 2019, received by email from the DMA, 13 May 2019.
- 58 Interview with General Salah, Ministry of Interior, at the DMA, Baghdad, 3 May 2019.
- 59 Email from Khatab Omer Ahmed, IKMAA, 8 May 2018.
- 60 Email from Khatab Omer Ahmed, IKMAA, 1 July 2019.
- 61 Email from Ahmed Aljasim, DMA, 7 May 2019.
- 62 Email from Shinobu Mashima, UNMAS, 4 May 2019; interviews with Chris Driver-Williams, Programme Manager Northern Iraq, G4S, and Simon Woodbridge, G4S, Mosul, 8 May 2019.
- 63 Email from Portia Stratton, MAG, 13 May 2019; and interview in Erbil, 6 May 2019.
- 64 Email from Portia Stratton, MAG, 13 May 2019.
- 65 Email from Fatmire Uka, DDG, 23 May 2019.
- 66 Email from Peter Smethers, FSD, 27 March 2019.
- 67 Emails from Andrea Trevison, Country Director – Iraq, HI, 7 and 10 August 2019.
- 68 Emails from Nicholas Torbet, Deputy Head of Region, Middle East, North Africa and Afghanistan, HALO Trust, 12 April and 18 August 2019; and interview with Frank Philip, Iraq Programme Manager, HALO Trust, Baghdad, 1 May 2019.
- 69 Interview with Gus Guthrie, Country Director, NPA, Baghdad, 3 May 2019; and email, 26 May 2019.
- 70 Interviews with operators in Iraq, 28 April–6 May 2019.
- 71 Email from Portia Stratton, MAG, 13 August 2019.
- 72 Interview with Brigadier-General Hassan, Ministry of Defence, Baghdad, 3 May 2019.
- 73 Email from Portia Stratton, MAG, 13 May 2019.
- 74 Email from Gus Guthrie, NPA, 26 May 2019.
- 75 Interview with Frank Philip, HALO Trust, Baghdad, 1 May 2019.
- 76 Interviews with operators in Iraq, 28 April–6 May 2019.
- 77 Email from Shinobu Mashima, UNMAS, 4 May 2019.
- 78 Twenty-fourth report of the Analytical Support and Sanctions Monitoring Team, UN Security Council doc. S/2019/570, 15 July 2019, p. 5.
- 79 Email from Ahmed Aljasim, DMA, 7 May 2019.
- 80 Email from Khatab Omer Ahmed, IKMAA, 1 July 2019.
- 81 Article 7 Report (for 2018), Form G, p. 28.
- 82 Interviews with operators in Iraq, 28 April–6 May 2019.
- 83 Email from Ahmed Aljasim, DMA, 7 May 2019.
- 84 Email from Portia Stratton, MAG, 13 May 2019.
- 85 Emails from Gus Guthrie, NPA, 26 May and 8 August 2019; and Chris Ramsden, Project Manager, NPA Iraq North, 8 August 2019.
- 86 Ibid.
- 87 Ibid.
- 88 Email from Portia Stratton, MAG, 13 May 2019.
- 89 Clearance reported for MAG in Nineva in Table 10 includes the clearance of areas containing mines of an improvised nature already reported.
- 90 Ibid.
- 91 Press briefing, Pehr Lodhammar, UNMAS, in Geneva, 7 February 2019.
- 92 Janus Infographic, "Area release in 2018, Anbar, Ninewa and Kirkuk Governorates", received by email from David Courtney, International Operations Program Manager, Janus Global Operations, 12 February 2019.
- 93 Email from Ahmed Aljasim, DMA, 7 May 2019.
- 94 Email from Portia Stratton, MAG, 13 May 2019 and interview in Erbil, 6 May 2019. In 2017, MAG cleared 5.96km² of improvised mine-affected area representing 85% of what was cleared by NGOs.
- 95 Emails from Fatmire Uka, DDG Iraq, 23 May 2019; Peter Smethers, FSD, 27 March 2019; Nicholas Torbet, HALO Trust, 12 April 2019; Andrea Trevison, HI, 7 August 2019; Portia Stratton, MAG, 13 May 2019; and Gus Guthrie, NPA, 26 May 2019.
- 96 Email from Shinobu Mashima, UNMAS, 4 May 2019.
- 97 Emails from Peter Smethers, FSD, 27 March 2019; and Portia Stratton, MAG, 13 May 2019.
- 98 Email from Ahmed Aljasim, DMA, 7 May 2019.
- 99 Ibid.
- 100 MAG reported that in Nineveh it cleared 202 other devices, including 128 items of UXO from improvised ordnance, 11 abandoned radio-controlled IEDs, 29 abandoned command-operated IEDs, 22 booby-traps, and 12 other improvised devices. Email from Portia Stratton, MAG, 19 August 2019. The claimed mine clearance includes the area (reported above in Table 8) that was cleared of anti-personnel mines of an improvised nature. Clearance of this area is not included in the Mine Action Review statistics for clearance in 2018.
- 101 In Mosul's Al-Shifa hospital complex, formerly the biggest and most modern in Iraq but used by Islamic State as its headquarters, Optima reported clearing 340,000m² and more than 1,800 explosive devices.
- 102 Interview with Nibras Fakhir Matrood, Director, DMA RMAC South, in Basrah, 29 April 2019.
- 103 "Decisions on the request submitted by Iraq for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention", 21 December 2017.
- 104 Interview with Baker Saheb Ahmed, Assistant Director General, DMA, Baghdad, 5 May 2019.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MAY 2012 FULFILLED ARTICLE 5 OBLIGATIONS IN 2018

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

NO MINED AREAS REMAINING

AP MINE
CLEARANCE* IN 2018

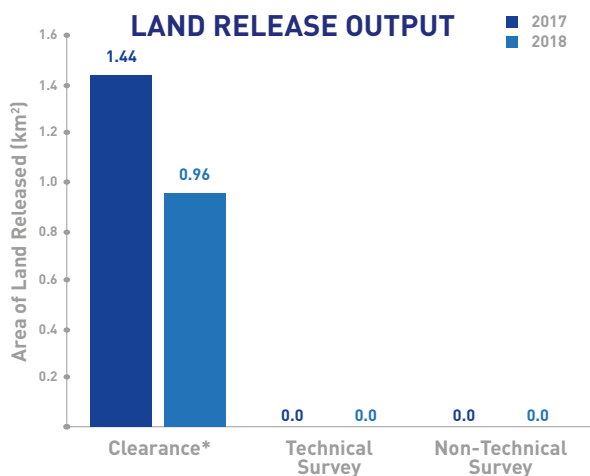
0.96_{km²}

AP MINES
DESTROYED IN 2018

6

*Sampling and verification of mined
areas cleared previously

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

In 2018 – six years after formally declaring it had fulfilled its Article 5 clearance obligations – Jordan finally completed the verification and sampling project of previously cleared mined areas in the Jordan Valley and checks of previously cleared mined areas on the northern borders, bringing it back into compliance with Article 5 of the Anti-Personnel Mine Ban Convention (APMBC).

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	9	There are no remaining mined areas suspected or confirmed to contain anti-personnel mines in Jordan. Residual contamination may yet be found from time to time.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	8	The NCDR is responsible for coordinating, accrediting, regulating, and quality assuring all mine action organisations in Jordan. Jordan provided government funding to the NCDR and for verification of previously cleared mined areas.
GENDER (10% of overall score)	6	According to the NCDR, there is equal access to women and men in survey and clearance teams. Survey and community liaison teams in Jordan are mixed and women and children are consulted during these activities.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	9	Jordan uses the Information Management System for Mine Action (IMSMA) database and submits timely and accurate annual Article 7 reports.
PLANNING AND TASKING (10% of overall score)	8	The NCDR has a 2015–20 National Plan which includes plans to address explosive remnants of war (ERW) contamination in Jordan, and also covered the required sampling and verification in the Jordan Valley and checks on the northern border.
LAND RELEASE SYSTEM (20% of overall score)	5	The sampling and verification project in the Jordan Valley was conducted by manual demining teams under the NCDR, and the checks on the northern border by the Armed Forces' Royal Engineering Corps (REC).
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	9	In 2018, Jordan completed the verification and sampling project of previously cleared mined areas in the Jordan Valley and checks of previously cleared mined areas on the northern borders, bringing it into compliance with APMBC Article 5.
Average Score	7.7	Overall Programme Performance: GOOD

DEMINEING CAPACITY

MANAGEMENT

- National Committee for Demining and Rehabilitation (NCDR) Board of Directors
- NCDR

NATIONAL OPERATORS

- NCDR
- Armed Forces' Royal Engineering Corps (REC)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Jordan reports that it completed sampling and verification for missing mines in previously cleared areas in the Jordan Valley and checks of previously cleared mined areas on the northern borders by June 2018.¹ According to Jordan's most recent APMBC Article 7 report, there are no remaining areas in need of verification in either the Jordan Valley or the northern borders.²

Jordan had previously declared fulfilment of 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.³ 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."⁴

This pertained 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;⁵ and second to verification needed along Jordan's **northern border with Syria**, due to a considerable discrepancy between the recorded number of emplaced mines and the number actually cleared (estimated to be more than 10,000 mines⁶). Some of the difference in the figures was ascribed to the movement of mines to outside identified areas, due to flooding and terrain fluctuations, detonations,⁷ and unrecorded clearance operations by the army or by smugglers.⁸ In February 2019, Jordan offered a further explanation for some of the difference: the failure to record some of the earlier clearance.⁹

With respect to the **Jordan Valley**, Jordan reported in its December 2012 declaration of Article 5 completion that 5km² remained to be verified in an effort expected to take two years.¹⁰ As at the end of 2017, 1.4km² of area in need of verification remained across 36 areas in the Jordan Valley.¹¹ In September 2018, Jordan reported to Mine Action Review

that sampling and verification in the Jordan Valley, overseen by the National Committee for Demining and Rehabilitation (NCDR), had been completed in June 2018.¹² Jordan subsequently announced completion of its "verification for missing mines" project in June 2018, in its Transparency Statement at the Seventeenth Meeting of States Parties in November 2018.¹³

With respect to the **northern border**, in its 2012 Article 5 Declaration of Completion, Jordan reported that some 6.9km² remained to be verified, and that the process being undertaken by Norwegian People's Aid (NPA) had been delayed for security reasons.¹⁴ 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.¹⁵ By May 2013, the estimated area needing verification had been reduced to around 5km², but operations by NPA were halted because of the security situation.¹⁶

In its 2015–20 National Plan, Jordan reported that 3.7km² remained to be verified and inspected by QC teams along the northern border.¹⁷ Jordan reported that, as at end 2017, just over 2.8km² across 18 areas along the northern border still needed verification.¹⁸ In September 2018, Jordan reported to Mine Action Review that the Jordanian military had "checked" the remaining areas on the northern border,¹⁹ and in its Transparency Statement at the Seventeenth Meeting of States Parties in November 2018, Jordan subsequently announced completion of quality control procedures by its armed forces, and the use of the land for military purposes.²⁰ In February 2019, Jordan reconfirmed to Mine Action Review that the required checks in this area had been completed before June 2018 and no future action was needed from the NCDR.²¹

Jordan remains contaminated by explosive remnants of war (ERW), 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.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Jordan established the NCDR under a Royal Decree, which the government subsequently incorporated into law.²² The NCDR's board of directors includes representatives of the Jordanian Armed Forces, the government, non-governmental organisations (NGOs), landmine survivors, and the media.²³ The NCDR did not, though, become fully operational until 2004, when a new administration, chaired by Prince Mired Raad Zeid al-Hussein, was appointed.²⁴ The NCDR is responsible for coordinating, accrediting, regulating, and quality-assuring all mine action organisations, as well as for fundraising.²⁵ It is also responsible for ensuring mine action is integrated into the country's wider development strategies.²⁶

In addition, Jordan's national plan reports that the NCDR will transition from a national institution focusing largely on its own explosive ordnance clearance, to one that will concentrate on assisting other conflict-affected countries to overcome the challenges of mine action and ERW removal.²⁷

In 2018, the Jordanian government provided 220,000 Jordanian dinars (approximately US\$310,300) towards the cost of the NCDR and 20,000 Jordanian dinars (approximately US\$28,200) for verification of areas in the Jordan Valley.²⁸

GENDER

All groups affected by anti-personnel mine contamination, including women and children, were consulted during survey and community liaison activities, as specified in Jordan's national standards.²⁹ Survey and community liaison teams are mixed gender and in some surveys women made up 50% of the team. Relevant mine action data are disaggregated by sex and age.³⁰

According to the NCDR, there is equal access for women and men in survey and clearance teams, including managerial-level positions, but there is a greater proportion of women in survey teams than in clearance teams.³¹

INFORMATION MANAGEMENT AND REPORTING

The NCDR uses the Information Management System for Mine Action (IMSMA) database.³²

Jordan submits timely and accurate annual Article 7 reports under the APMBC.

PLANNING AND TASKING

The NCDR's 2015–20 National Plan aimed to verify, sample, and release the remaining 5.4km² in the **Jordan Valley** by the end of 2017, by deploying six manual clearance teams and one mechanical demining team at a projected cost of US\$2 million.³³ Jordan fell slightly behind schedule, due to not deploying the capacity assumed in the National Plan, but completed the sampling and verification in the **Jordan Valley** in June 2018.³⁴

According to the 2015–20 National Plan, resuming verification and release of the remaining mined areas along the **northern border** with Syria was dependent on the security situation but, would require one year's work with three manual teams and one mechanical team, at an expected cost of \$1 million.³⁵ According to the National Authorities, Jordan's military reportedly "checked" the areas on the **northern borders** and that, as a result of these checks, further QC by the NCDR in that region was deemed unnecessary.³⁶

LAND RELEASE SYSTEM

OPERATORS

The verification and demining operations in Jordan were conducted by the NCDR and REC. From October 2015, the NCDR deployed four operational teams, totalling 35 deminers, for verification and clearance.³⁷ From January 2018, capacity was reduced to three operational teams.³⁸

OPERATIONAL TOOLS

According to the NCDR, a shortage of funds prevented it from deploying mechanical assets and mine detection dogs (MDDs) in its Jordan Valley operations.³⁹

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

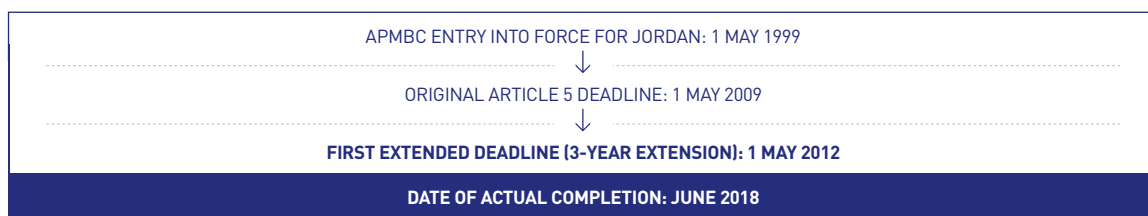
In 2018, Jordan reported finding and destroying six anti-personnel mines (five M14 mines and one M35 mine) and releasing a total of 961,860m², during sampling and verification efforts in the Jordan Valley.⁴⁰

This represents a decrease on the 1.44km² of land verified and released in 2017, when 75 anti-personnel mines (72 M14 mines and 3 M35 mines) and 2 anti-vehicle mines were destroyed.⁴¹ The decrease in 2018 is due to the fact that

sampling and verification efforts in the **Jordan Valley** were completed in June 2018,⁴² and, according to Jordan, no mined areas suspected or confirmed to contain anti-personnel mines remain.⁴³

In addition, Jordan's military reportedly "checked" the areas on the **northern borders**,⁴⁴ but Jordan did not report any anti-personnel mines as having been found and destroyed in 2018, as part of that process.⁴⁵

ARTICLE 5 DEADLINE AND COMPLIANCE



Jordan is believed to no longer have outstanding Article 5 obligations. In its latest Article 7 transparency report, Jordan reported that, as at the end of 2018, no mined areas requiring verification or quality control (QC) remained.⁴⁶

Prior to June 2018, Jordan declared fulfilment 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. When Jordan submitted its formal declaration of completion to the Twelfth Meeting of States Parties in December 2012,⁴⁷ it acknowledged that "a residual risk could remain in areas where landmines have been emplaced",⁴⁸ and noted that verification efforts had resulted in the discovery of additional mined areas.⁴⁹ Between declaring completion in 2012 and completion of the sampling and verification project in 2018 in the Jordan Valley and of checks of remaining areas on the northern border, Jordan had been in violation of the APMBC as it had failed to request an extension to its 2012 Article 5 deadline while it undertook the required sampling and verification.

Jordan had continued to discover and clear significant numbers of mines in areas it verified, despite having declared completion.

In the period between 2014 and 2018, Jordan verified close to 5km of mined area (see Table 1), during which a total of 463 anti-personnel mines, 10 anti-vehicle mines, and 181 other items of UXO were discovered and destroyed.⁵⁰

Table 1: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (verified) (km ²)
2018	0.96
2017	1.44
2016	1.36
2015	0.65
2014	0.55
Total	4.96

- 1 Emails from Mohammad Breikat, Director, NCDR, 30 September and 7 October 2018; Statement of Jordan on Transparency, 17th Meeting of States Parties, Geneva, 30 November 2018; and interview, in Geneva, 7 February 2019.
- 2 Article 7 Report (for 2018), Form D.
- 3 Declaration by Jordan of completion of implementation of Article 5, APMBC 12th Meeting of States Parties, 3–7 December 2012 (hereafter, Jordan 2012 Article 5 Declaration of Completion).
- 4 Jordan 2012 Article 5 Declaration of Completion.
- 5 Statement of Jordan, 16th Meeting of States Parties, Vienna, December 2017.
- 6 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.
- 7 Jordan 2012 Article 5 Declaration of Completion; and Statement of Jordan, 16th Meeting of States Parties, Vienna, December 2017.
- 8 Email from Mikael Bold, NPA, 12 February 2012.
- 9 Interview with Mohammad Breikat, NCDR, Geneva, 7 February 2019.
- 10 Jordan 2012 Article 5 Declaration of Completion.
- 11 Article 7 Report (for 2017), Form D; and email from Mohammad Breikat, NCDR, 14 April 2018.
- 12 Email from Mohammad Breikat, NCDR, 30 September 2018; and interview Geneva, 7 February 2019.
- 13 Statement of Jordan on Transparency, 17th Meeting of States Parties, Geneva, 30 November 2018.
- 14 Jordan 2012 Article 5 Declaration of Completion.
- 15 Email from Jamal Odibat, Operations Reporting Officer, NCDR, 8 May 2014.
- 16 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.
- 17 NCDR, "Jordan's National Mine Action Plan 2015–20", Amman, undated.
- 18 Article 7 Report (for 2017), Form D; and email from Mohammad Breikat, NCDR, 14 April 2018.
- 19 Emails from Mohammad Breikat, NCDR, 30 September and 7 October 2018.
- 20 Statement of Jordan on Transparency, 17th Meeting of States Parties, Geneva, 30 November 2018.
- 21 Interview with Mohammad Breikat, NCDR, Geneva, 7 February 2019.
- 22 Jordan 2012 Article 5 Declaration of Completion.

- 23 NCDR, "Jordan's National Mine Action Plan 2005–2009", Amman, June 2005, pp. 1–2.
- 24 Ibid.; and Jordan 2012 Article 5 Declaration of Completion.
- 25 NCDR, "Jordan's National Mine Action Plan 2005–2009", Amman, June 2005, pp. 1–2.
- 26 Email from Muna Alalul, NCDR, 31 July 2011.
- 27 NCDR, "2015–2020 NCDR National Plan", Amman, undated.
- 28 Article 7 Report (for 2018), Form H.
- 29 National Technical Standards and Guidelines, NCDR, 1 September 2015; and email from Mohammad Breikat, NCDR, 24 July 2019.
- 30 Email from Mohammad Breikat, NCDR, 24 July 2019.
- 31 Ibid.
- 32 Email from Mohammad Breikat, NCDR, 14 April 2018.
- 33 NCDR, "2015–2020 NCDR National Plan", Amman, undated.
- 34 Emails from Mohammad Breikat, NCDR, 30 September and 7 October 2018.
- 35 NCDR, "2015–2020 NCDR National Plan", Amman, undated.
- 36 Interview with Mohammad Breikat, NCDR, Geneva, 7 February 2019.
- 37 Emails from Mohammad Breikat, NCDR, 25 August 2016, 10 April 2017, and 14 April 2018.
- 38 Email from Mohammad Breikat, NCDR, 14 April 2018.
- 39 Email from Mohammad Breikat, NCDR, 30 September 2018.
- 40 Article 7 Report (for 2018), Form D and Appendix 1.
- 41 Article 7 Report (for 2017), Form D; and email from Mohammad Breikat, NCDR, 14 April 2018.
- 42 Interview with Mohammad Breikat, NCDR, in Geneva, 7 February 2019.
- 43 Ibid.
- 44 Emails from Mohammad Breikat, NCDR 30 September and 7 October 2018.
- 45 Article 7 Report (for 2018), Form D and Appendix 1.
- 46 Article 7 Report (for 2018), Form D.
- 47 Jordan 2012 Article 5 Declaration of Completion.
- 48 "Jordan becomes the first Middle Eastern country free of all known landmines", Press release, 24 April 2012.
- 49 Jordan 2012 Article 5 Declaration of Completion.
- 50 See Mine Action Review reports on clearance in Jordan covering 2014–17.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 31 DECEMBER 2020
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

LIGHT,
BUT PRECISE EXTENT UNCLEAR

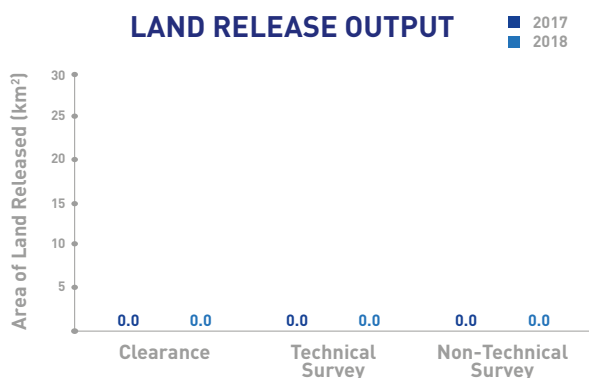
AP MINE
CLEARANCE IN 2018

0 km²

AP MINES
DESTROYED IN 2018

0

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Niger experienced a surge in attacks by non-state armed groups employing mines and other explosive devices of an improvised nature in 2018. Niger pledged to resume mine clearance from the end of 2018 but has not recorded any survey or clearance since that date.

RECOMMENDATIONS FOR ACTION

- Niger should submit a comprehensive Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request, including details of past survey and clearance, an updated list of mined areas requiring clearance, and a detailed workplan for meeting its international legal obligations.
- Niger should submit annual Article 7 reports detailing the progress of mine action as the APMBC requires.
- Niger should develop and implement a fundraising strategy to ensure it fulfils commitments made in its earlier Article 5 deadline extension request.
- Niger should seek and facilitate engagement of international demining organisations.
- Niger should ensure 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.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	Niger has identified limited anti-personnel mine contamination in the Agadez region but it lacks clarity on the extent. It also now faces escalating attacks by non-state armed groups and new contamination from mines of an improvised nature.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	5	The limited mine action in the past five years was funded by Niger's limited resources but while stipulating the need for international funding and for further progress has not availed itself of support offered by humanitarian organisations.
GENDER (10% of overall score)	2	Niger's limited statements on mine action make no reference to gender.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	3	Inconsistent reporting of mine clearance points to weak information management. Niger has submitted only one Article 7 transparency report since 2012 (in 2018).
PLANNING AND TASKING (10% of overall score)	3	Niger lacks a strategic plan for mine action or detailed workplans.
LAND RELEASE SYSTEM (20% of overall score)	4	Niger has reported that it has national standards that are compliant with the International Mine Action Standards (IMAS) but it is not known if they have been formally adopted.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	2	Niger did not release any mined area in the last two years and there is a lack of clarity about the extent of clearance since 2014.
Average Score	3.7	Overall Programme Performance: VERY POOR

DEMINING CAPACITY

MANAGEMENT

- Commission Nationale pour la Collecte et le Contrôle des Armes Illicites (CNCCAI)

NATIONAL OPERATORS

- CNCCAI

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Niger reported in 2018 that it had two mined areas totalling 235,557m² near Madama, a military base in the north-east of the country: a confirmed hazardous area (CHA) of 39,304m² and a suspected hazardous area (SHA) of 196,253m².¹ Three hazardous areas visited by Norwegian People's Aid (NPA) in Madama in 2017 were believed to contain mostly French M51 minimum-metal anti-personnel mines. Nigerien army engineers, conducting earlier clearance operations, had found the mines buried in sand at depths of up to one metre.² Niger's varying statements on clearance activities leave some uncertainty about the extent of the CHA remaining to be cleared (see Article 5 compliance section below).³

Niger also identified five additional SHAs in the Agadez region (in Achouloulouma, Blaka, Enneri, Orida, and Zouzoudinga) but said non-technical and technical survey in 2014 had determined they were not contaminated by anti-personnel mines and that communities in the area had reported accidents only involving anti-vehicle mines.⁴ A PRB M3 anti-vehicle mine was also discovered in March 2019 near the central town of Intikane.⁵ 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.⁶

Table 1: Anti-personnel mine contamination by region (at 2016)⁷

Region	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Agadez	1	39,304	1	196,253	2	235,557

NEW CONTAMINATION

The growing use of mines of an improvised nature in western Niger over the past year has added another dimension of uncertainty over the scale of Niger's challenge. Starting in the second half of 2018, Niger experienced a surge in attacks by groups affiliated with Islamic State or al-Qaida. Attacks were concentrated in the western Tillabery and Tahoua regions, employing a range of artisanal explosive devices, including anti-vehicle mines; victim-activated, pressure plate devices that appear to meet the APMBBC definition of anti-personnel mines; and command-detonated devices.⁸

A mine or improvised explosive device (IED) detonation in January 2019 injured four Niger soldiers near Titahoune (Tillabery)⁹ and an improvised device detonated under a convoy of vehicles in an ambush by heavily-armed insurgents in Tillabery in May 2019 during which 28 soldiers were killed.¹⁰ A 12-ton armoured US Army vehicle was disabled in June 2019 by an improvised mine on the outskirts of Ouallem town (Tillabery). The device was activated by a weather-proofed pressure plate linked to an 81mm mortar. Its explosion detonated a main charge consisting of nearly a dozen 60mm mortar shells.¹¹ A car bomb attack on a Nigerien army base near the border with Mali in July started an assault in which insurgents killed 18 Nigerien soldiers.¹²

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The national mine action programme is managed by the National Commission for the Collection and Control of Illicit Weapons (Commission Nationale pour la Collecte et le Contrôle des Armes Illicites, CNCCAI), which reports directly to the President.

All demining has been carried out by the Nigerien army. In 2015, Niger said it had 60 deminers but lacked sufficient equipment for them to be able to work at the same time.¹³

NPA conducted evaluation missions to Niger in May 2015 and December 2017 to assess the possibility of assisting Niger to meet its Article 5 deadline. Contacts continued in 2019, exploring the possibility of NPA setting up a programme to support CNCCAI clearance operations.¹⁴

GENDER

Niger's latest (third) Article 5 deadline extension request, submitted in 2016, made no reference to gender.

INFORMATION MANAGEMENT AND REPORTING

Niger submitted an Article 7 report in 2018, the first report since 2012. It also delivered statements to the APMBBC Intersessional Meetings and Meeting of States Parties in 2018.

PLANNING AND TASKING

Niger does not have a strategic plan for mine action. Its third Article 5 deadline extension request in 2016 did not set out a workplan or benchmarks for survey or clearance as requested by the APMBC Committee on Article 5 Implementation.

Niger's Article 7 Report for 2013–18 set out a rudimentary operational timeline providing for clearance of 196,253m² by 2020, including 56,000m² in 2018, 100,253m² in 2019, and 40,000m² in 2020.¹⁵

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In its Third Article 5 Extension Request Niger reported that, it had drafted national mine action standards (NMAS) in accordance with the International Mine Action Standards (IMAS) and standard operating procedures.¹⁶ No information has been provided on whether Niger's NMAS have been finalised and adopted.

A Norwegian People's Aid (NPA) team's visit to Adama in December 2017 noted manual clearance was the main tool of demining by Niger's army engineers but highlighted the operational challenges. The M-51 mines mostly found in the area contained no components and were largely undetectable

by conventional metal detectors and sufficiently small as to make detection by GPR-based detectors unreliable calling for full manual excavation. The process was slow and the sandy environment, prone to subsidence and back-filling, made it difficult to maintain consistent excavation depths. Mechanical excavation using sifting and screening equipment would dramatically improve the speed of technical survey and clearance but faced severe logistical challenges because of the long distances, absence of roads, limited provisions for maintenance and cost. Mine Detection Dogs were also deemed unsuitable because of the extreme climate and the potential for deep-buried mines.¹⁷

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

CLEARANCE IN 2018

Niger claimed it was unable to conduct any clearance in 2018 because of the lack of financial resources, the higher priority given to counterterrorism activities, and the "failure" of unspecified international organisations to respect their commitments. It pledged to resume demining activities at the start of 2019.¹⁸ CNCCAI reportedly deployed 30 deminers in mid-June 2019 to conduct mine clearance in Madama. The operation was reportedly funded by Niger from national resources.¹⁹

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMB (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. It is not on track to meet this deadline.

It is unclear what progress Niger has made since the Maputo Review Conference in 2014. The amount of clearance reported by Niger from 2014 to 2016 in Madama has varied from 17,000m² and 750 mines to 39,304m² and 1,075 mines.²⁰ NPA's assessment mission in December 2017 received reports of clearance ranging from 29,000m² to 39,304m².²¹

Niger submitted a second request for an extension to its Article 5 deadline on 12 November 2015, less than two months before the expiry of its first extended deadline. States Parties observed this did not conform to procedure and left insufficient time for analysis and discussion. The decision also observed that the plan presented by Niger in the request was "workable but lacks ambition". States parties agreed to give Niger a one-year extension and requested that it provide, in its revised submission, information on the areas already released disaggregated by the method of release and an updated workplan listing all areas known or suspected to contain anti-personnel mines and annual clearance projections during the period covered by the request.²²

The third extension request Niger submitted in 2016 did not include such a workplan and a request from the Committee on Article 5 Implementation for additional information received no reply.²³

Niger's third extension request said it needed more than US\$3.2 million in funding 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.²⁴ 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 2019.²⁵

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.²⁶ NPA and DDG have made offers of assistance to Niger but received no reply.²⁷

Table 2: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (verified) (km ²)
2018	0
2017	0
2016	0.01
2015	0.01
2014	0
Total	0.02

1 Article 7 Report (for 2013 to April 2018), Annex I, p. 19.

2 NPA, "End of Mission Report: CTA-HMA Inputs", undated but 2018.

3 2016 Article 5 deadline Extension Request, p. 8; Analysis of Niger's 2016 Article 5 deadline Extension Request, p. 3.

4 2016 Article 5 deadline Extension Request, pp. 6–8.

5 "Explosive developments: The growing threat of IEDs in Western Niger", The Armed Conflict Location & Event Data (ACLED) Project, 19 June 2019, p. 3.

6 Executive Summary of Niger's Second Article 5 deadline Extension Request, 27 November 2015; and Statement of Niger, Third APBMC Review Conference, Maputo, 24 June 2014.

7 2016 Article 5 deadline Extension Request, p. 6.

8 "Explosive Developments: The Growing Threat of IEDs in Western Niger", ACLED Project, 19 June 2019, pp. 2–5.

9 "Niger: military convoy hit by IED attack in Tillabéri region Jan. 31", GardaWorld, 1 February 2019, at: bit.ly/32lb5Lw.

10 "Niger: Attaque meurtrière contre l'armée à la frontière malienne", Jeune Afrique, 16 May 2019, at: bit.ly/32EZSvq.

11 T. Gibbons-Neff, "Roadside blast in Niger that hit Americans shows growing threat", New York Times, 14 June 2019, at: nyti.ms/2M2mZKA.

12 "Niger: 18 soldiers killed in attack on military outpost near Inates", TheDefensePost, 2 July 2019, at: bit.ly/2M4lETt.

13 Statement of Niger, APBMC Intersessional Meetings (Committee on Article 5 Implementation), Geneva, 25 June 2015.

14 Emails from Jean-Denis Larsen, DRC Country Director, NPA, 19 July 2017, 3 October 2018, and 15 August 2019.

15 Article 7 Report (for 2013 to April 2018), Annex 1, p. 23.

16 2016 Article 5 deadline Extension Request, pp. 8–9.

17 NPA, "End of Mission Report: CTA-HMA Inputs", undated but 2018.

18 Statements of Niger, Intersessional Meetings (Committee on Article 5 Implementation), 7 June 2018; and 17th Meeting of States Parties, 27 November 2018.

19 Email from Jean-Denis Larsen, NPA, 15 August 2019.

20 Analysis of Niger's 2016 Article 5 deadline Extension Request, p. 3; and Article 7 Report (for 2013 to April 2018).

21 Email from Jean-Denis Larsen, NPA, 19 July 2017.

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", APBMC 14th Meeting of States Parties, Geneva, 4 December 2015.

23 Analysis of Niger's 2016 Article 5 deadline Extension Request, p. 2.

24 2016 Article 5 deadline Extension Request, pp. 11–13; and Executive Summary of Niger's 2015 Article 5 deadline Extension Request, p. 3.

25 Statement of Niger, Intersessional Meetings (Committee on Article 5 Implementation), Geneva, 7–8 June 2018.

26 Statements of Niger, Intersessional Meetings (Committee on Article 5 Implementation), Geneva, 19–20 May 2016; and 14th Meeting of States Parties, Geneva, 1 December 2015; 2016 Article 5 deadline Extension Request, p. 13; and Executive Summary of Niger's 2015 Article 5 deadline Extension Request, p. 3.

27 Email from Chris Natale, Mine Action Advisor, NPA, 29 July 2016; Statement of the International Campaign to Ban Landmines, 15th Meeting of States Parties, Santiago, 28 November 2016.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2012
NEW EXTENDED DEADLINE NEEDED

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

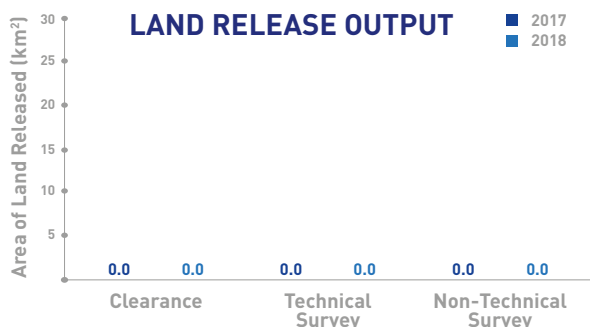
EXTENT UNKNOWN

AP MINE
CLEARANCE IN 2018

0 km²

AP MINES
DESTROYED IN 2018

0



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Nigeria's military reopened the strategically-important Maiduguri-Bama-Banki road in March 2018 after four years when it was closed due to insecurity and the presence of explosive devices. Nigeria informed states parties in May 2019 that non-technical survey and clearance of mines and improvised explosive devices would start "as soon as security conditions permit", enabling Nigeria to report on suspected or confirmed contamination. Conflict, which is ongoing, features continued use of munitions by non-state armed groups.

RECOMMENDATIONS FOR ACTION

- Nigeria should urgently take all possible measures to clear anti-personnel mines, including those of an improvised nature.
- Nigeria should give priority to mine action in the humanitarian response to the emergency in the north-east and establish a mine action centre to work with humanitarian partners to develop a structured programme for survey and, when security permits, clearance.
- Nigeria should encourage and facilitate the provision of assistance and expertise from humanitarian demining organisations and continue to provide risk education to the civilian population.
- Nigeria should support systematic collection of data on incidents, casualties, and contamination, disaggregated by device types.
- Nigeria should submit an Article 7 report to inform states parties to the Anti-Personnel Mine Ban Convention (APMBC) of the discovery of any contamination from anti-personnel mines, including those of an improvised nature, and report on the location of all suspected or confirmed mined areas under its jurisdiction or control. It should also report on the status of programmes for their destruction and request to its Article 5 deadline which expired on 1 March 2012.

DEMINING CAPACITY

MANAGEMENT

- No national mine action authority or mine action centre

NATIONAL OPERATORS

- Army, police

INTERNATIONAL OPERATORS

- Danish Demining Group (DDG)
- Mines Advisory Group (MAG)

OTHER ACTORS

- UNMAS

UNDERSTANDING OF AP MINE CONTAMINATION

Nigeria continued to experience casualties in 2018 and 2019 from Boko Haram's widespread use of explosive devices, including mines of an improvised nature, in Adamawa, Borno and Yobe states in the north east. The extent and nature of contamination remains unclear.

A scoping mission by UNMAS to assess explosive threats in Adamawa, Borno, and Yobe states in 2017 noted widespread use of pressure-plate devices along the main supply routes which were configured to detonate from the weight of a person and function as very large anti-personnel mines.¹ These fall within the APMBC. Borno state was the most severely impacted. Civilians reported the presence of victim-activated devices in 76% of Local Government Areas (LGAs) in Borno; 59% of LGAs in Yobe; and 52% of LGAs in Adamawa.²

Improvised devices, whether body-borne, vehicle-borne, command-detonated, or victim-activated, continue to pose the main explosive threat. The widespread presence of these devices holds back the resettlement of people displaced by conflict, prevents access to agricultural land and obstructs delivery of humanitarian aid and basic services.³

Assessments in 2015 and 2017 both cited reports of the presence of mines but that perception is changing. Interviewees in a DDG assessment in Borno and Adamawa in November 2015 reported the presence of Chinese Type 4 anti-personnel mines and Type 72 anti-vehicle mines. It noted local community reports of local government areas in Borno state that were believed to need clearance, including Bama, Dikwa, Gwoza, Kala-Balge, Kukawa, Marte, and Ngala.⁴ UNMAS's scoping mission said "reliable resources" had reported the use of anti-personnel and anti-vehicle mines around defensive positions.⁵ In 2019, UNMAS said that despite such oral reports, "no physical evidence of (manufactured) landmine(s) has been found".⁶

NEW CONTAMINATION

Operators report continued re-contamination of roads that have been opened by the military and police.⁷ Troops took back control of the town of Gwoza in 2014 but a roadside device explosion close to the town in March 2019 killed eight people and injured seven more.⁸

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Nigeria does not have a formal mine action programme. The Nigerian army and police conduct explosive ordnance disposal (EOD) operations coordinated by the Theatre Commander to respond to operational priorities. The army's clearance of explosive remnants of war (ERW) 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 keep military supply routes open.⁹ The police have seconded units to the military to conduct clearance in newly-secured areas and deployed EOD teams to Maiduguri and a number of other towns.¹⁰

The United Kingdom and the United States each provided a military support team to the Theatre Command headquarters in Maiduguri. The teams included EOD advisers capable of providing training and equipment. In 2018, the Nigerian authorities were reportedly unwilling to receive their advice or support and made no request for UN support, but cooperation with British military experts was reported to have developed in 2019.¹¹

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 internally displaced persons (IDPs). It assigns responsibility for clearance to the National Emergency Management Agency (NEMA), the Nigerian Military, and paramilitary bodies. The plan provided a budget of 76 million naira (approximately \$380,000) for clearance of 38 local government areas but provided no details of how the plan would be implemented or the basis for this budget.¹² In September 2018, it was announced that the federal government was planning to spend \$6.7 billion to deliver the Buhari Plan.¹³

The humanitarian response programme for the north-east has a Mine Action Sub-sector co-chaired by the Ministry of Reconstruction, Rehabilitation and Resettlement and UNMAS. At the request of the UN humanitarian coordinator, UNMAS deployed a team of five to the capital of Borno state, Maiduguri, in July 2018 to provide planning, coordination and technical advice notably to support plans for resettlement of IDPs and for the delivery risk education, survey and clearance.¹⁴

GENDER

Nigeria, lacking a mine action programme, has not taken up gender in the context of mine action.

The UN humanitarian response programme for 2019–21 unveiled in December 2018 said women, girls, boys, and men living in, or potentially returning to, areas suspected or known to be contaminated with mines or other explosive devices would be involved in all stages of mine action

programming. It called for "age and gender appropriate risk education activities to minimize loss of life and injuries as a result of explosive remnants of war", targeting 200,000 girls, 178,000 boys, 51,000 women, and 45,000 men.¹⁵ UNMAS was conducting an analysis in 2019 on the impact of explosive devices on different socio-economic groups, genders, and age groups to inform the humanitarian response.¹⁶

INFORMATION MANAGEMENT AND REPORTING

Nigeria does not have a mine action information management system and has not submitted an Article 7 report since 2012.

In a statement to the 2019 APMBIC Intersessional Meetings, Nigeria said it would provide information on all areas of contamination “as soon as security conditions permit” access for non-technical survey of Adamawa, Borno, and Yobe states. It acknowledged that “much needs to be done” and called for international technical support.¹⁷

UNMAS said it started to collect data on explosive incidents in 2018. Information was gathered mainly from open sources, including the Armed Conflict Location & Event Data Project (ACLED), as well as security information provided by the UN,

NGOs, and the Multinational Joint Task Force. Information was also provided by the Nigerian army and police EOD units but not on a systematic basis.¹⁸ MAG also maintained a database of different incidents related to mines and other explosive ordnance, as well as collecting information on casualties.¹⁹

UNMAS, DDG, and MAG developed standardised reporting forms to capture data on risk education, non-technical survey, and victims. Incidents and victims are not recorded due to the limited geographic reach of operators as a result of insecurity. To strengthen the reporting, UNMAS was developing a reporting network and planned to provide training for NGOs.²⁰

PLANNING AND TASKING

Nigeria does not have an institutional framework for humanitarian mine action, a strategic plan for mine action or annual workplans for the humanitarian organisations responding to emergency needs in the north-east.

The UN humanitarian response programme for 2019–21 provided for mine action activities focusing on:

- risk education on the dangers posed by explosive threats, with the aim of reducing the risk to a level where people can live safely
- non-technical surveys to collect and analyse data on the presence, type, and level of contamination, in order to support land release and the prioritisation of any subsequent clearance; and
- clearance of contaminated areas.

However, humanitarian mine action activity in 2018 and the first half of 2019 was restricted by insecurity to limited survey and risk education in areas that were accessible, which included Banki, Gwoza, and Ngala in Borno state.²¹

LAND RELEASE SYSTEM

OPERATORS

All clearance is conducted by the Nigerian army and police with support from paramilitary groups.

MAG has worked in Nigeria since 2016, initially in arms management and destruction. In 2017 it opened an office in Maiduguri and started providing risk education to IDPs, refugees, and host communities affected by the conflict. In 2018, MAG operated with 12 community liaison teams delivering risk education and working to develop

understanding of contamination in Borno state, mainly through remote assessment (see Survey in 2018 section below). Since 2017, MAG has worked in Maiduguri, Ngala, Mafa, Konduga, Bama, Jere, Dikwa, Biu, Chibok, Damboa, Gwoza, Gubio, Kaga, Mobbar, Monguno, and Nganzai.²²

DDG undertook a limited explosive threat assessment in December 2015 and subsequently undertook risk education in IDP camps.²³

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

SURVEY IN 2018

UNMAS reported that MAG and DDG conducted “23 non-technical surveys” in 2018, believed to have actually been preliminary assessments, which identified two victim-activated explosive devices and a range of other items, including hand grenades, rocket-propelled grenades and air-dropped ordnance.²⁴

MAG said it had not had sufficient access to locations to conduct non-technical survey, but between March 2017 and December 2018 it conducted “initial survey” in 36 areas in Borno state and marked and mapped 43 explosive ordnance devices for destruction by the army or police. In 2019 MAG has also conducted remote contamination assessments, interviewing individuals from displaced communities and compiling a profile of contamination in their villages.²⁵

CLEARANCE IN 2018

Nigeria has not released results of any clearance activities.

In March 2018, the army reopened the main road linking Maiduguri, Bama (Borno state's second biggest town), and Banki, which had been closed by Boko Haram activity for four years. The re-opening was made possible by clearance of mines, including those of an improvised nature, but no details were reported. The theatre commander, Major General Nicholas Rogers, said authorities envisaged insurgents would continue to lay mines.²⁶

The Acting Brigade Commander of the 21st armoured Brigade, Colonel Garba Nura, said in March 2018 that it was conducting operations around Bama to prepare the way for the return of IDPs.²⁷

Between January and the end of July 2019, army and police EOD teams were reported to have cleared 105 IEDs planted on roads in north eastern states, "including 46 victim-activated devices".²⁸

ARTICLE 5 DEADLINE AND 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.²⁹

Under the Convention's agreed framework, in the event mined areas are discovered after the expiry of a state party's Article 5 clearance deadline, it should immediately inform all other states parties of this discovery and undertake to destroy or ensure the destruction of all anti-personnel mines as soon as possible. Nigeria has not submitted an Article 7 transparency report since 2012.

Given the extent of apparent contamination from mines of an improvised nature, 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.³⁰

- UNMAS, "Mission Report: UNMAS Explosive Threat Scoping Mission to Nigeria 3 to 14 April 2017", p. 3.
- Email from Lionel Pechera, Technical Advisor, UNMAS, 25 June 2019.
- Ibid; and email from Lionel Pechera, UNMAS, 2 September 2019.
- DDG, "Mine Action Assessment: Northeastern Nigeria (Adamawa and Borno States) 1–15 November 2015", undated, at: bit.ly/2xS56FZ.
- UNMAS, "Mission Report: UNMAS Explosive Threat Scoping Mission to Nigeria 3 to 14 April 2017", p. 3.
- Email from Lionel Pechera, UNMAS, 25 June 2019.
- Interview with Nina Seecharan, MAG, 9 July 2019.
- Agence France Presse, "Landmine killed eight in NE Nigeria", 19 March 2019.
- DDG, "Mine Action Assessment: Northeastern Nigeria (Adamawa and Borno States) 1–15 November 2015".
- UNMAS, "Mission Report: UNMAS Explosive Threat Scoping Mission to Nigeria 3 to 14 April 2017", p. 5.
- Ibid.
- PCNI, "The Buhari Plan: Rebuilding the North East: Volume II", June 2016, pp. 23–26.
- "Federal government to spend \$6.7 billion Northeast reconstruction, rehabilitation, resettlement plan", News Agency of Nigeria, 1 September 2018, at: bit.ly/2Z8u1ko.
- Emails from Lionel Pechera, UNMAS, 25 June and 17 July 2019.
- UN, "Humanitarian Response Strategy January 2019 – December 2021", December 2018, pp. 43, 48.

- Email from Lionel Pechera, UNMAS, 17 July 2019.
- Statement of Nigeria, Intersessional Meetings, Geneva, 23 May 2019.
- Emails from Lionel Pechera, UNMAS, 25 June and 17 July 2019.
- Email from Nina Seecharan, MAG, 9 July 2019.
- Emails from Lionel Pechera, UNMAS, 25 June and 17 July 2019.
- UN, "Humanitarian Response Strategy January 2019–December 2021", December 2018, pp. 43, 48.
- Email from Nina Seecharan, MAG, 2 October 2018.
- UNMAS, "Mission Report: UNMAS Explosive Threat Scoping Mission to Nigeria 3 to 14 April 2017", p. 6.
- Email from Lionel Pechera, UNMAS, 25 June 2019.
- Email from and telephone interview with Nina Seecharan, MAG, 9 July 2019.
- A. Haruna, "Military reopens Maiduguri-Bama-Banki road held by Boko Haram for years", Premium Times, 24 March 2018, at: bit.ly/2GhEZgq.
- A. Haruna, "How Bama IDPs will return home – Gov. Shettima", Premium Times, 30 March 2018, at: bit.ly/30IBLKD.
- Email from Lionel Pechera, UNMAS, 2 September 2019.
- Statement of Nigeria, APMBC 11th Meeting of States Parties, Phnom Penh, 29 November 2011.
- Final Report of the APMBC 12th Meeting of States Parties, Geneva, 21 January 2013, p. 10.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 FEBRUARY 2025 UNCLEAR WHETHER ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

LIGHT,
BUT PRECISE EXTENT UNCLEAR

AP MINE
CLEARANCE IN 2018

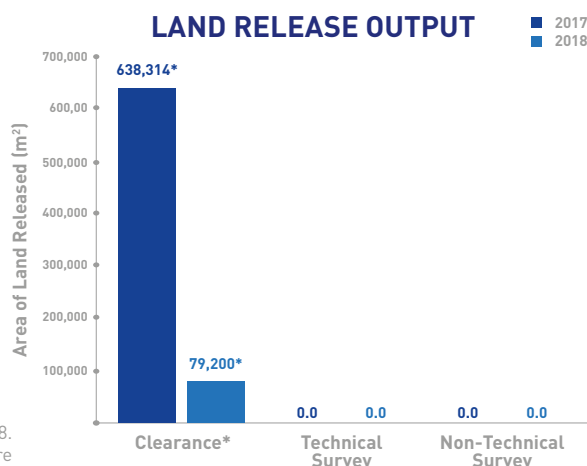
79,200_{M²}*

AP MINES
DESTROYED IN 2018

0_{M²}

*Area cleared included in Oman's Article 7 report for 2018.
Number of AP mines destroyed not reported and therefore
assumed to be zero.

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **MEDIUM**

KEY DEVELOPMENTS

In 2018, Oman informed states parties to the Anti-Personnel Mine Ban Convention (APMBC) that it was considering setting up a mine action centre. Oman is conducting "re-clearance" of certain suspected mined areas and plans to complete release of these areas ahead of its Article 5 deadline in 2025.

RECOMMENDATIONS FOR ACTION

- Oman should proceed with setting up a mine action centre and programme to oversee and ensure release of all suspected mined areas as soon as possible and no later than its Article 5 deadline in 2025.
- Oman should ensure it conducts land release operations according to international standards and seek to apply non-technical and technical survey, to confirm contamination prior to clearance, whenever possible.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	Oman does not have any confirmed mined areas, but does have suspected mined areas resulting from contamination during the 1960s and 70s. Oman reported that it has cleared most of the suspected mined areas in accordance with available resources, but that it is now "re-clearing" certain suspected mined areas to make sure they are free from anti-personnel mine contamination.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	7	The Army is the only institution involved in mine action.
GENDER (10% of overall score)	2	Oman's statements on mine action make no reference to the issue of gender.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	5	Oman has submitted an Article 7 transparency report for 2018, detailing clearance and its plans for land release.
PLANNING AND TASKING (10% of overall score)	6	In its Article 7 transparency report for 2018, Oman included a work plan to release all remaining suspected mined areas before its 2025 Article 5 deadline.
LAND RELEASE SYSTEM (20% of overall score)	3	It is unknown if Oman has any system in place for land release.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	Oman reported clearance of a small amount of mined area between July and December 2018. Oman did not include information on the number of anti-personnel mines discovered during clearance in 2018, which Mine Action Review has therefore assumed to be zero.
Average Score	5.0	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- No national mine action authority or mine action centre

NATIONAL OPERATORS

- Royal Army of Oman

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

Oman is suspected to be contaminated by mines, though the precise location and extent of any residual threat is not known. In its initial Article 7 report, submitted in 2015, Oman declared that there were no areas in the Sultanate confirmed to be mined, but reported "many" suspected mined areas in the south, particularly Dhofar Region.¹ In a statement to the APMBC Intersessional meeting in Geneva in June 2018, and in its Article 7 report for 2018, Oman repeated there were no confirmed mined areas and no record of any mine casualties in the last 20 years.²

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. Mines were planted randomly by militants in small quantities and there are no maps or registers detailing contamination. Friendly forces reportedly

cleared their own contaminated area directly after the end of actions in 1976 and the Armed Sultan's Engineering Unit Forces started clearance of the areas suspected to have been mined by the militants. However, Oman has reported that it is impossible to be sure that the areas have been fully cleared, and therefore re-clearance of certain suspected mined areas is required to ensure no anti-personnel mines remain.³ This is for three reasons: the size of the region (about 99,000km²); the lack of maps or marking; and the terrain (which includes mountains and valleys), with many mined areas located on steep slopes. In addition, the rain over the years may have scattered the mines.⁴

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.⁵

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Oman has not had a functioning mine action programme. Clearance is being performed by its army engineers.⁶

Oman stated in June 2018 that it began implementing a national programme in 2017 and was planning to set up a national mine action centre and would then appeal for supply of equipment but it did not specify when this would occur.⁷

GENDER

Details are not available on the extent to which gender is considered and reflected in Oman's national mine action efforts.

INFORMATION MANAGEMENT AND REPORTING

After joining the APMBC in 2015, Oman submitted annual Article 7 reports.

PLANNING AND TASKING

In its most recent Article 7 report, submitted in August 2019, Oman provided a workplan for the release of all remaining suspected mined area before its Article 5 deadline in 2025.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Standards applied by the army are not known. According to its latest Article 7 transparency report, mined cleared have historically been cleared in accordance with the resources available.⁸

OPERATORS

Oman's army engineers are responsible for mine/ERW clearance.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

Between July and December 2018, Oman cleared 79,200m² of suspected mined area. Oman did not report the number of anti-personnel mines discovered during clearance, which Mine Action Review has therefore assumed to be zero. This compares to clearance of 638,314m² between April 2017 and January 2018, during which no anti-personnel mines were discovered or destroyed.¹

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR OMAN: 1 FEBRUARY 2015
↓
ORIGINAL ARTICLE 5 DEADLINE: 1 FEBRUARY 2025
ON TRACK TO MEET ARTICLE 5 DEADLINE: UNCLEAR WHETHER ON TRACK
CURRENT LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (MAPUTO +15 POLITICAL DECLARATION ASPIRATION): MEDIUM

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.

In its most recent Article 7 report, Oman presented a plan to complete clearance of remaining suspected mined areas by its Article 5 deadline.¹⁰

Oman has cited the challenges it faces in locating and clearing mines in large and remote areas of desert. Conditions were further complicated in 2018 by severe weather, including Cyclone Mekunu in May 2018 and Tropical Storm Luban in October 2018, which caused flooding likely to have compounded the shifting of mines.¹¹

1 Initial Article 7 Report, 2015, pp. 4–5.
2 Oman statement to the APMBC Intersessional Meetings, Geneva, 7–8 June 2018; and Article 7 Report, (for 2018).
3 Article 7 Reports submitted in 2015 and 2019.
4 Initial Article 7 Report, 2015, pp. 4–5.
5 "Humanitarian Demining", Journal of Mine Action, 2001, p. 49.
6 Article 7 Report (for 2018).
7 Statement of Oman to the APMBC Intersessional Meetings, Geneva, 7–8 June 2018.
8 Article 7 Report (for 2018).
9 Article 7 Report (for 2018).
10 Ibid.
11 Statement of Oman, 17th Meeting of States Parties, Geneva, 29 November 2018.

**ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MAY 2018
HAS FULFILLED ARTICLE 5 OBLIGATIONS****KEY DEVELOPMENTS**

In April 2019, the Governor of Peleliu – the only Palauan State in the Second World War where a prolonged ground battle took place – issued an official statement declaring that “Peleliu State believes the presence of anti-personnel (AP) landmines has been eradicated from our state.” The Governor further noted that, “Cleared Ground’s local teams from Peleliu have been systematically surveying and clearing ERW [explosive remnants of war] across Peleliu Island for almost 10 years now with funding from many countries

including Palau, and of the hundreds of caves, no known cave has gone unchecked for AP landmines. In May 2018, Palau’s 10 year treaty deadline to be free of AP mines was met, and continuing ERW surveys have found no AP landmine since.”¹ Mine Action Review has, as a consequence, deleted Palau from the list of mine-affected states parties with outstanding Anti-Personnel Mine Ban Convention (APMBC) Article 5 obligations.

RECOMMENDATIONS FOR ACTION

- Palau should submit an APMBC Article 7 transparency report confirming there are no mined areas under its jurisdiction or control suspected to contain anti-personnel mines.

UNDERSTANDING OF AP MINE CONTAMINATION

Until recently, it was unclear whether or not Palau still had mined areas suspected to contain anti-personnel mines, as the results of survey in Peleliu state, by Cleared Ground Demining (CGD), had not been made public. In 4 April 2019, however, the Governor of Peleliu issued an official statement noting that while small stocks of anti-personnel mines were discovered by survey teams, before and since the expiry of Palau's APMBC deadline for clearance of emplaced anti-personnel mines no emplaced anti-personnel mine has been discovered.²

Palau became a state party to the APMBC in 2008 and invited CGD to help Palau deal with its Second World War explosive ordnance contamination, with particular emphasis on determining whether anti-personnel mines remained. According to the Governor, Peleliu state was the only one in Palau where significant combat took place during the Second World War.³ Survey activities "discovered some small stores of Japanese Type 93 AP landmines in the defensive caves constructed by Japanese Forces in 1944 on Bloody Nose Ridge (Omlebelochek Mountains) on Peleliu Island, with 22 mines found the first year, 7 mines the next year, and one or two in the next years. The mines, some still in their packing boxes, had decayed badly over 75 years, and in many instances the explosives were eaten away by termites".⁴

According to the Governor of Peleliu, there have been no reported accidents on Peleliu from anti-personnel mines.⁵ Furthermore, military maps made available by Japan did not indicate the use of anti-personnel mines,⁶ and archival research, including a 1945 Cave Fighting Manual by the US military, based on the Peleliu cave systems, shows no reference to the use of anti-personnel mines. Rather, artillery was wheeled out from protection within the caves and Japanese Forces frequently reinfiltrated the cave system, often at night, supporting the argument that mines would not have been emplaced around the caves.⁷

However, since 2011, there has been a lack of clarity and consistency in the reporting of anti-personnel mines destroyed in Palau, in particular whether anti-personnel mines discovered and destroyed were abandoned stocks of anti-personnel mines, which fall under Article 4 of the APMBC, or emplaced and armed anti-personnel mines, which fall under Article 5.

In its initial Article 7 report following entry into force of the APMBC, Palau had declared no known or suspected mined areas.⁸ However, in 2011, Palau stated for the first time that it had mined areas on its territory and that contamination to date had 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.⁹ In December 2011, in its statement to the APMBC Eleventh Meeting of States Parties, Palau claimed (wrongly) that it was not "obligated under the AP Convention to destroy emplaced antipersonnel mines because it never produced, stockpiled, used, nor transported them."¹⁰

In its subsequent Article 7 report submitted in 2012, Palau stated that clearance had been completed of all anti-personnel mines at the only two areas with confirmed contamination. 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."¹¹ At that time, CGD confirmed that anti-personnel mine contamination was only of abandoned stockpiled mines.¹²

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".¹³ 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.¹⁴ Palau also reported that its contamination "was a result of a fiercest battle fought in the Pacific during WWII [the Second World War]. With such circumstance, Palau is seeking assistance toward [an] island-wide survey to know its mine[d] areas and or suspected mine[d] areas."¹⁵

In December 2015, CGD reported having cleared emplaced and armed anti-personnel and anti-vehicle mines in Palau between January 2014 and November 2015 in Peleliu state.¹⁶ This included clearance of five type 93 HE blast anti-personnel mines, which were reportedly laid and armed, in two separate caves, between January 2014 and November 2015.¹⁷ Palau did not submit Article 7 reports for 2013, 2014, or 2015, as it is obligated to do by the APMBC, but in its Article 7 report for 2016, submitted in 2017, it included the back-dated period and reported the five type 93 HE blast anti-personnel mines destroyed by CGD under Article 4, rather than Article 5, of the APMBC.¹⁸ 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.¹⁹ 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)".²⁰ These mines are covered and prohibited by the APMBC, but were not included in Palau's reporting under Article 7 of the Convention.

In its UXO [unexploded ordnance] 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."²¹

While it has now been confirmed that Palau does not have mined areas known or suspected to contain anti-personnel mines, it continues to be contaminated by ERW, including UXO on many of its 200 islands, and sea mines, left over from World War II,²² when it was the scene 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.²³ 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.²⁴ 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).²⁵

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Palau is in the process of establishing a mine action programme to address its ERW 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.²⁶ The UXO Advisory Committee 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.²⁷

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.²⁸

As at August 2018, the National Safety Office team had an operational capacity of 16 personnel, in addition to 2 safety officers (responsible for coordinating operations) and 1 international NPA advisor.²⁹ National Safety Office ERW team personnel also provide explosive ordnance disposal (EOD) cover to Palau's water and sewer improvement projects,³⁰ and will conduct risk assessments for all planned infrastructure work.³¹

GENDER

Details are not available on the extent to which gender is reflected in Palau's ERW action programme.

INFORMATION MANAGEMENT AND REPORTING

With the support of NPA, the National Safety Office established a national UXO database in January 2017,³² 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 ERW clearance in Palau, and to verify and assess data for reporting to the Palau authorities, local communities, and the international community.³³

The National Safety Office now receives both historical and current data on contamination, survey, and clearance, to populate the Information Management System for Mine Action (IMSMA) database.³⁴ All items found to date have been reported by clearance operators, and entered into the UXO database, with the exception of certain historical data from CGD.³⁵

PLANNING AND TASKING

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 2017.³⁶

The UXO policy outlines national coordination measures and assigns responsibilities to the relevant ministries and documents the role of the UXO Advisory Committee.

Palau, in conjunction with international partners including NPA, CGD, and JMAS, has been 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.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In March 2017, Palau enacted Presidential Executive Order 392, which formally adopted the Palau UXO Policy.³⁷

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, 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.³⁸

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.³⁹ 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.⁴⁰

In its Article 7 report (for 2017), Palau reported that UXO Standard Operating Procedures (SoPs) had been drafted and were undergoing review prior to adoption.⁴¹ As at July 2019, Palau had not submitted an Article 7 report for 2018.

OPERATORS

CGD has been conducting ERW clearance operations in Palau, both on land and in the sea, since 15 September 2009.⁴² 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.⁴³

In 2012, JMAS, a Japanese demining NGO, began working in Palau, with a focus on underwater UXO clearance.⁴⁴

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

Palau now has capacity to direct trained national personnel to clear priority areas of ERW.⁴⁵ A new government demolition area became operational in early 2018, which is run by the National Safety Office, and which is also used by JMAS.⁴⁶

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

No operators in Palau reported finding any anti-personnel mines in 2018.⁴⁷

SURVEY IN 2018

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.⁴⁸

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 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".⁴⁹

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 also included Second World War research on how the caves were used during the conflict, which indicated that anti-personnel mines had not been emplaced.⁵⁰ Finally, military maps made available by Japan did not indicate the use of anti-personnel mines.⁵¹

CLEARANCE IN 2018

No operators in Palau reported finding any anti-personnel mines in 2018.⁵²

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR PALAU: 1 MAY 2008
ORIGINAL ARTICLE 5 DEADLINE: 1 MAY 2018 (COMPLETED FULFILMENT OF ARTICLE 5 OBLIGATIONS)

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. On 4 April 2019, the Governor of Peleliu issued a statement that, "Peleliu State believes the presence of anti-personnel (AP) land mines has been eradicated from our state."⁵³

- 1 Statement by the Governor of Peleliu, regarding "The status of presence of anti-personnel land mines within the territorial boundaries of the state of Peleliu", 1 April 2019.
- 2 Ibid.
- 3 Ibid.
- 4 Ibid.
- 5 Ibid.
- 6 Emails from Luke Atkinson, Programme Manager, Norwegian People's Aid (NPA), 11 and 12 July 2017; and Statement by the Governor of Peleliu, regarding "The status of presence of anti-personnel land mines within the territorial boundaries of the state of Peleliu", 1 April 2019.
- 7 CGD, "2nd and 3rd Quarter Report of GICHD (1st April to 31st October 2017)", 9 November 2017, p. 2 and annex, p. 3.; and Statement by the Governor of Peleliu, regarding "The status of presence of anti-personnel land mines within the territorial boundaries of the state of Peleliu", 1 April 2019.
- 8 Article 7 Report, Form C, for the periods 1 May to 14 September 2008 and 16 September 2008 to 16 September 2009.
- 9 Article 7 Report (for 2010), Form C.
- 10 Statement of Palau, APMBC 11th Meeting of States Parties, Phnom Penh, 1 December 2011.
- 11 Article 7 Report, Form C (for 2011).
- 12 Email from Cassandra McKeown, CGD, 18 July 2011.
- 13 Article 7 Report (for 2012), Form C.
- 14 Ibid.
- 15 Ibid.
- 16 Email from Steve Ballinger, Operations Director, CGD, to the Palau Authorities, 1 December 2015.
- 17 Ibid.
- 18 Article 7 Report (for 2017), Form G.
- 19 Email from Steve Ballinger, CGD, to the Palau Authorities, 1 December 2015.
- 20 Ibid.
- 21 Government of Palau, "UXO Action Plan 2017-19", 1 March 2017, p. 7.
- 22 Statement of Palau, APMBC 6th Meeting of States Parties, Zagreb, 29 November 2005; and emails from Luke Atkinson, NPA, 11 and 12 July 2017.
- 23 US military statistics included in the document provided to Landmine Monitor by email from Cassandra McKeown, Finance Director, CGD, 19 May 2010.
- 24 Government of Palau, "UXO Action Plan 2017-19", 1 March 2017, p. 6; and "UXO Policy", 1 March 2017.
- 25 Emails from Luke Atkinson, NPA, 11 and 12 July 2017.
- 26 Article 7 Report (for 2016).
- 27 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
- 28 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.
- 29 Interview with Luke Atkinson, NPA, 31 August 2018.
- 30 Email from Luke Atkinson, NPA, 30 August 2017; and interview, 31 August 2018.
- 31 Email from Luke Atkinson, NPA, 21 March 2017.
- 32 Email from Eunice Akiwo, Ministry of State, 21 April 2017.
- 33 Article 7 Report (for 2016 and 2017), Form A.
- 34 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.
- 35 Interview with Luke Atkinson, NPA, 31 August 2018.
- 36 Article 7 Report (for 2016), Form A.
- 37 Article 7 Report (for 2017), Form A.
- 38 Government of Palau, "UXO Policy" and "UXO Action Plan 2017-19", 1 March 2017; and Article 7 Report (for 2016).
- 39 Email from Luke Atkinson, NPA, 30 August 2017.
- 40 Interview with Luke Atkinson, NPA, 31 August 2018.
- 41 Article 7 Report (for 2017), Form A.
- 42 CGD, "Republic of Palau Project", accessed 12 October 2016, at: bit.ly/2SmK1Nd; and M. L. Poso, "Team removes WWII ordnance in Palau", Palau Horizon, 3 May 2010, at: bit.ly/2XUpX6a.
- 43 CGD, "Republic of Palau Project".
- 44 Pacific Islands Report, "Team From Japan Removes Depth Charges From Palau Wreck", 22 December 2015, at: bit.ly/2LncFxe; Government of Palau, "UXO Action Plan 2017-19", 1 March 2017, p. 6; and email from Yasuo Terada, Programme, JMAS, 17 March 2017.
- 45 Interview with Luke Atkinson, NPA, 31 August 2018.
- 46 Ibid.
- 47 Interview with Luke Atkinson, NPA, 14 August 2019.
- 48 Interview with Luke Atkinson, NPA, 31 August 2018.
- 49 CGD, "2nd and 3rd Quarter Report of GICHD (1st April to 31st October 2017)", 9 November 2017, p. 2 and annex.
- 50 CGD, "2nd and 3rd Quarter Report of GICHD (1st April to 31st October 2017)", 9 November 2017, p. 2 and annex, p. 3.
- 51 Emails from Luke Atkinson, NPA, 11 and 12 July 2017.
- 52 Interview with Luke Atkinson, NPA, 14 August 2019.
- 53 Statement by the Governor of Peleliu regarding the status of presence of anti-personnel land mines within the territorial boundaries of the state of Peleliu, 1 April 2019.

PALESTINE



CLEARING THE MINES 2019

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JUNE 2028
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MEDIUM, **5km²** (ESTIMATED)
probably less than

AP MINE
CLEARANCE IN 2018

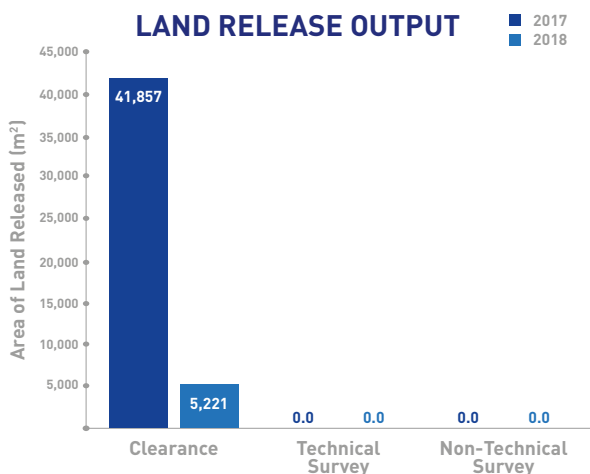
5,221^{*} m²

AP MINES
DESTROYED IN 2018

12^{*}

*Excludes 2018 clearance output for the Karne Shomron and Jinsafut minefields in the Qalqiliya governorate of the West Bank, which was not reported by Israel

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Palestine acceded to the Anti-Personnel Mine Ban Convention (APMBC) in December 2017, becoming a state party on 1 June 2018. All mined areas are located in territory under Israeli control. To date, Israel has not authorised demining operations to be conducted by or on behalf of the Palestinian Mine Action Centre (PMAC), but progress is being made in clearance of mine contamination in the West Bank.

RECOMMENDATIONS FOR ACTION

- PMAC should report accurately and consistently on the extent of mined area and annual clearance output.

DEMINING CAPACITY

MANAGEMENT

- Higher Committee for Mine Action
- Palestine Mine Action Centre (PMAC)

NATIONAL OPERATORS

- 4M (clearance now completed)

INTERNATIONAL OPERATORS

- The HALO Trust

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

In its initial APMBC Article 7 report submitted in November 2018, Palestine reported 69 areas suspected to contain anti-personnel mines on the border with Jordan, covering a total area of 18.51km² and all under Israeli control.¹ Palestine also reported that it is not possible for it to know if there are further mined areas in eastern Jerusalem or in other areas under Israeli control, including in the region of Israeli settlements or closed military zones.²

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. All minefields, including those laid by the Jordanian military, are under Israeli military control.³ In addition, HALO Trust reported being made aware of three other anti-personnel mined areas in the Jordan Valley, namely at Shademot Mehola (65,000m²) and Sokot (228,000m²), containing mixed anti-personnel and anti-vehicle mine contamination; and at Taysir (5,500m²), which contains only anti-vehicle mines.⁴ Clearance operations must therefore be coordinated with the Israeli authorities,⁵ in addition to PMAC.

According to The HALO Trust, as at July 2019, there was nearly 0.3km² of confirmed mined area (excluding the Jordan Valley) across four minefields in Palestine and two minefields in no-man's-land between the West Bank and Israel (see Table 1).⁶ All six minefields were laid by the Jordanian army.

This is a reduction of two mined areas, compared to mine contamination at the end of 2017, as clearance of Karne Shomron and Jinsafut minefields in Qalqiliya governorate was completed in 2018 by Israeli demining company, 4M, which won an Israeli Ministry of Defence tender.⁷

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.⁸

Most mined areas are located in Area C of the West Bank, along the border with Jordan. Area C covers approximately 60% of the West Bank.⁹

Table 1: Mined area (at July 2019) (excluding the Jordan Valley)*¹⁰

Governorate	Minefield Task	Contamination	CHAs	Area (m ²)
Jenin	Araba	AV and AP mines	1	1,257
	Qabatiya	AV and AP mines	1	8,212
	Yabad	AV and AP mines	1	42,829
Tul Kareem	Nur a-Shams	AV and 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
Totals			6	280,042

CHA = Confirmed hazardous area AV = Anti-vehicle AP=Anti-personnel

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

PMAC was established in accordance with Palestinian Minister of Interior decision on 25 March 2012,¹¹ 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.¹²

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).¹³ The committee has established a number of sub-committees to deal with technical issues, risk education, legal affairs, foreign affairs, and health and safety.¹⁴

In November 2016, Palestine announced that it was seeking to adopt and enact a mine action law. Palestine was hopeful of completing the legal procedures within a year and then presenting the draft law to the legislative council for endorsement, followed by signature by the President.¹⁵ As at February 2019, however, the process was still ongoing.¹⁶

PMAC, which has 12 employees,¹⁷ is staffed with personnel from the Palestinian National Security Forces, Civil Police, and Civil Defence. In 2013, 36 PMAC personnel were trained by UNMAS for demining but were not subsequently authorised by Israel to conduct clearance.¹⁸ 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.¹⁹ A new director of PMAC was appointed in July 2017, following the previous director's retirement.²⁰

PMAC does not have its own budget, and the Palestinian authority only provides funding for the salaries of PMAC employees and the costs of the PMAC office.²¹ Israel does not grant Palestine authorisation to conduct mine clearance operations.²²

Neither PMAC nor the Israeli National Mine Action Authority (the INMAA) provides direct funding for HALO Trust's clearance operations.²³ At the baptism site clearance task in the West Bank, the INMAA contributes ILS2 million (approximately US\$548,000) to quality assurance (QA).²⁴ 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, and since 2018, by the European Union too.²⁵

GENDER

It is not known whether national mine action programme has a gender policy and implementation plan.

The HALO Trust has a global policy on gender and diversity. HALO Trust's operations team works and lives within the Palestinian communities and is all male. During 2018, The HALO Trust deployed a female finance officer, who also participates in survey work in the field as a native speaker, and a female doctor at the baptism site.²⁶

INFORMATION MANAGEMENT AND REPORTING

PMAC uses the Information Management System for Mine Action (IMSMA) database, Level 1.²⁷

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.²⁸ As a result, all three entities are in possession of HALO Trust survey and clearance data relating to demining operations in the West Bank.

Palestine submitted an initial Article 7 report in November 2018, as required by the APMBC.²⁹ However, Palestine's Article 7 report for 2018 (submitted in 2019), does not contain any further details, including the amount of mined area cleared in 2018.³⁰

PLANNING AND TASKING

PMAC has a Strategic Plan for 2017–20, in which primary objectives are the clearance of the Araba, Deir Abu Daif, Nur a-Shams, Qabatiya, and Yabad minefields.³¹ Clearance of Deir Abu Daif was completed in 2017.

HALO Trust's survey and clearance in the West Bank is prioritised by its international donors, in conjunction with the INMAA and PMAC.³²

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The HALO Trust's standing operating procedures (SoPs), which are based on its international standards and which also comply with national standards, are approved by the INMAA. Once a year, The HALO Trust submits its SoPs, including any necessary amendments, to the INMAA for approval.³³

OPERATORS

To date, Israel has not authorised demining operations to be conducted by or on behalf of PMAC.³⁴ 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 2014,³⁵ and continues to conduct clearance operations in the West Bank.

The HALO Trust works under the auspices of both the INMAA and PMAC. Its manual clearance team in the West Bank is composed of deminers from Georgia with capacity varying between 10 and 33 deminers according to the task/work cycle.³⁶ In addition, during 2018, 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.³⁷ HALO Trust added a second armoured tracked excavator and a screener to its operations in April 2019, with EU funding, to support mechanical clearance of the three minefields in the Jenin governorate.³⁸

The HALO Trust planned to deploy up to 24 deminers at the baptism site and in Jenin governorate in 2019. Since the manual segments of the three minefields in Jenin governorate have been completed, up to six deminers will support the mechanical team.³⁹

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.⁴⁰ In addition, as required by the INMAA, 4CI Security, an external INMAA-certified QA/QC company, is contracted to monitor HALO Trust's clearance in accordance with Israeli National Mine Action Standards.⁴¹

OPERATIONAL TOOLS

The HALO Trust conducts both manual and mechanical clearance in the West Bank. HALO Trust also uses a drone for survey and mapping purposes, and maps generated are shared with all parties involved for planning and follow up.⁴²

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

The HALO Trust released 5,221m² through clearance in 2018 and did not release any land through survey.

Under Convention on Certain Conventional Weapons (CCW) Amended Protocol II, Israel reported that the INMAA had overseen clearance of approximately 1.2km² in 2018, destroying 1,350 mines and ERW, in addition to cancellation of 0.7km² non-technical survey.⁴³ However, there was no disaggregation on what proportion of this land release was of mined area (as opposed to battle area) or whether it also includes land released in Palestinian territory in the West Bank.

In 2018, clearance of Karne Shomron and Jinsafut minefields, in the Qalqiliya governorate of the West Bank, was completed by Israeli operator, 4M, contracted by the Israeli Ministry of Defence, but clearance output is not known.⁴⁴

SURVEY IN 2018

No land was reduced by The HALO Trust through technical survey in 2018 or cancelled through non-technical survey.⁴⁵ 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.⁴⁶

CLEARANCE IN 2018

In 2018, The HALO Trust cleared 5,221m² of mined area, at the Yabad minefield in Jenin governorate, during which 12 anti-personnel mines were destroyed.⁴⁷ This is a decrease compared to 2017, when HALO Trust cleared 41,857m², and the drop in output is due to the fact that HALO Trust's operations in Jenin district were suspended between April to October 2018, due to a change in US Foreign Policy which led to the cessation of US funding for the external QA.⁴⁸

The HALO Trust also commenced clearance of the West Bank minefield at Qaser al-Yahud (the baptism site), in the Jordan Valley, in March 2018,⁴⁹ with both funding from international donors and Israel.⁵⁰ The project aims to remove mines and explosive ordnance in the area of the baptism site, which covers a total estimated area of 870,000m².⁵¹ Approximately 90,000m² is thought to potentially contain anti-personnel mines, including those of an improvised nature.⁵² 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-vehicle mines in multiple lines and more than 2,600 anti-vehicle mines in total. The land and buildings inside the seven church compounds are suspected to contain mines and booby-traps, but no official records exist regarding this contamination.⁵³

In addition, from October 2017 Israel 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 completed in 2018.⁵⁴ The INMAA has not, however, provided details of the area of land cleared in these two minefields or the number of mines destroyed.

PROGRESS IN 2019

The HALO Trust secured funding for external QA from a private foundation, and in May 2019 resumed clearance operations at Araba minefield in Jenin Governorate.⁵⁵

The HALO Trust completed clearance of the seven churchyards and their compound buildings at the baptism site by the end of July 2019.⁵⁶ It was also looking to secure Israeli funding to clear the remainder of the valley floor (anti-vehicle mine lines (some of which are being cleared by the IDF and sub-surface battle area contamination)).⁵⁷

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR PALESTINE: 1 JUNE 2018

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 JUNE 2028

NOT ON TRACK TO MEET ARTICLE 5 DEADLINE.

COMPLETION IS CONTINGENT ON POLITICAL FACTORS AND DEMINING PROGRESS MADE BY ISRAEL AND THE HALO TRUST, AS PALESTINE DOES NOT HAVE CONTROL OF MINED AREAS UNDER ITS JURISDICTION.

CURRENT LIKELIHOOD OF COMPLETING CLEARANCE BY 2025
(MAPUTO +15 POLITICAL DECLARATION ASPIRATION): LOW

PMAC planned to complete clearance of mined areas by the end of 2020, if there were no obstacles from the other parties.⁵⁸ Clearance in the West Bank is constrained by available funding⁵⁹ and is impacted by political factors, including the lack of authorisation granted by Israel for Palestine to conduct mine clearance operations.⁶⁰

It is, however, a positive development that The HALO Trust was permitted to begin mine clearance operations in April 2014, and, as at July 2019, HALO Trust had completed clearance of five minefields in Area C of the West Bank. Clearance of a sixth minefield, Araba, was planned to be completed by the end of September 2019.⁶¹

As at the end of 2018, four Jordanian-laid minefields in the governorates of Jenin and Tul Kareem, which fall within HALO Trust’s donor agreement, remained to be cleared. 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.⁶²

In February 2019, the INMAA hoped that clearance of mined areas in the West Bank would be finished in two years. According to the INMAA, the Yalo and Canada Park minefield will be cleared, but according to humanitarian prioritisation, noting that minefields are fenced and marked, and pose little humanitarian impact.⁶³

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 2017–19.⁶⁴

Table 2: Five-year summary of AP mine clearance in the West Bank (2014–18)

Year	Area cleared (m²)
2018	5,221
2017	41,857
2016	34,057
2015	63,411
2014	21,832
Total	166,378

- 1 Palestine Initial Article 7 Report, 26 November 2018, Form D and Annex 2.
- 2 Ibid., Form D.
- 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 Email from Ronen Shimoni, Programme Manager, HALO Trust, 21 September 2019.
- 5 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.
- 6 Emails from Ronen Shimoni, HALO Trust, 22 April and 3 August 2017, and 14 May 2018.
- 7 Email from Ronen Shimoni, HALO Trust, 10 April 2019.
- 8 Email from Celine Francois, Programme Officer, UNMAS Jerusalem, 5 July 2012.
- 9 Ibid.; and "UNMAS 2013 Annual Report".
- 10 Email from Ronen Shimoni, HALO Trust, 10 April 2019. The two minefields in no-man's land are located west of the separation barrier in an Israeli controlled area. Contamination data in Annex 1 of Palestine's, Initial Article 7 report, Form D and Annex 2, 26 November 2018, reported the size of Araba minefield as 11,123m², Qabatiya as 8,212m², Yabad as 48,402m², and Nur a-Shams as 37,810m².
- 11 Minister of Interior Decision No. 69 (outgoing 1223), 25 March 2012.
- 12 Emails from Celine Francois, UNMAS Jerusalem, 19 July 2012; and Imad Mohareb, Planning Department, PMAC, 31 March 2013.
- 13 Emails from Celine Francois, UNMAS Jerusalem, 5 and 19 July 2012; and UN, "2012 Portfolio of Mine Action Projects", New York, 2013.
- 14 Email from the Planning Department, PMAC, 9 May 2016.
- 15 Statement of Palestine, 15th Meeting of States Parties, Santiago, 29 November 2016.
- 16 Interview with Brigadier Osama Abu Hananeh, Director, PMAC, Geneva, 7 February 2019.
- 17 Ibid.
- 18 Initial Article 7 Report, Form D, 26 November 2018.
- 19 Email from staff member in the Planning Department, PMAC, 26 June 2018.
- 20 Email from staff member in the Planning Department, PMAC, 30 August 2018.
- 21 Email from staff member in the Planning Department, PMAC, 26 June 2018; and interview with Brigadier Osama Abu Hananeh, PMAC, Geneva, 7 February 2019.
- 22 Initial Article 7 report, Form D, 26 November 2018; and interview with Brigadier Osama Abu Hananeh, PMAC, Geneva, 7 February 2019.
- 23 Email from Ronen Shimoni, HALO Trust, 22 April 2017.
- 24 Email from Michael Heiman, formerly INMAA, 26 May 2018; and interview with Marcel Aviv, INMAA, in Geneva, 7 February 2019.
- 25 Emails from Ronen Shimoni, HALO Trust, 22 April 2017 and August 21 2019; and telephone interview, 3 August 2017.
- 26 Email from Ronen Shimoni, HALO Trust, 10 April 2019.
- 27 Email from staff member in the Planning Department, PMAC, 30 August 2018.
- 28 Email from Ronen Shimoni, HALO Trust, 3 Sept 2018.
- 29 Initial Article 7 Report, Form D, 26 November 2018.
- 30 Article 7 Report (for 2018).
- 31 PMAC, "Strategic Plan 2017–2020", undated.
- 32 Email from Ronen Shimoni, HALO Trust, 22 April 2017.
- 33 Email from Ronen Shimoni, HALO Trust, 14 May 2018.
- 34 Email from the Planning Department, PMAC, 26 June 2018.
- 35 Email from Tom Meredith, HALO Trust, 11 May 2015.
- 36 Email from Ronen Shimoni, HALO Trust, 10 April 2019.
- 37 Ibid.
- 38 Ibid.
- 39 Ibid.
- 40 Email from Ronen Shimoni, HALO Trust, 14 May 2018.
- 41 Email from Ronen Shimoni, HALO Trust, 10 April 2019.
- 42 Ibid.
- 43 CCW Amended Protocol II Article 13 Report (for 2018), Form B.
- 44 Email from Ronen Shimoni, HALO Trust, 10 April 2019.
- 45 Ibid.
- 46 Email from staff member in the Planning Department, PMAC, 9 May 2016; and telephone interview with Ronen Shimoni, HALO Trust, 3 August 2017.
- 47 Email from Ronen Shimoni, HALO Trust, 10 April 2019.
- 48 Ibid.
- 49 Emails from Ronen Shimoni, HALO Trust, 14 May 2018; and Michael Heiman, formerly INMAA, 26 May 2018; CCW Amended Protocol II Article 13 Report (for 2018), Form B.
- 50 Interview with Marcel Aviv, INMAA, Geneva, 7 February 2019.
- 51 Email from Ronen Shimoni, HALO Trust, 14 May 2018.
- 52 Email from Michael Heiman, formerly INMAA, 26 May 2018.
- 53 Email from Ronen Shimoni, HALO Trust, 14 May 2018; and telephone interview, 23 August 2018.
- 54 Email from Ronen Shimoni, HALO Trust, 10 April 2019.
- 55 Emails from Ronen Shimoni, HALO Trust, 10 April and 21 August 2019.
- 56 Ibid.
- 57 Ibid.
- 58 Statement of Palestine, APMB 16th Meeting of States Parties, Vienna, 20 December 2017; and email from staff member in the Planning Department, PMAC, 26 June 2018.
- 59 Email from Ronen Shimoni, HALO Trust, 21 August 2019.
- 60 Initial Article 7 Report, Form D, 26 November 2018; and interview with Brigadier Osama Abu Hananeh, PMAC, in Geneva, 7 February 2019.
- 61 Email from Ronen Shimoni, HALO Trust, 21 August 2019.
- 62 Emails from Ronen Shimoni, HALO Trust, 22 April 2017 and 14 May 2018; and telephone interview, 3 August 2017.
- 63 Interview with Marcel Aviv, INMAA, in Geneva, 7 February 2019.
- 64 Interview with Michael Heiman, then INMAA, in Geneva, 15 February 2018; and emails, 23 July and 10 August 2017 and 26 May 2018.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 31 DECEMBER 2024
UNCLEAR WHETHER ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

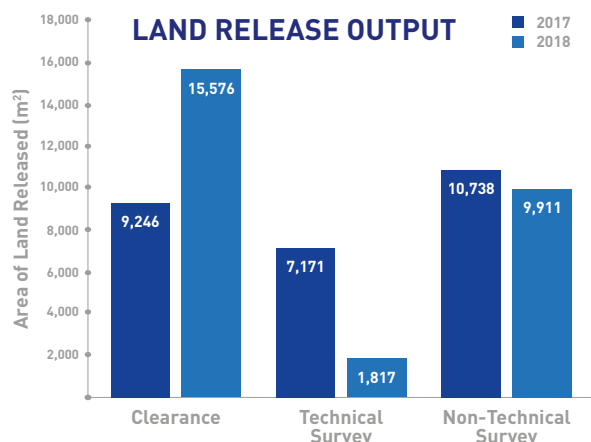
LIGHT, **0.1 km²**
(ESTIMATED)

AP MINE
CLEARANCE IN 2018

0.02 km²

AP MINES
DESTROYED IN 2018

140



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **MEDIUM**

KEY DEVELOPMENTS

In 2018, the joint Ecuador-Peru Binational Humanitarian Demining Unit completed clearance of the Tiwinza square kilometre. In other respects, however, Peru fell well short of its land release targets for the year. Peru's estimate of outstanding mine contamination is not based on high-quality survey and no progress appears to have been made in realising Peru's promised improvements of its mine action

programme. In May 2019, a helicopter accident with four casualties caused a delay to operations and even before then, Peru was not on track to meet its targets for the year. Peru is at growing risk of not completing clearance of outstanding mine contamination by its Article 5 deadline, already extended for far too long.

RECOMMENDATIONS FOR ACTION

- Peru should conduct quality survey on its outstanding mined areas to develop an accurate baseline of anti-personnel mine contamination.
- Peru should develop and implement new policies for land release to ensure that targeted clearance is being conducted as part of a comprehensive land release methodology.
- Peru should provide updates in its annual Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency reports on progress with respect to its "Updated National Plan for Humanitarian Demining 2018–2024".
- Peru should develop and implement prioritisation criteria for survey and clearance tasks.
- Peru should seek international assistance to expand its use of mine detection dogs (MDDs) to find mined areas and also to reduce and release land within those areas.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	Peru has yet to carry out quality survey to determine accurately the extent of its outstanding mine contamination. The figure given in its latest Article 7 report cannot be reconciled with the amount of clearance conducted in 2018 and is inconsistent across reports and reporting periods.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	6	Peru has the requisite legislation and the necessary management structure in place to oversee demining operations. Peru funds all its own operations and while the budget increased in 2018 there was still a gap between budget and costings.
GENDER (10% of overall score)	2	Peru has not provided any information about gender within its mine action programme.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	Anti-personnel mine contamination, survey and clearance figures are inconsistent and inaccurate within reports and across reporting periods. Peru has not reported on any improvements to information management in 2018.
PLANNING AND TASKING (10% of overall score)	5	Peru has a national plan for demining 2018-24 with annual land release targets. However, it did not meet its targets for 2018 and is not on track to meet its targets for 2019. There is a lack of clarity about whether Peru has a criteria for prioritisation in place.
LAND RELEASE SYSTEM (20% of overall score)	6	Peru has twice made commitments to develop new policies for land release and implement new demining techniques. As at July 2019, Peru has not reported on whether these have been achieved. In May 2019, a helicopter accident killed two deminers and injured two others.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	3	Peru's land release output rose very slightly in 2018 but was expected to fall in 2019. Peru could easily meet its Article 5 deadlines with the implementation of improved land release methodologies given a modicum of political will.
Average Score	4.3	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT

- Peruvian Mine Action Centre (CONTRAMINAS)

NATIONAL OPERATORS

- Peruvian Army's Directorate General for Humanitarian Demining (DIGEDEM)
- CONTRAMINAS Security Division (DIVSECOM)
- Joint Ecuador-Peru Binational Humanitarian Demining Unit

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

The estimate of remaining anti-personnel mine contamination in Peru's latest APMBC Article 7 report, as at end 2018, was 358,867m² across 116 suspected hazardous areas (SHAs) within four "sectors" (see Table 1). Previously, Peru reported that as at the beginning of 2018 mine contamination totalled 396,171m² across 124 SHAs.¹ The difference between the beginning and end of 2018 is not reconciled by the amount of land release reported.²

Peru's reporting of outstanding mine contamination is inconsistent between reports. In its Article 7 transparency report for the previous year (for the period March 2017 to March 2018) Peru stated that as at March 2018, remaining mine contamination totalled 426,325m² across 134 SHAs and, in the same report, 396,171m² across 124 SHAs.³ In its statement to the Article 5 Committee in May 2019 Peru reported that it had 117 mined areas of 411,660m² remaining and 7,556 anti-personnel mines to destroy.⁴

The size and extent of the 116 suspected mined areas varies widely, with one area only 5m² in size while the largest, by far, is estimated to extend over 160,000m².⁵ In fact, most of this large area should be released by survey, without the need for recourse to full clearance. The true amount of contaminated land is probably no more than 100,000m² as Peru does not use polygons to delineate hazardous areas, despite having detailed mine maps of almost all the affected areas.

In its 2016 Article 5 extension request and "Updated National Plan for Humanitarian Demining 2018–2024" Peru stated that it would carry out survey activities to determine the size and location of the mined areas using mine records.⁶ Since 2016, however, Peru has only reduced 34,736m² by technical survey and 25,433m² by non-technical survey. As at end 2018, all of Peru's outstanding contamination was in SHAs.

Mine contamination in Peru results from a 1995 border conflict with Ecuador. The mined section of the border was predominantly in the Condor mountain range that was at the centre of the dispute.

Table 1: Anti-personnel mine contamination by sector (at end 2018)⁷

Sector	CHAs	SHAs	Area (m ²)
Santiago	0	42	70,690
Tiwinza	0	16	88,922
Cenepa	0	40	18,290
Achuime	0	18	180,965
Totals	0	116	358,867

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The national mine action programme is managed by the Peruvian Mine Action Centre (Centro Peruano de Acción contra las Minas Antipersonal, CONTRAMINAS). CONTRAMINAS is responsible for setting strategy and priorities and for overall coordination of mine action activities. It consists of an Interministerial Executive Council, chaired by the Ministry of Foreign Affairs, and a Technical Secretariat, which oversees the Ministry of Foreign Affairs' Directorate of Security and Defence.⁸

CONTRAMINAS was created in December 2002 after the issuance of a "Supreme Decree", an additional "Supreme Decree" issued in July 2005 regulates CONTRAMINAS.⁹ Directive 001 regulates demining operations at the Peruvian Army's Directorate General for Humanitarian Demining (DIGEDEHUME) while Directive 006 regulates compliance under the APMBC.¹⁰

In its revised second Article 5 deadline extension request, submitted in August 2016, Peru estimated that US\$38.6 million would be needed to finish the job, all of which was due to be funded by the Peruvian government.¹¹ This estimate was also included in its "Updated National Plan for Humanitarian Demining 2018–2024". Since 2010, Peru has reported contributing about \$1.4 million annually for anti-personnel mine survey and clearance which is less than the annual amount costed by Peru as needed to complete clearance by 2024. Based on the figures it has supplied, almost half of this total could be saved by completing clearance by 2021. In its 2016 extension request Peru pledged to increase the annual budget to meet its requested deadline and that it would reach out to international entities for support in order to conclude implementation well in advance of its deadline.¹² In 2018, the Executive Council of CONTRAMINAS increased the annual budget to \$2.36 million although it had been costed at \$3.88 million.¹³

GENDER

As at July 2019, no information had been provided by the national authority on gender within the Peruvian mine action programme. Gender does not feature in Peru's 2016 Article 5 deadline extension request or in its Updated National Plan for Humanitarian Demining.¹⁴

INFORMATION MANAGEMENT AND REPORTING

CONTRAMINAS uses the Information Management System for Mine Action (IMSMA) database.¹⁵ Peru submits its Article 7 reports on a timely basis and reports on its progress in Article 5 implementation at intersessional meetings and Meetings of States Parties. However, the quality of data in these reports are poor with frequent inconsistencies and inaccuracies both within reports and across reporting periods.¹⁶ The Fifteenth Meeting of States Parties, in their decision on Peru's 2016 extension request, noted the importance of Peru providing updated information on an annual basis within its Article 7 reports and that Peru should report on progress in accordance with the Guide to Reporting.¹⁷

Peru submitted its last Article 5 deadline extension request in 2016.¹⁸ In granting Peru's 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 would be dealt with during the remaining period covered by the request and by which organisation; and an updated budget.¹⁹ 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 0.5km², which is more than the remaining mine contamination.²⁰

PLANNING AND TASKING

According to Peru's Updated National Plan for Demining for 2018–24, remaining suspected mine contamination of some 0.49km² spread across 127 SHAs will be released by 31 December 2024. Peru expected to clear 8,089 mines from the areas.²¹ The plan for the seven years beginning 1 January 2018 is as follows:

Table 2: Planned clearance in 2018–24 (Updated Plan)²²

Year	Sector	Mined areas	Area (m ²)	AP mines
2018	Tiwinza	16	119,415	2,697
2019	Cenepa	13	92,850	627
2020	Achuime	20	9,458	746
2021	Cenepa	16	12,301	653
2022	Cenepa – Santiago	18	180,965	392
2023	Santiago	16	28,225	838
2024	Santiago	28	48,065	2,136
Totals		127	491,279	8,089

In its Article 7 Report for 2018, Peru included a plan for clearance of 116 mined areas from 2019 to 2024:

Table 3: Planned clearance in 2019–24 (Article 7)²³

Year	Sector	Mined areas
2019	Tiwinza	16
	Cenepa	4
2020	Cenepa	20
2021	Cenepa	16
2022	Achuime	18
2023	Santiago	21
2024	Santiago	21
Total		116

In 2018, Peru was due to clear 16 mined areas totalling 119,415m² from the Tiwinza sector according to its Updated National Plan for Demining for 2018–24 or 12 mined areas from Tiwinza of unspecified area according to its Article 7 Report for 2017. In fact, Peru released just 27,303m² across eight mined areas in the Tiwinza sector.²⁴

Peru had a Demining Action Plan for 2019, with clearance in the Cenepa sector beginning in April, but in May demining operations were suspended following a helicopter accident.²⁵

Peru's criteria for prioritising survey and clearance operations are unclear. In its decision on Peru's 2016 extension request, the Article 5 Committee noted that Peru should prioritise operations based on the socio-economic impact of mined areas.²⁶ One of the activities listed as part of CONTRAMINAS objective to develop new demining policies was to determine the priority of the objectives for the clearance, in coordination with DIGEDEM and DIVSECOM.²⁷ As at July 2019, Peru has not reported on whether this activity has been completed.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Peru conducts demining in accordance with the Binational Manual for Humanitarian Demining, developed under the Binational Cooperation Programme with Ecuador, and with the Humanitarian Demining Procedures Manual, based on the International Mine Action Standards (IMAS) which were adapted to the Peruvian context.²⁸

One of CONTRAMINAS four objectives in Peru's 2016 extension request was to develop new policies for land release, with the aim of finalising these policies within six months of approval of the plan. The same objective was included in its Updated National Plan for Demining for 2018–24.²⁹ As at July 2019, it is not known if these new policies have been developed, and Peru had not provided an update on the issue in its latest Article 7 report. As noted by the Fifteenth Meeting of States Parties, Peru should conduct evidence-based survey to define its SHAs and identify confirmed hazardous areas (CHA).³⁰

OPERATORS

DIGEDEHUME is responsible for demining on the border with Ecuador with two teams each of 60 deminers.³¹ In 2018, DIGEDEHUME carried out eight "work days" of 20 days each between April and October.³² The CONTRAMINAS Security Division (DIVSECOM), which is responsible for supporting DIGEDEHUME with demining operations, has 40 police officers trained in demining.³³

In its 2016 extension request, Peru committed to strengthening the capacity of the Humanitarian Demining School of CONTRAMINAS, with the aim of increasing capacity by 20% in the second semester of 2017. This was deferred to the second semester of 2018 in Peru's Updated National Plan for Demining for 2018–24.³⁴ As at July 2019, no information has been provided on whether this has occurred.

The joint Ecuador-Peru Binational Humanitarian Demining Unit is deployed to areas that were at the centre of the conflict between the two nations. In October 2015, the unit began operations in a mined area estimated to extend over 43,500m² within the Tiwinza square kilometre.³⁵ In 2018, clearance of the Tiwinza square kilometre was completed.³⁶

OPERATIONAL TOOLS

Peru has not yet used machines for demining, and until 2015 mine detection dogs (MDD) were only used for quality control after clearance. In 2015, MDDs were used for the first time to locate mines.³⁷ 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 consider seeking 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 April 2019, had not yet been introduced.³⁸ In its updated multi-year plan submitted in May 2018, one of Peru's strategic objectives for 2018–24 included the development, design, and implementation of new humanitarian demining techniques, such as with machines or dogs.³⁹

DEMINER SAFETY

In May 2019, a helicopter carrying four demining personnel crashed killing two and wounding two others. After the crash the Accident Investigation Board of Army Aviation went to the scene to determine the cause of the accident.⁴⁰

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

In 2018, a total of 27,303m² was released in the Tiwinza sector, of which 15,576m² was cleared, 9,911m² cancelled through non-technical survey, and 1,817m² reduced through technical survey. A total of 140 mines were destroyed.

SURVEY IN 2018

In 2018, a total of 11,728m² was released through survey in the Tiwinza sector, including 9,911m² cancelled through non-technical survey (see Table 4), and 1,817m² reduced through technical survey (see Table 5).⁴¹

This is a reduction compared to 2017, particularly in technical survey output, when Peru reduced 7,171m² through technical survey and cancelled 10,738m² through non-technical survey in Tiwinza.⁴²

There is some overlap between the figures for 2018 and 2017 due to the reporting periods of Peru's Article 7 reports. In its 2017 Article 7 report the reporting period ran from March 2017 to March 2018, while in its 2018 Article 7 report the reporting period was from January to December 2018.

Table 4: Cancellation through non-technical survey in 2018⁴³

Sector	Area cancelled (m ²)
Tiwinza	9,911
Total	9,911

Table 5: Reduced by technical survey in 2018⁴⁴

Sector	Area reduced (m ²)
Tiwinza	1,817
Total	1,817

CLEARANCE IN 2018

In 2018, a total of 15,576m² was cleared in the Tiwinza sector and 140 anti-personnel mines were found and destroyed.⁴⁵ This is an increase in the area cleared from 2017 when Peru reported clearance of 9,246m² in Tiwinza.⁴⁶ From March 2017 to March 2018, Peru was clearing 24m² per mine, while from January to December 2018, Peru was clearing 111m² per mine.

Table 6: Mine clearance in 2018⁴⁷

Sector	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Tiwinza	8	15,576	140	N/R	N/R
Totals	8	15,576	140	N/R	N/R

AP = Anti-personnel AV = Anti-vehicle N/R = Not Recorded

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 7: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m ²)
2018	15,576
2017	*9,246
2016	**18,317
2015	***76,336
2014	8,458
Total	127,933

* Covers the period March 2017 to March 2018

** Covers the period March 2016 to March 2017

*** Covers the period March 2015 to March 2016

In its decision on Peru's 2016 extension request, the Fifteenth Meeting of States Parties noted that as Peru was seeking to develop enhanced processes of land release "Peru may find itself in a situation wherein it can proceed with implementation faster than that suggested by the amount of time requested".⁴⁸ Peru should easily be able to complete clearance well before its Article 5 deadline if it used the full range of land release techniques and efficient, targeted clearance. At least 75,000m² can be released each year based on an earlier review of data and on discussions with senior officials at the General Directorate.⁴⁹

In its Updated National Plan for Demining for 2018–24, Peru outlined three scenarios for the completion of anti-personnel mine clearance by the 2024 deadline. The first, the "probable" scenario, involves completing demining operations with the current available personnel (two demining companies and 40 police officers trained in demining) but to achieve this, the annual budget needs to be increased. The second, the "possible" scenario, is to complete clearance before the deadline with increased personnel (three demining companies and the police deminers, equipment and budget. The third scenario, the "desirable" scenario, is to complete demining well in advance of the deadline with the support of international entities.⁵⁰ In Peru's statement to the Committee for the Strengthening of Cooperation and Assistance in May 2019, Peru thanked Germany and China for their donations of demining equipment in 2018–19 and thanked Italy, the United States, Hungary, Norway and the NGO Norwegian People's Aid for ongoing discussions on possible cooperation and Chile for the exchange of information on demining issues.⁵¹

Since the 2014 Maputo Review conference, Peru's survey and clearance output has fallen by 78% from a high of 122,926m² in 2015 to 27,303m² in 2018. Peru's land release output was similar between 2017 and 2018. In Peru's Updated National Plan for Demining 2018–24, four specific goals have been set within an overarching institutional strategic objective of the total elimination of anti-personnel mines from Peruvian territory by 2024. These goals include CONTRAMINAS formulating new land release policies; developing and implementing new demining techniques; and strengthening the capacity of the demining school.⁵² All of these goals have the potential to increase Peru's land release output if implemented. Peru has yet to report on any progress against these goals.

1	Anti-Personnel Mine Ban Convention (APMBC) Article 7 Report (for 2018), Form F.	23	Article 7 Report (for 2018), Form F.
2	Remaining AP mine contamination at January 2018 = 396,171m ² ; Total land release in 2018 = 27,303m ² ; Remaining AP mine contamination at end 2018 = 358,867m ² which is a difference of 37,304m ² .	24	Ibid.
3	Article 7 Report (for March 2017 to March 2018), Forms C and F.	25	Statement of Peru, Committee on Article 5 implementation, Geneva, 22 May 2019.
4	Statement of Peru, Committee on Article 5 Implementation, Geneva, 22 May 2019.	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. 15.
5	Ibid., Annex I.	27	Updated National Plan for Humanitarian Demining 2018–2024, p. 15.
6	Revised 2016 Article 5 deadline Extension Request, July 2016, pp. 20–21; and Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 15.	28	Revised 2016 Article 5 deadline Extension Request, July 2016, p. 16.
7	Article 7 Report (for 2018), Form C.	29	Revised 2016 Article 5 deadline Extension Request, July 2016, p. 36; and Updated National Plan for Humanitarian Demining 2018–2024, p. 14.
8	Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 3.	30	Decisions on the request submitted by Peru for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 1 December 2016, para. d.
9	Supreme Decree No. 113-2002-RE; and Supreme Decree No. 051-2005-RE.	31	Updated National Plan for Humanitarian Demining 2018–2024, pp. 10 and 12.
10	Directive No. 001/2009/DIGEDEHUME-SINGE; and Directive No. 006.	32	Statement of Peru, Committee on Article 5 implementation, Geneva, 22 May 2019.
11	Revised 2016 Article 5 deadline Extension Request, July 2016, p. 18.	33	Updated National Plan for Humanitarian Demining 2018–2024, pp. 10 and 12.
12	Ibid., p. 11.	34	Ibid., p. 16.
13	Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 11.	35	2017 Article 5 deadline Extension Request, Additional Information provided on 8 September 2017, p. 1.
14	Revised Second Article 5 deadline Extension Request, July 2016; and Updated National Plan for Humanitarian Demining 2018–2024, May 2018.	36	Statement of Peru, Committee on Article 5 Implementation, Geneva, 29 November 2018.
15	Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 8.	37	Presentation by DIGEDEHUME, Lima, 15 March 2016.
16	In Peru's statement on Article 5 implementation in 2018 at the 17 th Meeting of States Parties clearance by DIGEDEHUME was reported at 40,800m ² with 290 mines destroyed while in their Article 7 report clearance was 15,576m ² with 140 mines destroyed. In Peru's Article 7 report (for the period March 2017 to March 2018) Peru stated that as at March 2018, remaining mine contamination totalled 426,325m ² across 134 SHAs and, in the same report, 396,171m ² across 124 SHAs. In its statement to the Article 5 Committee in May 2019 Peru reported that it had 117 mined areas of 411,660m ² remaining and 7,556 anti-personnel mines to destroy.	38	Revised Second Article 5 deadline Extension Request, July 2016, pp. 5–6.
17	Decisions on the request submitted by Peru for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 1 December 2016, para. g.	39	Updated National Plan for Humanitarian Demining 2018–2024, pp. 15–16.
18	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, October 2016, para. 22.	40	Telesur, "Peru: De-mining Helicopter Crashes Near Ecuador Border, Kills 2", 18 May 2019, at: bit.ly/2XxEJzv .
19	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.	41	Article 7 Report (for 2018), Form F.
20	Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 11.	42	Article 7 Report (for April 2017 to March 2018), Form F.
21	Ibid., 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 ² as compared with 412,094m ² in the first version of the request. See Revised Second Article 5 deadline Extension Request, July 2016, p. 4.	43	Ibid.
22	Updated National Plan for Humanitarian Demining 2018–2024, May 2018, p. 11.	44	Article 7 Report (for 2018), Form F.
		45	Ibid.
		46	Article 7 Report (for April 2017 to March 2018), Form F.
		47	Article 7 Report (for 2018), Form F.
		48	Decisions on the request submitted by Peru for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 1 December 2016, para. c.
		49	This is based on 48 military deminers working for 160 days each year and each deminer clearing an average of 10m ² per day. Discussions with DIGEDEHUME, Lima, 15 March 2016.
		50	Updated National Plan for Humanitarian Demining 2018–2024, p. 13.
		51	Statement of Peru, Committee for the Strengthening of Cooperation and Assistance, Geneva, 24 May 2019.
		52	Updated National Plan for Humanitarian Demining 2018–2024, pp. 14–16.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2021 NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

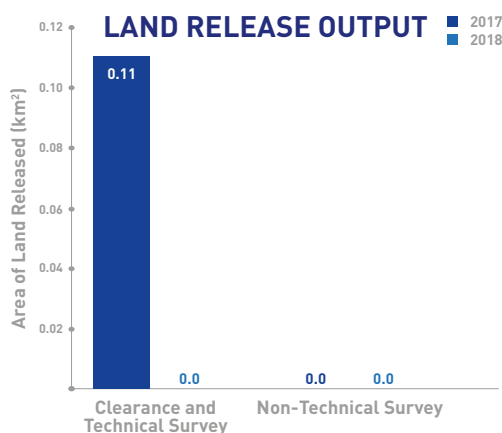
LIGHT,
BUT PRECISE EXTENT UNKNOWN

AP MINE
CLEARANCE IN 2018

0 km²

AP MINES
DESTROYED IN 2018

N/R



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Humanity and Inclusion (HI; formerly Handicap International), the only international mine action operator in Senegal since 2014, was forced to suspend operations in October 2017 due to a lack of funding. In February 2019, it resumed operations in Goudomp department, with new funding secured from the United States.

Under the European Union (EU) Council Decision in support of the implementation of the Anti-Personnel Mine Ban Convention (APMBC) and the Maputo Action Plan, a "National Stakeholder Dialogue" workshop was held in Dakar on 29–30 October 2018, with support from the APMBC's Implementation Support Unit.

Overall progress in land release remained painstakingly slow for yet another year in 2018, 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). Serious obstacles also remain to be overcome, primarily in regard to ongoing insecurity which denies access for demining in certain areas of Casamance and a lack of technical and financial 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.
- Senegal should ensure that suspected hazardous areas (SHAs) are recorded on the basis of demonstrable evidence and with specific size estimates and the information made public.
- Senegal should submit its outstanding Article 7 transparency report and ensure subsequent annual updates are submitted each year prior to the 30 April deadline.
- The Government of Senegal should make national funding and resources available for demining while developing and implementing a resource mobilisation strategy to secure longer term funding.

- Senegal 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.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	Senegal's reporting of its estimate of remaining mine contamination has been inconsistent. It also includes over 140 areas which have still to be surveyed and a number of areas with an unknown size, making it difficult to have much confidence in the estimate reported.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	3	Senegal has shown scant political commitment to meeting its Article 5 obligations with any urgency in recent years. The failure to demine areas around military installations raises concerns about its compliance with the Anti-Personnel Mine Ban Convention (APMBC) and even the prohibition on use of landmines.
GENDER (10% of overall score)	5	CNAMS informed Mine Action Review that 40% of the demining team were women in 2018.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	Senegal's reporting has been highly inconsistent in recent years and difficult to make sense of. It failed to submit an updated Article 7 transparency report in 2019, in violation of its treaty obligations, and did not officially report on progress in land release in 2018.
PLANNING AND TASKING (10% of overall score)	3	In October 2018, Senegal elaborated a revised timeline to address the remaining areas of contamination by its 2021 APMBC Article 5 deadline. However, a persistent problem which has curtailed progress in land release in recent years has remained a lack of access to certain areas due to ongoing insecurity. In the past, Senegal's tasking has been strongly criticised by an international mine action operator.
LAND RELEASE SYSTEM (20% of overall score)	4	Senegal's National Mine Action Standards were last reviewed in 2013.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	3	Senegal's progress towards meeting its 2021 Article 5 deadline has been meagre. It is hopeful, though, that the return of Humanity and Inclusion (HI) and the resumption of demining operations will prevent further stagnation while a stakeholder dialogue workshop held in October 2018 might renew interest and commitment to making progress in mine action.
Average Score	3.9	Overall Programme Performance: VERY POOR

DEMINING CAPACITY

MANAGEMENT

- National Commission for the Implementation of the Ottawa Convention
- Senegalese National Mine Action Centre (CNAMS)

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- Humanity and Inclusion (HI)

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE 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 2018, it continued to report inconsistent figures for the amount of confirmed and suspected contaminated areas remaining, as it has in previous years. Four departments (Bignona, Goudomp, Oussouye and Ziguinchor) of Senegal's total of 45 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. A comprehensive claim of 1.2km² for nationwide mine contamination does not appear to be based on firm evidence.¹

According to figures reported by CNAMS, as at end 2018, a total of almost 0.49km² remained to be addressed across 37 mined areas with a further 11 other areas of unknown size.² In addition, 144 areas which still remained to be surveyed (127 areas in Bignona department, 4 in Oussouye, and 13 in Ziguinchor), along with.³ It is not possible to reconcile these figures with past reported estimates of remaining contamination and reported progress in land release. Moreover, 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.⁴

The extent of contamination is better known in the south of Casamance, where previous survey in the region has identified several SHAs, between the border with Guinea-Bissau and the Casamance river to the north and the Atlantic Ocean to the west.⁵ In August 2018, HI informed Mine Action Review that areas such as north Sindian in Bignona department where significant contamination was suspected were still unsurveyed. However, for security reasons and a lack of resources, the area had not been addressed.⁶

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.

NATIONAL OWNERSHIP AND 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 the CNAMS. Regional mine action coordination committees have been established in Kolda, Sédiou, and Ziguinchor departments.

The CNAMS is responsible for promoting the national mine action programme, mobilising resources, coordinating survey and conducting demining, designing and implementing a victim assistance programme, accrediting demining organisations, and monitoring and evaluating activities.⁷

In June 2018, the CNAMS informed states parties to the APMBC that it expected approximately €6.5 million 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 mine action activities.⁸ CNAMS revised the figure reported as needed to complete clearance in October 2018, down to close to €5.5 million. It claimed that the government had earmarked more than €1.8 million for mine action in 2019.⁹ Senegal's revised October 2017 workplan notes that a resource mobilisation plan should be included in the document but it does not contain one.¹⁰

GENDER

CNAMS informed Mine Action Review that the national mine action strategy prohibit sexual discrimination and strongly encourages recruitment of women in demining. Four of ten members of the demining team in the Senegalese national mine action programme were women in 2018.¹¹

INFORMATION MANAGEMENT AND REPORTING

According to HI, CNAMS's Information Management System for Mine Action (IMSMA) database system was upgraded in 2015.¹² Senegal's reporting in recent years has been difficult to follow, and it failed to submit an updated Article 7 transparency report in 2019 or any official reporting of land release carried out in 2018.

PLANNING AND TASKING

At the October 2018 stakeholder dialogue workshop, CNAMS outlined a workplan for completion of survey and clearance by its 2021 Article 5 deadline. This included non-technical survey of areas of unknown size and the 144 areas not yet visited in 2019, and technical survey and clearance of all remaining areas and any new areas identified through the non-technical survey in December 2018–January 2021.¹³

Specifically, of the 37 areas with a known size of contamination totalling just over 491,000m², in December 2018–April 2019, 12 areas with a size of 265,233m² in Goudomp department were planned to be addressed, while in May–June 2019, six areas with a size of 37,048m² were to be addressed in Ziguinchor department along with five areas covering 38,020m² in Bignona department. In January 2020–January 2021, the remaining nine areas with a size of 77,240m² will be addressed in Oussouye and Bignona departments, along with five areas with a size of 73,554m² in Ziguinchor department, for a total of 14 areas with a size of just under 150,800m². Of the areas of unknown size, eight areas in Bignona and three areas in Goudomp departments would, it is claimed, be addressed in October–November 2019 with all remaining areas will be addressed in January 2020–January 2021.¹⁴

Previously, 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. A revised version was then concluded on 13 October 2017. The workplan lists 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 contamination 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.

Senegal did not meet the targets set in its 2017 workplan for 2018, nor those in its most recent Article 7 report (for calendar year 2017).

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Senegal does not have national mine action legislation in place, based on available information.

Senegal's national mine action standards were developed in 2009 and revised in 2013. According to CNAMS, the 2013 revision included standards for accreditation, technical investigation, minimum mine clearance depth, and the use of machines and mine detection dogs in demining.¹⁵

OPERATORS

HI has remained the only international demining operator in Senegal since 2014. As at October 2017, it had suspended its demining operations in the country for lack of funding.¹⁶ During that year, it employed 26 operational staff, two national managerial staff, and an expatriate operations manager.¹⁷ Operations resumed in February 2019 thanks to funding from the United States. In May 2019, however, five deminers were kidnapped and then released the same day, and some of their equipment stolen. Since then, the authorities have been in negotiations to be able to recover the equipment and restart clearance.¹⁸

OPERATIONAL TOOLS

Prior to cessation of operations in October 2017, HI deployed a soil preparation and mechanical mine clearance machine, the Digger D-3.¹⁹

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Senegal did not formally report on progress in land release in 2018. In October 2018, CNAMS reported that since its second extension request granted in 2016 it had visited 72 of 79 locations, determining that 67 were not contaminated and the remaining 5 (with a size of 14,670m²) were recorded as SHAs. In addition, 29 areas with a total size of 164,990m² had been cleared, with the destruction of 22 mines and explosive remnants of war (ERW).²⁰ It did not disaggregate these figures by year.

LAND RELEASE OUTPUTS IN 2018

SURVEY IN 2018

As noted above, Senegal has not officially reported any area released or confirmed through survey in 2018. Previously, in 2017, HI reported confirming 16 mined areas with a combined size of 65,393m²: one area in Bignona department with a size of 1,000m² and 15 areas in Goudomp department with a size of 64,393m², all of which were subsequently released through technical survey and clearance.²¹

CLEARANCE IN 2018

Likewise, Senegal has not officially reported on any clearance in 2018. In 2017, HI reported releasing a total of 65,400m² through technical survey and clearance (though it was unable to disaggregate between the two), including one area in Bignona department with a size of 1,000m² and 15 areas in Goudomp department with a combined size of 64,393m². These areas were released with the destruction of two anti-personnel mines, one anti-vehicle mine, and one item of unexploded ordnance (UXO).²² However, CNAMS reported that 18 CHAs with a total size of 106,658m² were cleared in 2017 in Goudomp department, Ziguinchor region, with the destruction of three anti-personnel mines.²³

DEMINER SAFETY

In mid-May 2019, demining operations, which had recently restarted thanks to US funding, were again suspended following the kidnapping of five deminers by an MFDC faction. This occurred despite an agreement having been obtained to operate in that zone, according to CNAMS. As noted above, the deminers were all released the same day.²⁴

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 1: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m ²)
2018	0
2017	65,400*
2016	147,650
2015	0
2014	N/R
Total	213,050

*Includes technical survey and clearance

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 improbable that it will not meet this deadline.

In August 2018, HI stated that the likelihood that Senegal would meet its Article 5 deadline of 1 March 2021 was "more than low" in view of the remaining situation of more than 1.2km² 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.²⁵

In June 2018, Senegal informed APMBC states parties that with the current pace of performance it was unlikely to be able to meet its clearance objectives of end 2020.²⁶ In October 2018, CNAMS highlighted a lack of access to certain targeted areas, the withdrawal of traditional mine action partners, and deteriorating demining equipment as primary challenges.²⁷ Senegal has previously claimed that the circumstances impeding compliance with its international legal obligations include general insecurity; MFDC reticence to agree to demining operations; ongoing concerns over deminer safety; and a decrease in technical and financial resources in recent years.²⁸

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 Norwegian People's Aid (NPA) in 2014 and the loss of financial support from key donors, explaining in part the sharp reduction in its clearance capacities. CNAMS' allocation of tasks has also 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.²⁹

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 the MFDC in meetings with Senegalese officials.³⁰ 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.³¹ CNAMS has, though, 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.³²

There is, though, 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 address the issue of mine clearance.

Another fundamental problem is Senegal's ongoing lack of a comprehensive understanding of its mine problem. Concerns have also 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 the laying of landmines by rebel forces was sporadic, while the Senegalese Armed Forces placed hundreds, if not thousands, of mines around military outposts in Casamance.³³

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.³⁴

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.³⁵ HI has reported that its teams cleared 22,162m² in Boutoute-Djibanar in connection with a former army base in 2015–16, destroying "around" 19 anti-personnel mines.³⁶ It is not certain that all other bases have been demined.

Based on present capacity and its poor track record, without a major change in political will and resources, Senegal will not meet its Article 5 deadline, or even the Maputo political declaration 2025 goal.

1 Email from Ibrahima Seck, Head of Operations and Information Management, CNAMS, 16 September 2019.
2 Ibid.
3 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018, available at: bit.ly/2TJTY89.
4 Email from Ibrahima Seck, CNAMS, 18 August 2017; and Article 7 Report (for 2016), Form D.
5 Ibid.
6 Email from Faly Keita, Coordinator, Casamance Site, HI, 8 August 2018.
7 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.
8 Statement of Senegal, APMBC Intersessional Meetings, Geneva, 8 June 2018.
9 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.
10 CNAMS, "Updated Workplan for Senegal's Article 5 Extension 2016–2021", 13 October 2017, p. 20.
11 Email from Ibrahima Seck, CNAMS, 16 September 2019.
12 Email from Julien Kempeneers, HI, 1 September 2016.
13 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.
14 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.
15 Ibid.
16 Email from Julien Kempeneers, HI, 26 September 2016.
17 Email from Faly Keita, HI, 8 August 2018.
18 Email from Ibrahima Seck, CNAMS, 20 September 2019.

19 Ibid.
20 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.
21 Email from Faly Keita, HI, 8 August 2018.
22 Ibid.
23 Article 7 Report (for 2017), Form D.
24 Email from Ibrahima Seck, CNAMS, 20 September 2019.
25 Email from Faly Keita, HI, 8 August 2018.
26 Statement of Senegal, APMBC Intersessional Meetings, Geneva, 8 June 2018.
27 Presentation by CNAMS, "National Stakeholder Dialogue: Towards a Mine-Free Senegal" workshop, Dakar, 29–30 October 2018.
28 Analysis of Senegal's request for a second Article 5 deadline extension submitted by the Committee on Article 5 Implementation, 17 November 2015, p. 22.
29 K. Millett, "Clearance and Compliance in Casamance: is Senegal doing all it should?", Blog post, 2014, at: bit.ly/33M3nRs.
30 H. Sagna, "Humanitarian demining in Casamance: negotiations and operations still deadlocked", *Enquête*, 17 June 2015.
31 Statement of ICBL, 14th Meeting of States Parties, Geneva, 2 December 2015; and email from Ibrahima Seck, CNAMS, 22 August 2016.
32 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.
33 Ibid.
34 A. Grovestins and A. Oberstadt, "Why landmines keep on killing in Senegal", IRIN, 3 August 2015, at: bit.ly/2THyclz.
35 Email from Ibrahima Seck, CNAMS, 18 August 2017.
36 Email from Julien Kempeneers, HI, 19 April 2017.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

LIGHT,
(GOVERNMENT ESTIMATE) **1.73 km²**

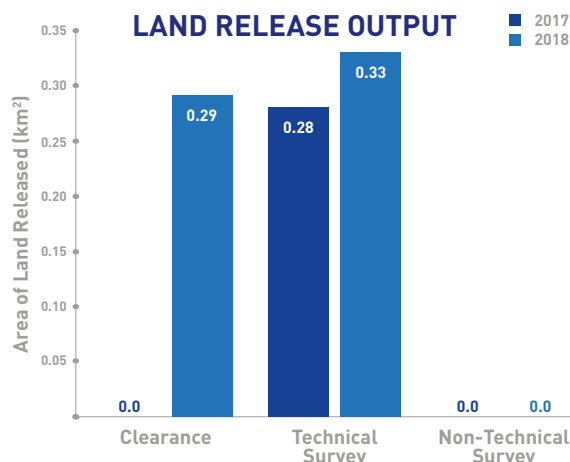
AP MINE
CLEARANCE IN 2018

0.29 km²

AP MINES
DESTROYED IN 2018

29

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **HIGH**

KEY DEVELOPMENTS

In 2018, Serbia requested and was granted a further four-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline until 1 March 2023. The Serbian Mine Action Centre (SMAC) continued to demonstrate a willingness to adopt more efficient land release methodology in instances where technical survey is more appropriate than full clearance. SMAC also attracted a new international donor in 2018 and another in 2019, putting it back on track to meet its Article 5 deadline.

RECOMMENDATIONS FOR ACTION

- Serbia should consider using its armed forces for mine clearance or inviting demining non-governmental organisations (NGOs) to help meet its treaty obligations by fulfilling its Article 5 obligations by 2023.
- SMAC should conduct non-technical and technical survey, rather than full clearance, in instances where survey represents the most efficient means to release part or all of areas suspected or confirmed to contain anti-personnel mines.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	Serbia has remaining suspected hazardous areas, but needs to conduct survey for physical evidence of mines and confirm or discredit reported contamination, before conducting full clearance.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	7	Serbia has strong national ownership of its mine action programme, which is nationally funded. It also doubled the amount of national funding towards survey and clearance in 2018 and is actively attracting new donors to help it meet its completion plan.
GENDER (10% of overall score)	3	SMAC does not have a gender policy in place and does not disaggregate relevant mine action data by sex and age. However, it does ensure women and children are consulted during survey and community liaison activities and there is equal access to employment for qualified women and men in survey and clearance.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	7	Serbia submits timely, accurate, and comprehensive annual Article 7 reports on Article 5 progress, which are consistent between reporting periods, and provides regular updates on progress at APMBC meetings.
PLANNING AND TASKING (10% of overall score)	7	SMAC has a plan in place for completion of Article 5 implementation with planned annual land release output through to its treaty deadline, subject to funding. Serbia also produces revised annual workplans based on actual progress.
LAND RELEASE SYSTEM (20% of overall score)	6	Although SMAC has expressed a preference for full clearance of SHAs over technical survey, it did reduce land through technical survey in 2017 and 2018, demonstrating a greater willingness to adopt more efficient land release practices.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	Serbia has set a target date for completion of Article 5, but meeting it is largely contingent on securing sufficient funding. Land release output in 2018 was through both technical survey and clearance, and was an increase on 2017.
Average Score	6.0	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- Sector for Emergency Management, under the Ministry of Interior (acts as the national mine action authority)
- Serbian Mine Action Centre (SMAC)

NATIONAL OPERATORS

- Saturnia d.o.o.

INTERNATIONAL OPERATORS

- DOK-International d.o.o., Pale, Bosnia and Herzegovina (BiH), Belgrade branch

NGOs:

- In Demining, Pale, BiH, Belgrade branch
- Stop Mines, Pale, BiH, Belgrade branch

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

As at 1 April 2019, eight areas in Bujanovac municipality, covering more than 1.73km², were suspected to contain anti-personnel mines (see Table 1).¹ This is a decrease from the 2.35km² of mined areas a year earlier, the result of release through technical survey and clearance.

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.² According to the national authorities, previous surveys found insufficient evidence for mined areas to be classified as confirmed hazardous areas, so they remain as suspected hazardous areas (SHAs).³

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.⁴ Contamination also exists within Kosovo (see Mine Action Review's *Clearing the Mines* report on Kosovo for further information).

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 depots⁵ (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Serbia for further information).

Table 1: Anti-personnel mine contamination by village (at 1 April 2019)⁶

Municipality	Village	SHAs	Area (m ²)
Bujanovac	Ravno Bučje	1	390,300
	Končulj	5	1,181,820
	Dobrosin	1	28,000
	Turija	1	131,400
Totals		8	1,731,520

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

According to a Government Decree on Protection against Unexploded Ordnance, the Sector for Emergency Management, under the Ministry of Interior, acts as the national mine action authority (NMAA).⁷ The NMAA is responsible for developing standard operating procedures (SoPs); accrediting demining operators; and supervising the work of SMAC.⁸

SMAC was established on 7 March 2002, with a 2004 law making it responsible for coordinating demining; collecting and managing mine action information (including casualty data); and surveying SHAs. It also has a mandate to plan demining projects, conduct quality control (QC) and monitor operations, ensure implementation of international standards, and conduct risk education.⁹ As from 1 January 2014, according to a Government Decree on Protection against Unexploded Ordnance, the Sector for Emergency Management, under the Ministry of Interior, is responsible for accrediting demining operators. Previously, SMAC was responsible for doing so.¹⁰

A new director of SMAC was appointed by the Serbian government in the autumn of 2015,¹¹ and as at 2018, SMAC had a total of eight staff.¹² SMAC reported that, in 2016, restructuring resulted in a greater proportion of operational posts.¹³

SMAC is fully funded by Serbia, including for survey activities, development of project tasks for demining and clearance of contaminated areas, follow-up on implementation of project tasks, and quality assurance (QA) and QC of demining. Around €150,000 per year is allocated to the work of SMAC from the national state budget.¹⁴ In addition, the unexploded ordnance (UXO) disposal work of the Sector for Emergency Situations of the Ministry of Interior is also state funded.¹⁵

Since 2015, Serbia has also been allocating national funds for survey and clearance, with roughly €100,000 allocated per year.¹⁶ In 2018, the Serbian Government allocated double the amount of national funds for demining operations to €200,000 allocated per year (which were matched with US and Korean funding and tendered through ITF Enhancing Human Security (ITF)), and Serbia continues to seek additional international funding.¹⁷ At the request of the national authorities, national funding was increased to €350,000 for 2019 demining operations.¹⁸ SMAC hopes that national funding, matched through ITF, will be made available annually throughout the remainder of its Article 5 extension request period.¹⁹

GENDER

SMAC does not have a gender policy in place and does not disaggregate relevant mine action data by sex and age. However, it does ensure women and children are consulted during survey and community liaison activities and there is equal access to employment for qualified women and men in survey and clearance operations. Around 10% of those employed in survey and clearance teams, and also of those in mine action managerial or supervisory positions in Serbia, are women.²⁰

INFORMATION MANAGEMENT AND REPORTING

SMAC uses its own information management system. Previously, SMAC discussed the possibility of the installation of the Information Management System for Mine Action (IMSMA) with the Geneva International Centre for Humanitarian Demining (GICHD),²¹ but there were no ongoing discussions in that regard as at June 2019.

PLANNING AND TASKING

In its 2018 Article 5 deadline extension request, Serbia included a costed plan for the completion of demining, with clear milestones, for 2018–23.²² In its Article 7 report for 2018, Serbia set out a slightly updated plan: to release 606,210m² in 2019; 467,880m² in 2020; 316,790m² in 2021; 195,000m² in 2022; and the remaining 145,640m² in 2023.²³ Serbia intends to use non-technical survey, technical survey, manual clearance, mechanical demining (where applicable), and mine detection dogs (MDDs, where applicable), to complete clearance in Serbia before its 2023 Article 5 deadline.²⁴ Progress is, however, contingent on funding and Serbia has stated that if it cannot secure international support for demining, its workplan will be directly affected. On the other

hand, if more funds are provided, Serbia maintains it could implement its workplan more quickly.²⁵

The Government of Serbia adopts SMAC's annual workplan, as well as the annual report on its work.²⁶ The 2019 workplan has been adopted by the Serbian government.²⁷

Serbia prioritises the demining of areas which directly affect the local population, such as those close to settlements where local people have abandoned their houses and stopped cultivating land due to fear of landmines.²⁸ 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.²⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

According to SMAC, survey and clearance operations in Serbia are conducted in accordance with the International Mine Action Standards (IMAS).³⁰

National mine action standards (NMAS) were said to be in the final phase of development as at September 2015.³¹ 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.³² However, this process has been hindered due to lack of capacity,³³ and as at March 2019, the development of the NMAS was still "in progress".³⁴

Under new directorship in late 2015, SMAC reassessed its land release methodology to prioritise full clearance over technical survey of hazardous areas.³⁵ This does not correspond to international best practice, and is an inefficient use of scarce 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, it will fully clear these areas, rather than using technical survey to more accurately identify the boundaries of contamination.³⁶

SMAC's position on its preferred land release methodology remains the same, although there is now a willingness to conduct technical survey in a form "adjusted to the context of Serbia", in response to the stated preference of international donors for technical survey above clearance, where appropriate.³⁷

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, not planted in specific patterns.³⁸ According to SMAC, incidents involving people or animals have occurred in most of these suspected areas or else mines have been accidentally detected.³⁹ The reduction of mined area through technical survey in the municipality of Bujanovac in 2017 and 2018, however, demonstrates SMAC's greater willingness to adopt more efficient land release practices.

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.⁴⁰ 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.⁴¹

Technical survey is employed "to additionally collect information by technical methods on a suspected area and in case when the data collected by a non-technical survey are not sufficient for suspected areas to be declared hazardous or safe".⁴² Clearance is reported to be conducted in accordance with the IMAS and to a depth of 20cm.⁴³

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 NGOs, which are selected through public tender procedures executed by ITF, supported by international funding.⁴⁴

The Ministry of Interior issues accreditation to mine action operators that is valid for one year. In 2018, 14 companies/organisations were accredited for demining: seven from Serbia, four from Bosnia and Herzegovina (BiH), two from Croatia, and one from Russia.⁴⁵

Thirty deminers were deployed for technical survey of mined areas in 2018; one team (10 deminers) from Saturnia d.o.o. and two teams (20 deminers) from Stop Mines.⁴⁶ A further 30

deminers were deployed for mine clearance in 2018: one team each (10 deminers) from DOK-International d.o.o., In Demining, and Stop Mines.⁴⁷ This represents an increase in survey and clearance capacity compared to the previous year.

No non-technical survey was conducted in 2018.⁴⁸

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.⁴⁹ 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, and is also responsible for demolition of items found by SMAC.⁵⁰

OPERATIONAL TOOLS

Technical survey and clearance in Serbia is primarily conducted manually.

MDDs were used in technical survey and clearance operations in 2018 to release land,⁵¹ but according to Serbia most of the suspected mined areas are mountainous with challenging terrain and thick vegetation and are not

appropriate for the use of MDDs or machinery.⁵² 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.⁵³

SMAC uses data obtained by unmanned aerial vehicles to develop and monitor clearance and technical survey projects.⁵⁴

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of 0.62km² of mined area was released in 2018, of which 0.29km² was cleared and 0.33km² was reduced through technical survey, during which a total of 29 anti-personnel mines and 1,347 other items of UXO were destroyed. No mined area was cancelled through non-technical survey.

SURVEY IN 2018

In 2018, 329,820m² of mined area was reduced through technical survey, in the villages of Ravno Bučje and Djordjevac, in Bujanovac municipality, by Saturnia d.o.o. and Stop Mines, during which 14 anti-personnel mines and two other items of UXO were destroyed (see Table 2).⁵⁵ This is an increase on the 275,800m² reduced through technical survey in 2017.⁵⁶ No mined area was cancelled through non-technical survey in 2018 or in 2017.

Table 2: Reduction of mined area through technical survey in 2018⁵⁷

Municipality	Village	Operator	Area reduced (m ²)	AP mines destroyed	UXO destroyed
Bujanovac	Ravno Bučje	Saturnia and Stop Mines	113,600	5	2
	Ravno Bučje	Stop Mines	71,120	4	0
	Djordjevac	Saturnia and Stop Mines	145,100	5	0
Totals			329,820	14	2

AP = Anti-personnel

CLEARANCE IN 2018

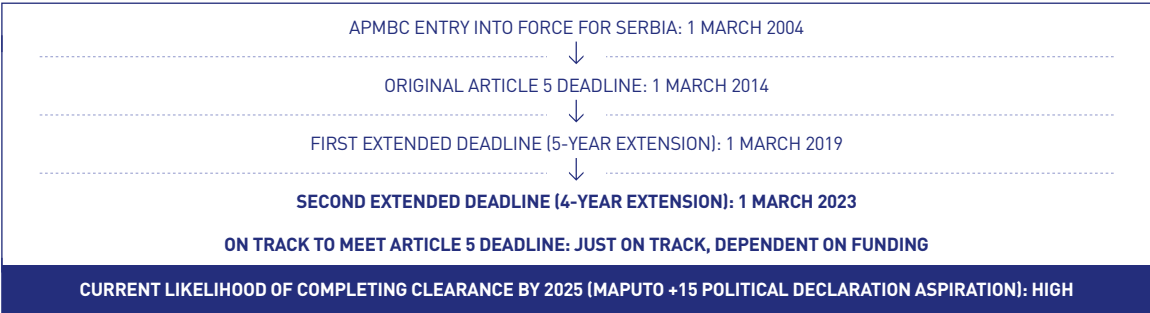
In 2018, two mined areas were cleared, releasing 293,200m² and destroying 15 anti-personnel mines and 1,345 items of other UXO. The mine clearance, in the villages of Dobrosin and Lučane in Bujanovac municipality, was conducted by two NGOs and a commercial company, all from BiH (see Table 3).⁵⁸ This is an increase in clearance output on 2017, when no land was released clearance.⁵⁹

SMAC did not have available data on the number of mines destroyed by the EOD department within the Sector for Emergency Management during spot tasks in 2018.⁶⁰

Table 3: Mine clearance in 2018⁶¹

Municipality	Village	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	UXO destroyed
Bujanovac	Dobrosin	In Demining, and DOK-International	1	220,000	9	0
	Lučane	Stop Mines	1	73,200	6	1,345
Totals			2	293,200	15	1,345

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the second extension (for four years) granted by states parties in 2018), Serbia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2023. Serbia is just on track to meet this deadline, if it can secure required funding.

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 facing several challenges in complying with its Article 5 obligations, including lack of adequate financial resources, and the presence of areas contaminated with CMR and other ERW.⁶² 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.⁶³

In the last five years Serbia has cleared a total of almost one square kilometre of mined area (see Table 4).

Table 4: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	0.29
2017	*0
2016	0
2015	0.41
2014	0.27
Total	0.97

*0.28km² was reduced through 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, and also fell behind on land release output in its subsequently adjusted workplans in 2015, 2016, and 2017.⁶⁴ This was largely due to a lack of funding, but in a positive development, on top of existing US funding, Serbia also secured funding from a new donor, the Republic of Korea, in 2018, and has further secured funding from another new donor, Japan, in 2019.⁶⁵

This additional funding is set to put SMAC back on track to meet its planned land release outputs detailed in its 2018 Article 5 deadline extension request, and updated most recently, in its Article 7 report for 2018.⁴⁶

In its 2018 Article 5 extension request Serbia calculated that it requires an estimated €2.5 million to complete the release of all remaining mined areas, of which €900,000 is planned to come from national budget and around €1.6 million from ITF and other sources of international funding.⁴⁷

In June 2018, during the APMBBC intersessional meetings, Serbia and the Committee on the Enhancement of Cooperation and Assistance convened an "Individualised Approach Platform" meeting, to hold a frank discussion with relevant stakeholders on the current status of Serbia's national programme, the needs and challenges in completing its Article 5 obligations and its commitments net the Maputo Action Plan.⁴⁸

SMAC has pledged to continue to raise awareness of its need for further funding and will seek funding from state authorities, public enterprises, and local authorities.⁴⁹

- 1 Article 7 Report (for 2018), Form C; and email from Slađana Košutić, Planning and International Cooperation Advisor, SMAC, 26 March 2019.
- 2 2018 Article 5 deadline Extension Request, p. 7; and Article 7 Report (for 2018), Form C.
- 3 Article 7 Report (for 2018), Form C.
- 4 2013 Article 5 deadline Extension Request, p. 5; and Article 7 Report (for 2014), Form C.
- 5 2018 Article 5 deadline Extension Request, p. 7.
- 6 Ibid.; and email from Slađana Košutić, SMAC, 26 March 2019.
- 7 Official Gazette of the Republic of Serbia, No. 70/13.
- 8 Emails from Darvin Lisica, (then) Regional Programme Manager, Norwegian People's Aid (NPA), 6 May and 12 June 2016.
- 9 "Law of Alterations and Supplementations of the Law of Ministries", Official Gazette, 84/04, August 2004; interview with Petar Mihajlović and Slađana Košutić, SMAC, Belgrade, 26 April 2010; and 2018 Article 5 deadline Extension Request, p. 17.
- 10 2018 Article 5 deadline Extension Request, p. 17.
- 11 Interview with Jovica Simonović, Director, SMAC, in Geneva, 18 February 2016.
- 12 2018 Article 5 deadline Extension Request, p. 16.
- 13 Ibid., p. 10.
- 14 Ibid., p. 16.; Article 7 Report (for 2018), Form C; and email from Slađana Košutić, SMAC, 26 March 2019.
- 15 SMAC, "Mine situation", accessed 8 May 2019, at: bit.ly/1Nom1V7.
- 16 Email from Slađana Košutić, SMAC, 6 April 2017; interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request.
- 17 2018 Article 5 deadline Extension Request, p. 9; Article 7 Report (for 2018), Form C; and email from Slađana Košutić, SMAC, 26 March 2019.
- 18 Article 7 Report (for 2018), Form C.
- 19 Email from Slađana Košutić, SMAC, 26 March 2019.
- 20 Ibid.
- 21 Email from Branislav Jovanović, Director, SMAC, 4 May 2015.
- 22 2018 Article 5 deadline Extension Request, pp. 8, 9, 31, and 32.
- 23 Article 7 Report (for 2018), Form C.
- 24 2018 Article 5 deadline Extension Request, p. 28; 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018; and Article 7 Report (for 2018), Form C.
- 25 Article 7 Report (for 2018), Form C.
- 26 2018 Article 5 deadline Extension Request, p. 16; and email from Slađana Košutić, SMAC, 26 March 2019.
- 27 Email from Slađana Košutić, SMAC, 26 March 2019.
- 28 Ibid.
- 29 Email from Slađana Košutić, SMAC, 12 April 2018.
- 30 SMAC, "Mine Situation", accessed 8 May 2019, at: bit.ly/1Nom1V7.
- 31 Interview with Branislav Jovanović, SMAC, in Dubrovnik, 10 September 2015.
- 32 Email from Slađana Košutić, SMAC, 6 April 2017.
- 33 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017.
- 34 Email from Slađana Košutić, SMAC, 26 March 2019.
- 35 Interview with Jovica Simonović, SMAC, in Geneva, 18 February 2016.
- 36 Ibid.
- 37 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.
- 38 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.
- 39 Article 7 Report (for 2018), Form C.
- 40 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and Article 7 Report (for 2018), Form.
- 41 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017.
- 42 Article 7 Report (for 2018), Form C.
- 43 Ibid.
- 44 2018 Article 5 deadline Extension Request, p. 18.
- 45 Ibid., p. 17.
- 46 Email from Slađana Košutić, SMAC, 26 March 2019.
- 47 Ibid.
- 48 Email from Slađana Košutić, SMAC, 26 March 2019.
- 49 Article 7 Report (for 2018), Form J.
- 50 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and Second APMBBC Article 5 deadline Extension Request (2018), p. 18.
- 51 Email from Slađana Košutić, SMAC, 26 March 2019.
- 52 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; 2018 Article 5 deadline Extension Request, pp. 25 and 30; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.
- 53 Email from Slađana Košutić, SMAC, 26 March 2019.
- 54 Ibid.
- 55 Article 7 Report (for 2018), Form C; and email from Slađana Košutić, SMAC, 26 March 2019.
- 56 Email from Slađana Košutić, SMAC, 12 April 2018.
- 57 Article 7 Report (for 2018), Form C and Annex III; and email from Slađana Košutić, SMAC, 26 March 2019.
- 58 Article 7 Report (for 2018), Form C; and email from Slađana Košutić, SMAC, 26 March 2019.
- 59 Email from Slađana Košutić, SMAC, 12 April 2018.
- 60 Email from Slađana Košutić, SMAC, 26 March 2019.
- 61 Article 7 Report (for 2018), Form C; and email from Slađana Košutić, SMAC, 26 March 2019.
- 62 Article 7 Report (for 2018), Form C.
- 63 Ibid.
- 64 2013 Article 5 deadline Extension Request, p. 26; Preliminary observations of the Committee on Article 5 Implementation, Intersessional Meetings, Geneva, 19–20 May 2016; and "Republic of Serbia Updated Detailed Work Plan for the Remaining Period Covered by the Extension", submitted to the Implementation Support Unit (ISU), 3 March 2016; email from Slađana Košutić, SMAC, 6 April 2017; and Article 7 Report (for 2016), Form D.
- 65 Article 7 Report (for 2018), Form C; and email from Slađana Košutić, SMAC, 26 March 2019.
- 66 Article 7 Report (for 2018), Form C.
- 67 2018 Article 5 deadline Extension Request, pp. 9 and 34.
- 68 APMBBC Individualised Approach Meeting, intersessional meetings, Geneva, 7 June 2018; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.
- 69 2018 Article 5 deadline Extension Request, p. 34; and 2018 Article 5 deadline Extension Request, Additional Information received 28 June 2018.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 OCTOBER 2022 NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MEDIUM, 72.2KM²

GOVERNMENT ESTIMATE, AND NO BASELINE EXISTS,
BUT ACTUAL CONTAMINATION LIKELY TO BE FAR LESS

AP MINE
CLEARANCE IN 2018

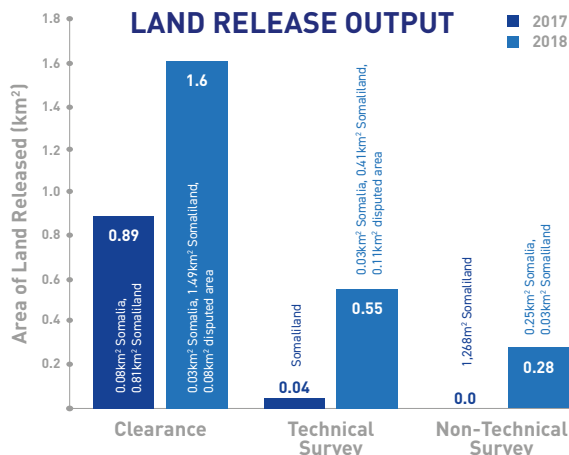
1.60KM²

AP MINES
DESTROYED IN 2018

297

(including 77 destroyed
during spot tasks)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

The extent of survey of anti-personnel mined areas rose during the year, but clearance fell by more than 60% compared to 2017 and no anti-personnel mines were found (although 45 mines were destroyed in spot tasks). This adds yet another year to the track-record of limited progress in fulfilling Somalia's Article 5 obligations. In Somaliland, land release fared far better, with substantial increases in anti-personnel survey and clearance, and more than double the amount of mines destroyed.

RECOMMENDATIONS FOR ACTION

- Somalia should establish a national baseline of anti-personnel mine contamination as soon as security conditions allow.
- Somalia should commit resources for mine action operations.
- Somali Explosive Management Authority (SEMA)'s status within the Federal Government of Somalia should be officially recognised and national resources budgeted annually for its operating costs.
- Continued efforts should be undertaken to support SEMA to manage the Information Management System for Mine Action (IMSMA) database. Regular updates from the database should be shared with all implementing partners.
- The Federal Government should formally endorse the new National Mine Action Strategic Plan 2017–2020.
- Somalia should develop a mine action resource mobilisation strategy and initiate dialogue with development partners on long-term support.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	Considerable effort is needed to establish a baseline of anti-personnel mine contamination across Somalia. Large swathes of the country have yet to be surveyed and many areas are inaccessible due to ongoing conflict and insecurity. Lack of funding is also considered a major constraint.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	4	More effective management of the mine action programme was achieved through ongoing capacity development with the Somali Explosive Management Authority (SEMA). The Somali Government has still to formally recognise SEMA as a government institution and provide funding for its operations.
GENDER (10% of overall score)	5	Somalia's National Mine Action Strategic Plan 2017–2022 includes provisions on gender and diversity. SEMA has demonstrated a positive orientation to addressing gender-related issues, in a national context which can present barriers to effective gender mainstreaming.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	5	SEMA has assumed full ownership and responsibility for the national mine action database, resulting in improvements in information management. Somalia submitted its first Article 7 transparency report for several years in July 2018; but subsequent reporting remained of poor quality, lacking in detail and clarity.
PLANNING AND TASKING (10% of overall score)	6	Operators reported that SEMA's ability to manage planning and tasking increased in 2018, but external factors such as the security situation continue to prevent access to certain areas of the country and hampered the deployment of mine action teams.
LAND RELEASE SYSTEM (20% of overall score)	5	A process to revise Somalia's National Technical Standards and Guidelines was ongoing in 2018, which was due to be completed in 2019.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	4	Land release outputs remained limited in 2018, primarily due to ongoing armed conflict, new security threats, and a lack of resources and operational capacity. No anti-personnel mines were found during clearance operations, adding yet another year of very minor progress in fulfilling Somalia's Article 5 obligations. Substantial progress was, however, made in anti-personnel survey and clearance operations in Somaliland.
Average Score	4.6	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT

- SEMA
- Mine Action Department in the Somaliland Ministry of Defence (formerly, Somaliland Mine Action Centre)

NATIONAL OPERATORS

- SEMA federal state consortium
- National NGOs

INTERNATIONAL OPERATORS

- The HALO Trust
- Norwegian People's Aid (NPA)
- Ukroboronservice

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

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. Mines along the border with Ethiopia, mainly in legacy minefields, also continued to affect civilians in south-central Somalia.¹

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 explosive remnants of war (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.²

A baseline of mine contamination is still lacking in Somalia, primarily due to a lack of resources to deploy sufficient survey teams and lack of access to areas due to security concerns and al-Shabaab control, though operators reported some progress towards establishing a better understanding of anti-personnel mine contamination during the year.³

Of greater concern was the drastic shrinking of areas for mine action operations due to security in 2018. The HALO Trust reported that, as at March 2018, a large portion of Hiraan region became too dangerous for operations due to al-Shabaab attacks. It was forced to refocus operations in Galmudug state instead.⁴

According to Somalia's Article 7 transparency report, as at April 2019, a total of 879 contaminated areas (192 confirmed hazardous areas (CHAs), 511 suspected hazardous areas (SHAs), and 176 explosive ordnance disposal (EOD) tasks) had been registered in the SEMA national database. Of this, it reported 38% of recorded contamination was mixed anti-personnel and anti-vehicle mine contamination, while a further 8% was contaminated solely by anti-personnel mines.⁵

A total of 74 areas were reported as confirmed or suspected to contain solely anti-personnel mine contamination with a size of just under 72.2km² (28 CHAs with a size of just over 12.4km² and 46 SHAs covering close to 59.8km²).⁶ This is a massive, and unexplained increase on the contamination Somalia reported in its Article 7 report for 2017 of 21.3km².⁷

According to Somalia's Article 7 report for 2018, mine contamination remaining in Somalia, as recorded in the national database was as follows.

Table 1: Mine contamination (at end 2018)⁸

Type of contamination	CHAs	SHAs
AP/AV	175	159
AP	28	46
Totals	203	205

AP = Anti-personnel AV = Anti-vehicle

While no comprehensive estimates yet exist of mine contamination in Somalia, surveys completed in 2008 in Bakol, Bay, and Hiraan regions revealed that, of a total of 718 communities, around one in ten was contaminated by mines and/or ERW.⁹ Other contaminated areas lie along the border with Ethiopia, in Galguduud, Gedo, and Hiraan regions. Non-technical survey initiated in 2015 identified more than 6km² of mined area.¹⁰

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 8km², most of which are barrier minefields or military base perimeter minefields.¹¹

In 2018, The HALO Trust continued to deploy survey teams across Somaliland in order to build a more accurate assessment of the remaining contamination, focusing on former military camp minefields along the Ethiopian border. While the general extent of contamination in Somaliland has been well established as a result of surveys undertaken by The HALO Trust over the past 20 years, a combination of low-density minelaying and lack of first-hand information has meant that new mined areas continue to be found. Four minefields were added to the database in 2018, with a combined size of just over 1.5km².¹²

In the Puntland state administration, mine contamination was assessed during Phase 2 of a Landmine Impact Survey (LIS), implemented by the Survey Action Centre (SAC) and the Puntland Mine Action Centre (PMAC) in the regions of Bari, Nugaal, and the northern part of Mudug.¹³

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.¹⁴

Table 2: Anti-personnel mine contamination (at April 2019)¹⁵

State	CHAs	Area (m ²)	SHAs	Area (m ²)	Total CHA/SHA	Total area (m ²)
Galmudug	13	5,810,966	8	2,891	21	5,813,857
Hirshabelle	3	761,727	0	0	3	761,727
South West	12	5,837,076	0	0	12	5,837,076
Jubaland	0	0	1	59,776,693	1	59,776,693
Puntland	0	0	37	N/R	37	N/R
Totals	28	12,409,769	46	59,779,584	74	72,189,353

EXPLOSIVE REMNANTS OF WAR AND CLUSTER MUNITION REMNANTS

Somalia also has a significant problem contamination from ERW, including what is thought to be very limited contamination from cluster munition remnants (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Somalia for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Mine action management in Somalia continues to be 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 the Mine Action Department within the Somaliland Ministry of Defence (formerly, the MCICA), and before that the Somaliland Mine Action Centre, SMAC) in Somaliland.¹⁶

SEMA maintains a presence across Somalia through its five Federal State members: the Puntland State Office, Galmudug State Office, Hirshabelle State Office, South West State Office, and Jubaland Office.¹⁷ Under each of the five members is an independent consortium of national NGOs implementing mine action activities.

SEMA was established in 2013 as the mine action centre for Somalia, replacing the Somalia National Mine Action Authority (SNMAA) created two years earlier.¹⁸ SEMA's aim was to assume full responsibility for all explosive hazard coordination, regulation, and management by December 2015.¹⁹ However, SEMA's legislative framework was not approved by the Federal Parliament in 2016 as expected, and progress was further stalled by elections in February 2017 that resulted in a period of government paralysis.²⁰ Due to this lack of parliamentary approval, SEMA has not received funding from the Federal Government of Somalia since the expiry of its grant in 2015.²¹

In May 2019, SEMA informed Mine Action Review that no further progress had been made in the Somali Parliament towards the formal adoption of SEMA's legislative framework, though it was hopeful that this could be achieved by the end of 2019. It reported it did not receive any national funding or support from the government again in 2018; however, it also said that efforts were underway to secure government funding for its operations in 2019.²²

SEMA continued to face external challenges posed by the security situation. In July 2018, the SEMA office at the Ministry of Internal Security in Mogadishu was attacked and significantly damaged, some of its staff injured, and much of SEMA's office materials, including computers and documents, were destroyed.²³ UNMAS reported in May 2019 that efforts to restore the office were ongoing with its support.²⁴

In 2018, with United Kingdom Department for International Development (DFID) funding, Norwegian People's Aid (NPA) continued its capacity development work with SEMA. NPA reported that capacity building of SEMA and their national

consortium partners was closely monitored in 2018 by milestones developed and agreed upon between NPA and SEMA. Key focus areas were information management support; support for operational planning, prioritisation, and tasking of available clearance resources; and increasing capacity within the senior SEMA management team.²⁵ UNMAS reported providing financial support to SEMA's headquarters and state offices in 2018.²⁶

NPA reported seeing positive progress throughout the year, especially with SEMA taking ownership of its coordination/ tasking role, but also with its capacity to participate in treaty meetings. In NPA's view, without support from the Federal Government at present, capacity development support remains critical to ensure national ownership of the mine action programme and a sustainable national capacity in Somalia.²⁷

SEMA began conducting quarterly meetings with all mine action implementing partners in November 2018, with a focus on monitoring of operations. Operators considered this a major step forward towards improving the cooperation, consultation, and coordination between SEMA and the clearance operators within Somalia.²⁸

PUNTLAND

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 Puntland State Office has coordinated mine action with local and international partners, including Danish Demining Group (DDG) and Mines Advisory Group (MAG).²⁹ It runs the only police explosive ordnance disposal (EOD) team in Puntland, which is responsible for collecting and destroying explosive ordnance.³⁰

SOMALILAND

As part of a larger process of government reform in early 2018, the Somaliland Mine Action Centre (SMAC), which was responsible for coordinating and managing demining in Somaliland since 1997, was restructured and renamed the Mine Clearance Information and Coordination Authority (MCICA), and underwent a change of line ministry from the Office of the Vice President to the Ministry of Defence.³¹ It was renamed the Mine Action Department in January 2019.³²

GENDER

Somalia's National Mine Action Strategic Plan 2017–2020 recognises gender and diversity as cross-cutting issues for the national mine action programme, in line with Somalia's National Development Plan objectives to "implement gender equality in education and mainstream gender in all of its programmes with a focus on adolescent girls". The National Mine Action Strategic Plan stipulates that the mine action programme must reflect gender objectives and ensure that the specific needs of women, girls, boys, and men are taken into account, including through delivery of gender-equality programming, and insistence on the adoption of a gender-sensitive approach by consortia and implementing partners. It also recognises the importance of conducting context analyses in areas of mine action operations to clarify important gender and diversity issues, such as clan affiliation, movement patterns of local populations, and barriers to participation for different gender and age groups.³³

In May 2019, SEMA informed Mine Action Review that it does not have an internal gender or diversity policy or implementation plan. It acknowledged that this was "unfortunate", and pledged that it would strive for gender balance in the future, by ensuring equal employment opportunities for qualified men and women.³⁴

SEMA also reported that within the federal state national mine action NGO consortia, there was a large focus on gender and gender balance in survey and community liaison teams to ensure the inclusive participation of all affected groups, including women and children. It confirmed that data collection was disaggregated by sex and age, and gender taken into account in the prioritisation, planning, and tasking of survey and clearance activities.³⁵

NPA reported that the gender balance within its programme staff increased in 2018, up from 16% female and 84% male staff in January, to 23% female and 77% male staff by December, and with a 50/50 gender balance within its senior management team. NPA provided three trainings on gender mainstreaming and sexual harassment for SEMA staff and consortium partners from each of the federal states. The results were surprisingly positive, with open and frank

discussions during the trainings, particularly within SEMA's and NPA's management teams.³⁶

The HALO Trust reported that in its operations in Somalia in 2018, 13% of operations staff were female, and that two out of fifteen management staff were women. It confirmed that across its operations, survey and mine risk education (MRE) teams regularly liaised with different community groups, with a focus for certain MRE efforts on children. It reported that all MRE teams and most of its EOD teams had at least one woman, who could effectively reach out to women in local communities to ensure their voices were heard.³⁷

The HALO Trust informed Mine Action Review that while gender was a priority focus for survey activities to ensure that a clear and holistic understanding of contamination is gained through reaching men, women, girls, and boys, gender was not a consideration in prioritisation of tasks (see Planning and tasking section below).

In its operations in Somaliland, The HALO Trust reported that of the 38 women employed by HALO in 2018, 18 (47%) were employed in operational roles in survey and clearance teams, and 6 (16%) were employed in managerial/supervisory level positions. The HALO Trust noted, however, that in the Somaliland programme, there had been a historical preference towards recruiting men, prompted in part by local cultural and religious norms. Efforts to introduce female demining sections began in 2007 in the face of some initial difficulties, not least in convincing women themselves that demining was a suitable career option given cultural norms and expectations. As the Somaliland programme has decreased in size since 2014, and no new demining sections have been hired, HALO reported it was challenging to redress this balance at a late stage in the programme's lifespan.³⁸

The HALO Trust additionally reported that, following a visit from the Geneva-based Gender in Mine Action Programme (GMAP) in 2017, HALO made improvements to its reporting mechanisms for sexual abuse, exploitation, and harassment, and appointed a female member of national staff as Point of Contact for gender issues in Somaliland in 2018.³⁹

INFORMATION MANAGEMENT AND REPORTING

In 2017, ownership of the national IMSMA database was fully transferred from UNMAS to SEMA, with support and capacity-building from NPA.⁴⁰ NPA reported that IMSMA operators within SEMA were carrying out data verification and entry. Reporting forms were standardised throughout the mine action sector during the year, ensuring that all operators were using the same reporting forms.⁴¹

Somalia's national mine action strategic plan places considerable emphasis on remedying shortcomings in information management.⁴² According to the Plan, a specific national mine action standard on information management was developed in 2018.⁴³ In May 2019, SEMA informed Mine Action Review that a process to verify the historical data contained in the UNMAS database was ongoing, with assistance from NPA. This will help SEMA to develop a list of priorities for clearance in its workplan for 2020.⁴⁴

NPA and HALO Trust both noted improvements in SEMA's information management capacity in 2018. HALO would welcome a process for regular review of the IMSMA database and data

sharing with implementing partners, to ensure staff are not put at risk if new minefields are identified. NPA pledged to continue capacity development support for SEMA on information management through 2020, where after SEMA information management staff are expected to fully manage the database independently, barring any significant staff turnover.⁴⁵

In July 2018, SEMA submitted its first APMBC Article 7 transparency report for several years covering calendar year 2017, reflecting improvements in its information management and reporting capacity and greater transparency and efforts to engage with the APMBC community. However, subsequent reporting has been of poor quality, lacking basic details on the size of and progress to address remaining contamination, and with considerable inconsistencies in year-to-year reporting.

The Mine Action Department, the mine action authority in Somaliland, manages a separate IMSMA database. The HALO Trust reported that regular checks of the database for accuracy of recording were carried out in 2018.⁴⁶

PLANNING AND TASKING

Somalia's National Mine Action Strategic Plan 2017–2020, developed with input from SEMA, UNMAS, international operators, national NGO consortia, and international institutions in late 2017, was awaiting final approval by the Somali Minister of Internal Security throughout 2018. A review of the final draft of the document was scheduled for June 2019.⁴⁷

The plan focuses on setting “achievable” goals over the next three-year period. The strategy's five goals, identified by SEMA, are as follows:

- To enhance SEMA's ability to lead and enable effective and efficient mine action
- To develop the Somali mine action consortia into a wholly national mine action capacity
- To engage with stakeholders in order to understand, and better respond to, their mine action needs
- To achieve a mine-impact-free Somalia
- To comply with treaties binding Somalia on mines and other explosive threats.

In February 2018, an updated second “phase” of the five-year “Badbaado Plan for Multi-Year Explosive Hazard Management for 2018–2022”, first developed in 2015 by SEMA, UNMAS, and the UN Assistance Mission in Somalia (UNSOM), was officially launched in Geneva. It claims to be a plan to “make Somalia mine free by 2022”, but it is not realistic and does not contain any detail as to the amount of contamination remaining to be addressed, nor targets for completion.⁴⁸ This view is not, however, shared by UNMAS.⁴⁹

SEMA is developing a mine action workplan for 2020, in cooperation with the SEMA state offices, which would be officially presented as Somalia's first annual workplan during the treaty meetings in 2019.⁵⁰

In Somaliland, The HALO Trust reported that no strategic mine action plan was in place in 2018, though a series of meetings with the mine action authority and other stakeholders were held in preparation for transition of the mine action programme to national ownership and the development of a mine action strategic plan in 2019.⁵¹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national mine action legislation in Somalia. UNMAS developed National Technical Standards and Guidelines (NTSGs) for Somalia in 2012–13.⁵² In May 2019, SEMA reported that a review of the NMAS had been carried out in 2018 but that nothing was changed, though a chapter on information management was added.⁵³ Final approval of the revisions was expected by mid 2019, following consultations with all mine action stakeholders.⁵⁴

The HALO Trust reported that SEMA still lacked capacity and technical training to perform quality assurance (QA) checks in 2018, and that consequently it carried out internal QA. It noted that SEMA staff had expressed interest in QA and was receiving training from NPA to build a national external QA capacity.⁵⁵

In Somaliland, The HALO Trust confirmed that the Mine Action Department continued to conduct formal QA reviews in 2018, with support from HALO.⁵⁶

In addition to demining staff, it reported employing a further 117 support staff and 95 temporary staff from local communities in Somaliland during 2018.⁵⁷

NPA continued mine clearance throughout the year within the disputed area between Somaliland and Puntland, with two manual mine clearance teams and one survey/MRE team. It is the only international operator accepted to work in the disputed area by the different local clans. In addition, throughout the first quarter of the year, five survey/MRE teams were deployed across all five federal states of South-Central Somalia, until the completion of a UK DFID grant at the end of March.⁵⁸

NPA reported that a new field office was established within the capital of Puntland to accommodate the arrival and in-country training of mine detection dogs (MDDs) and the capacity development of SEMA state personnel and consortium partners from Puntland and Galmudug states, as well as forward field support for planned survey and clearance and police EOD activities in 2019.⁵⁹

OPERATORS

In 2018, two international NGOs conducted clearance operations in Somalia and Somaliland, The HALO Trust and NPA, along with UNMAS-contracted commercial clearance company, Ukroboronservice.⁶⁰

While The HALO Trust's mine clearance programme in Somaliland has been ongoing since 1999, in the first half of 2015, the organisation opened a new programme in south-central Somalia. At the start of 2018, The HALO Trust had 12 manual mine clearance teams deployed for clearance of anti-personnel mines in Somalia. In March, the operations of eight teams were suspended for security reasons, and the remaining four were sent to a battle area clearance (BAC) task, which was still ongoing in May 2019. HALO also deployed four weapon and ammunition disposal (WAD) teams, which were primarily occupied with EOD call-outs during the year.⁶¹

In Somaliland, The HALO Trust employed 434 demining/operational personnel and 3 mechanical assets in 2018.

UNMAS continued to contract Ukroboronservice to carry out mine action activities in support of the African Union Mission in Somalia's (AMISOM) security priorities in 2018 through its four mobile multi-task teams conducting ERW clearance across four of Somalia's federal states, with the exception of Puntland; 56 community liaison officers to deliver risk education and liaison activities; and two 18-strong manual clearance teams. During the year, the number of manual clearance teams increased from two to six, all of which were deployed along the border with Ethiopia in Bakool and Hiran regions from September 2018.⁶² In response to a request received from a local authority, one clearance team relocated to Galgaduud in August 2019 in coordination with the Galmudug Mine Action Centre (SEMA Galmudug).⁶³

OPERATIONAL TOOLS

Only manual clearance of mines was conducted in Somalia in 2018. In Somaliland, both manual clearance and mechanical demining was carried out, with the deployment of machines by The HALO Trust.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

Close to 2.43km² of anti-personnel mined area was released in total across Somalia and Somaliland in 2018: almost 1.6km² through mine clearance and close to 0.55km² reduced through technical survey, and 0.28km² through cancellation through non-technical survey. A total of 220 anti-personnel mines, 4 anti-vehicle mines, and 148 items of UXO were destroyed as a result. A further 77 anti-personnel mines were destroyed in spot tasks. A total of just under 1.85km² of mine contamination was confirmed during the year.⁶⁴

SURVEY IN 2018

As reported above, no comprehensive overview of SHAs exists in Somalia, and as at the end of 2018, no nationwide survey had been conducted, mainly due to the security situation and a lack of resources.⁶⁵

In 2018, The HALO Trust and NPA cancelled a combined total of nearly 0.28m² through non-technical survey and reduced a further 0.55m² through technical survey in Somalia and Somaliland.⁶⁶ Of this, the majority of survey output occurred in Somaliland (just over 435,000m² (29,000m² through non-technical survey and 406,000m² through technical survey), while just over 274,700m² was released in Somalia (248,700m² through non-technical survey and 26,000m² through technical survey), along with an additional 113,600m² reduced in the disputed area between Somaliland and Puntland.⁶⁷

This is an overall increase from 2017, when the two operators reported cancelling a total of just under 1,300m² through non-technical survey and reducing just under 42,000m² through technical survey in Somalia and Somaliland.⁶⁸

The HALO Trust reported that survey was not its primary activity in 2018 as most of its resources were deployed on BAC tasks and EOD call-outs. It cancelled a total of 248,795m² in Hirshabelle state in Somalia and just over 29,000m² in Somaliland, along with identifying one previously unrecorded area of anti-personnel mine contamination with a size of just over 305,400m² in Somalia.⁶⁹

NPA reported that non-technical survey activities were carried out through the first quarter of 2018 in all federal states of Somalia, as part of joint NPA and federal consortium partner projects.⁷⁰ A total of 2,810,095m² of area was confirmed but no area was cancelled. NPA completed survey in the disputed area between Somaliland and Puntland during the year, with the release of just over 113,600m² through technical survey.⁷¹ It did not record any additional mined areas containing anti-personnel mines, only anti-vehicle mines.⁷²

Table 3: Cancellation through non-technical survey in 2018⁷³

Area	Operator	Area cancelled (m ²)
Hirshabelle (Somalia)	HALO	248,795
Toghdeer (Somaliland)	HALO	29,054
Total		277,849

Table 4: Reduction of mined area through technical survey in 2018⁷⁴

Area	Operator	Area reduced (m ²)
Sool/Sanaag (disputed area)	NPA	113,637
Hirshabelle (Somalia)	HALO	25,942
Toghdeer (Somaliland)	HALO	406,022
Total		545,601

CLEARANCE IN 2018

A combined total of just under 1.6km² was released through clearance in Somalia, Somaliland, and the disputed area between Somaliland and Puntland in 2018, with the destruction of 220 anti-personnel mines, 4 anti-vehicle mines, and 148 items of UXO. The great majority of this occurred in Somaliland, where a total of just under 1.49km² was cleared and 219 anti-personnel mines destroyed; while in Somalia a total of 0.03km² was reported cleared, however no anti-personnel mines were found. An additional 0.08km² was cleared in the disputed area between Somaliland and Puntland, with one anti-personnel mine destroyed.⁷⁵

This compared with 2017, when just over 0.9km² of anti-personnel contaminated area was cleared in total in Somalia and Somaliland.⁷⁶ Of this, 0.08km² was cleared in Somalia with the destruction of 4 anti-personnel mines, while 0.81km² was cleared in Somaliland, with 87 anti-personnel mines destroyed.⁷⁷

In 2018, The HALO Trust reported conducting three months of manual mine clearance before switching its clearance teams to a high priority BAC task for the remainder of the year. As such, its clearance outputs for mined areas in Somalia in 2018 were significantly lower than in 2017. It reported that 15 anti-personnel mines were destroyed in EOD spot tasks in Somalia during the year.⁷⁸ A further 45 anti-personnel mines were destroyed by Ukroboronservice in spot tasks during 2018.⁷⁹

In Somaliland, clearance of anti-personnel mined areas by The HALO Trust rose significantly from just over 0.75km² in 2017 to nearly 1.46km² in 2018, with an increase in anti-personnel mines destroyed from 87 in 2017 to 219 in 2018. A total of 17 additional anti-personnel mines were destroyed in EOD spot tasks in Somaliland in 2018.⁸⁰ An additional 1.5km² of mined area was also confirmed during the year.⁸¹

NPA reported clearing two areas with a size of 80,464m² in the disputed territory between Somaliland and Puntland in 2018, with the destruction of 1 anti-personnel mine, 1 anti-vehicle mine, and 81 items of UXO.⁸²

Table 5: Mine clearance in 2018⁸³

Region	Operator	Areas cleared	Area cleared (m²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Sool/Sanaag (disputed area)	NPA	2	80,464	1	1	81
Hirshabelle (Somalia)	HALO	*2	28,038	0	0	5
Awdaal (Somaliland)	HALO	0	127,836	76	0	0
Maroodi Jeex (Somaliland)	HALO	3	295,210	34	0	44
Toghdeer (Somaliland)	HALO	2	1,066,527	109	3	18
Totals		9	1,598,075	220	4	148

* HALO reported one area was not yet completed in 2018

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SOMALIA: 1 OCTOBER 2012
↓
ARTICLE 5 DEADLINE: 1 OCTOBER 2022
ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
CURRENT LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (MAPUTO +15 POLITICAL DECLARATION ASPIRATION): LOW

Table 6: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km²)
2018	1.60
2017	0.89
2016	1.14
2015	1.64
2014	2.20
Total	7.47

Under Article 5 of the APMBC, Somalia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 October 2022. It is not on track to meet this deadline.

According to operators, without significant improvements in the security environment and significant amounts of funding, there is no possibility that Somalia will meet its 2022 deadline. The full extent of contamination remains unknown, and survey is far from complete with large areas not yet surveyed due to lack of safe access. Active conflict continued to stymie progress, severely limiting field access for operators in 2018 and requiring constant adaptation to volatile situations. Adding to this instability, the government had still yet to officially recognise SEMA in its role as the national mine action centre.⁸⁴

In Somaliland, The HALO Trust had hoped to complete clearance of the last known and accessible mined area in Somaliland by mid 2019.⁸⁵

- 1 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", undated, pp. 6 and 12.
- 2 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.
- 3 Emails from Chris Pym, Deputy Head of Region (Africa), HALO Trust, 9 May 2019; and Claus Nielsen, Country Director, NPA, 14 May 2019.
- 4 Email from Chris Pym, HALO Trust, 9 May 2019.
- 5 Article 7 Report (for 2018), Form J.
- 6 Ibid.
- 7 Article 7 Report (for 2017), Form J.
- 8 Ibid.
- 9 UNMAS, "Annual Report 2011", New York, August 2012, p. 68.
- 10 Email from Tom Griffiths, Regional Director North Africa, HALO Trust, 25 May 2016.
- 11 Ibid.
- 12 Email from Chris Pym, HALO Trust, 9 May 2019.
- 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 UNMAS, "2019 Portfolio of Mine Action Projects, Somalia"; and UNMAS, "2015 Portfolio of Mine Action Projects, Somalia".
- 15 Article 7 Report (for 2018), Form J.
- 16 Email from Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.
- 17 Ibid.
- 18 Interview with Mohamed Abdulkadir Ahmed, SEMA, in Geneva, 9 April 2014; and email from Kjell Ivar Breili, UNMAS, 12 July 2015.
- 19 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 20 Emails from Mohamed Abdulkadir Ahmed, SEMA, 14 June 2016; and Hilde Jørgensen, NPA, 3 May 2017.
- 21 Emails from Terje Eldøen, Programme Manager, NPA, 22 October 2016; and Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.
- 22 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.
- 23 Email from Chris Pym, HALO Trust, 9 May 2019.
- 24 Email from Hussein Ibrahim Ahmed, Project Manager, UNMAS, 22 May 2019.
- 25 Email from Claus Nielsen, NPA, 13 April 2019.
- 26 Email from Hussein Ibrahim Ahmed, UNMAS, 22 May 2019.
- 27 Email from Claus Nielsen, NPA, 13 April 2019.
- 28 Emails from Chris Pym, HALO Trust, 9 May 2019; and Claus Nielsen, NPA, 13 April 2019.
- 29 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", p. 9.
- 30 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 31 Email from Chris Pym, HALO Trust, 9 May 2019.
- 32 Email from Chris Pym, HALO Trust, 2 June 2019.
- 33 SEMA, "Somalia National Strategic Plan, 2019", pp. 21–22.
- 34 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.
- 35 Ibid.
- 36 Email from Claus Nielsen, NPA, 13 April 2019.
- 37 Email from Chris Pym, HALO Trust, 9 May 2019.
- 38 Ibid.
- 39 Ibid.
- 40 Email from Claus Nielsen, NPA, 22 March 2018.
- 41 Ibid.
- 42 "Somalia National Mine Action Strategic Plan", Draft Version, February 2018, p. 5.
- 43 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019; and "Somalia National Mine Action Strategic Plan", Draft Version, February 2018.
- 44 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.
- 45 Email from Claus Nielsen, NPA, 13 April 2019.
- 46 Email from Chris Pym, HALO Trust, 9 May 2019.
- 47 Emails from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019; and Claus Nielsen, NPA, 13 April 2019.
- 48 SEMA, "Badbaado Phase II: Meeting the Obligations of the Anti-Personnel Mine Ban Treaty 2018–2022".
- 49 Email from Hussein Ibrahim Ahmed, UNMAS, 5 September 2019.
- 50 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.
- 51 Email from Chris Pym, HALO Trust, 14 May 2018.
- 52 Email from Terje Eldøen, NPA, 5 June 2016; and response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 53 Email from Abdulkadir Ibrahim Mohamed Hoshow, SEMA, 9 May 2019.
- 54 Ibid.
- 55 Email from Chris Pym, HALO Trust, 9 May 2019.
- 56 Ibid.
- 57 DDG and Mines Advisory Group (MAG) continued to have operations in Somalia and Somaliland in 2018, but did not carry out demining.
- 58 Email from Chris Pym, HALO Trust, 9 May 2019.
- 59 Ibid.
- 60 Email from Claus Nielsen, NPA, 13 April 2019.
- 61 Ibid.
- 62 Emails from Hussein Ibrahim Ahmed, UNMAS, 22 May 2019; and Ghirmay Kiros, UNMAS, 20 and 24 June 2018.
- 63 Email from Hussein Ibrahim Ahmed, UNMAS, 5 September 2019.
- 64 Emails from Chris Pym, HALO Trust, 9 May 2019 and 14 May 2018; and Claus Nielsen, NPA, 14 May 2019 and 22 March 2018.
- 65 Emails from Chris Pym, HALO Trust, 9 May 2019; and Claus Nielsen, NPA, 14 May 2019.
- 66 Ibid.
- 67 Ibid.
- 68 Emails from Chris Pym, HALO Trust, 14 May 2018; and Claus Nielsen, NPA, 22 March 2018.
- 69 Email from Chris Pym, HALO Trust, 9 May 2019.
- 70 Email from Claus Nielsen, NPA, 14 May 2019.
- 71 Ibid.
- 72 Ibid.
- 73 Emails from Chris Pym, HALO Trust, 9 May 2019; and Claus Nielsen, NPA, 14 May 2019.
- 74 Ibid.
- 75 Ibid.
- 76 Emails from Tom Griffiths, HALO Trust, 19 May 2017; and Chris Pym, HALO Trust, 14 May 2018.
- 77 Emails from Chris Pym, HALO Trust, 14 May 2018; and Claus Nielsen, NPA, 14 May 2019 and 22 March 2018.
- 78 Email from Chris Pym, HALO Trust, 9 May 2019.
- 79 Email from Hussein Ibrahim Ahmed, UNMAS, 6 September 2019.
- 80 Emails from Chris Pym, HALO Trust, 9 May 2019 and 14 May 2018; and Claus Nielsen, NPA, 14 May 2019 and 22 March 2018.
- 81 Email from Chris Pym, HALO Trust, 9 May 2019.
- 82 Email from Claus Nielsen, NPA, 14 May 2019.
- 83 Email from Claus Nielsen, NPA, 14 May 2019.
- 84 Emails from Chris Pym, HALO Trust, 9 May 2019; and Claus Nielsen, NPA, 14 May 2019.
- 85 Email from Tom Griffiths, HALO Trust, 31 May 2017.

SOUTH SUDAN



CLEARING THE MINES 2019

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 9 JULY 2021
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MEDIUM, 15km²
(ESTIMATED)

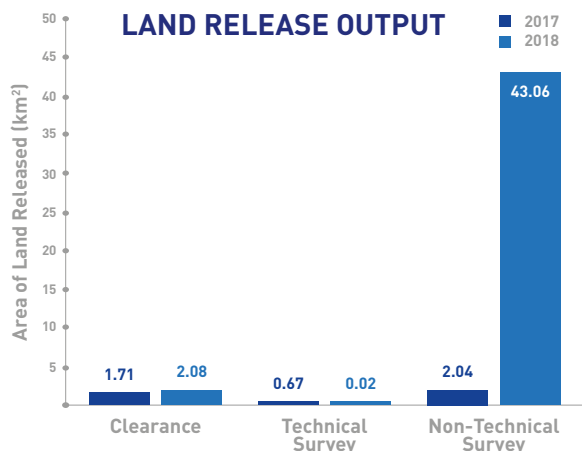
AP MINE
CLEARANCE IN 2018

2.08km²

AP MINES
DESTROYED IN 2018

1,166

(including 3 destroyed
during spot tasks)



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **MEDIUM**

KEY DEVELOPMENTS

The number of areas suspected or confirmed to contain anti-personnel mines in South Sudan dropped dramatically, by nearly 50km², from just under 80km² at the end of 2017, to just under 30km² at the end of 2018. Improvements in the security situation which enabled greater freedom of movement for mine action teams, coupled with a focus on targeted re-survey and database review of large recorded suspected hazardous areas (SHAs), led to the significant cancellation of a number of hazards that were for some time thought to be either inflated or just inaccurate. Clearance of

anti-personnel mined area also rose during 2018, along with a considerable increase in the number of anti-personnel mines found and destroyed.

While South Sudan has determined it will not meet its July 2021 Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline, and will request an additional extension for a period of five years, as a result of the progress made in 2018, it is now far more able to accurately present the size of the remaining challenge and the resources and time required to address it.

RECOMMENDATIONS FOR ACTION

- South Sudan should set concrete and realistic annual targets for completing survey and clearance of anti-personnel mines in its forthcoming Article 5 deadline extension request.
- South Sudan should strive to plan, where possible, for mine action operations to support peace and stabilization efforts.
- Efforts should continue to ensure accurate recording and reporting by operators of data 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 as well as to the National Mine Action Authority (NMAA).
- The mandate of the UN Mission in South Sudan (UNMISS) should be changed to include support for capacity development of the national mine action programme.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	The understanding of remaining contamination in South Sudan improved significantly in 2018, with more than 53km ² of land released, primarily as a result of re-survey and database review. The task remaining became far more achievable, with estimated contamination at end 2018 at 29.8km ² , down from nearly 80km ² the previous year.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	4	The National Mine Action Authority (NMAA) continued to face serious financial and technical limitations preventing it from managing mine action operations effectively in 2018. The United Nations Mine Action Service (UNMAS) was responsible for much of the mine action programme's functioning, including database management, accreditation, tasking, and quality management.
GENDER (10% of overall score)	6	South Sudan's second national mine action strategy for 2018–22 includes a section on gender, as does South Sudan's National Technical Standards and Guidelines (NTSGs). These include a focus on ensuring gender-balanced survey teams and gender- and age-sensitive data collection and community outreach.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	7	A comprehensive review of all data in South Sudan's Information Management System for Mine Action (IMSMA) database was carried out in 2018, along with re-survey of recorded suspected and confirmed hazardous areas thought to be exaggerated or erroneously recorded. These activities resulted in significant gains in the understanding of mine contamination.
PLANNING AND TASKING (10% of overall score)	6	South Sudan's most recent National Mine Action Strategy 2018–2022, developed with support from the Geneva International Centre for Humanitarian Demining (GICHD), was officially launched in September 2018. Improvements in the security situation enabled an increase in access for mine action operations in a number of previously inaccessible areas.
LAND RELEASE SYSTEM (20% of overall score)	7	According to UNMAS, the NTSGs for mine action in South Sudan are subject to constant review by UNMAS and the NMAA. In 2018, the NTSGs were amended in regard to storage and transport of explosives and the conduct of explosive ordnance disposal (EOD) operations.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	While South Sudan will not meet its current Article 5 deadline of 2021, its remarkable progress in land release output and obtaining a more realistic picture of remaining contamination in 2018 place it in a much better situation as it prepares its second Article 5 extension request, with a much more achievable problem to tackle.
Average Score	6.5	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- National Mine Action Authority (NMAA)

NATIONAL OPERATORS

- None

INTERNATIONAL OPERATORS

- DanChurchAid (DCA)
- Danish Demining Group (DDG)
- Mines Advisory Group (MAG)
- G4S Ordnance Management (G4S)
- MECHEM
- The Development Initiative (TDI)

OTHER ACTORS

- UN Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

South Sudan is heavily contaminated by anti-personnel and anti-vehicle mines, as well as explosive remnants of war (ERW), including cluster munition remnants (CMR). The weapons were used during nearly 50 years of Sudanese civil war in 1955–72 and 1983–2005. The signing of the Comprehensive Peace Agreement in January 2005 led to the 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 new armed conflict across the country.

According to UNMAS, at end 2018, South Sudan had a combined total of 147 areas confirmed and suspected to contain anti-personnel mines covering a total area of almost 29.8km² (see Table 2).¹ This is a massive decrease from the end of 2017, when a total of 220 areas containing anti-personnel mines were reported with a total size of nearly 80km².²

Nine of South Sudan's (formerly ten) states contain mined areas, with Central Equatoria the most heavily contaminated, followed by Eastern Equatoria and Jonglei, according to UNMAS. Of the remaining anti-personnel mine contamination, less than 3.3km² is confirmed hazardous area (CHA), while 26.5km² of SHA is thought to be mined (see Table 2).³

Table 1: Mined area (at end 2018)⁴

Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
Anti-personnel mines	69	3,276,155	78	26,505,130
Anti-vehicle mines	32	1,339,612	31	1,765,906
Totals	101	4,615,767	109	28,271,036

CHAs = Confirmed hazardous areas

Table 2: Anti-personnel mined area by state (at end 2018)⁵

State	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHAs and CHAs	Total area (m ²)
Central Equatoria	38	1,189,016	37	443,736	75	1,632,752
Eastern Equatoria	16	546,654	11	92,836	27	639,490
Jonglei	9	1,112,036	15	20,680,535	24	21,792,571
Lakes	0	0	1	2,500	1	2,500
North Bahr El Ghazal	1	37,500	0	0	1	37,500
Upper Nile	3	93,761	4	4,684,713	7	4,778,474
Warrap	0	0	1	40,000	1	40,000
West Bahr El Ghazal	1	201,738	1	0	2	201,738
Western Equatoria	1	95,450	8	560,810	9	656,260
Totals	69	3,276,155	78	26,505,130	147	29,781,285

While significant progress was made in 2018 to more accurately define the extent of contamination remaining, its full extent is not known, as additional mined areas continue to be identified. Ongoing conflict continues to result in new unexploded ordnance (UXO), particularly in Greater Equatoria, Jonglei, Unity, and Upper Nile states. Insecurity continues to greatly limit access to many areas of the country, severely impeding efforts to confirm or address contamination, particularly in the Greater Upper Nile region.⁶

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 finalised as of writing, 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.

In the Equatoria region, the NMAA reported that while the peace agreement signed in September 2018 had brought a cessation in violence across the majority of the country, fighting continued in the region as at May 2019, which prevented access to determine the full extent of contamination or clearance in the region. However, the NMAA reported that of all hazards remaining in the database, the three largest recorded areas accounted for more than 10km², and it was confident that more survey work will yield continued significant reduction in the contamination to be addressed.⁷

At the same time, new areas of anti-personnel mine contamination continued to be added to the database in 2018. A total of close to 3.2km² was added, including over 1.1km² of recorded contaminated area which was re-classified as anti-personnel contamination from other types of recorded hazardous area in a database review; just over 600,000m² of previously unknown anti-personnel mined area identified through survey; and a further nearly 1.5km² of area was added to the size of a number of recorded anti-personnel mined areas already existing in the database.⁸

While previously undiscovered areas of anti-personnel mine contamination continued to be found in 2018, Mine Action Review is not aware of any confirmed new use of

anti-personnel mines in the renewed conflict that erupted in 2013. In July 2019, UNMAS stated that no new use of anti-personnel mines, including of an improvised nature, was recorded in 2018.⁹

Previously, dating back to 2015, there were allegations of use of anti-personnel mines by South Sudanese government forces in an area around Nassir, Upper Nile state.¹⁰ In June 2018, South Sudan informed states parties to the APMBC that in November 2017, a four-person investigation team travelled to Nassir to investigate the March 2015 allegation. The investigation team found no evidence of landmines being laid in the vicinity of Nassir, on or around the alleged date in 2015.¹¹

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The South Sudan Demining Authority (SSDA) – since renamed the NMAA – was established by presidential decree in 2006 to act as the national agency for planning, coordination, and monitoring of mine action in South Sudan.¹² There is no national mine action legislation in South Sudan.¹³

In 2011, UN Security Council Resolution 1996 tasked UNMAS with supporting South Sudan in demining and strengthening the capacity of the NMAA. UNMAS (with the NMAA) has been overseeing mine action across the country through its main office in Juba, and sub-offices in Bentiu, Bor, Malakal, and Wau. 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.¹⁴

While it is planned that the NMAA will eventually assume full responsibility for all mine action activities, according to UNMAS the NMAA continued to face serious financial and technical limitations preventing it from managing mine action operations effectively in 2018. It requires substantial resources and capacity building assistance if it is to operate effectively.¹⁵

UN Security Council Resolution 1996 authorised UNMISS to support mine action through assessed peacekeeping funds.¹⁶ 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.¹⁷

In 2018, the Government of South Sudan funded the costs of NMAA staff salaries and its sub-offices across the country. It did not, however, provide any funding for the conduct of survey or clearance.¹⁸ UNMAS has reported that the Government of South Sudan is only able to provide minimal funding and support to all national institutions, including the NMAA. It has raised 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, has not been prioritised by donors, who have been increasingly unwilling to support government institutions until a peace agreement is implemented.¹⁹

Positively, UNMAS reported that as part of South Sudan's preparations to request an extension to its APMBC Article 5 deadline, a centrally-led effort to mobilise additional resources for mine action was underway in 2019.²⁰

GENDER

South Sudan's second national mine action strategy for 2018–22 includes a section on gender, focusing on how different gender and age groups are affected by mines and ERW and have specific and varying needs and priorities. Guidelines on mainstreaming gender considerations in mine action planning and operations in South Sudan are also incorporated in the strategy, including on the collection of data disaggregated by sex and age.²¹ UNMAS reported that the programme was also implementing the UN Gender Guidelines for Mine Action, monitored by a gender focal point.²²

South Sudan's National Technical Standards and Guidelines (NTSGs) contain provisions requiring all community liaison teams to tailor activities on the basis of the gendered needs of beneficiaries, and to address the specific risks faced by women and girls.²³ All teams are reportedly gender balanced in composition and trained to be inclusive, for example by ensuring outreach through non-technical survey and risk education is done separately for different age and gender groups, and taking local cultural practices into consideration.²⁴

At the same time, UNMAS reported that task prioritisation in 2018 was predominantly dependent on security considerations and that resources were concentrated on tasks within limited geographical areas rather than on the basis of gender needs.²⁵ It claimed there was equal access in employment opportunities for qualified men and women in survey and clearance teams across the organisations operating in South Sudan, but reported that 16% of staff in operational roles such as deminers and community liaison officers were women, while women accounted for 11% of all staff in managerial or supervisory positions across the five operators conducting mine action operations in South Sudan in 2018.²⁶

Mines Advisory Group (MAG) reported that, in 2018, a basic demining training course was offered to 20 interested women with no previous demining experience, in an effort to increase the number of potentially qualified women applicants for operational demining positions. It reported that, since the training, 16 of the women had been hired for MAG operational teams. As at April 2019, MAG stated that all of its seven clearance teams included women deminers, including a number of women previously employed as cooks or community liaison officers who had participated in the demining training course and were subsequently offered operational positions.²⁷ MAG reported that during 2018, it continually hired women as deminers as openings became available, and by April 2019 one third of its deminers employed were female.²⁸

INFORMATION MANAGEMENT AND REPORTING

A comprehensive review of all data in South Sudan's IMSMA database was carried out in 2018, along with re-survey of recorded SHAs and CHAs thought to be exaggerated or erroneously recorded. These activities resulted in significant gains in the understanding of mine and ERW contamination. UNMAS informed Mine Action Review that, wherever possible, the database disaggregates mined areas, CMR, and other ERW-contaminated areas, including spot tasks.²⁹

PLANNING AND TASKING

South Sudan's most recent National Mine Action Strategy 2018–2022, developed with support from the Geneva International Centre for Humanitarian Demining (GICHD) and funded by Japan, was officially launched in September 2018.³⁰ According to UNMAS, the strategy has three strategic goals with related targets:³¹

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 contamination area is clarified and confirmed and the problem is addressed through appropriate survey and clearance methods, ensuring safe land is handed back to affected communities for use.

Strategic Goal 3: Safe behaviour is promoted among women, girls, boys, and men to reduce mine/ERW accidents and promote safe livelihood activities.

According to UNMAS, the operational focus for 2019–2020 would be on further clarifying the contamination remaining in the database, with re-survey of hazards that are thought to be exaggerated in size. Clearance will continue across the country, wherever it is safe to do so.³² UNMAS also reported that it was working with the NMAA to develop plans for a national capacity that will be responsible for the clearance of residual contamination. This will be the responsibility of the Government of South Sudan.³³

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

According to UNMAS, the NTSGs for mine action in South Sudan are subject to constant review by UNMAS and the NMAA. In 2018, the NTSGs were amended with respect to the storage and transport of explosives and the conduct of explosive ordnance disposal (EOD) operations.³⁴ UNMAS also noted that the NTSGs require all mine action teams to conduct regular internal quality assurance (QA), along with quality control (QC) sampling of 10% of each area cleared. UNMAS conducted additional external QA through visits to each clearance task in 2018, as well as upon the completion of a clearance task.³⁵

In May 2019, the NMAA reported that as a result of years of fighting and insecurity, most mine action teams in South Sudan had been reconfigured to be small and mobile, able to react to rapidly changing security access, which has greatly reduced the extent of demining.³⁶ As a result, the teams are not properly scaled to undertake area clearance in the most efficient manner. The NMAA said that existing capacity would need to be reconfigured into fewer but larger demining teams, which will require additional support, as well as peace and stability to enable deployment on larger area tasks.³⁷

OPERATORS

In 2018, UNMAS reported that mine action operating capacity remained on a par with that deployed in 2017, with almost 1,000 persons working in the sector. Operators included three international demining non-governmental organisations (MAG, DanChurchAid (DCA), and Danish Demining Group (DDG)), and three commercial companies (G4S Ordnance Management (G4S), MECHEM, and The Development Initiative (TDI)).³⁸

MAG reported beginning operations in 2018 with seven clearance teams, which reduced to six at the end of the year. It deployed one dedicated team for mechanically-assisted minefield clearance, as well as number of EOD spot tasks, and four MTTs with the capacity to conduct manual or mechanically assisted clearance, depending on tasking orders. Of the five teams, one was deployed on tasks which included anti-personnel mined areas during the year.³⁹

OPERATIONAL TOOLS

According to UNMAS, a range of mine action operational tools were in use in 2018, including two MineWolf 240 machines, a MineWolf 330, Bozena, and PT300 machine, and eight mine detection dogs.⁴⁰

DEMINER SAFETY

According to UNMAS, there were no accidents during mine clearance in 2018. However, one accident occurred during EOD activities, when a female national staff member was killed and another national staff member injured. The incident was investigated by a joint team comprised of the NMAA, UNMAS, and a third-party clearance operator. The incident led to the withdrawal of MECHEM's accreditation to work in South Sudan. UNMAS reported that lessons learned were shared with all operators in the country.⁴¹

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

South Sudan has reported a total release of all forms of hazardous area of more than 45.1km² in 2018: 2.08km² released through clearance, 0.02km² reduced through technical survey, and 43.06km² cancelled through non-technical survey, with the destruction of 1,163 anti-personnel mines.⁴² A additional three anti-personnel mines were destroyed during spot tasks. A further 7.4km² cancelled during a desk review of database records and just under 0.5km² re-classified from anti-personnel mine contamination to other types of hazardous area.⁴³

SURVEY IN 2018

In 2018, there was a remarkable twentyfold increase in survey output compared with 2017, with 43km² cancelled through non-technical survey and a further 20,000m² reduced through technical survey.⁴⁴ This compared to just over 2km² released through survey in 2017, all by cancellation.⁴⁵

The increase in survey output was due in part to a rapprochement between the principal warring parties that culminated on 12 September 2018 with the signing of the Revitalized Agreement on the Resolution on the Conflict in South Sudan. This led to greater freedom of movement for mine action teams and enabled them to access some reported hazards in previously hard to reach areas. This increased access, coupled with a focus on re-survey from all operators as well as a thorough desk review of all reported hazards by UNMAS, resulted in the cancellation of a significant number of hazards that it stated had for some time had been suspected of being either inflated or incorrect.⁴⁶

As noted in table 4, the desk review of the database led to a number of tasks being cancelled or re-classified in 2018, with a total of 65 areas with a size of just over 7.4km² cancelled outright and a further 16 areas with a size of just under 0.5km² re-classified from anti-personnel mine contamination to other types of hazardous area.⁴⁷

Table 3: Cancellation of mined area through non-technical survey in 2018⁴⁸

State	Operator	Area cancelled (m ²)
Central Equatoria	G4S	57,182
Central Equatoria	TDI	124,486
Eastern Equatoria	TDI	143,588
Jonglei	G4S	8,115,945
Lakes	G4S	21,000
Northern Bahr El Ghazal	TDI	59,686
Unity	G4S	80
Upper Nile	MAG	34,471,616
Upper Nile	G4S	3,063
Western Bahr El Ghazal	G4S	65,500
Total		43,062,146

Table 4: Reduction of mined area through technical survey in 2018⁴⁹

State	Operator	Area reduced (m ²)
Central Equatoria	MAG	14,922
Jonglei	TDI	1,426
Total		16,348

CLEARANCE IN 2018

A total of 15 mined areas covering nearly 2.1km² were released through clearance in 2018, with the destruction of 1,163 anti-personnel mines, 71 anti-vehicle mines, and 553 items of UXO (see Table 5).⁵⁰ This is a sizeable increase from 2017, when a total of 20 areas with a size of just over 1.7km² were cleared, with the destruction of 734 anti-personnel mines, 42 anti-vehicle mines, and 34,600 items of UXO.⁵¹ UNMAS reported that the increase in clearance in 2018 was in large part a reflection of increased security in the country.⁵²

An additional three anti-personnel mines were destroyed in EOD spot tasks by TDI and G4S during the year.⁵³ UNMAS also reported that in 2018 a total of six areas suspected to contain anti-personnel mine contamination with a total size of just over 67,000m² were cleared, which were not found to contain any mines, although four items of UXO were found and destroyed.⁵⁴

Table 5: Mine clearance in 2018⁵⁵

State	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Central Equatoria	G4S	7	762,617	132	70	298
Central Equatoria	MAG	3	1,227,678	906	0	250
Eastern Equatoria	TDI	1	8,162	42	0	0
Jonglei	G4S	1	29,314	67	0	5
Jonglei	TDI	0	4,845	16	0	0
Northern Bahr El Ghazal	TDI	2	35,276	0	0	0
Unity	TDI	1	8,000	0	1	0
Totals		15	2,075,892	1,163	71	553

AP = Anti-personnel AV = Anti-vehicle

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SOUTH SUDAN: 9 JULY 2011
↓
ARTICLE 5 DEADLINE: 9 JULY 2021
ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
CURRENT LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (MAPUTO +15 POLITICAL DECLARATION ASPIRATION): MEDIUM

Table 6: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	2.08
2017	1.71
2016	2.65
2015	5.10
2014	2.72
Total	14.26

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.

In 2020, South Sudan intends to submit an extension request asking for an additional five years to complete its Article 5 obligations. According to UNMAS and the NMAA, this is believed to be an adequate to clear all known contaminated area in the country, and that given the appropriate support and the necessary security conditions, the clearance of both mines and CMRs could be completed by 2026.⁵⁶

However, serious obstacles to completion remain the poor security situation that still prevails in some parts of the country, a lack of stable humanitarian access to certain areas, the continued discovery of previously unrecorded contamination, and a lack of certainty over sustained funding. The focus for 2019–20 will be on further clarifying the extent of contamination remaining, with re-survey of areas thought to be exaggerated in size. Clearance will continue across the country, wherever it is safe to do so.⁵⁷

- 1 Email from Richard Boulter, Senior Programme Manager, UNMAS, 22 July 2019; and Article 7 Report (for 2018), Form C.
- 2 Email from Tim Lardner, Chief, Mine Action, UNMAS, 27 February 2018.
- 3 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 by President Salva Kiir, which were then further subdivided into 32 states by presidential decree in January 2017.
- 4 Email from Richard Boulter, UNMAS, 22 July 2019; and Tess Bresnan, Senior Programme Officer, 3 August 2019.
- 5 Email from Richard Boulter, UNMAS, 22 July 2019.
- 6 UNMAS, "2018 Portfolio of Mine Action Projects: South Sudan".
- 7 Statement by Jurkuch Barach Jurkuch, NMAA, Intersessional Meetings, Geneva, 22 May 2019.
- 8 Email from Richard Boulter, UNMAS, 22 July 2019.
- 9 Ibid.
- 10 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, 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: bit.ly/2Y5xsvT. 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: bit.ly/2JVspW3; and I. Gridneff, "South Sudan Army's Landmine Use Escalates War, Monitors Say", Bloomberg Business, 30 March 2015, at: bloom.bg/2LKsiPe.
- 11 Statement by Jurkuch Barach Jurkuch, NMAA, Intersessional Meetings, Geneva, 8 June 2018. 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.
- 12 "South Sudan De-Mining Authority", undated, at: bit.ly/2Y5Eb4o.
- 13 Email from Ayaka Amano, UNMAS, 2 May 2019.
- 14 South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, 2012, p. iv.
- 15 Emails from Richard Boulter, UNMAS, 30 May 2019; and Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 16 UNMISS, "United Nations Mine Action Coordination Centre [UNMACC]", undated, at: bit.ly/2YctHjl.
- 17 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 18 Email from Ayaka Amano, UNMAS, 2 May 2019.
- 19 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 20 Email from Ayaka Amano, UNMAS, 2 May 2019.
- 21 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 22 Email from Ayaka Amano, UNMAS, 2 May 2019.
- 23 Ibid.
- 24 Ibid.
- 25 Ibid.
- 26 Ibid.
- 27 Email from Katie Shaw, Programme Officer, MAG, 26 April 2019.
- 28 Email from Katie Shaw, MAG, 21 August 2019.
- 29 Email from Ayaka Amano, UNMAS, 2 May 2019.
- 30 Ibid.
- 31 Emails from Tim Lardner, UNMAS, 27 February and 1 March 2018; and Richard Boulter, UNMAS, 6 June 2018.
- 32 Email from Richard Boulter, UNMAS, 22 July 2019.
- 33 Ibid.
- 34 Email from Ayaka Amano, UNMAS, 2 May 2019.
- 35 Ibid.
- 36 Statement by Jurkuch Barach Jurkuch, NMAA, Intersessional Meetings, Geneva, 22 May 2019; and emails from Tim Lardner, UNMAS, 27 February and 1 March 2018.
- 37 Statement by Jurkuch Barach Jurkuch, NMAA, Intersessional Meetings, Geneva, 22 May 2019.
- 38 Email from Richard Boulter, UNMAS, 22 July 2019.
- 39 Email from Katie Shaw, MAG, 19 July 2019.
- 40 Email from Richard Boulter, UNMAS, 22 July 2019.
- 41 Ibid.
- 42 Ibid.
- 43 Ibid. Of the 16 tasks, five were re-classified as 'confrontation areas', three as cluster munition strikes, and eight were re-classified as UXO spot tasks.
- 44 Email from Katie Shaw, MAG, 19 July 2019.
- 45 Email from Tim Lardner, UNMAS, 27 February 2018; and Article 7 Report (for 2017), pp. 7 and 12.
- 46 Email from Richard Boulter, UNMAS, 22 July 2019. Of the 16 tasks, five were re-classified as 'confrontation areas', three as cluster munition strikes, and eight were re-classified as UXO spot tasks.
- 47 Email from Richard Boulter, UNMAS, 22 July 2019. Of the 16 tasks, five were re-classified as 'confrontation areas', three as cluster munition strikes, and eight were re-classified as UXO spot tasks.
- 48 Emails from Richard Boulter, UNMAS, 22 July 2019; and Katie Shaw, MAG, 19 July 2019.
- 49 Ibid.
- 50 Emails from Tim Lardner, UNMAS, 27 February 2018; and Richard Boulter, UNMAS, 5 September 2018.
- 51 Ibid.
- 52 Email from Richard Boulter, UNMAS, 22 July 2019.
- 53 Email from Richard Boulter, UNMAS, 22 July 2019.
- 54 Ibid.
- 55 Emails from Richard Boulter, UNMAS, 22 July 2019; and Katie Shaw, MAG, 19 July 2019.
- 56 Email from Ayaka Amano, UNMAS, 2 May 2019.
- 57 Email from Richard Boulter, UNMAS, 22 July 2019.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JUNE 2028 ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MEDIUM, 10^{km}²
(ESTIMATED)

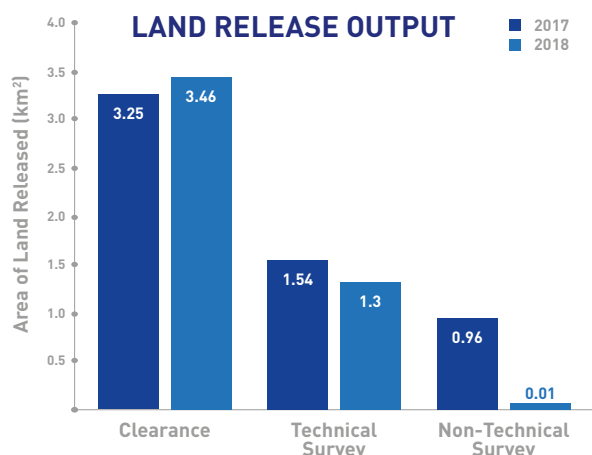
AP MINE
CLEARANCE IN 2018

3.46^{km}²

AP MINES
DESTROYED IN 2018

31,622

(including 299 destroyed
during spot tasks)



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **HIGH**

KEY DEVELOPMENTS

Sri Lanka officially became a state party to the Anti-Personnel Mine Ban Convention (APMBC) on 1 June 2018, becoming the 163rd country to adhere. While its Article 5 deadline is 1 June 2028, Sri Lanka has set a far more ambitious goal to complete mine clearance on its territory by the end of 2020.

While initially optimistic that Sri Lanka was on track to meet this goal, at the end of 2018, 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 is unlikely to complete clearance by the end of 2020. However, with relatively small extra funding, Sri Lanka's mine action operators could expand their capacity and operational output, making the end-2020 goal a possibility. Even if Sri Lanka is unable to meet the end-2020 goal, Sri Lanka should still complete clearance far in advance of its APMBC deadline.

RECOMMENDATIONS FOR ACTION

- Sri Lanka should clarify the total estimate of remaining mine contamination.
- Greater efforts should be placed on information management and ensuring that the database is up to date and that survey and clearance reports are sent to the National Mine Action Centre (NMAC) and entered into the national database in a timely fashion.
- Any changes in capacity or funding requirements that will impede completion of mine clearance should be reported as a matter of priority.
- Greater resources should be allocated to develop long-term national capacity, in particular the NMAC and the Sri Lankan Army (SLA) Humanitarian Demining Units and national mine action operators.
- Increased interaction between the NMAC and mine action operators would enhance the efficiency of the national mine action programme.
- Sri Lanka should develop plans for the management of contamination found after Article 5 completion. Strategies for the vocational retraining of deminers should be put in place.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	A district-by-district re-survey in 2015–17 resulted in the cancellation of 42.4km ² , providing far greater clarity on the extent of confirmed contamination remaining. However, Sri Lanka's official reporting of the estimate of contamination in its Article 7 transparency reports contain discrepancies and are inflated estimates based on projections for survey and reduction and outstanding survey and clearance reports not accounted for in the national database.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	8	Sri Lanka's national mine action programme is fully nationally owned, with considerable committed funding from the national government and significant contribution from the Armed Forces in the dedicated demining units.
GENDER (10% of overall score)	8	Sri Lanka's National Mine Action Strategy 2016–2020 contains a section on gender and diversity as cross-cutting themes for all mine action. It reflects awareness of the cultural context of gendered employment in mine action specific to Sri Lanka, with a focus on women's empowerment.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	6	As required under the Anti-Personnel Mine Ban Convention (APMBC), Sri Lanka has submitted an initial Article 7 report and a subsequent annual updated report. While progress can be seen in information management, data reporting between operators and the National Mine Action Centre (NMAC) continued to reflect a number of disparities and inconsistencies, which are also apparent in the Article 7 reports.
PLANNING AND TASKING (10% of overall score)	8	Sri Lanka's National Mine Action Strategy 2016–2020, developed with the support of the Geneva International Centre for Humanitarian Demining Centre, elaborates the national planning and tasking criteria, which are strongly centred around resettlement and urgent livelihood priorities for displaced civilians.
LAND RELEASE SYSTEM (20% of overall score)	7	Ongoing revisions to Sri Lanka's National Mine Action Standards took place in 2017 and in 2018, in a reportedly extensive review process. They were not yet made public. Improvements to land release methodology and corresponding increases in efficiency were reported by operators in 2018.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	Sri Lanka is well on track to meet its Article 5 clearance deadline of June 2028 and has set a highly ambitious goal of completing clearance of all mines and explosive remnants of war (ERW) by end 2020. It did not, however, meet its national mine action strategy target for land release in 2018.
Average Score	7.4	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT

- Ministry of National Policies, Economic Affairs, Resettlement, Rehabilitation, Northern Development, Vocational Training, Skills Development and Youth Affairs
- National Mine Action Centre (NMAC)

NATIONAL OPERATORS

- Delvon Assistance for Social Harmony (DASH) and sub-contractor SHARP
- Sri Lankan Army (SLA) Humanitarian Demining Units

INTERNATIONAL OPERATORS

- The HALO Trust
- Mines Advisory Group (MAG)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

According to Sri Lanka's NMAC, as at 30 April 2019, 271 mined areas were believed to contain anti-personnel mines covering a total of just over 22.4km² with a further nine suspected hazardous areas (SHAs) that may contain anti-personnel mines covering just under 1.6km², for a total of 280 areas with a size of close to 24km².¹

However, NMAC also reported that a total of nearly 5.1km² of clearance was not reflected in these Information Management System for Mine Action (IMSMA) database figures, along with a further 209,600m² expected to be cancelled and over 2.5km² expected to be reduced through technical survey. On this basis, NMAC reported that the actual estimate of remaining contamination was closer to 16.4km².²

Sri Lanka was once extensively contaminated by mines and explosive remnants of war (ERW). Most remaining contamination is in the north, the focus of three decades of armed conflict between the government and the Liberation Tigers of Tamil Eelam (LTTE), which ended in May 2009. Much progress in land release has occurred in the last decade however, with estimates of total contamination falling sharply: from 506km² at the end of 2010, to 98km² at the end of 2012, to nearly 68.4km² in 2015, and down to close to 16.4km² as at April 2019. The Northern province is still by far the most affected, as set out in Table 1.³

Table 1: Mined area and ERW contamination (at end 2018)⁴

Province	District	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHAs and CHAs	Total area (m ²)
Northern	Jaffna	16	1,635,450	1	182,783	17	1,818,233
	Kilinochchi	77	9,541,362	0	0	77	9,541,362
	Mullaitivu	94	7,911,557	5	649,220	99	8,560,777
	Vavuniya	18	1,303,850	1	667,057	19	1,970,907
	Mannar	53	1,626,788	2	76,177	55	1,702,965
Subtotals		258	22,019,007	9	1,575,237	267	23,594,244
Eastern	Trincomalee	7	170,922	0	0	7	170,922
	Ampara	1	12,686	0	0	1	12,686
	Batticaloa	1	8,294	0	0	1	8,294
Subtotals		9	191,902	0	0	9	191,902
North Central	Anuradhapura	4	216,524	0	0	4	216,524
Subtotals		4	216,524	0	0	4	216,524
Totals		271	22,427,433	9	1,575,237	280	24,002,670

While the progress achieved in land release in the past decade is remarkable, NMAC reported that just over a further 2.4km² of newly confirmed hazardous area was added to the database in 2018 as a result of mine action operations in 2018.⁵ Operators reported continuing to confirm new hazardous areas during demining operations, with MAG alone confirming 40 new hazardous areas with a size of nearly 0.7km² in four districts during the year.⁶

MAG informed Mine Action Review that the CHA reported in Batticaloa district was identified after clearance of the district was completed in 2017.⁷

In total, in April 2019, Sri Lanka reported that since demining operations began in 2002, Sri Lanka has been able to declare 4,616 areas totalling over 1,280km² free from the threat of mines, with the destruction of more than 737,000 anti-personnel mines and over 1,400,000 other explosive items, including anti-vehicle mines and unexploded ordnance (UXO).⁸

Non-technical survey which began in June 2015 was completed in February 2017, with cancellation of 42km² of SHA, reducing total contamination from more than 68km² to close to 26km².⁹ 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.¹⁰ As at August 2019, clearance of two other districts, Puttalam, Polonnaruwa, was also reportedly complete.

Most remaining contamination is located in Sri Lanka's five northern districts. Both sides made extensive use of mines, including belts of P4 Mk I and Mk II blast anti-personnel mines laid by the SLA, and long defensive lines with a mixture of mines and improvised explosive devices (IEDs) laid by the LTTE.¹¹ Indian Peacekeeping Forces also used mines during their presence from July 1987 to January 1990.¹²

The SLA used both anti-personnel and anti-vehicle mines, with all use said to have been recorded.¹³ 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.¹⁴

Aside from mines, Sri Lanka remains contaminated with a wide range of ERW, including unexploded air-dropped bombs, artillery shells and missiles, mortar bombs, hand-held anti-tank projectiles, and rifle and hand grenades. Large caches of abandoned explosive ordnance (AXO) also exist, particularly in the north.¹⁵ These are being cleared at the same time as the remaining minefields.¹⁶

NATIONAL OWNERSHIP AND 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). In 2019, the Ministry's name had changed to the Ministry of National Policies, Economic Affairs, Resettlement, Rehabilitation, Northern Development, Vocational Training, Skills Development, and Youth Affairs. The Ministry's Secretary serves as the Director of the NMAC. The NMAC has responsibilities for priority setting, information management, quality assurance (QA) and quality control (QC), coordination with demining organisations and cooperation partners, and establishing policy and standards.¹⁷

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.¹⁸

The Government of Sri Lanka created a national budget line for mine action in 2015.¹⁹ According to Sri Lanka's initial Article 7 transparency report, the government of Sri Lanka has committed 758,534,964 rupees (approx. US\$4.45 million) each year in 2018–20 to cover the operational costs of the SLA Humanitarian Demining Units and the Navy Humanitarian Demining Unit's survey and clearance activities, with an additional 20 million rupees (US\$118,497) a year to cover the administrative costs of the NMAC.²⁰

GENDER

Sri Lanka's National Mine Action Strategy for 2016–20 contains a specific section on gender and diversity, which it emphasises are cross-cutting issues for the planning, implementation, and monitoring of all mine action initiatives. The strategy pledges to ensure that all mine action activities, from survey and clearance to victim assistance, are conducted in a targeted manner to ensure the equal participation of all age and gender groups, and that all data is collected is disaggregated by sex and age. It further recognises that mine action in Sri Lanka should be tied to the implementation of the Women, Peace, and Security Agenda and Sustainable Development Goal 5 on Gender Equality and the empowerment of women, noting that the safe-guarding of non-discriminatory employment opportunities and the promotion of gender equality and empowerment of women has been a particularly successful aspect of Sri Lanka's national mine action programme.²¹

In 2019, Ms. Sasi Jalatheepan was appointed Deputy Director of the NMAC, promoted from within the government Ministry which oversees the NMAC. She is the first woman to hold this position in Sri Lanka.

National operator DASH considers gender equality and employment of women important to its programme, with 25% of its staff Sri Lankan female employees, 80% of whom are widows, single mothers, and/or breadwinners for their families. Together with its subcontractor, SHARP, both have sought to progressively increase the number of women employed in operational positions, recognising the positive impact employment has on women and their families' well-being.²²

International operators The HALO Trust and MAG confirmed that each organisation has gender policies in place, with a focus on achieving equal access to employment, gender-balanced survey and clearance teams, gender-focused community liaison outreach, disaggregated data collection, and a gender focus to be employed during pre- and post-clearance assessments.²³ Both organisations reported increasing efforts to encourage women to apply for operational, as well as managerial positions, and positive trends in the increasing number of women employed in their respective programmes as a result.²⁴

The HALO Trust reported that more than 40% of its staff in Sri Lanka were women and that it was making special efforts to employ women war widows and women who are the sole breadwinners of their families. It reported its deployment structure was designed to allow demining teams to be deployed daily from bases in Kilinochchi, Jaffna, and Jeyapuram, in order to allow female staff to return to their homes at the end of each working day, rather than being based in remote camps for lengthy periods of time. This ensured that women who had dependants at home were able to provide for their families while maintaining their daily home lives. HALO Trust also reported specific efforts to encourage women's employment through advertising maternity leave policies.²⁵

MAG reported actively encouraging women to take up traditionally male-oriented roles within its programme, including operationally as deminers, mechanical operators, site supervisors, or team leaders. It stated that overcoming barriers which inhibited participation by women, girls, people with disabilities, ethnic minorities, and other marginalised groups was an essential focus for its programme operations in order to ensure that programme delivery is inclusive, both in terms of internal staff composition and external programme outreach. As such, it reported that internal training and awareness-raising ensures that staff working with communities recognise the importance of gender and diversity and have an understanding of tools and approaches to enable inclusive participation.²⁶

INFORMATION MANAGEMENT AND REPORTING

Sri Lanka's national IMSMA database has undergone substantial and continuing improvements since the installation of an updated version in 2015 and a subsequent process of data entry and ground verification.²⁷ Since that time, operators have reported that significant efforts have been exerted by all stakeholders to correct erroneous data entered into the IMSMA database and to update it on the basis of re-survey, leading to a more accurate representation of remaining contamination.²⁸

In 2019, The HALO Trust reported it was submitting reports every two weeks to NMAC and that a review of IMSMA data was usually held on a quarterly basis.²⁹ It reported that a number of training sessions were held in 2018, including a follow-up Geographic Information System (GIS) training delivered by HALO Trust staff for NMAC, the RMAO, and the SLA Humanitarian Demining Units, with a focus on developing new skills using Esri ArcGIS online software for the creation of maps and operational dashboards. It had budgeted for

further information management capacity development initiatives in 2019, with a focus on recording and display of clearance data during ongoing tasks and training in the use of a prediction tool, developed by HALO, to assist the NMAC with end-state planning.³⁰

MAG reported that the number of meetings held to update the IMSMA database increased in 2018, with weekly meetings frequently held with the RMAO to ensure that database entries and newly identified SHAs were recorded accurately. A transition to the use of IMSMA Core software with assistance from the Geneva International Centre for Humanitarian Demining (GICHD) is also planned for 2020.³¹

In compliance with its APMBC obligations, Sri Lanka submitted an initial Article 7 transparency report, which appears to cover the period from 2002 up until August 2018, and a subsequent annual updated report with information current as at April 2019.³² Both reports reflect considerable progress in the quality of reporting, although challenges remain.

PLANNING AND TASKING

At the request of the NMAC, Sri Lanka's National Mine Action Strategy for 2016–20 was reviewed in April 2018 in a multi-stakeholder workshop facilitated by the GICHD, and in consultation with operators and the SLA. The reviewed strategy was officially re-launched at an event in Colombo in March 2019, attended by representatives of all mine action stakeholders, government officials, civil society, and international donor governments.

As stated, the strategy sets the goal of clearing all mines by end 2020, and contains the following strategic objectives:

1. The remaining mine/ERW problem is addressed using the most appropriate methodologies and tools.
2. Mine/ERW safe behaviour among women, girls, boys and men is promoted.
3. The needs of mine/ ERW victims are determined and met and victims are integrated into the society.
4. Sri Lanka complies with its international convention obligations.
5. Long-term residual contamination is effectively managed with appropriate and sustainable national capacities.
6. Sri Lanka mine action sector can access good quality information for its strategic and operational decision-making.³³

The initial strategy set a target of the release of 6.5km² of contamination by clearance and technical survey per year.³⁴ This target increased however to 9km² released through clearance and technical survey per year in the revised version of the strategy published in September 2018 (but only finalised in 2019).³⁵ The revised strategy states that "completion of clearance at the end of 2020 will only be possible if considerably more funding is made available, allowing all five operators to expand to their maximum capacity".³⁶

The strategy commits the government of Sri Lanka to ensure that relevant plans are in place to ensure effective management of residual contamination.³⁷ It sets out that the NMAC will lead efforts to plan for a transitional phase, a process which will involve the SLA, relevant government ministries, and civil society, noting that post-completion roles and responsibilities for management of residual contamination must be clarified, transparent, and communicated to all relevant stakeholders. It also commits the government and mine action operators to develop strategies for the demobilisation of deminers as completion approaches, in order to enable them vocational training and other employment prospects.³⁸

Sri Lanka's mine action programme has a well-developed prioritisation system. The primary priority is the clearance of land for resettlement of displaced persons, where it is essential that areas used for livelihoods are cleared simultaneously. According to the NMAC, despite marking of contaminated areas and sustained risk education, returnees are likely to enter contaminated areas, especially agricultural areas, to meet their basic livelihood needs. As such, socio-economic pressures and livelihood activities are vital considerations in the prioritisation process in relation to resettlement plans.³⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

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. Input on suggested changes was subsequently provided by all stakeholders in the second quarter of 2018 and a follow-up workshop was held in April 2018, facilitated by the GICHD, to discuss proposed revisions. As at August 2018, however, the subsequent expected revised version of the NMAS had yet to be made public and the previous version remained in place.⁴⁰

The HALO Trust reported increased land release output in 2018 due to a number of improvements in methodology and standing operating procedures (SoPs). HALO Trust said these included more deminers carrying out raking, which HALO Trust referred to as "REDS" or "Rapid Excavation and Detection System", and a corresponding decrease in the number of deminers using full manual excavation. The REDS method, HALO stated, had a higher clearance rate of nine to twelve square metres per deminer per day, compared to seven to nine square metres per deminer doing full manual excavation methods.⁴¹

The number of teams using the REDS method increased from 16 at the start of the year to 25 by December 2018. Improvements to the REDS methodology were also made during the year, expanding the technique's application from a 1.2-metre-wide demining lane to a 3-metre-wide lane. The rationale for the change was that a deminer working over a wide lane would result in more efficient use of time and energy, and, as such, the increase to 3-metre-wide lanes was expanded to all REDS teams in June, following trials carried out in May.⁴²

The HALO Trust also reported an increase in mechanical clearance outputs from 2017 to 2018 following research and development in ground preparation and spatial management. It reported a 70% increase in mechanical clearance rates where a PrimeTech 300D tiller and "earth bunds" to facilitate simultaneous deployment of machines and manual demining are used.⁴³ The tiller is a remote-controlled armoured machine, designed to withstand any detonations. The PrimeTech tills (ploughs) the soil first, then an excavation machine moves the tilled soil into a cleared area where it is spread out for manual inspection by raking. Tilled soil can be excavated and manually inspected much faster than non-tilled soil.⁴⁴

According to the NMAC, external QA and QC were conducted in 2018 as in previous years.⁴⁵ The HALO Trust and MAG confirmed that NMAC continued QA/QC in 2018, with completed areas sampled during post-clearance inspection prior to handover to local communities.⁴⁶ Final QA checks of post-clearance inspection had been occurring within one month of HALO Trust's submission of completion reports, the organisation said, and approval of minefield execution plans often occurred within the same day of submission.⁴⁷

OPERATORS

In 2018, demining continued to be 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, on average, HALO employed 683 operations personnel per month in 2018, a slight increase from 654 operations personnel per month in 2017.⁴⁸ With predicted increased donor funding, HALO planned to recruit and deploy an additional eight manual teams and five mechanical teams in 2019, resulting in a workforce of more than 800 staff.

MAG's capacity increased in 2018 to 18 manual clearance teams, up from 15 in 2017, and nine mechanical teams, an addition of one from the previous year, as a result of increased funding. Highly encouragingly, MAG reported that it was increasing its capacity from 18 manual clearance teams to 36 in 2019 as a result of increased funding, and that, as a consequence, its capacity was set to double in a very short time.⁴⁹

According to the NMAC, in 2018, the SLA's demining unit deployed a total of 380 personnel in demining operations, which was a slight decrease from the 418 employed in 2017. DASH's demining personnel remained at 365 in 2018, but with a decrease in the number of demining staff deployed by its subcontractor, SHARP, which fell by more than half to 50.⁵⁰

OPERATIONAL TOOLS

In 2018, The HALO Trust reported that as at December 2018, a total of nine mechanical assets were deployed in operations, including five front-end loaders, one tracked Caterpillar, one JCB excavator, one Prime Tech tiller, and one Beach Tech machine. This increase in capacity compared to previous years was enabled by greater donor funding and more use of machines to clear mine lines in the Muhamalai minefield. The HALO Trust planned to purchase several additional mechanical assets during 2019.⁵¹

According to the NMAC, the SLA reportedly deployed seven mechanical assets and eleven mine detection dogs in 2018.⁵² MAG reported deploying nine mechanical teams, including excavators, mini-excavators, and front-end loaders for vegetation clearance and ground preparation to facilitate clearance.⁵³

DEMINER SAFETY

According to NMAC, a total of six persons were involved in demining accidents in 2018: four injured in separate incidents in Trincomalee, Kilinochchi, and Jaffna districts, and two deminers killed in an incident in Mullaitivu district. NMAC informed Mine Action Review that as per Sri Lanka's National Mine Action Standards, investigations were conducted shortly after each incident and lessons learned were shared as part of awareness raising efforts by NMAC with the organisations concerned.⁵⁴

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of nearly 4.8km² of anti-personnel mined area was reported released in 2018: more than 3.46km² through clearance, reduction of nearly 1.3km² through technical survey, and close to 0.01km² cancelled through non-technical survey.⁵⁵

SURVEY IN 2018

A total of 1.3km² was reportedly released through survey in 2018: 7,590m² cancelled through non-technical survey in 2018, along with almost 1.3km² reduced through technical survey.⁵⁶ This compared with 2017, when a total of close to 2.5km² was released through survey (0.96km² cancelled and 1.54km² reduced).⁵⁷

According to the NMAC, a continued decrease in survey output was a result of the re-survey which was completed in early 2017. As a result, there were no area tasks cancelled through survey in 2018, and partial cancellations within tasks rarely happened during the year, it said.⁵⁸ MAG reported that a greater accuracy in defining new SHAs through non-technical survey also contributed to lesser cancellation and area reduction during the year.⁵⁹ The HALO Trust did not report any cancellation through non-technical survey in 2018. Three tasks were identified for cancellation but due to restricted access caused by flooding, cancellation was postponed until 2019.⁶⁰

The HALO Trust also reported that a small increase in area reduced through technical survey in 2018 of just over 72,100m² was due to the nature of the tasks worked on in 2018, which included more SLA tasks where distinct and

clean minelaying patterns were more likely to occur, thereby increasing opportunities for reduction through technical survey.⁶¹ HALO Trust also reported identifying and surveying nine new tasks in 2018 with a total size of 193,776m².⁶² MAG also reported identifying 40 CHAs in 2018, with a total size of 743,695m² in Mannar, Mullaitivu, Trincomalee, and Vavuniya.⁶³

MAG reported a decrease in the amount of area reduced through technical survey in 2018, as the clearance to technical survey ratio shifted from 45:55 to 60:40 during the year. Additionally, the programme worked predominantly on newer, more accurate SHAs identified in the re-survey in 2017.⁶⁴

Table 2: Cancellation of mined area through non-technical survey in 2018⁶⁵

Province	Operator	Area cancelled (m ²)
Mannar	MAG	6,359
Trincomalee	MAG	1,231
Total		7,590

Table 3: Reduction of mined area through technical survey in 2018⁶⁶

District	Operator	Area reduced (m ²)
Anuradhapura	Sri Lanka Army	45,025
Jaffna	Delvon Assistance for Social Harmony	2,440
	HALO Trust	205,467
Kilinochchi	Delvon Assistance for Social Harmony	129,417
	HALO Trust	44,163
	SHARP	67,260
Mannar	MAG	411,294
Mullaitivu	Delvon Assistance for Social Harmony	100,473
	HALO Trust	11,006
	MAG	116,410
	Sri Lanka Army	30,929
Puttalam	Sri Lanka Army	472
Trincomalee	MAG	54,373
	Sri Lanka Army	2,780
Vavuniya	Delvon Assistance for Social Harmony	74,761
Total		1,296,270

CLEARANCE IN 2018

More than 3.46km² of mined area was reportedly cleared in 2018, with a total of 31,323 anti-personnel mines, and 85 anti-vehicle mines destroyed.⁶⁷ This compared with 2017, when more than 3.2km² of mined area was reportedly cleared.⁶⁸

Table 4: Mine clearance in 2018⁶⁹

District	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Ampara	Sri Lanka Army	1	13,530	72	0	0
Anuradhapura	Sri Lanka Army	1	26,037	3	0	3
Jaffna	DASH	1	22,165	987	0	10
	HALO Trust	7	89,729	145	1	168
	Sri Lanka Army	2	45,558	72	0	276
Kilinochchi	DASH	11	280,809	2,198	41	927
	HALO Trust	14	1,506,703	9,138	31	2,214
	SHARP	5	215,934	3,432	12	1,570
	Sri Lanka Army	4	90,384	2,052	0	51
Mannar	MAG	31	519,916	2,458	0	152
Mullaitivu	DASH	11	108,855	4,672	0	3,342
	HALO Trust	4	117,202	191	0	7
	MAG	6	80,099	769	0	4
	Sri Lanka Army	5	137,809	1,938	0	75
Polonnaruwa	Sri Lanka Army	1	5,825	2	0	0
Puttalam	Sri Lanka Army	1	17,761	815	0	0
Trincomalee	MAG	8	113,103	600	0	9
	Sri Lanka Army	1	27,123	1,441	0	2
Vavuniya	DASH	3	45,972	338	0	16
Totals		117	3,464,514	31,323	85	8,826

AP = Anti-personnel AV = Anti-vehicle

The HALO Trust reported an increase of just over 410,400m² of anti-personnel mine clearance in 2018 compared with the previous year, which it attributed to an increase in the average number of teams deployed, from 61 to 65, with an increase in donor funding, along with a number of improvements in land release methodology and standard operating procedures that resulted in increased efficiency (see section on land release methodology above).⁷⁰ The number of anti-personnel mines destroyed by HALO Trust during clearance also increased significantly, from nearly 6,600 in 2017 to almost 9,500 in 2018.⁷¹

MAG also reported increased clearance output in 2018, by a smaller margin of just over 80,400m², which it said was due to the introduction of an additional mechanical asset for ground preparation and vegetation removal and three additional mine action teams. The number of anti-personnel mines MAG reported clearing more than doubled, however, from just over 1,700 in 2017 to over 3,800 in 2018.⁷²

In addition, the HALO Trust reported 299 anti-personnel mines were destroyed during explosive ordnance disposal (EOD) spot tasks in 2018, along with 2 anti-vehicle mines, and 69 items of UXO.⁷³

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR SRI LANKA: 1 JUNE 2018
↓
ARTICLE 5 DEADLINE: 1 JUNE 2028
ON TRACK TO MEET ARTICLE 5 DEADLINE: YES
CURRENT LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (MAPUTO +15 POLITICAL DECLARATION ASPIRATION): HIGH

Table 5: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	3.46
2017	3.25
2016	2.35
2015	3.52
2014	3.75
Total	16.33

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 far in advance of this deadline, at the latest by the end of 2021.

The HALO Trust and MAG have both reported that meeting the end-2020 goal is an ambitious target which will require additional funding and capacity.⁷⁴ While there were a number of positive developments towards this goal during the year, a significant set-back was that the anticipated increase in capacity of the SLA demining units did not materialise in 2018 as was hoped. NMAC additionally also continued to be under-resourced.⁷⁵

MAG had hoped 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. However, it reported that nine CHAs with a total size of over 182,000m² had been newly identified in Trincomalee in 2018–19, and that as at August 2019, clearance was ongoing and expected to continue into 2020.⁷⁶

The HALO Trust reported that, in coordination with NMAC and its RMAO, all accessible minefields were expected to be cleared in Jaffna district by the end of 2019, a highly significant achievement given the level of contamination. The HALO Trust stated that while it did not have permission as at August 2019 to conduct clearance inside the High Security Zone, it was continuing to pursue a collaboration with the SLA to support further handover of cleared areas to local communities. At the same time, it was continuing to focus operations on the Muhamalai minefield, along with other tasks in southern Kilinochchi district and northern Mullaitivu district.⁷⁷

It also reported that with an expected increase in donor funding, HALO can complete its allocated clearance tasks by the end of 2020. However, it noted that HALO will likely need to absorb tasks from other organisations to compensate for shortfalls and that key discussions on this issue will be required across the mine action sector.⁷⁸

MAG cautioned that its community liaison teams alone had confirmed an additional 21 hazardous areas with a size of over 486,900m² in the first seven months of 2019, in addition to what was identified in 2018. As a result, MAG's teams would need to work at a fully increased capacity until 2021 to meet the current allocations, it said. If funding support is stepped up, however, the timeframe could be reduced. Without this increase, reaching the 2020 national goal will not be likely, MAG said.⁷⁹

At the same time, the re-launch of the National Mine Action Strategy in March 2019 and the government of Sri Lanka's renewed commitment to becoming mine free by 2020, has attracted new attention from the international donor community and operators reported receiving increased funding in 2019.⁸⁰

- 1 Email from Sasi Jalatheepan, Deputy Director, NMAC, 11 August 2019; and Article 7 Report, submitted in 2019, p. 9. The Article 7 report states that the amount of suspected hazardous area remaining was 1,392,454m², but still reports total contamination as 24,002,670m², which is consistent with Sri Lanka's reporting to Mine Action Review that the size of the remaining amount of SHA was in fact 1,575,237m². The Article 7 report contains a number of other inconsistencies and mathematical errors.
- 2 Article 7 Report, submitted in 2019, p. 11. There are discrepancies and inconsistencies in the figures reported in the Article 7 report on the projections for cleared area not included in IMSMA; area to be cancelled; and area to be reduced versus the total estimate of remaining contamination based on these projections.
- 3 Emails from Mahinda Bandara Wickramasingha, Assistant Director Operations, Quality Management, and Planning, Chairman Accreditation Committee, NMAC, 8 and 9 October 2018.
- 4 Emails from Sasi Jalatheepan, NMAC, 11 August 2019 and Beth Lomas, MAG, 22 August 2019; and Article 7 Report, submitted in 2019, p. 9.
- 5 Email from Sasi Jalatheepan, NMAC, 11 August 2019.
- 6 Email from Beth Lomas, Programme Support Coordinator, South and South-east Asia, MAG, 26 July 2019.
- 7 Email from Beth Lomas, MAG, 22 August 2019.
- 8 Article 7 Report, submitted in 2019, p. 5.
- 9 Email from Alistair Moir, MAG, 27 September 2017.
- 10 Email from Alistair Moir, MAG, 8 August 2018.
- 11 Interviews with demining operators, Colombo, 29 March–2 April 2010; and with Maj. Pradeep Gamage, Officer-in-Charge, North Jaffna Humanitarian Demining Unit (H DU), Jaffna, 3 April 2007.
- 12 Ministry of Prison Reforms, Rehabilitation, Resettlement, and Hindu Religious Affairs, "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6.
- 13 Ibid.; and interview with Rob Syfret, Operations Manager, HALO Trust, in Kilinochchi, 12 September 2016.
- 14 Email from Valon Kumnova, HALO Trust, 11 April 2014; and "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6.
- 15 "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 6.
- 16 Email from Matthew Hovell, Regional Director, HALO Trust, 30 September 2018.
- 17 Article 7 Report, submitted in 2019, p. 12.
- 18 "Sri Lanka National Mine Action Strategy 2016–2020", May 2016, p. 9.
- 19 Ibid., p. 22.
- 20 Initial Article 7 Report, submitted in 2018, p. 13; and Article 7 Report, submitted in 2019, p. 12.
- 21 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 6.
- 22 Ibid.
- 23 Emails from Belinda Vause, Programme Manager, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July 2019.
- 24 Ibid.
- 25 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 26 Email from Beth Lomas, MAG, 26 July 2019.
- 27 36 Email from Alistair Moir, MAG, 8 August 2018.
- 28 Emails from Bartholomew Digby, HALO Trust, 5 March 2018; Alistair Moir, MAG, 8 August 2018 and 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017.
- 29 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 30 Ibid.
- 31 Email from Asa Massleberg, GICHD, 5 September 2019.
- 32 Neither report specifies the date submitted or precise reporting period.
- 33 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 11.
- 34 Ibid., p. 13.
- 35 "Sri Lanka National Mine Action Strategy 2016–2020", Reviewed version, September 2018, p. 11.
- 36 Ibid., p. 4.
- 37 Ibid., p. 1.
- 38 Ibid., p. 17.
- 39 Article 7 Report, submitted in 2019, p. 3.
- 40 Emails from Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July 2019.
- 41 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 42 Ibid.
- 43 The "bund" system, HALO Trust reported, involves the creation of a soil mound, or "bund", using mechanical assets to create a natural barrier within a mechanical task to separate two areas for work, which decreases the safety distance required by the International Mine Action Standards (IMAS) and allows for simultaneous mechanical clearance and raking. Email from Belinda Vause, HALO Trust, 9 August 2019.
- 44 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 45 Email from Sasi Jalatheepan, NMAC, 11 August 2019.
- 46 Emails from Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July 2019.
- 47 Email from Bartholomew Digby, HALO Trust, 5 March 2018.
- 48 Ibid.
- 49 Email from Beth Lomas, MAG, 26 July 2019.
- 50 Email from Sasi Jalatheepan, NMAC, 11 August 2019.
- 51 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 52 Email from Sasi Jalatheepan, NMAC, 11 August 2019.
- 53 Email from Beth Lomas, MAG, 22 August 2019.
- 54 Ibid.
- 55 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.
- 56 Emails from Sasi Jalatheepan, NMAC, 11 August 2019; Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July 2019.
- 57 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.
- 58 Email from Sasi Jalatheepan, NMAC, 11 August 2019.
- 59 Email from Beth Lomas, MAG, 26 July 2019.
- 60 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 61 Ibid.
- 62 Ibid.
- 63 Email from Beth Lomas, MAG, 26 July 2019.
- 64 Ibid.
- 65 Emails from Sasi Jalatheepan, NMAC, 11 August 2019; Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July and 22 August 2019.
- 66 Emails from Sasi Jalatheepan, NMAC, 11 August 2019; Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July and 22 August 2019.
- 67 Ibid.
- 68 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.
- 69 Emails from Sasi Jalatheepan, NMAC, 11 August 2019; and Beth Lomas, MAG, 26 July and 22 August 2019; and Belinda Vause, HALO Trust, 9 August 2019.
- 70 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 71 Ibid.
- 72 Email from Beth Lomas, MAG, 26 July 2019.
- 73 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 74 Emails from Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July 2019.
- 75 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 76 Email from Alistair Moir, MAG, 8 August 2018; and Beth Lomas, MAG, 22 August 2019.
- 77 Email from Belinda Vause, HALO Trust, 9 August 2019.
- 78 Ibid.
- 79 Email from Beth Lomas, MAG, 26 July 2019.
- 80 Emails from Belinda Vause, HALO Trust, 9 August 2019; and Beth Lomas, MAG, 26 July 2019.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 APRIL 2023 NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

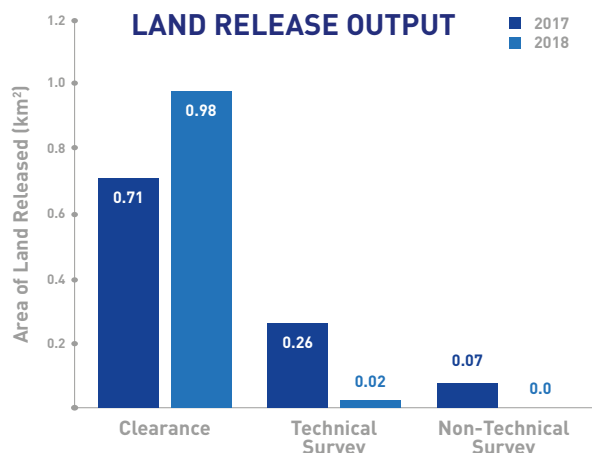
MEDIUM, 10^{km²}
(ESTIMATED)

AP MINE
CLEARANCE IN 2018

0.98^{km²}

AP MINES
DESTROYED IN 2018

31



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **MEDIUM**

KEY DEVELOPMENTS

In November 2018, Sudan was granted a four-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline of 1 April 2019, setting a new deadline for completion of clearance by 1 April 2023. While the extension request is of good quality and sets concrete annual targets and projections for survey and clearance to reach completion by 2023, Sudan did not meet its land release targets in 2017–18. In 2018, mine clearance output increased slightly, though with a decrease in the number of anti-personnel mines destroyed.

Positively, Sudan reported improvements during the year in the security situation in both Blue Nile and South Kordofan states, the two most heavily contaminated regions in Sudan. Sudan's ability to meet its extended deadline will be highly dependent on security and access to these areas, as well as on resources.

On 4 April 2018, Kassala state was declared free of mines and explosive remnants of war (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.
- Sudan should produce two updated workplans, the first by 30 April 2020, with revised estimates of contamination and budgetary requirements, in accordance with the terms of Sudan's latest extension.
- 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 on progress in implementing the resource-mobilisation strategy in its latest extension request, including how it intends to fill the considerable funding gap it has identified.

- Sudan should continue its efforts to encourage international operators to return, which could significantly boost mine action capacity and output.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	Sudan has a good understanding of contamination, although the vast majority of recorded contamination is suspected hazardous area, which likely will result in significant cancellation or reduction through survey. A major exception, however, are the states of South Kordofan and Blue Nile, where insecurity has prevented access in recent years and contamination is expected to be high.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	7	Sudan's national mine action programme is entirely nationally owned. It benefits from experienced national mine action centre staff, as well as from experienced national mine action operators. The government has notably provided consistent funding for mine action at US\$2million per year.
GENDER (10% of overall score)	6	Gender is said to be mainstreamed in the national mine action strategic plan for 2019–23 and in the national mine action standards, with an emphasis on gender-balanced survey teams and the employment of women. At the same time, Sudan acknowledges difficulties in employing women in operational roles due to local customs and traditions.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	8	Sudan's Information Management System for Mine Action (IMSMA) software is being upgraded to the New Generation version, with assistance from the Geneva International Centre for Humanitarian Demining (GICHD). Significant efforts to correct errors in the database were made during the year, including ongoing efforts to incorporate data from Abyei. Sudan's increased transparency in reporting and communication, with the aim of facilitating international cooperation and assistance, is evident.
PLANNING AND TASKING (10% of overall score)	7	A new national mine action strategic plan for 2019–23 has been finalised and is awaiting endorsement. Sudan's Article 5 deadline extension request is realistic, achievable, and contains clear targets and resources required to reach completion. However, the security situation in Blue Nile and South Kordofan has prevented the deployment of mine action teams to heavily contaminated areas. Access to these states increases as security improves.
LAND RELEASE SYSTEM (20% of overall score)	7	A review of Sudan's National Mine Action Standards was completed and the revised standards were awaiting endorsement as at May 2019.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	Sudan did not meet its Article 5 extension request targets for 2018; however, the forthcoming revised national mine action strategic plan will set new annual milestones for survey and clearance. The primary factors which will determine Sudan's ability to comply with its Article 5 deadline are security and access to Blue Nile and South Kordofan states and a funding gap of an estimated \$58 million.
Average Score	6.8	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- Sudanese National Mine Action Authority (NMAA)
- Sudan National Mine Action Centre (NMAC)

NATIONAL OPERATORS

- National Units for Mine Action and Development (NUMAD)
- JASMAR for Human Security
- Friends for Peace and Development Organization (FDPO)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2018, Sudan had a total of 94 areas suspected or confirmed to contain anti-personnel mines, covering a total of just over 18.9km². According to the Sudanese National Mine Action Centre (NMAC), of this total, 52 areas with a size of nearly 2.4km² are confirmed contamination, while anti-personnel mine contamination is suspected in a further 42 areas with a total size of just over 16.5km².¹ An additional 29 areas covering nearly 5km² are suspected to contain only anti-vehicle mines, as set out in Table 1.²

According to NMAC, during clearance operations in 2018, three areas suspected to contain anti-personnel mines with a total size of 10,400m² were 'closed', while six new areas with a size of 557,798m² were registered, of which three areas with a size of 362,245m² were 'closed' while three areas with a size of 195,553m² remained opened. It was also discovered that two areas thought to be contaminated with UXO contained anti-personnel mines and were reclassified. NMAC stated that the difference between contamination remaining at the end of 2017 and that at the end of 2018 was 185,153m² which was a difference in the size of contamination remaining, not the number of areas to be addressed.

This is a slight increase in the overall size of contamination recorded as at the end of 2017, when Sudan had 94 mined areas covering a total of just over 18.7km².³ An additional 27 areas were suspected to contain only anti-vehicle mines, with a total size of nearly 5km².⁴

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.⁵ 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.

At the end of 2018, of Sudan's mine- and ERW-affected states, three contained anti-personnel mines: Blue Nile, South Kordofan, and Western Kordofan. Blue Nile and South Kordofan were believed to be the most heavily contaminated, as set out in Table 2.⁶ According to NMAC, a total of 557,798m² of anti-personnel mine contamination was added to the database in 2018.⁷ No mines have been reported in Darfur, where the main threat is from UXO.⁸

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 2016.⁹ On 4 April 2019, another milestone was reached with the declaration of Abu Karshola town in South Kordofan state, once heavily contaminated with mines and ERW, free of known contamination, a positive indication of increasing access and improvements in the security situation.¹⁰

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.¹¹ As at April 2019, a total of 3,582 hazardous areas had been registered in the Information Management System for Mine Action (IMSMA) database since 2002, of which 3,376 were reported to have been released through various clearance methods, leaving a total of 206 hazardous areas with a size of just over 26.1km² to be addressed.¹²

In 2018, the extent of mine and ERW contamination in the border area of Abyei between Sudan and South Sudan remained not fully known due to ongoing restrictions on access.¹³

Table 1: Mined area (at end 2018)¹⁴

Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
Anti-personnel mines	52	2,402,260	42	16,516,788
Anti-vehicle mines	0	0	29	5,000,082
Totals	52	2,402,260	71	21,518,870

CHAs = Confirmed hazardous areas SHAs = Suspected hazardous areas

Table 2: Anti-personnel mined area by state (at end 2018)¹⁵

State	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Blue Nile	4	219,663	5	841,683	9	1,061,346
South Kordofan	48	2,182,597	34	15,653,114	82	17,835,711
Western Kordofan	0	0	3	21,991	3	21,991
Totals	52	2,402,260	42	16,516,788	94	18,919,048

NEW CONTAMINATION

NMAC reported that there were no reports of the use of anti-personnel mines, including of an improvised nature, in 2018.¹⁶

EXPLOSIVE REMNANTS OF WAR AND CLUSTER MUNITION REMNANTS

Sudan also has a significant problem with ERW, including very limited contamination from cluster munition remnants, primarily as a result of the more than 20 years of civil war that led to the Comprehensive Peace Agreement in 2005 and South Sudan's independence in July 2011 (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Sudan for further information). While no mines have been found in Darfur, ERW in Darfur includes unexploded air-delivered bombs, rockets, artillery and mortar shells, and grenades.¹⁷

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Sudanese National Mine Action Authority (NMAA) and NMAC manage Sudan's mine action programme. Upon the independence of South Sudan, NMAC assumed full ownership of national mine action with responsibility for coordinating all mine clearance, including accreditation and certification of clearance agencies. After starting an emergency programme in 2002, in 2015 the UN Mine Action Service (UNMAS) resumed a lead role in supporting UN mine action efforts in Sudan and provided assistance and technical support to NMAC following an invitation from the Sudanese Government.¹⁸

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.¹⁹ 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.²⁰

In Darfur, under the umbrella of UNAMID, UNMAS works under the name of the Ordnance Disposal Office (ODO) in direct support of UNAMID priorities.²¹ UN Security Council Resolution 2429 (2018) calls for the gradual withdrawal of

UNAMID by 2020. As such, UNMAS reported that some of ODO's responsibilities in Darfur were being handed over to UNMAS Sudan, and that it was to take over ODO's role in ERW clearance, risk education, and victim assistance as of 2019 in North, South, East, and West Darfur states, while ODO would focus its responsibilities in the area of Jabal Marrah.²²

In 2018, the Government of Sudan contributed US\$2 million to the running costs of NMAC and for demining activities.²³ It has consistently funded the national mine action programme at this level for the past three years, doubling its funding for mine action from \$1 million in 2015, and up from almost \$0.5 million in 2014.²⁴ NMAC expected to receive the same funding in 2019.²⁵

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 meet the 2023 deadline.²⁶ 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.²⁷

GENDER

In 2019, NMAC reported that gender is mainstreamed in the national mine action strategic plan for 2019–23 and in the national mine action standards. It stated that under those standards, all survey and community liaison teams are to be gender balanced, and that women and children are consulted during survey and community liaison activities. It said that gender is also taken into account in the prioritisation, planning, and tasking of survey and clearance activities, as per the national mine action standards.²⁸

NMAC says it always encourages women to apply for employment in the national programme, whether at the office level or in the field. Positively, it reported that almost 40% of NMAC staff employed at the managerial or supervisory levels are women. However, it noted that there were few women employed in operational roles in the survey and clearance teams due to "local customs and traditions".²⁹

INFORMATION MANAGEMENT AND REPORTING

In May 2019, NMAC informed Mine Action Review that it was using both the IMSMA legacy version in parallel with the newer version, IMSMA-NG.³⁰ In 2018, NMAC began a process of upgrading the IMSMA software to the newer New Generation version, with assistance from the Geneva International Centre for Humanitarian Demining (GICHD). Significant efforts to correct errors in the database were also

undertaken.³¹ The database does not contain information on the disputed Abyei area.³² However, UNMAS informed Mine Action Review in June 2019 that UNISFA was working with NMAC on database sharing and had co-located an IMSMA officer within the NMAC office in Khartoum to help share historical data, while it was also providing NMAC a monthly report on activities in Abyei.³³

PLANNING AND TASKING

In March 2018, Sudan submitted a request for an extension of its APMBC Article 5 clearance deadline for a period of four years to 1 April 2023. The request contains a detailed workplan with annual survey and clearance projections on a state-by-state basis (see Article 5 Compliance section).

In May 2019, NMAC reported that a new national mine action strategic plan for 2019–23 had been finalised and was waiting approval. The plan aims at fulfilling Sudan's APMBC obligations, and was developed in coordination with the GICHD to replace its previous national mine action strategy for 2016–19.³⁴ NMAC stated that detailed annual workplans had been developed for each year under the new strategic plan.³⁵

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In May 2019, NMAC reported that a review of Sudan's National Mine Action Standards (NMAS), reportedly ongoing since 2015, had been completed and the revised standards were awaiting endorsement.³⁶

NMAC confirmed that in 2018, QA and quality control activities were carried out according to the NMAS.³⁷

(FPDO). In 2018, NMAC reported that a total of 22 mine action teams were operational (7 manual clearance teams, 11 multi-task teams, 3 mine detection dog teams, and 1 route verification and clearance team). It reported that the deployment of additional teams was made possible in newly accessible areas in Blue Nile and South Kordofan states.³⁸

In Darfur, in 2018, clearance operations continued to be conducted by commercial operator Dynasafe (DML) and NUMAD.³⁹

OPERATORS

In 2018, no international non-governmental organisation (NGO) was conducting demining operations in Sudan. National demining operators are JASMAR for Human Security, National Units for Mine Action and Development (NUMAD), and the Friends for Peace and Development Organization

OPERATIONAL TOOLS

As noted above, demining is carried out primarily using manual clearance, as well as through the use of mine detection dog teams.

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Sudan's Article 5 deadline extension request is to clear all mined areas and ERW-contaminated areas by 1 April 2023. Towards this goal, overall land release rose dramatically in 2018, to a total of nearly 17.4km² mine and battle area released, up from just under 3.9km² released in total in 2017.⁴⁰ Of this, just over 1km² of mined area was released through technical survey and clearance. No cancellation was reported in 2018.

LAND RELEASE OUTPUTS IN 2018

SURVEY IN 2018

A total of just over 21,000m² was reduced through technical survey in 2018. No areas were reported released through cancellation, and a total of just under 558,000m² was confirmed. This is a significant decrease in output from 2017, when nearly 335,000m² was released through survey, including close to 260,000m² reduced through technical survey, just under 75,000m² cancelled through non-technical survey, and six areas with a size of 157,000m² confirmed as mined.⁴¹

CLEARANCE IN 2018

According to NMAC, nearly 980,000m² was released through clearance in 2018, almost all by NUMAD, as in the previous year. This was an increase from 2017, when just over 707,330m² was released through clearance.⁴² A total of 689,898m² was cleared manually and a further 289,550m² by MDD teams in 2018.⁴³

Despite the increase in clearance output in square metres, only 31 anti-personnel mines and 13 anti-vehicle mines were destroyed during mine clearance in 2018.

Table 3: Mine clearance in 2018⁴⁴

State	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed
Blue Nile	NUMAD	0	0	0	0
	JASMAR	0	5,140	0	1
	FPDO	0	4,140	0	1
South Kordofan	NUMAD	1	722,963	0	0
	JASMAR	2	45,529	23	0
	FPDO	0	4,242	0	1
Kassala	NUMAD	5	197,434	8	10
Totals		8	979,448	31	13

AP = Anti-personnel AV = Anti-vehicle

ARTICLE 5 DEADLINE AND COMPLIANCE

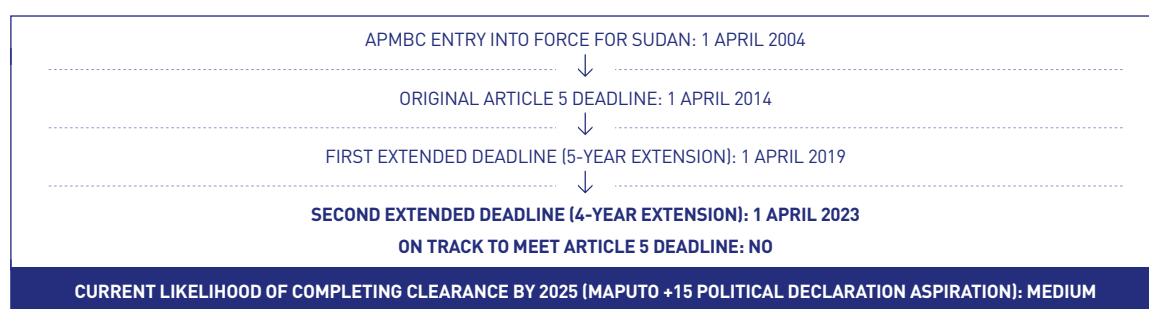


Table 4: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	0.98
2017	0.71
2016	1.04
2015	0.42
2014	2.47
Total	5.62

Under Article 5 of the APMBC (and in accordance with the four-year extension granted by states parties in 2018), Sudan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 April 2023.

In March 2018, Sudan submitted a request for a four-year extension of its Article 5 deadline to 1 April 2023. The extension request was notably thorough, generally of good quality, and includes a workplan with annual targets for completion and a revised number of areas in each state it plans to address with a total planned release of 53 CHAs with a size of 26.4km² and 171 SHAs with a size of 22km².⁴⁵ The request does, however, contain some discrepancies in the total amounts of survey and clearance output projections, which require additional clarification.⁴⁶

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.⁴⁷ The request contains detailed projections for Blue Nile state of eight areas with a total size of just over 1km² to be addressed in 2018–20 and 127 areas with a size of just over 23.3km² to be addressed in South Kordofan from 2017–23. 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 21,991m² remain to be addressed, offering conflicting information as to when this will occur.⁴⁸ It also does not contain information on how contamination in Abyei will be cleared.

The workplan foresees a considerable increase in land release output, from a total of 8km² in 2017–18 to 23.4km² in 2018–19. Sudan was asked by the 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.⁴⁹ Concerns were also raised that under the plan for 2019–23, close to 90% of SHAs remaining will be released through survey, and that this percentage is higher than any survey outputs in 2012–16 (averaging close to 74%).⁵⁰

Overall, the primary concern with Sudan's ability to meet its Article 5 extension request deadline remains that it is heavily dependent upon improved security in the heavily affected states of Blue Nile and South Kordofan. A further significant factor which continues to impede Sudan's progress is a lack of clearance capacity formerly provided by international demining operators. Sudan has made numerous requests for technical and logistical support and appeals for the return of international operators' support.

In November 2018, Sudan reported that as a result of enhanced cooperation, both nationally and internationally, in particular stemming from a meeting on Sudan of the APMBC's Committee on the Enhancement of Cooperation and Assistance's "individualised approach" initiative in 2017, a number of positive developments had resulted. This initiative, Sudan reported, alongside nationally convened mine action events and donor field visits to mine-affected areas, had resulted in an increase in earmarked funds to the mine action programme, with some US\$7.1 million in new funding for mine action pledged by the governments of Italy, Japan, the United Kingdom, and the United States.⁵¹

- 1 Email from Hatim Khamis Rahama, Technical Advisor, NMAC, 1 May 2019; and Article 7 Report (for 2018), Form C.
- 2 Statement of Sudan, APMBC Intersessional Meetings, Geneva, 22 May 2019.
- 3 Emails from Hatim Khamis Rahama, NMAC, 7 August 2019 and 13 May 2018. According to NMAC, during clearance operations in 2018, three areas suspected to contain anti-personnel mines with a total size of 10,400m² were "closed". Six new areas with a size of 557,798m² were registered, of which three (covering a total of 362,245m²) were "closed" while the other three (covering a total of 195,553m²) remained opened. It was also discovered that two areas thought to be contaminated with UXO actually contained anti-personnel mines and were reclassified as mined areas. NMAC stated that the difference between contamination remaining at the end of 2017 and that at the end of 2018 was 185,153m².
- 4 Email from Ahmed Elser Ahmed Ali, Chief of Operations, NMAC, 9 May 2016.
- 5 Ibid.
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- 27 Ibid., p. 63.
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ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 APRIL 2020
EXTENSION REQUESTED TO 31 DECEMBER 2025

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MEDIUM, 5km²
(ESTIMATED)

AP MINE
CLEARANCE IN 2018

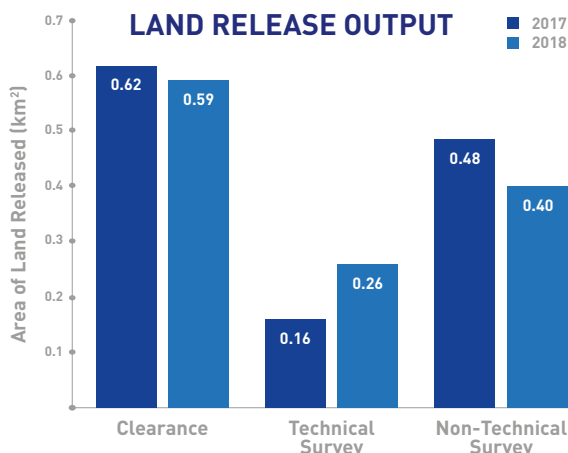
0.59km²

AP MINES
DESTROYED IN 2018

5,013

(including 15 destroyed
during spot tasks)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

In 2018, the Tajikistan National Mine Action Centre (TNMAC) began elaborating what may be Tajikistan's final Article 5 extension request, with assistance from the United Nations Development Programme (UNDP). Tajikistan is requesting a final extension of its deadline to 31 December 2025, but the forecast that this will be enough time to complete clearance is based on a significant expansion in capacity, which has not yet been secured.

Tajikistan also approved a national gender strategy in mine action for 2018–22 in October 2018, elaborated with support

from the Geneva Mine Action Programme (GMAP, now a programme of the Geneva Centre for Humanitarian Demining (GICHD)).

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 where mines remain. Any survey of the border will require agreement and cooperation between both nations.

RECOMMENDATIONS FOR ACTION

- Tajikistan should seek to expand its demining capacity in order to survey its 41 suspected hazardous areas (SHAs) as soon as possible, in order to more accurately determine the extent of mine contamination.
- Tajikistan should commit to provide regular updates to Anti-Personnel Mine Ban Convention (APMBC) states parties on progress in implementing Article 5 during the extension period.
- Tajikistan should consider expanding the humanitarian demining capacity of the Tajik Armed Forces, as well as further exploring the potential to train and deploy Tajik Border Guard 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).

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	5	Tajikistan's baseline of remaining anti-personnel mine contamination is not yet an accurate assessment. Forty-one SHAs have yet to be surveyed, and many confirmed hazardous areas (CHAs) require further survey to more accurately locate and delineate the actual minefield. The extent of mined area on the Uzbek border also has still to be accurately determined.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	7	Tajikistan has strong national ownership of mine action, including the contribution of Ministry of Defence (MoD) clearance teams. There is political will and an enabling environment for Article 5 implementation.
GENDER (10% of overall score)	7	A national gender strategy in mine action for 2018–22, elaborated with support from GMAP, was approved in October 2018. Mine Action data is disaggregated by sex and age, and women and children consulted during community liaison.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	6	TNMAC is in the process of installing Information Management System for Mine Action (IMSMA) Core, with support from the GICHD.
PLANNING AND TASKING (10% of overall score)	7	Tajikistan has a National Strategy on Humanitarian Mine Action 2017–2020, and is developing a strategic workplan for implementation of Article 5, in line with the deadline extension it is requesting to the end of 2025. The GICHD has worked with TNMAC and UNDP to develop PriSMA (the Priority Setting Tool for Mine Action).
LAND RELEASE SYSTEM (20% of overall score)	7	Tajikistan has appropriate national mine action standards in place, and deploys evidence-based land release methodology. It currently lacks sufficient survey capacity, but is slowly developing this.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	Tajikistan cleared nearly 0.6km ² of mined area in 2018. This is less than it had planned to clear, and is substantially less than the average 1.3km ² of clearance per annum foreseen in its deadline extension request. In order to meet planned targets and have any chance of meeting its Article 5 obligations by 2025, Tajikistan must secure funding for additional capacity.
Average Score	6.3	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- Commission for the Implementation of International Humanitarian Law (CIIHL)
- Tajikistan National Mine Action Centre (TNMAC)

NATIONAL OPERATORS

- TNMAC
- Ministry of Defence (MoD), Humanitarian Demining Company (HDC)
- Union of Sappers Tajikistan (UST)

INTERNATIONAL OPERATORS

- Norwegian People's Aid (NPA)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- Organization for Security and Co-operation in Europe (OSCE)
- Tajik Border Guard Forces
- United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

Tajikistan is affected by mines and, to a much lesser extent, explosive remnants of war (ERW), including cluster munition remnants, as a result of past conflicts (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Tajikistan for further information).

At the end of 2018, Tajikistan had 12.1km² of mined area: just over 7.9km² of mine contamination across 154 confirmed hazardous areas (CHAs) and almost 4.2km² across 95 SHAs, as set out in Table 1.¹ The mined areas are located in four provinces.

The overall baseline contamination at the end of 2018 is an increase compared to the end of 2017, which it stood at 7.46km² of CHA and almost 1.35km² of SHA.² This is largely due to 3.25km² of legacy SHA on the Tajik-Uzbek border being added to the baseline of mined area. However, even taking this into account, the difference in figures between mined area as at the end of 2017 and 2018, cannot be satisfactorily explained or reconciled.

Table 1: Anti-personnel mined area by province (at end 2018)³

Province	District	CHA		SHA	
		Nos.	Area (m ²)	Nos.	Area (m ²)
Gorno-Badakhshan Autonomous Region	Darvoz	8	1,169,600	2	20,000
	Vanj	6	908,119	0	0
	Shugnan	3	56,000	0	0
	Ishkoshi	0	0	1	5,000
Subtotals		17	2,133,719	3	25,000
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	91	3,659,698	4	140,000
	Kabodiyon	1	0	0	0
	Shahri	1	30,000	0	0
	Khovaling	2	120,000	1	30,000
Subtotals		136	5,723,491	36	866,000
Sughd Region (Uzbek border)	Asht	0	0	11	610,000
	Ayni	0	0	5	535,000
	Isfara	0	0	20	1,105,000
	Konibodom	0	0	3	165,000
	Panjakent	0	0	13	715,000
	Shahrison	0	0	2	120,000
Subtotals		0	0	54	3,250,000
Central Region	Sangvor	1	50,000	2	50,000
Subtotals		1	50,000	2	50,000
Totals		154	7,907,210	95	4,191,000

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 1999–2001; and the Central Region of Tajikistan was contaminated as a result of the 1992–97 civil war.⁴

A national survey in 2003–05 by the Swiss Foundation for Mine Action (FSD) estimated that mine and ERW contamination extended over 50km².⁵ 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 generating unreliable results. As a result, the sizes of SHAs were miscalculated and their descriptions not clearly recorded.⁶ While most minefield maps/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 through survey and data analysis.⁷

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), in the Central Region, and along the Uzbek border.⁸ 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.⁹

Depending on the weather, 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.¹⁰

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, and it was not comprehensive, being 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.¹¹

While Tajikistan and Uzbekistan settled most of their 1,283km-long border dispute following the collapse of the Soviet Union, certain areas have not yet been delineated and therefore the exact location of mined areas is not known. 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.¹² Most of the mines are believed to be on Uzbek territory,¹³ but there is a possibility that some mines may have been displaced downhill into Tajikistan due to landslides or flooding.¹⁴ The 3.25km² of SHA on the border with Uzbekistan, included in Tajikistan's 2019 extension request,¹⁵ is a rough estimate and the actual extent of any anti-personnel mined area on Tajik territory along this border will only be more accurately established once both countries permit survey and have delimited the border.

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.¹⁶ Any demining operations will require agreement and cooperation between the two nations; as at July 2019, the Tajik Ministry of Foreign Affairs (MoFA) was in negotiation with the Uzbek MoFA regarding survey of the Tajik-Uzbek border.¹⁷

In September 2013, records of 110 (subsequently corrected to 107) previously unrecorded and unsurveyed minefields were made public for the first time, with security constraints said to have prevented survey activities in the past.¹⁸ All are located in the provinces of Khatlon and the GBAO along the border with Afghanistan.¹⁹ Non-technical survey of the minefields began in 2014.²⁰ As at May 2019, 41 unsurveyed SHAs (corresponding to 30 minefield records) were said to remain.²¹ TNMAC plans to complete survey of the remaining unsurveyed minefields by 2023.²² While none of the unsurveyed areas is considered completely inaccessible for the survey (or for subsequent clearance),²³ serious challenges have been reported during survey in accessing the mined areas in mountainous terrain and with one mined area blocking access to a number of others.²⁴

Furthermore, many surveyed minefield records/CHAs do not accurately reflect the reality in the field, as significant time has passed since the minefield records were made and the landscape may have changed in the meantime. Further technical survey/re-survey is therefore required to more accurately locate and delineate the actual mine contamination.

According to Tajikistan, the total size of un-surveyed area is estimated to be 941,000m² (with approximately 11,685 mines) and the total area planned for re-survey is 2,770,557m². Survey and re-survey of these areas will be conducted by Union of Sapers of Tajikistan (UST) and Norwegian People's Aid (NPA). Tajikistan acknowledges the urgency and importance of establishing a clear baseline of anti-personnel mine contamination as soon as possible and in August 2019 TNMAC announced that a survey working group will be established with expert representatives from all key stakeholders and implementing partners, under the guidance and direction of TNMAC. The group will help plan and prioritise survey tasks.²⁵

With the introduction of an arrangement for medical evacuation by helicopter, in collaboration with the Armed Forces, there are no longer any mined areas deemed to be "inaccessible".²⁶ There are, however, mined areas on two islands in the Panj river on the Tajik-Afghan border, one of which is 538,500m² in size and the other 30,000m², which are said to be "non-executable" at the present time. The islands were created by a change in the flow of the river, and it is possible that the river may again change its path and re-connect the islands with the Tajik river bank in the future.²⁷

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Commission for the Implementation of International Humanitarian Law (CIIHL), chaired by the first deputy of the Prime Minister, and containing key representatives from relevant line ministries, acts as Tajikistan's national mine action authority, responsible for mainstreaming mine action in the government's socio-economic development policies.²⁸

In June 2003, the Government of Tajikistan and UNDP established the Tajikistan Mine Action Centre (TMAC) with a view to it becoming a nationally owned programme in the short term,²⁹ though this did not happen until more than ten years later. TMAC was made responsible for coordinating and monitoring all mine action activities.³⁰ Since then, TMAC has acted as the secretariat for the CIIHL to which it reports.³¹

On 3 January 2014, TNMAC was established by government decree to replace TMAC.³² 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.³³ In 2018, UNDP helped TNMAC to elaborate Tajikistan's plan for Article 5 completion. UNDP plans to transfer assets, knowledge, and expertise directly to TNMAC³⁴ with UNDP support due to decrease in 2019.³⁵ In 2016, Tajikistan's Parliament adopted a Law on Humanitarian Mine Action, which covers all aspects of mine action.³⁶

The Ministry of Defence (MoD) plays a significant role in Tajikistan's mine action sector, in particular by conducting demining directly.³⁷ The Organization for Security and Co-operation in Europe Programme Office in Dushanbe (OSCE POiD) has supported the MoD to update its multi-year plan, entitled "Ministry of Defence of the Republic of Tajikistan Co-operation Plan for Humanitarian Demining 2018–2023".³⁸

An agreement on cooperation between the Governments of Tajikistan and Afghanistan was signed in 2014, since when TNMAC has coordinated with the UN Mine Action Centre for Afghanistan (UNMACCA) and Afghanistan's Department of Mine Action Coordination (DMAC) on land release approaches, NMAS, exchange visits, cross-border projects, victim assistance, and risk education.³⁹ Since 2017, this also includes collaboration on quality management (QM).⁴⁰

In 2018, the Government of Tajikistan supported TNMAC coordination activities with funding of US\$53,933.⁴¹ 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.⁴² In total, \$480,000 is allocated annually from Tajikistan's state budget as in-kind contributions.⁴³

GENDER

In September 2017, experts from the Geneva Mine Action Programme (GMAP, now a programme of the GICHD) prepared and submitted to TNMAC a draft of a national gender strategy in mine action for 2018–22. The strategy was approved by TNMAC in October 2018.⁴⁴ Gender in Tajikistan is also addressed by a number of laws and documents, including the national development strategy through to 2030, approved by the parliament on 1 December 2016.⁴⁵

TNMAC reported that women and children are consulted during survey and community liaison activities. As at July 2019, community liaison/non-technical survey teams were not yet gender balanced, but TNMAC plans to diversify survey teams to help reach a wider audience and more sources of information. Relevant mine action data are disaggregated by sex and age.⁴⁶

Women account for around 20% of survey and clearance teams in Tajikistan, and around 25% of managerial/supervisory level positions.⁴⁷ According to its 2019 Article 5 extension request, Tajikistan aims to double its demining capacity, subject to funding.⁴⁸ Such an increase to operational capacity will present an opportunity to build on the lessons learned from fielding female and mixed teams, and to improve the gender balance for deminers in line with Tajikistan's Gender and Diversity Mine Action Strategy.

The MoD's Humanitarian Demining Company (HDC) does not currently have a gender policy or implementation plan. However, the HDC does consult with all groups, including women and children, during survey and community liaison activities. While there is equal access to employment for qualified women and men in the HDC survey and clearance teams, including for managerial level/supervisory positions, in practice women do not apply for these positions and as at August 2019, no women were employed by the HDC.⁴⁹

The HDC deploys conscript soldiers as deminers, with regular MoD personnel overseeing operations. In Tajikistan, military service is compulsory for men and voluntary for women. However, while there are no formal obstacles for women undertaking military service, very few currently choose to do so, which also helps explain the absence of women serving in the HDC. The OSCE Programme Office in Dushanbe regularly emphasises the importance of including women in all aspects of the work and especially as officers and in managerial positions.⁵⁰ TNMAC has acknowledged that it will be a challenge to achieve gender balance as those who currently serve in the military are predominantly male. However it will discuss and prioritise identifying key positions that can be filled by female candidates, such as paramedics and/or QA/QC officers, in addition to seeking to increase female civilian capacity in coordination with other implementing partners.⁵¹

NPA has a gender and diversity policy which is integrated into NPA's Tajikistan project proposals and operations, and gender mainstreaming is a mandatory part of its training activities in Tajikistan. NPA ensures that all groups are included during community consultation activities, and has a gender balanced community liaison team to help ensure this. NPA disaggregates mine action data by sex and age.⁵²

NPA makes an effort to try to employ a gender balanced workforces to the extent that is possible in Tajikistan context, and has men and women employed in key positions. Of NPA's operational staff, 22% are women; and 36% of management/supervisory staff.⁵³

INFORMATION MANAGEMENT AND REPORTING

In 2016, Tajikistan updated its national mine action database to Information Management System for Mine Action (IMSMA) version 6.0.⁵⁴ TNMAC is now installing IMSMA Core, with support from the GICHD,⁵⁵ and expected it to become fully operational in the course of 2019.⁵⁶

Data in the national information management system are accessible to clearance operators, and data collection forms enable collation of necessary data.⁵⁷ Tajikistan submits

annual Article 7 transparency reports and delivers updates on its progress in Article 5 implementation at the APMBC intersessional meetings and meetings of states parties. However, TNMAC should aim to improve its land release terminology and methodology, to make it more consistent with the IMAS, and refer to the amount of mined area cancelled through non-technical survey or reduced through technical survey.

PLANNING AND TASKING

The previous national mine action strategic plan for 2010–15 expired at the end of 2015.⁵⁸ A new National Strategy on Humanitarian Mine Action 2017–2020 was approved by government decree No. 91 on 25 February 2017.⁵⁹

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.⁶⁰

In September 2018, a group was created to prepare Tajikistan’s Article 5 deadline extension request, which included representatives from the Executive Office of the President of Tajikistan, multiple ministries, and the Committee for Emergency Situations and Civil Defense.⁶¹ UNDP also supported the preparation of the extension request.

The annual projections in Tajikistan’s 2019 Article 5 extension request are, however, simplistic, based on average clearance rates, without more detailed analysis of the remaining mined areas. Tajikistan’s extension request projections also assume an increased clearance capacity that Tajikistan has not yet secured.

TNMAC plans to reach an average annual clearance target of more than 1.3km² in order to release nearly 8.85km² of remaining mined area (excluding the Uzbek border) by 2025.⁶² In its operational workplan for 2019, planned clearance output was 1,369,429m²,⁶³ significantly greater than the 0.59km² cleared in 2018.

The 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.⁶⁴ A pilot of PriSMA (the Priority Setting Tool for Mine Action) was conducted from July to September 2017,⁶⁵ and a second version was subsequently developed and piloted.⁶⁶ TNMAC prepared its latest operations plan based on PriSMA and Tajik Border Forces recommendations, 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 those with a smaller number can be surveyed by clearance teams during demining operations); 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).⁶⁷

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Tajikistan’s revised National Mine Action Standards (TNMAS) were approved by decree on 1 April 2017.⁶⁸

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 methodology helps improve the efficiency of survey operations, by confirming areas as mined and more accurately determining the location of mined areas.⁶⁹ It is especially useful, as minefield records are sometimes incomplete or inconsistent due to incorrect coordinates and grid numbering or lack of landmarks/reference points, and there are often few local people to ask about evidence of mines or accidents 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, or flooding.⁷⁰

Since early October 2017, the UST has been conducting non-technical survey with technical survey intervention, in line with the new land release methodology in Tajikistan.⁷¹ Prior to this, UST was only conducting non-technical survey. The use of technical interventions is expected to improve operational efficiency, but it will also slow down the rate of survey by UST of the remaining unsurveyed minefields.⁷²

While in many instances the suspected mined area is cancelled or reduced through survey, 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.⁷³

OPERATORS

In 2018, operational capacity included five military multi-purpose manual teams (four from the MoD HDC and one from the Committee of Emergency and Civil Defence) totalling 64 personnel; four multi-purpose manual Norwegian People's Aid (NPA) teams (for clearance and technical survey), totalling 33 demining personnel;⁷⁴ and two UST non-technical survey teams (totalling 11 personnel).⁷⁵

Following the signature of an MoU with the OSCE POiD in 2009, the MoD established the HDC.⁷⁶ Since TNMAC's nationalisation, the HDC has acted as a contractor for TNMAC, and OSCE POiD funds the HDC through TNMAC.⁷⁷ The MoD provides five teams to the HDC as part of its commitment to assist TNMAC meet Tajikistan's Article 5 obligations. The HDC's de-mining activities are conducted using conscript soldiers as deminers, with regularly employed MoD officers managing operations and the clearance sites. In 2018, 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. In 2019, OSCE continued to three teams from the unified budget as before and the two teams that were funded by United States through OSCE in 2018 are now funded directly by United States Department of State to TNMAC after successful capacity building and as part of a transition to national ownership and sustainability.⁷⁸

According to the MoD, more deminers could be trained and deployed if additional funding were 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.⁷⁹

In its 2019 Article 5 deadline extension request, Tajikistan set out its hope to double the clearance capacity currently provided by the MoD and NPA. The government of Tajikistan would pay the salaries of the five additional MoD teams, but Tajikistan still needs to secure international funding for equipment and running costs for these teams.⁸⁰

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.⁸¹ 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 2010–13.⁸²

OPERATIONAL TOOLS

Neither mine detection dogs (MDDs) nor machines were used operationally in 2018. 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.⁸³

The MoD has one demining machine, which is not currently deployed.⁸⁴ Tajikistan recognises that there are still potentially mined areas where mechanical assets can usefully be deployed (15–20% from total remaining areas in

UST, a national not-for-profit organisation, 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 clearance.⁸⁵ 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.⁸⁶ In 2018, two UST teams (four surveyors per team) conducted non-technical survey in the Shamsiddin Shohin district of the Khatlon region.⁸⁵ The capacity of the two UST survey teams was due to increase slightly, to six surveyors per team in 2019.⁸⁶

In late 2018, NPA established a technical advisor position, focused more on supporting national capacities (including TNMAC and the survey capacity of UST). NPA has proposed establishing a survey working group to meet at least monthly and be active during the 2019 demining season, bringing relevant stakeholders together. In August 2019, Tajikistan reported that it planned to establish the survey working group.⁸⁷

Technical survey is conducted as standard during NPA clearance tasks. NPA did not have a dedicated survey team in 2018, and non-technical survey conducted in 2018, at the request of TNMAC, was conducted by NPA's technical advisor, task supervisor, and supported with medical staff. NPA hopes to be able to transition into conducting more survey activities in coordination with TNMAC in order to be able to better define the remaining levels of contamination. As such, NPA trained and deployed its first survey team in April 2019 and planned to add a second survey team in February 2020, to conduct non-technical survey and targeted technical survey to support TNMAC with resurvey of CHAs and potentially with the survey of unsurveyed mined areas.⁸⁸ The survey team is a multi-task team and so can also be deployed to support NPA's clearance teams, when it is not deployed for survey.⁸⁹

Tajikistan's 2019 extension request references the role of the Tajik Border Guard Forces in providing security for demining operations on the Tajik-Afghan border and says TNMAC planned to involve Tajik Border Guard Forces in demining on the Tajik-Afghan border.⁹⁰ There is currently a small pilot project in which NPA has trained two border guard officers who have been seconded to work with NPA's civilian capacity during the 2019 demining season.⁹¹ This could be further expanded, if the political will is there and funding is available. Since the Border Guard Forces are also responsible for granting permission to access the contaminated areas along the Tajik/Afghan border, increased cooperation on demining may help to overcome previous security restrictions on access to these areas.⁹²

the lowlands), though this would require additional financial support.⁹³ 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 could be suitable for mechanical demining.⁹⁴ In August 2018, TNMAC announced that it had recently established a Technical Working Group focused on operational efficiency and quality assurance, and that one of the first tasks of the working group will be to conduct a feasibility study on the reactivation of mechanical assets in Tajikistan.⁹⁵

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of 1.12km² of mined area was released in 2018, of which 0.6km² was cleared, over 0.2km² was reduced through technical survey, and nearly 0.4km² was cancelled through non-technical survey.⁹⁸

SURVEY IN 2018

In 2018, a total of 0.4km² was cancelled through non-technical survey by NPA and UST in Khatlon province (see Table 2), and a further 0.23km² was reduced through technical survey by the MoD and NPA in Khatlon and GBAO provinces (see Table 3).⁹⁹ This was a slight decrease on the 0.48km² cancelled in 2017, but an increase compared to the 0.16km² reduced in 2017.¹⁰⁰

Also in 2018, two minefields of 865,000m² were confirmed by TNMAC, and three minefields that make up 146,000m² were confirmed by NPA.¹⁰¹

Table 2: Cancellation of mined area through non-technical survey in 2018¹⁰²

Operator	Province	District	Area cancelled (m ²)
UST	Khatlon	Sh. Shohin	366,000
NPA	Khatlon	Sh. Shohin	34,634
Total			400,634

Table 3: Reduction of mined area through technical survey in 2018¹⁰³

Operator	Province	District	Area reduced (m ²)
MOD	Khatlon	Sh. Shoin	83,100
NPA	Khatlon	Sh. Shoin	92,777
		Khovaling	54,469
	GBAO	Darvos	25,625
Total			255,971

CLEARANCE IN 2018

In 2018, the MoD/HDC and NPA cleared nearly 0.6km² across 9 mined areas (including suspended areas not yet completed as at the end of 2018), destroying 4,998 anti-personnel mines and 136 items of UXO (see Table 4).¹⁰⁴ This is a very slight decrease on the 0.62km² cleared in 2017.

An additional 15 anti-personnel mines were destroyed during spot explosive ordnance disposal (EOD) spot tasks in 2018.¹⁰⁵

Anti-personnel mines were found in all clearance tasks in 2018, with the exception of a minefield in Khavalong district, Khatlon province tasked to NPA for clearance. However, while no mines were found, there was strong evidence of the past presence of mines, with discoveries of mine fragments and demolition craters.¹⁰⁶

Table 4: Mine clearance by operator in 2018*¹⁰⁷

Operator	Province	District	Areas cleared	Area cleared (m ²)	AP mines destroyed	UXO destroyed
NPA	GBAO	Darvos	1	22,622	11	2
	Khatlon	Sh. Shohin	1	12,522	214	29
	Khatlon	Sh. Shohin	1	8,210	488	0
	Khatlon	Sh. Shohin	1	20,143	2	5
	Khatlon	Khovaling	1	12,699	0	0
	Khatlon	Khovaling	1	54,658	7	0
MoD	GBAO	Darvos	1	16,270	64	0
	Khatlon	Sh. Shohin	1	423,439	4,210	100
	Khatlon	Sh. Shohin	1	22,650	2	0
Totals			9	593,213	4,998	136

AP = Anti-personnel

* Clearance includes suspended area not yet completed as at end 2018.

ARTICLE 5 DEADLINE AND 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. Tajikistan will not meet this deadline and has requested a second extension of its Article 5 deadline to 31 December 2025. However, Tajikistan's extension request is very optimistic and calculated on the assumption of substantially increased capacity (five additional MoD teams and two additional NPA teams), for which Tajikistan has yet to secure funding, but which are planned to be operational from 2020. Based on current capacity and land release output, Tajikistan is not on track to complete Article 5 clearance obligations by the end of 2025, and may even be hard pushed to complete by 2030.

Tajikistan has faced a number of challenges in Article 5 implementation, including a reduction in demining capacity; insecurity along its border with Afghanistan and lack of permission to conduct demining in some of the Western districts; 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.¹⁰⁸ In addition, since its first extension request in 2009, Tajikistan identified 107 previously unrecorded and unsurveyed SHAs, which also set it behind target.

Tajikistan's 2019 Article 5 deadline extension request includes plans to address the SHAs and CHAs in the provinces of Khatlon and the Gorno-Badakhshan Autonomous Region (GBAO) along the Afghan border and in the Central Region, but not the 3.25km² of SHA on the Uzbek border which Tajikistan says will be addressed only once a political agreement has been made.¹⁰⁹ As at July 2019, the Tajik MoFA was in negotiation with the Uzbek MoFA regarding survey of the Tajik-Uzbek border.¹¹⁰

The annual land release milestones in Tajikistan's Article 5 extension request are 1,388,819m² (2020), 1,218,722m² (2021), 1,284,655m² (2022), 1,277,666m² (2023), 1,138,919m² (2024) and 1,170,000m² (2025). However, Tajikistan needs an additional US\$12.4 million in total, to enable it to double capacity in order to reach these targets and complete by the end of 2025.¹¹¹

TNMAC plans to hold strategy workshops in 2019, convening relevant mine action stakeholders together to develop a workplan for implementation of the 2020–25 extension request period, including resource mobilisation.¹¹²

In total during the last five years, Tajikistan has cleared just over 2.6km² 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.¹¹³ 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.¹¹⁴

Table 3: Five-year summary of AP mine clearance (2014–18)¹¹⁵

Year	Area cleared (km ²)
2018	0.59
2017	0.62
2016	0.50
2015	0.25
2014	0.65
Total	2.61

Tajikistan had expected to release 30 minefields in 2018 (26 in Khatlon district, 3 in GBAO, and 1 in the Central Region, totalling over 1.9km²;¹¹⁶ an estimate which it subsequently reduced to 1.5km² across 20 minefields,¹¹⁷ but Tajikistan's actual clearance output in 2018 was less than half this estimated output.

Tajikistan's baseline of remaining anti-personnel mine contamination is not yet an accurate assessment, which makes elaboration of accurate clearance projections and timelines for Article 5 completion difficult. TNMAC estimates that it will complete survey of the 41 unsurveyed minefield records by 2023.¹¹⁸ 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.¹¹⁹ Some mountainous areas only permit 40 operational days per year.¹²⁰

In addition to challenges posed by the remoteness and challenging terrain of the mined areas and the short demining window in some regions, the volatility of the security situation on the Afghan Border is also a potential challenge.¹²¹ Tajikistan's 2019 extension request tacitly assumes that all districts along the Tajik-Afghan border will be accessible, from the perspective of security, for clearance. To date, this has not been the case for many of the heavily mined western districts of the Tajik-Afghan border. Access to these mined areas is a prerequisite for Tajikistan's Article 5 completion.

In May 2019, during the APMBC intersessional meetings, Tajikistan convened an "Individualised Approach Platform" meeting, with support from the Implementation Support Unity (ISU). The meetings allowed TNMAC to outline its current work and to present the challenges and opportunities faced in meeting its Article 5 obligations.¹²²

Tajikistan has reported that it requires continued international assistance to increase demining capacity and fulfil its Article 5 obligations, including the need to modernise the capacity of its mine clearance teams.¹²³ Tajikistan requires a total of US\$36 million to fulfil its Article 5 obligations up to 2025.¹²⁴ Without this funding, Tajikistan will not meet the 2025 Maputo aspiration for completion of mine clearance.

- 1 Article 7 Report (for 2018), Form D and Annex II.
- 2 Email from Muhabbat Ibrohimzoda, Director, Tajikistan National Mine Action Centre (TNMAC), 25 April 2018; and Article 7 Report (for 2016), Form D.
- 3 Article 7 Report (for 2018), Form D and Annex II; and email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 4 Tajikistan Mine Action Centre (TMAC), "Scope of the Problem", accessed 29 July 2019 at: bit.ly/2ZhlFpN.
- 5 R. Roberts, "Evaluation of United Nations Development Programme Support to the Tajikistan Mine Action Programme", January 2012, p. 11, at: bit.ly/20qRe0B.
- 6 Article 5 deadline Extension Request, 31 March 2009, p. 1.
- 7 Statement of Tajikistan, Intersessional Meetings, Geneva, 8 June 2017.
- 8 Article 7 Report (for 2018), Form D and Annex II; 2019 Article 5 deadline Extension Request, pp. 9-10; and email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 9 Interview with Muhabbat Ibrohimzoda and Murtazo Gureзов, TNMAC, Dushanbe, 25 May 2018; and Statement of Tajikistan, APMBC 16th Meeting of States Parties, Vienna, 20 December 2017.
- 10 Interview with Muhabbat Ibrohimzoda and Murtazo Gureзов, TNMAC, Dushanbe, 25 May 2018.
- 11 Ibid.
- 12 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018.
- 13 Statement of Tajikistan, APMBC 16th Meeting of States Parties, Vienna, 20 December 2017.
- 14 "National Strategy of the Republic of Tajikistan on Humanitarian Mine Action for 2017–2020", 25 February 2017.
- 15 2019 Article 5 deadline Extension Request (draft), 31 March 2019.
- 16 Article 7 Report (for 2018), Form D.
- 17 Emails from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018 and 25 July 2019.
- 18 Statement of Tajikistan, 14th Meeting of States Parties, Geneva, 1 December 2015; and interview with Muhabbat Ibrohimzoda, TNMAC, and Sebastian Kasack, UNDP, in Geneva, 23 June 2015.
- 19 TNMAC, "Draft Article 5 Completion Plan 2016–20", 4 October 2016.
- 20 Statement of Tajikistan, 14th Meeting of States Parties, Geneva, 1 December 2015; and TNMAC, "Draft Article 5 Completion Plan 2016–20", 4 October 2016.
- 21 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 8; Presentation on Article 5 Extension Request, Geneva, 23 May 2019; and email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 22 Presentation by Tajikistan on Article 5 deadline Extension Request, Geneva, 23 May 2019; and email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 23 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018, and interview, Dushanbe, 25 May 2018.
- 24 TNMAC, "Draft Article 5 Completion Plan 2016–20", 4 October 2016; and Statement of Tajikistan, Intersessional Meetings, Geneva, 8 June 2017.
- 25 2019 Article 5 deadline Extension Request, Additional Information received 3 August 2019.
- 26 Interviews with Muhabbat Ibrohimzoda, TNMAC, and Kurbonmamad Kurbonmamadov, MoD, Dushanbe, 29 May 2018.
- 27 Interview with Muhabbat Ibrohimzoda and Murtazo Gureзов, TNMAC, Dushanbe, 25 May 2018.
- 28 2019 Article 5 deadline Extension Request, p. 4; and 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 20.
- 29 Rebecca Roberts, "Evaluation of UNDP Support to the Tajikistan Mine Action Programme", p. 12, at: bit.ly/2VrxVY8.
- 30 APMBC Article 5 deadline Extension Request, 31 March 2009, p. 1; and TMAC, "About TMAC", 2012, accessed 10 March 2014 at: bit.ly/2LvPUb1.
- 31 Roberts, "Evaluation of UNDP Support to the Tajikistan Mine Action Programme", p. 12.
- 32 Email from Muhabbat Ibrohimzoda, TNMAC, 3 April 2015.
- 33 TNMAC, "Draft Article 5 Completion Plan 2016–20", 4 October 2016.
- 34 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 27.
- 35 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 36 Email from Aubrey Sutherland-Pillai, NPA, 18 October 2016.
- 37 MoD, "Strategic Plan on Humanitarian Demining 2013–2016", Dushanbe, 17 July 2013; and Response to Landmine Monitor questionnaire by Luka Buhin, Mine Action Office, OSCE Office in Tajikistan, 8 April 2014.
- 38 Email from Luka Buhin, OSCE Office in Tajikistan, 9 October 2017.
- 39 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 August 2016 and 22 May 2017.
- 40 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018; and Statement of Tajikistan, APMBC 16th Meeting of States Parties, Vienna, 20 December 2017.
- 41 Article 7 Report (for 2018), Form D.
- 42 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018.
- 43 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 44 Email from Muhabbat Ibrohimzoda, TNMAC, 14 June 2019.
- 45 Email from Muhabbat Ibrohimzoda, TNMAC, 14 June 2019; and 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 28.
- 46 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 47 Ibid.

- 48 2019 Article 5 deadline Extension Request (draft), 31 March 2019.
- 49 Email from Johan Dahl, Acting Head, Political-Military Department, OSCE Programme Office, with information provided by Khurram Maksudzoda, Head of the MoD HDC, 27 August 2019.
- 50 Email from Johan Dahl, OSCE, 27 August 2019.
- 51 2019 Article 5 deadline Extension Request, Additional Information received 3 August 2019.
- 52 Email from Melissa Andersson, Country Director, NPA, 11 April 2019.
- 53 Ibid.
- 54 Email from Muhabbat Ibrohimzoda, TNMAC, 22 May 2017.
- 55 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 29.
- 56 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 57 Email from Melissa Andersson, NPA, 11 April 2019.
- 58 Interview with Muhabbat Ibrohimzoda, TNMAC, and Ahad Mahmudov, Programme Manager, UNDP, in Geneva, 23 June 2015.
- 59 "National Strategy of the Republic of Tajikistan on humanitarian mine action for 2017–2020", 25 February 2017; and 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 21.
- 60 Email from Asa Massleberg, GICHD, 5 October 2017.
- 61 Article 7 Report (for 2018), Form D and Annex II.
- 62 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 63 Ibid.
- 64 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 May 2017; and Aubrey Sutherland, NPA, 14 March 2017; and Statement of Tajikistan, Intersessional Meetings, Geneva, 8 June 2017.
- 65 Email from Wendi Pedersen, Focal point for Tajikistan, GICHD, 5 October 2017.
- 66 Emails from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018, and Melissa Andersson, NPA, 5 April 2018.
- 67 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 68 Email from Muhabbat Ibrohimzoda, TNMAC, 22 May 2017; and 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 21.
- 69 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 August 2016, 22 May 2017, and 27 April 2018; GICHD, Presentation on "NTS Field Studies: General Findings", 15 February 2018, Geneva; and Article 7 Report (for 2017), Forms A and D.
- 70 "Non-technical survey/technical intervention", Presentation by Muhabbat Ibrohimzoda, TNMAC, at the 21st International Meeting of National Mine Action Programme Directors and United Nations Advisers, Geneva, 13–16 February 2018; and interview with Muhabbat Ibrohimzoda, TNMAC, Dushanbe, 25 May 2018.
- 71 Email from Luka Buhin, OSCE Office in Tajikistan, 9 October 2017.
- 72 Interview with Saynuridin Kalandarov, UST, Dushanbe, 29 May 2018.
- 73 Email from Saynuridin Kalandarov, UST, 30 August 2018.
- 74 Email from Melissa Andersson, NPA, 11 April 2019.
- 75 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 76 Email from and telephone interview with Luka Buhin, OSCE Office in Tajikistan, 18 March 2014; and Response to Landmine Monitor questionnaire, 8 April 2014.
- 77 Email from Muhabbat Ibrohimzoda, TNMAC, 12 May 2015.
- 78 Email from Johan Dahl, OSCE, 25 August 2019.
- 79 Interview with Kurbonmamad Kurbonmamadov, MoD, Dushanbe, 29 May 2018.
- 80 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 45.
- 81 Response to Landmine Monitor questionnaire by Luka Buhin, OSCE Office in Tajikistan, 8 April 2014.
- 82 Email from and telephone interview with Luka Buhin, OSCE Office in Tajikistan, 18 March 2014; and Response to Landmine Monitor questionnaire, 8 April 2014.
- 83 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 May 2017; and Aubrey Sutherland, NPA, 18 October 2017.
- 84 Interview with Saynuridin Kalandarov, UST, Dushanbe, 29 May 2018.
- 85 Emails from Muhabbat Ibrohimzoda, TNMAC, 22 May 2017 and 27 April 2018; and interview, Dushanbe, 29 May 2018.
- 86 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 87 2019 Article 5 deadline Extension Request, Additional Information received 3 August 2019.
- 88 Emails from Melissa Andersson, NPA, 11 April and 19 August 2019.
- 89 Email from Melissa Andersson, NPA, 11 April 2019.
- 90 2019 Article 5 deadline Extension Request (draft), 31 March 2019, p. 22.
- 91 Emails from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019; and Melissa Andersson, NPA, 11 April 2019.
- 92 Email from Melissa Andersson, NPA, 11 April 2019.
- 93 Email from Muhabbat Ibrohimzoda, TNMAC, 17 February 2015; Statement of Tajikistan, Committee on Article 5 Implementation, Geneva, 25 June 2015; and TNMAC, "Draft Article 5 Completion Plan 2016–20", 4 October 2016.
- 94 Interview with Kurbonmamad Kurbonmamadov, MoD, Dushanbe, 29 May 2018.
- 95 2019 Article 5 deadline Extension Request (draft), 31 March 2019, pp. 35 and 46.
- 96 Email from Melissa Andersson, NPA, 11 April 2019.
- 97 2019 Article 5 deadline Extension Request, Additional Information received 3 August 2019.
- 98 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 99 Ibid.
- 100 Article 7 Report (for 2017), Form D and Annex II.
- 101 Article 7 Report (for 2018), Form D and Annex II.
- 102 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019. There was a discrepancy in the area of land cancelled by NPA in 2018 reported by TNMAC for NPA (34,634m²), and by NPA directly (112,000m²). Email from Melissa Andersson, NPA, 11 April 2019. Tajikistan's Article 7 Report (for 2018), Form D, only includes the 16 minefields cancelled through non-technical and technical survey teams, with an area of 366,000km².
- 103 Emails from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019; and Melissa Andersson, NPA, 11 April 2019. There was a discrepancy in the 2018 technical survey output data reported by TNMAC for NPA in Sh. Shohin and Darvos districts, and that reported by NPA directly. This is due to NPA only reporting clearance output upon final completion and not upon suspension.
- 104 Emails from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018; Melissa Andersson, NPA, 5 April 2018; and Chris Rennick, FSD, 13 March 2018; and Article 7 Report (for 2017), Form A.
- 105 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 106 Ibid.
- 107 Article 7 Report (for 2018), Form D; and emails from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019; and Melissa Andersson, NPA, 11 April 2019. According to Tajikistan's Article 7 report (for 2018), 134 anti-personnel mines were destroyed in 2018.
- 108 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018; and interview, Dushanbe, 30 May 2018.
- 109 Presentation by Tajikistan on Article 5 deadline Extension Request, Geneva, 23 May 2019.
- 110 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 111 Presentation by Tajikistan on Article 5 deadline Extension Request, Geneva, 23 May 2019.
- 112 Email from Muhabbat Ibrohimzoda, TNMAC, 25 July 2019.
- 113 Emails from Muhabbat Ibrohimzoda, TNMAC, 19 August 2016; and Aubrey Sutherland-Pillai, NPA, 10 August 2016; and Statement of Tajikistan, APMBC 14th Meeting of States Parties, Geneva, 1 December 2015.
- 114 Emails from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018; and Melissa Andersson, NPA, 5 April 2018.
- 115 See Mine Action Review and Landmine Monitor reports on clearance in Tajikistan covering 2013–16.
- 116 Article 7 Report (for 2017), Form D and Annex II.
- 117 Email from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018.
- 118 Presentation by Tajikistan on Article 5 deadline Extension Request, 23 May 2019, Geneva.
- 119 Interviews with Muhabbat Ibrohimzoda, TNMAC, and Saynuridin Kalandarov, UST, Dushanbe, 29 May 2018.
- 120 Presentation by Tajikistan on Article 5 deadline Extension Request, 23 May 2019, Geneva.
- 121 Ibid.
- 122 2019 Article 5 deadline Extension Request, Additional Information received 3 August 2019.
- 123 Article 7 Report (for 2018), Form D.
- 124 Ibid.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 31 OCTOBER 2023
UNCLEAR WHETHER ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

HEAVY, 20_{km²}
(ESTIMATED)

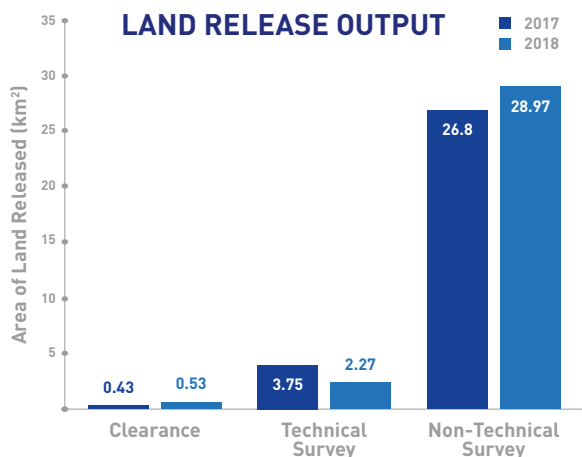
AP MINE
CLEARANCE IN 2018

0.53_{km²}

AP MINES
DESTROYED IN 2018

7,413

(including 21 destroyed
during spot tasks)



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **MEDIUM**

KEY DEVELOPMENTS

Thailand's mine action programme continues to improve. Although land release output only rose by almost 0.8km² from 2017 to 2018, Thailand expected to reach its target of 120km² for 2019. While this target is ambitious, improvements to land release methodology, along with increased survey capacity and the mine action budget, means that, as at July 2019, Thailand was on track to meet this figure for the year.

The Thailand Mine Action Centre (TMAC) is working to resolve challenges in staff and skill retention and to sustain the necessary national funding needed for extra capacity and equipment. Access to mined areas subject to successful border demarcation remains an issue and Thailand will not be able to meet its clearance deadlines without resolving this.

RECOMMENDATIONS FOR ACTION

- Thailand should report anti-personnel mine contamination classified into suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs).
- Thailand should agree a task with Cambodia to complete its pilot border clearance project by the end of 2019.
- Thailand should elaborate a gender policy and implementation plan for mine action.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	Thailand is currently conducting non-technical survey on all suspected hazardous areas (SHAs), which is due to be concluded by October 2020 and expects actual anti-personnel mine contamination to be around 90km ² .
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	7	Rotation of personnel and limited funding have been challenges for TMAC. In 2018, staff stayed in post providing continuity while plans are put in place to resolve staffing issues. The budget for 2018 was much lower than foreseen in the 2017 extension request, but there was a marked increase in the budget for 2019.
GENDER (10% of overall score)	4	While TMAC has had a female chief of unit in the past, much more could be done to achieve gender parity within the organisation. Women are mainly employed in administrative roles within TMAC and due to military regulations cannot work in the demining teams. However, this policy does not apply to civilian operators.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	7	TMAC made improvements to its information management in 2018 with the introduction of the Arc GIS Online, which will allow demining units to submit information online and TMAC to verify progress and make corrections.
PLANNING AND TASKING (10% of overall score)	8	Thailand met its land release targets for 2018 as set out in the plan for 2017–23 in its 2017 extension request. As at April 2019, this plan had been replaced by the "Five-Year Humanitarian Mine Action Plan, 1 November 2018–31 October 2023". Thailand was on track as of writing to meet its targets for 2019.
LAND RELEASE SYSTEM (20% of overall score)	8	TMAC revised two national standards in 2018 – on worksite planning and cancellation of SHAs – in support of its move towards a comprehensive toolbox of land release methodologies. Thailand is increasing non-technical survey capacity to focus on cancelling much of the overestimated SHAs in its database.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	Land release output was on a par with 2017 with a dramatic rise in output expected in 2019. Thailand's land release targets are ambitious and will require sustained funding, extra capacity and border demarcation where there are mined areas.
Average Score	7.0	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT

- National Committee for Humanitarian Mine Action (NMAC)
- Thailand Mine Action Centre (TMAC)

NATIONAL OPERATORS

- Humanitarian Mine Action Units (HMAU) 1-4 and HTMAC
- Thai Civilian Deminer Association (TDA)

INTERNATIONAL OPERATORS

- Norwegian People's Aid (NPA)

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE CONTAMINATION

As at December 2018, Thailand estimated that it had 360km² of outstanding anti-personnel mine contamination in 254 SHAs across ten provinces, a reduction of 31km² from 2017 (see Table 1). In 2018, 0.94km² of additional anti-personnel mined area was discovered in Sa Kaeo, Trat, Surin and Yala.¹

Since 2016, TMAC and Norwegian People's Aid (NPA) have been working on a pilot project re-surveying the overestimated SHAs. Taking into account the results of the pilot project, TMAC has forecasted that up to 80% of existing SHAs can be cancelled or reduced through survey so will be focusing their efforts in 2019–20 on cancelling land through non-technical survey before moving on to technical survey and full clearance in 2021–23.² NPA estimates that actual contamination is at 10–15% of the total.³ In its "Five-Year Humanitarian Mine Action Plan, 1 November 2018–31 October 2023" (hereafter, Five-Year Plan), Thailand projected that of the outstanding 360km² of contamination, 269km² will be cancelled through non-technical survey and nearly 91km² of CHA will remain for technical survey and clearance.⁴

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. The majority of outstanding contamination is located in seven eastern and north-eastern provinces bordering Cambodia, with the rest in Chiang Mai and Chumphon, bordering Myanmar, and in Pitsanuloke, on the border with Lao PDR.⁵

Table 1: Anti-personnel mined area by province (at end 2018)⁶

Region	Province	SHAs	Area (m ²)
North	Chiang Mai	4	25,615,188
	Phitsanulok	1	28,530,520
North-east	Ubon Ratchathani	58	101,227,784
	Si Sa Ket	43	73,383,526
	Surin	26	27,299,749
	Buri-Ram	15	19,483,928
East	Sa Kaeo	20	7,696,798
	Chanthaburi	21	3,936,224
	Trat	65	69,654,131
South	Chumphon	1	3,173,520
Totals		254	360,001,368

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Thailand created the National Committee for Humanitarian Mine Action (NMAC) in 2000, chaired by the prime minister and with responsibility for overseeing the national mine action programme. Since 2008, NMAC did not convene until it was reconstituted in May 2017, still with the prime minister as chairman. 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.⁷

NMAC is currently tasked with creating policy guidance and mobilising resources from all sectors to support mine action to be able to complete clearance in the allotted timeframe.⁸ In reality, however, NMAC has no operational or strategic power and is purely procedural.⁹

TMAC was established in 1999 under the Royal Thai Armed Forces Headquarters to coordinate, monitor, and conduct mine/ERW survey and clearance, risk education, and victim assistance throughout Thailand.¹⁰ While the roles and responsibilities within the sector are clear and coherent TMAC has had to contend with limited funding and, as a military organisation, with regular rotation of personnel at all levels.¹¹ 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 eight years. In order to maintain continuity, TMAC has made a request with the Royal Thai Armed Forces Headquarters that personnel working within TMAC remain in post for at least two years rather than be rotated out on an annual basis. TMAC also requested that personnel working in the Humanitarian Mine Action Units (HMAUs) either have the

required training and qualifications before they assume the role or that personnel remain in post for no less than two years. TMAC aims to have a 60:40 ratio of old personnel to new for the purposes of continuity and to retain knowledge.¹²

While the roles and responsibilities within TMAC are clear and coherent there have been some challenges with the command structure of the HMAUs. With the exception of one of the HMAUs, HTMAC, personnel come from the Division-Level Force of the Royal Thai Army and the Royal Thai Navy which means that they report to both TMAC and their respective divisions.¹³ TMAC has worked to educate the HMAUs, high ranking generals, and the Supreme Commander on the importance of mine action.¹⁴

Thailand and TMAC are said to be very accommodating to operators. They have given their full support to ensure that NPA has the required approvals and official documents necessary to operate. However, strong and strict regulations on who can handle explosives in Thailand together with restrictive rules and definitions on most demining equipment being regarded as military equipment hampers the possibility for civilian entities to become clearance operators.¹⁵

In 2018, TMAC received a budget of about THB70 million a year (approx. US\$2.1 million), much lower than the THB177 million (approx. US\$5.8 million) budgeted in Thailand's 2017 Article 5 deadline extension request.¹⁶ In 2019, TMAC's budget was greatly increased to THB248 million (approx. \$7.5 million) and TMAC stated in its Five-Year Plan that for the "foreseeable future" budget will not be a problem.¹⁷ TMAC will also be seeking additional funds to procure new equipment and repair of existing equipment, amounting to THB23 million

(approx. \$746,000) through to 2022.¹⁸ In September 2019, TMAC was due to finalise the budget for October 2019 to October 2021 and was planning to request funds for more personnel and equipment. This budget will be determined by need and will be adjusted dependent on results of the re-survey.¹⁹

Thailand indicated in both its 2017 extension request and its Five-Year Plan that it would welcome international assistance for capacity building and support for survey, equipment, technical capacity, and the development of new technologies.²⁰

GENDER

TMAC has stated that it will attempt to diversify where applicable as the male and female ratio is dependent on who volunteers for assignment to TMAC. In 2018, 27.5% of staff at TMAC were women, though they were mainly occupying administrative positions. In the past, women have been in leadership positions, with one woman acting as Chief of Special Affairs in 2012–13, and three women assuming head of section positions for mine risk education, victim assistance, and training at various points.²¹ There are no women working within the HMAUs as the Thai military does not allow women to perform combat duties and the roles are restricted to combat personnel.²²

During non-technical survey, the Thai Civilian Deminer Association (TDA) speaks to both men and women and employs both male and female local informants as part

of its teams. There is equal access to employment for qualified women and men in TDA survey and clearance teams, including for managerial level/supervisory positions. Currently, women make up 15% of operational roles, which was due to increase to 30% in 2019. Approximately 55% of managerial level/supervisory positions are held by women.²³

NPA has an organisational gender and diversity policy and all NPA survey teams are gender balanced. NPA encourages TMAC and the HMAUs to become gender balanced. When NPA conducts non-technical survey or community liaison activities, all local people are invited to participate, including women and children. Of 11 operational staff, 4 are women (36%), while three of five managers (60%) are women, as are two of four supervisors (50%).²⁴

INFORMATION MANAGEMENT AND REPORTING

TMAC established a data centre to process land release, risk education, and quality management data. It manages the central database using Excel and Geographic Information System (GIS) mapping. This information supports TMAC senior management in decision-making and operational planning.²⁵ The ArcGIS Online is being used as part of a support package provided by the Department of Survey of the Royal Thai Armed Forces. The ArcGIS assists TMAC and the HMAUs in data collection and dissemination, and mapping of SHAs and CHAs.²⁶ HMAUs will start to submit information to TMAC via an online system which allows for the verification of progress in the field and rectification of any issues. In 2018, TMAC organised training on the newly established system for 20 HMAU staff.²⁷

According to NPA and TDA, data in Thailand is accurate, up to date, and reliable, with data in the national information management system accessible to clearance organisations and data collection forms that are consistent and enable the collection of the necessary data.²⁸

Thailand submits timely and accurate Article 7 reports. Thailand was requested by the Sixteenth Meeting of State Parties to provide an updated workplan to the Committee on Article 5 Implementation by 30 April 2019.²⁹ The Five-Year Plan provides details on remaining challenges, outstanding mine contamination, and prioritisation and land release outputs for each area.³⁰ In previous years, Thailand had issues disaggregating data but its latest Article 7 report disaggregates survey and clearance data by province and by non-technical survey, technical survey, and clearance.

PLANNING AND TASKING

According to Thailand's Five-Year Plan in the first two years, from November 2018–October 2020, non-technical survey was prioritised in all outstanding SHAs with the expected cancellation of more than 269km². The second phase, from November 2020 to October 2023, will focus on technical survey and clearance of CHAs. It is expected that over 90km² of land will be cleared during this phase. Thailand is also operating under the assumption that the border demarcation issues will be resolved through bilateral cooperation, allowing the HMAUs to access these areas.³¹

Table 2: Planned land release from Five-Year Plan 2019–2023³²

Region	Province	2019 (m ²)	2020 (m ²)	2021 (m ²)	2022 (m ²)	2023 (m ²)
North	Pitsanulok	9,510,170	9,510,170	9,510,180	LF	LF
	Chiang Mai	1,103,526	0	0	9,308,072	15,203,590
North-east	Buri Ram	15,587,142	0	3,896,786	LF	LF
	Surin	0	21,839,800	5,459,949	LF	LF
	Si Sa Ket	39,495,981	19,210,841	0	14,676,704	LF
	Ubon Ratchathani	21,364,937	59,617,291	0	0	20,245,556
East	Chanthaburi	3,562,113	374,111	LF	LF	LF
	Sa Kaeo	1,724,472	1,695,254	1,669,773	1,490,174	1,117,125
	Trat	26,912,587	34,354,161	3,107,481	3,005,862	2,274,040
South	Chumphon	1,586,760	1,586,760	LF	LF	LF
Totals		120,847,688	148,188,388	23,644,169	28,480,812	38,840,311

LF = Landmine Free

In Thailand's Second Article 5 deadline extension request, submitted in August 2017, the completion of clearance was split into two phases, see Table 3. The first phase was from January 2017 to November 2018, with planned release of 63.8km² of suspected contamination, leaving 358.8km² to be tackled in the requested five-year extension period.³³ Thailand released 30.98km² in 2017 (target 34.74km²) and 31.75km² (target 29.05km²) in 2018, totalling 62.73km² over the two-year period, which was just over 1km² short of the target.³⁴

Table 3: Extension request 2017–23: land release targets (km²)³⁵

2017	2018	2019	2020	2021	2022	2023
34.74	29.05	72.12	72.06	73.23	74.54	66.86

In 2019, according to the Five-Year Plan, TMAC planned to release nearly 121km² across 93 SHAs by focusing on non-technical survey.³⁶ From 1 November 2018 to 30 April 2019, Thailand released nearly 72km², of which just over 70.3km² was cancelled through non-technical survey, 1.5km² was reduced through technical survey, and 39,080m² was cleared.³⁷ TMAC claimed to be on track to meet its 2019 land release targets as of writing, citing improved understanding of the land release methodology from the HMAUs, who have adopted a more dynamic planning process, and increased capacity from NPA and TDA.³⁸

Thailand is prioritising the north-eastern region, the most heavily contaminated area of the country where 61% of SHAs are located, but is also taking into account resource limitation and access issues in certain areas. Thailand is prioritising clearance according to the following five criteria (in order of importance): development potential; the access needs of the local community; proximity to the local population; terrain and environmental challenges; and border and security concerns.³⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

TMAC drafted its first national mine action standards (NMAS) with NPA's support in 2010, formally adopting them in June 2012, the year Thailand adopted the land release process.⁴⁰ Since then, the NMAS have undergone revisions in 2015 and 2018 in support of Thailand's shift towards using the full toolbox of land release methodologies rather than solely relying on technical survey and full clearance.⁴¹ In 2018, TMAC revised the NMAS on worksite planning and released a new NMAS on the "Cancellation of SHAs by Evidence Based Survey", which has made it easier to cancel previously inflated, largely uncontaminated SHAs.⁴² TMAC personnel have also been undergoing training on non-technical survey to improve speed and efficiency. The initial results have been promising with the release of three provinces in 2018: Uttaradit bordering Lao PDR, Tak bordering Myanmar, and Yala bordering Malaysia.⁴³

TMAC plans to revise its NMAS annually to keep them up-to-date and compliant with international mine action standards (IMAS) and in support of the Five-Year Plan. As at April 2019, TMAC's NMAS were undergoing major revisions to ensure their functionality.⁴⁴ TMAC says it considers input from operators and IMAS guidelines when revising the NMAS, ensuring there is a proper consultation process with input gathered at the beginning of every fiscal year (usually late October to early November).⁴⁵ The standing operating procedures (SoPs) will then be adjusted accordingly to the NMAS.⁴⁶

OPERATORS

All clearance in Thailand is conducted by the military due to regulations on who can handle explosives and operate demining equipment. There are five HMAUs, supervised by TMAC with personnel from the Royal Thai Army and Royal Thai Navy, which carry out survey and clearance operations. In addition, there is one national operator, TDA, and an international operator, NPA, which carry out survey in support of the HMAUs.⁴⁷ There may be changes to the regulations in the coming years due to the complications and related security concerns for military personnel entering the border areas. Once the TMAC/Cambodian Mine Action Centre (CMAC) border pilot project is completed, there is a possibility that civilian deminers will take part in clearance operations.⁴⁸ As at August 2019, TMAC is looking into easing the regulations so that operators can conduct EOD.⁴⁹

In 2018, TMAC deployed 24 non-technical survey personnel across 2 units, 104 technical survey personnel across 4 units, 22 clearance/explosive ordnance disposal (EOD) personnel across 5 units, and 11 mine detection dogs (MDDs) and 22 handlers across 5 units.⁵⁰ In 2018, there was an increase in the number of non-technical survey personnel compared to 2017 as TMAC is building capacity in preparation for an increase in non-technical survey operations in 2019 and 2020. A sharp increase in non-technical survey personnel is expected in 2019. TMAC plans to make a request for more armed forces personnel, who have already received the relevant training, in order to complete the re-survey by October 2020.⁵¹ The numbers of technical survey personnel were similar from 2017 to 2018, with a slight decrease expected in 2019. The number of clearance/EOD personnel will remain the same from 2017 to 2019.⁵²

In 2018, TDA deployed 19 field staff supporting HMAU 3 by conducting non-technical and technical survey. There was no change in capacity from 2017 but in 2019, due to an increase in Japanese funding, the number of field staff will increase and TDA will focus on expanding its "SIMA", its survey to identify mined areas comprised of non-technical survey, technical survey, and clearance of EOD spot tasks, which is focusing on technical survey capacity.⁵³

NPA has supported TMAC operations since 2011, conducting land release through non-technical and technical survey. In 2018, NPA deployed 11 non-technical survey personnel supporting HMAU 2 and 3. This was no change in capacity from 2017, but in 2019 NPA was deploying one more non-technical survey team, increasing from three teams to four. One of these teams will support MDD operations in 2019 before being deployed for technical survey.⁵⁴

OPERATIONAL TOOLS

All the HMAUs use MDDs during technical survey and verification. One of the HMAU units also uses a Medium MineWolf and Mini MineWolf for clearance when conditions permit. These machines have been lent to TMAC by the Humanitarian Demining Research and Development Program of the United States Department of Defence.⁵⁵ In 2018, NPA began to pilot the use of MDDs during technical survey with initial results reported to be promising.⁵⁶ TDA is planning to do research on bee mine detection.⁵⁷

DEMINER SAFETY

In 2018, in two separate incidents Cambodian soldiers requested TMAC deminers and TDA personnel to cease operations due to ongoing border demarcation, underscoring the potential for delays in the progress of border clearance.⁵⁸

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

Thailand released a total of almost 31.8km² in 2018, of which 0.5km² was cleared, nearly 2.3km² was reduced through technical survey and almost 29km² was cancelled through non-technical survey.

In addition, 94,296m² of previously unrecorded anti-personnel mine contamination was found and added to the database in 2018.⁴⁹

SURVEY IN 2018

A total of more than 31.2km² was released through survey in 2018 a slight increase from the 30.5km² released in 2017.

In 2018, almost 29km² was cancelled through non-technical survey, an 8% increase from the 26.8km² cancelled in 2017 (see Table 4). TMAC's focus on non-technical survey began in November 2018, so a much greater increase in non-technical survey output was expected for 2019.⁴⁰ The increase in non-technical survey output for NPA in 2018 is attributed to NPA teams gaining experience and an improved working relationship between NPA and HMAUs 2 and 3 in the areas of NPA operations.⁴¹ TDA reported that its non-technical survey outputs were significantly greater in 2018 than 2017.⁴²

In 2018, nearly 2.27km² was reduced through technical survey, a 39% decrease from the 3.75km² reduced in 2017. TMAC attributed this to the shift in focus away from technical survey and towards non-technical survey.⁴³ Minimal technical survey output was expected for 2019.

Table 4: Cancellation of mined area through non-technical survey in 2018⁴⁴

Province	Operator	Area cancelled (m ²)
Tak	HMAU 4	366,772
Uttaradit	HMAU 4	3,345,061
Si Sa Ket	NPA+HMAU 3	10,416,942
Ubon Ratchathani	HMAU 3	1,646,971
Surin	TDA+HMAU 3	773,681
Sa Kaeo	HMAU 1	1,328,000
Trat	HMAU 2	2,225,983
Trat	NPA+HMAU2	8,278,069
Yala	HTMAC	590,275
Total		28,971,754

Table 5: Reduction of mined area through technical survey in 2018⁴⁵

Province	Operator	Area reduced (m ²)
Si Sa Ket	HMAU 3	274,426
Ubon Ratchathani	HMAU 3	910,810
Surin	TDA+HMAU 3	839,266
Sa Kaeo	HMAU 1	181,618
Trat	HMAU 2	59,190
Total		2,265,310

CLEARANCE IN 2018

A total of 0.5km² was cleared by four HMAU units in 2018.⁴⁶ This is a small increase from the 0.4km² cleared in 2017.

Table 6: Mine clearance in 2018⁴⁷

Province	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Si Sa Ket	HMAU 3	4	54,986	567	0	51
Ubon Ratchathani	HMAU 3	5	169,740	2,791	681	92
Surin	HMAU 3	2	283,487	3,717	228	66
Sa Kaeo	HMAU 1	4	3,552	137	0	0
Trat	HMAU 2	2	17,137	180	0	29
Totals		17	528,902	7,392	909	238

AP = Anti-personnel AV = Anti-vehicle

In 2018, three HMAU units destroyed 21 anti-personnel mines and 139 items of UXO during EOD spot tasks.⁴⁸

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 7: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m²)
2018	528,902
2017 ⁶⁹	427,983
2016	394,238
2015	2,047,662
2014	228,911
Total	3,627,696

Thailand has made significant improvements to its mine action programme since the 2014 Maputo Review Conference moving away from an over reliance on clearance to the use of the full range of land release methodologies demonstrated in its Five-Year Plan. Thailand plans to cancel more than 269km² through non-technical survey from November 2018 to October 2020 before moving on to technical survey and clearance of the remaining 90km² over the following three years. While this is a positive step these land release targets are ambitious. In 2014–18, cancellation through non-technical survey totalled 129km², while reduction through technical survey released a further 18.3km². During the same period, clearance released only 3.6km². Land release therefore averaged just 31.5km² per year. NPA and TDA both believe that five years to complete clearance is too ambitious as Thailand will not only need more resources but will have to resolve the border demarcation issues which currently prevent access to certain mined areas.⁷⁰

Thailand was on track as of writing to meet its land release targets for 2019 but has set itself an even bigger target for 2020 and will need to further enhance the capacity of the HMAUs and operators. To achieve this TMAC, has identified areas for improvement, such as by increasing the number of survey teams and improving skills through training; obtaining the necessary demining equipment including exploring new technologies for survey and clearance; and increasing cooperation with neighbouring countries.⁷¹ For 2021 to 2023, TMAC has planned to release on average 30km² of mined area per year through technical survey and clearance, which will be a huge increase from its current output. In 2018, TMAC released just 2.8km² through technical survey and clearance.

The high proportion of remaining contamination located in border areas that are the subject of decades-old demarcation disputes or which are difficult to access due to insecurity is a major challenge for Thailand.⁷² Areas to be demarcated (ADs) have been divided into two categories: areas that can be accessed immediately and more complicated areas where access will need to be negotiated. In border areas with Lao PDR, 96% of the land boundary has been demarcated and there are no security concerns, while the border areas with Cambodia are still subject to the demarcation process.⁷³

Improved relations between Thailand and Cambodia have opened the way for increased contacts with Cambodia on border cooperation. The Thailand–Cambodia General Border Committee, chaired by the Deputy Prime Minister and Minister of Defence from both countries, has agreed that TMAC and CMAC can cooperate to conduct demining along the Thai–Cambodian border.⁷⁴ In September 2018, TMAC and CMAC met and agreed to find a task for a pilot project, a small area that could be cleared within a month as a symbolic demonstration of two sides working together. As at April 2019, the task had yet to be decided but TMAC hoped to complete the pilot project by the end of the year.⁷⁵

- 1 Anti-Personnel Mine Ban Convention (APMBC) Article 7 Report (for 2018), Form D.
- 2 Five-Year Humanitarian Mine Action Plan, 1 November 2018–31 October 2023, p. 12 (hereafter, Five-Year Plan), submitted alongside Thailand's Article 7 Report (for 2018).
- 3 Interview with Shushira Chonhenchob, Programme Manager, NPA, Bangkok, 9 April 2019.
- 4 Five-Year Plan, p. 12.
- 5 Article 7 Report (for 2018), Form D.
- 6 Ibid.
- 7 Interview with Lt.-Gen. Prasopchai Kongburan, Director General, TMAC, in Geneva, 8 June 2017.
- 8 Five-Year Plan, p. 49.
- 9 Interview with Shushira Chonhenchob, NPA, Bangkok, 9 April 2019.
- 10 2017 Article 5 deadline Extension Request, p. 1.
- 11 Interview with Col. Terdsak Trirattanagool, Assistant Director General, TMAC, Bangkok, 15 May 2017.
- 12 Email from Flt. Lt. Chotiboon Anukulvanich, Interpreter, TMAC (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 15 August 2019.
- 13 Ibid.
- 14 Interviews with Shushira Chonhenchob, NPA; and Lt.-Gen. Sittipol Nimnuan, TMAC, both in Bangkok, 9 April 2019.
- 15 Email from Aksel Steen-Nilsen, NPA, 28 March 2019.
- 16 Interview with Maj.-Gen Terdsak Trirattanagool, TMAC, Bangkok, 27 April 2018; 2017 Article 5 deadline Extension Request, p. 26.
- 17 Five-Year Plan, p. 20.
- 18 Ibid., p. 21.
- 19 Interview with Lt.-Gen. Sittipol Nimnuan, TMAC, Bangkok, 9 April 2019; and email from Flt. Lt. Chotiboon Anukulvanich, TMAC (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 15 August 2019.
- 20 2017 Article 5 deadline Extension Request, p. 28; and Five-Year Plan, p. 20.
- 21 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 15 August 2019.
- 22 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 23 Email from Amornchai Sirisai, Director, TDA, 21 March 2019.
- 24 Email from Aksel Steen-Nilsen, NPA, 28 March 2019.
- 25 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 26 Ibid.
- 27 Ibid.
- 28 Emails from Aksel Steen-Nilsen, NPA, 28 March 2019; and Amornchai Sirisai, TDA, 21 March 2019.
- 29 Decisions on the request submitted by Thailand for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the APMBC, 16MSP, para. iii.
- 30 Five-Year Plan, p. 5.
- 31 Ibid., p. 13.
- 32 Ibid.
- 33 2017 Article 5 deadline Extension Request, p. 25.
- 34 Analysis of the request submitted by Thailand for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 23 October 2017, para. 14.
- 35 2017 Article 5 deadline Extension Request, p. 5.
- 36 Five-Year Plan, p. 13.
- 37 Statement of Thailand, Committee on Article 5 implementation, Geneva, 22 May 2019.
- 38 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 39 Five-Year Plan, p. 45; and email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 40 Thai National Mine Action Standards, 1 April 2015.
- 41 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 42 Emails from Aksel Steen-Nilsen, NPA, 28 March 2019; and Flt. Lt. Chotiboon Anukulvanich, TMAC (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 15 August 2019.
- 43 Statement of Thailand, Committee on Article 5 Implementation, Geneva, 29 November 2018.
- 44 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 45 Ibid.
- 46 Ibid.
- 47 Five-Year Plan, p. 11; and email from Aksel Steen-Nilsen, NPA, 28 March 2019.
- 48 Interview with Lt.-Gen. Sittipol Nimnuan, TMAC, Bangkok, 9 April 2019.
- 49 Email from Flt. Lt. Chotiboon Anukulvanich, TMAC (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 15 August 2019.
- 50 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 51 Interview with Lt.-Gen. Sittipol Nimnuan, TMAC, Bangkok, 9 April 2019.
- 52 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 53 Emails from Amornchai Sirisai, TDA, 21 March and 21 August 2019.
- 54 Email from Aksel Steen-Nilsen, NPA, 28 March 2019.
- 55 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 56 Email from Aksel Steen-Nilsen, NPA, 28 March 2019.
- 57 Email from Amornchai Sirisai, TDA, 21 March 2019.
- 58 Interview with Maj.-Gen Terdsak Trirattanagool, TMAC, Bangkok, 27 April 2018; and email from Amornchai Sirisai, TDA, 21 March 2019.
- 59 Article 7 Report (for 2018), Form C. There is a discrepancy in the figures for 2018, with NPA reporting the discovery of two new CHAs with a total area of 163,706m² and TDA reporting 1,400m² of previously unrecorded anti-personnel mined area in Surin province.
- 60 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 61 Email from Aksel Steen-Nilsen, NPA, 28 March 2019.
- 62 Email from Amornchai Sirisai, TDA, 21 March 2019.
- 63 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 64 Article 7 Report (for 2018), Form C. There is a discrepancy in the figures in 2018. According to NPA, they cancelled 17,436,332m² in 2018: 5,396,393m² in Si Sa Ket; 3,931,823m² in Ubon Ratchathani; and 8,108,116m² in Trat. According to TDA, they cancelled 865,731m² through non-technical survey in Surin.
- 65 Article 7 Report (for 2018), Form C. TDA reported reducing 206,432m² through technical survey in Surin province.
- 66 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 67 Email from Amornchai Sirisai, TDA, 21 March 2019.
- 68 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 69 Thailand's Article 7 Report includes only TMAC's operating results.
- 70 Interviews with Shushira Chonhenchob, NPA, Bangkok, 9 April 2019; and Amornchai Sirisai, TDA, Bangkok, 10 April 2019.
- 71 Statement of Thailand, Committee on Article 5 implementation, Geneva, 22 May 2019.
- 72 Interview with Lt.-Gen. Sittipol Nimnuan, TMAC, Bangkok, 9 April 2019.
- 73 Analysis of the request submitted by Thailand for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 23 October 2017, para 16.
- 74 Email from Shushira Chonhenchob, NPA (on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC), 8 April 2019.
- 75 Interview with Lt.-Gen. Sittipol Nimnuan, TMAC, Bangkok, 9 April 2019.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2022 NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

HEAVY, 50^{km²}
(ESTIMATED)

AP MINE
CLEARANCE IN 2018

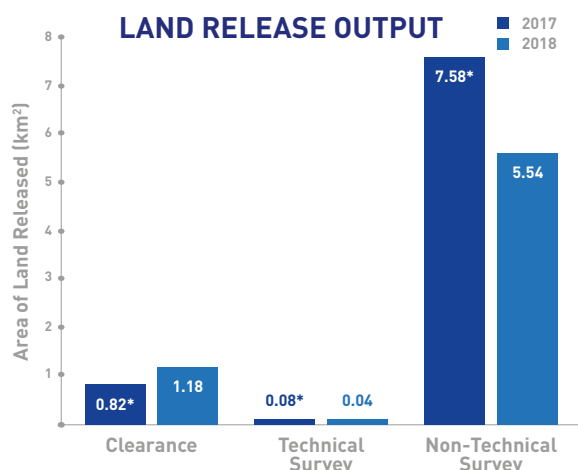
1.18^{km²}

AP MINES
DESTROYED IN 2018

22,220

*Included land release output for 2016 and 2017

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Turkey's mine action programme continued to make progress in 2018, releasing significantly more mined area than in previous years. This included demining on its Eastern border with Iran as part of the European Union (EU) Eastern Border Mine Clearance Project, managed by the United Nations Development Programme (UNDP); survey and clearance by Turkish armed forces demining personnel on the Syrian border, in support of the project to build a Border Security Surveillance System; and clearance of a former military base in the non-border region.

The Turkish Mine Action Centre (TURMAC) continued to strengthen its structure and capacity during the year, through recruitment and training of personnel, and enhanced coordination with other state institutions. It received support for capacity building from UNDP and the Geneva International Centre for Humanitarian Demining (GICHD). An Information Management System for Mine Action (IMSMA) database, created during 2017, became operational at the start of the 2018 demining season.

Turkey continued to expand its national military demining capacity in 2018 with approval being granted for five armed forces demining companies.

RECOMMENDATIONS FOR ACTION

- TURMAC should approve and publish its national strategic mine action plan for 2019–21 as soon as possible.
- Turkey should move forward, without delay, to expand survey and clearance of its non-border areas; continue and expand systematic survey and clearance on the Syria border; and start survey and clearance of 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 comply with the Anti-Personnel Mine Ban Convention (APMBC) by including all victim-activated improvised explosive devices (IEDs) that meet the definition of an anti-personnel mine in its clearance under Article 5 of the APMBC and its reporting under Article 7.

- Turkey should minimise the turnover of personnel at senior management level within TURMAC.
- Turkey should report on any survey or clearance of mined areas under its control in Northern Cyprus, or planned land release, in order to meet all of its APMBC Article 5 obligations.
- Turkey should heed the United Nations (UN) Security Council's renewed call for access to all remaining mined areas inside and outside the buffer zone on Cyprus.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	6	Turkey has a good understanding of the extent of CHA contamination, and the number of mines contained in the CHAs, but it has yet to qualify the amount of SHA contamination.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	6	TURMAC, which is entirely nationally funded, is now fully operational, with ongoing capacity development support from UNDP and the GICHD. However, TURMAC reports solely to the Ministry of Defence and suffers from a high level of turnaround in senior level positions, including the directorship.
GENDER (10% of overall score)	4	TURMAC is making efforts to take gender considerations into account in its mine action programme, including having mixed community and survey teams. However, while women make up 40% of TURMAC non-operations staff, regulations of the armed forces prevent women from serving in military demining units. Civilian operators are, however, encouraged to deploy female personnel.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	7	IMSMA, which became operational in Turkey from the start of the 2018 demining season, is being used by both military demining teams and for Phase 2 of the Eastern Border Mine Clearance Project. Turkey submits comprehensive, accurate, and timely annual Article 7 transparency reports.
PLANNING AND TASKING (10% of overall score)	5	TURMAC has yet to adopt and make public the draft national strategic mine action plan for 2019–21. The workplan published by Turkey in 2015 only includes plans for a relatively small proportion of Turkey's overall mined area.
LAND RELEASE SYSTEM (20% of overall score)	7	With support from UNDP and the GICHD, Turkey elaborated national mine action standards, which were issued in 2019.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	7	Turkey increased its clearance output in 2018, and also cancelled a significant amount of mined area on the Syrian border. Furthermore, Turkey approved expansion of its armed forces demining units in 2018, to become fully operational in 2019.
Average Score	6.2	Overall Programme Performance: AVERAGE

DEMINING CAPACITY

MANAGEMENT

- Ministry of Defence
- Turkish Mine Action Centre (TURMAC)

NATIONAL OPERATORS

- Altay (national sub-contractor under MECHEM)
- Turkish Armed Forces

INTERNATIONAL OPERATORS

- Denel MECHEM
- RPS-Explosive Engineering Services (QA and QC of the EU project)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

Turkey is contaminated with anti-personnel and anti-vehicle mines, as well as command-detonated IEDs. There is more than 157km² of confirmed mined area across 3,020 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;¹ therefore the total contaminated area is likely to be larger, but according to Turkey not significantly so.²

This is a reduction in the size of baseline contamination compared to the end of 2017, when more than 164km² of mine contamination was reported across 3,061 CHAs,³ the result of land release in 2018. The suspected mined area at the end of 2018 was unchanged from a year earlier.

According to TURMAC, the suspected mined areas are “relatively small”, their location and perimeters are mostly known, and some of them are believed to be mapping duplications or mistakes. TURMAC is planning to conduct non-technical survey of all mined areas in 2020, with a budget of €2.1 million.⁴

Table 1: Anti-personnel mined area by region (at end 2018)

Region	CHAs	Area (m ²)	AP mines in CHAs	AV mines in CHAs	SHAs	Area (m ²)
Syrian border	1,294	133,970,046	412,027	194,635	84	N/K
Iraqi border	596	2,862,835	79,017	0	373	N/K
Iranian border*	423	16,566,718	150,714	0	38	N/K
Armenian border	42	1,097,077	20,275	0	0	0
Non-border areas	665	2,830,422	34,410	0	206	N/K
Totals	3,020	157,327,098	696,443	194,635	701	N/K

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.

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 1992–95,⁵ and also with Azerbaijan.⁶ According to Turkey, its western borders with Bulgaria and Greece, as well as the border with Georgia, are mine-free.⁷ Mines were also laid around military installations within the country.⁸

Government forces emplaced landmines around military bases during the 1984–99 conflict with the Kurdistan Workers' Party (Partiya Karkerên Kurdistan, PKK) in the south-east of the country. According to Turkey, these mines were marked, fenced, and have been progressively cleared since 1998.⁹ In addition to mines laid by Turkish security forces, non-state armed groups have also emplaced mines and IEDs, rendering clearance more challenging.¹⁰

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.¹¹

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 Cyprus¹² (see the report on Cyprus in this work for further information). This puts into question its compliance with Article 5 of the APMBC.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

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 in January 2015, entering into force on 3 February 2015. The law defines the modalities and identifies the functions, jurisdictions, and responsibilities of the NMAC, which has responsibility for the clearance of mines and/or unexploded ordnance (UXO) to humanitarian standards in Turkey.¹³ 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 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.¹⁴

TURMAC was established on 3 February 2015,¹⁵ with a director appointed in August of that year.¹⁶ The director of TURMAC reports directly to the Undersecretary of the Ministry of National Defence.¹⁷

TURMAC is now fully operational but there has been a high level of turnaround in senior level positions, including the directorship, which negatively affects the management of the national mine action programme. Colonel Mehmet Zeki Eren was appointed as the Director of TURMAC in June 2018, but left his post in November after being appointed to a North Atlantic Treaty Organization (NATO) mission. Colonel Mesut Ekren, Chief of TURMAC's Quality Management Department, served as acting Director,¹⁸ and in July 2019 a new Director, Colonel Yıldırım Özerkan, was appointed by presidential decree.¹⁹

TURMAC's capacity-development efforts are being implemented in partnership with UNDP and the GICHD, as well as national partners.²⁰ A needs assessment by UNDP and the GICHD in October 2016 highlighted several capacity gaps in TURMAC.²¹ Responding to the findings of the assessment, Turkey subsequently claimed 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.²² TURMAC organised various trainings in 2018 to improve the capacity of its own personnel and that of the Military Demining Unit.²³

TURMAC is entirely funded by national funding,²⁴ as are the Turkish Armed Forces demining units.²⁵ Turkey reported investing around 50 million Turkish Lira (approx. US\$8.6 million) to procure new equipment to establish additional demining companies, and pledged that support for personnel, training, deployment, maintenance of equipment and other costs will be increased.²⁶

In addition, Turkey reported providing some €10 million (approx. US\$11.4 million) to the Eastern Borders Mine Clearance Project, which is implemented by UNDP and funded by the EU and the UN.²⁷

GENDER

According to TURMAC, the importance of gender diversity is included in Turkey's (draft) national mine action strategy while its national standards closely follow the international mine action standards (IMAS) on gender. Survey and community liaison teams include female personnel to facilitate access and participation by all groups, including women and children. Gender is not, however, taken into consideration in strategic planning and prioritisation.²⁸

Women are reported to have equal access to survey and QA/QC positions and make up 40% of TURMAC personnel in non-operations positions, including holding the position of department chiefs within TURMAC. However, due to the regulations of the Turkish Armed Forces, no women are in the military demining units. However, civilian contractors are encouraged and advised to deploy female personnel.²⁹

INFORMATION MANAGEMENT AND REPORTING

Since TURMAC's establishment in 2015, UNDP and the GICHD have supported it to establish a functioning information management (IM) system, IMSMA.³⁰ IMSMA was established in 2017³¹ and has been fully operational since the beginning of the demining season in 2018. Personnel from both TURMAC and the military have been trained on IMSMA, and it has been used by the military demining teams and in Phase 2 of the Eastern Border Mine Clearance Project since the beginning of 2018.³²

Prior to the creation of the IMSMA database, UNDP maintained a project database to record all operational data related to Phase 1 of the Eastern Border Mine Clearance Project.³³

Turkey has been submitting comprehensive, accurate, and timely annual Article 7 transparency reports.

PLANNING AND TASKING

Turkey has still to publish a national mine action strategy, despite national authorities assertions for several years that a multi-year strategic mine action plan had been drafted and was expected to be adopted shortly.³⁴ Significant changes in governmental regulations, legislation, processes, and structures in Turkey have delayed approval of the draft national strategic mine action plan for 2019–21, which as at July 2019 was waiting approval by the MoD.³⁵ The three-year plan reportedly covers national capacity development, survey and clearance of mined areas, the provision of mine risk education, and assistance to mine victims.³⁶

There is a workplan in place for 2019. MECHEM are planned to clear around 0.5km², under the Eastern Border Mine Clearance Project.³⁷ The military demining teams task plan was as follows:

- Doğubeyazıt (Eastern Border) 4 teams (gendarmérie)
- Ardahan Göle (non border) 2 teams
- Syrian Border in Hatay (8 teams) Kilis (4 teams)
- Hakkari (4 teams)
- Diyarbakır (2 teams)
- Şırnak (2 teams).³⁸

To date, prioritisation of clearance appears to have been influenced more by where permission is granted for operations and for which 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 has claimed that survey and clearance for the EU Eastern Border Project, are 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.³⁹

According to the draft national mine action plan, demining is prioritised according to:⁴⁰

- National political priorities
- Border management system
- Socio-economic projects
- Requests from citizens
- Non-border areas and military heavy weapons ranges.

SYRIAN BORDER

Mined areas of the Syrian border are 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.⁴¹ Minefields in this region are clearly mapped, marked, fenced, and reported to be well known to the local population.⁴²

According to its 2013 Article 5 extension request, Turkey had expected to complete clearance of mines along the Syria border by the end of 2019,⁴³ but clearance efforts were delayed due to the armed conflict in Syria.⁴⁴ However, construction of the Border Security Surveillance System along Turkey's border with Syria, which was completed in June 2018, is

supposed to allow the demining of the Syrian border to begin.⁴⁵ During the construction of the Border Security Surveillance System, which consists of a 837km-long modular concrete wall and impoundment (supported by a fence), as well as roads, and surveillance system, military demining teams were deployed to clear mines to enable operations to proceed in safety.⁴⁶ Demining efforts in support of the construction of the surveillance system also included 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.⁴⁷ Planned clearance on the Syrian border (i.e. not part of clearance to support construction of the Border Surveillance System), began in early 2018, focusing on the provinces of Hatay and Kilis.⁴⁸

EASTERN BORDERS

Turkey's 2013 Article 5 extension request set out plans for clearance of its eastern borders, beginning with the Armenian border and continuing southwards to the borders with Azerbaijan, Iran, and Iraq.⁴⁹ It was forecast that 13.5km² would be cleared in Phase 1 of the project and 2.4km² in Phase 2, as part of an EU project envisaged to start by the end of 2014.⁵⁰

The two-phase EU Eastern Border Mine Clearance project is being carried out under the supervision of the Turkish authorities in a joint project with UNDP.⁵¹ Under the project, UNDP is managing the demining and assuring quality while also supporting capacity development of TURMAC.⁵² The demining tender for the project was awarded to Denel MECHEM (MECHEM), as part of a consortium in which national operators would be subcontracted by MECHEM.⁵³ Clearance operations for Phase 1 of the project began in June 2016, and

were completed by the end of 2017.⁵⁴ A total of almost 3.3km² of mined area was released (0.64km² cleared, under 0.1km² reduced, and almost 2.6km² cancelled) with 25,667 mines were destroyed in 2016 and 2017.⁵⁵ This was significantly less than the 13.5km² that Turkey forecast would be cleared under Phase 1 in its 2013 Article 5 extension request.

Phase 2 of the project commenced behind schedule in June 2018, due to serious organisational issues in MECHEM in South Africa, which resulted in a change of senior management. MECHEM Turkey had to wait for these changes in order to sign the contract and start 2018 operations. In addition, personal protective equipment visors had to be changed, which also resulted in a delay to operations.⁵⁶ A one-year extension to the project was approved, with Phase 2 now expected to be completed at the end of 2019.⁵⁷

SOUTH-EASTERN/IRAQI BORDER

In 2017, Turkey had 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 2019.⁵⁸ However, no mention of any survey in this region was made in Turkey's latest Article 7 transparency report (for 2018).⁵⁹

Clearance of the 969 mined areas, totalling just over 2.86km², with the destruction of 79,017 anti-personnel mines, was

scheduled to start after Phase 2 of the Eastern Border Mine Clearance Project is completed.⁶⁰

TURMAC reported that the Syrian border was prioritised instead, to help the installation of the border management system and to reduce the flow of refugees through the border. According to TURMAC, under the EU project, €2.1 million will be allocated to non-technical survey across Turkey from national budget in 2020.⁶¹

NON-BORDER AREAS

Non-border areas account for less than 2% of all contaminated areas in Turkey. 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. In 2015, Turkey estimated that all 873 mined areas in non-border areas would be cleared by 2021, amounting to total clearance of 3.1km², with the destruction of 34,410 anti-personnel mines.⁶²

In this region, Turkey prioritises mine clearance 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.⁶³

Due to ongoing capacity development efforts and prioritisation of clearance for the construction of the wall and customs area on the Syrian border, no clearance took place in non-border areas in 2016 or 2017.⁶⁴ However, a small amount of clearance was conducted in 2018 at a former military range (see the "Land release output and Article 5 compliance" section below for details).

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

UNDP and the GICHD assisted TURMAC to formulate new national mine action standards based upon the International Mine Action Standards (IMAS) and the provisional standards elaborated for the EU Eastern Border Mine Clearance Project.⁶⁵

In April 2017, a set of national mine action standards were sent to the National Standards Institute of Turkey for approval.⁶⁶ In February 2019, 44 national mine action standards, including on land release policy, were issued.⁶⁷

As at July 2019, TURMAC's SoPs had been completed and were available on its webpage. The SoPs of the military demining units and MECHEM have been in use since 2017.⁶⁸

OPERATORS

In 2018, mine clearance operations in Turkey were conducted by MECHEM, with Altay as a subcontractor, 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 and at a military base in a non-border area.⁶⁹

MECHEM, a South African company, was awarded the tender for mine clearance under the EU Eastern Border Mine Clearance Project.⁷⁰ In 2018, MECHEM deployed 30 MDD teams, 11 clearance teams (approx. 100 deminers), and 1 Minewolf machine for Phase 2 of the EU project.⁷¹ RPS-Explosive Engineering Services, a United Kingdom-based company, was contracted for quality assurance (QA) and quality control (QC).⁷² TURMAC also has oversight of operations on site.⁷³ During 2018 operations, all deminers and team leaders of MECHEM and QA/QC personnel of RPS Explosive Engineering Services, were Turkish nationals.⁷⁴

In 2019, MECHEM was no longer sub-contracting to Altay, and was instead employing Turkish nationals directly.⁷⁵ As at July

2019, MECHEM was deploying 15 MDD teams, 6 clearance teams (approx. 60 deminers), and 1 Minewolf machine.⁷⁶

Military demining companies were accredited for manual demining in 2017.⁷⁷ Turkey is in the process of significantly expanding the number of military demining units, with approval for five new demining companies granted in 2018. Three of the five new demining companies (equivalent to twelve 9-person demining teams) were established in June 2018 and have been accredited for manual demining.⁷⁸ As at July 2019, procurement of equipment had been completed for two companies (eight demining teams), which were accredited in 2019 and tasked to several locations. The remaining companies were expected to become operational in 2020.⁷⁹

As at July 2019, a total of 26 military demining teams operational: 20 from the army and 6 from the gendarmerie.⁸⁰

The quality management of military demining troops is conducted by TURMAC personnel.⁸¹

OPERATIONAL TOOLS

Both MECHEM and Turkish army demining teams conduct mechanical as well as manual demining, and also use MDDs.

DEMINING SAFETY

There was one demining accident in October 2018, during which a Gendarmerie deminer suffered injuries to his hands whilst removing a DM-11 anti-personnel mine. The incident was investigated and was found to be due to a mistake by the deminer, while removing the detonator. Demining operators were informed about the issue and additional trainings were conducted.⁸²

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

According to its Article 7 report for 2018, more than 2km² of mined area was cleared, with the destruction of 22,220 anti-personnel mines. However, TURMAC subsequently advised Mine Action Review that the 2.08km² reported as clearance in 2018 in its Article 7 report unintentionally included 35,168m² reduced through technical survey and 864,316m² cancelled through non-technical survey. Therefore the correct clearance figure for 2018 is 1.18km².⁸³

In addition, according to Turkey's Article 7 report, a further 4.7km² of mined area was cancelled through non-technical survey.⁸⁴

SURVEY IN 2018

Nearly 5.54km² of mined area was cancelled through non-technical survey in 2018: 864,316m² cancelled through non-technical survey, but mistakenly reported as clearance (see above) and a further 4,672,000m² on the Syrian Border.⁸⁵ This is seemingly a decrease from the 7.5km² reported cancelled through non-technical survey the previous year, though the figure for 2017 includes land released for 2016 as well as 2017.⁸⁶

Non-technical survey in 2018 was conducted by TURMAC in the Hatay Region of the Syrian border and revealed that suspected areas had been used as agricultural land for many decades and the area had been free of mines. Consequently, approximately 4,672,000 m² of land was cancelled.⁸⁷

As previously mentioned, TURMAC advised that the 2.08km² reported as clearance in 2018 in Turkey's Article 7 report, included over 0.03km² reduced through technical survey. This compared to 0.08km² the previous year (which included land released for both 2016 and 2017).

CLEARANCE IN 2018

In its Article 7 report for 2018, Turkey reported clearance of 2.1km² of mined area: more than 1.4km² on the eastern border with Iran, almost 0.4km² on the Syrian border, and almost 0.3km² in non-border areas (see Table 2).⁸⁸ However, TURMAC subsequently informed Mine Action Review that the 2.1km² reported as cleared in its Article 7 report, mistakenly included 35,168m² reduced through technical survey and 864,316m² cancelled through non-technical survey, therefore putting correct clearance for 2018 at 1,183,986m².⁸⁹

Furthermore, there is under-reporting of the area cleared on the Syrian border, as no area/m² value was attributed to 1,015 anti-personnel mines destroyed during armed forces clearance to support safe construction of the Border Security Surveillance System. This is reportedly because TURMAC does not consider that this clearance has undergone quality control, despite the fact the cleared land is largely built over as part of the construction.⁹⁰

This is a significant increase in clearance output compared to the 0.82km² of mined area released through clearance the previous year, especially given that the 0.82km² reported in 2017 included clearance for both 2016 and 2017.⁹¹

Table 2: Mine clearance in 2018⁹²

Region	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Iran border	MECHEM	1,161,278	15,989	0	0
	Army Demining Units	246,380	5,141	0	0
Syria border	Army Demining Units	398,385*	1,090	14	0
Non-border areas	Army Demining Units	277,427	0	0	665
Totals		2,083,470*	22,220	14	665

*TURMAC subsequently confirmed to Mine Action Review that of the 2,083,470m² reported as cleared in 2018, 35,168m² was reduced through technical survey and 864,316m² cancelled through non-technical survey. Furthermore, no square metre output (only the number of mines destroyed) is reported for clearance along the Syria Border in support of the construction of the Border Security Surveillance System. The area reported on the Syria border is clearance in the Karkamış and Elbeyli regions on the border, during which 75 mines were found and destroyed. AV = Anti-vehicle

On the **Iranian border**, a total of 1,407,658m² of mined area was cleared in 2018, with the destruction of 21,130 anti-personnel mines. Of this 1,161,278m² was cleared under the contract with MECHEM, with destruction of 15,989 anti-personnel mines. This was part of Phase 2 of EU Eastern Border Mine Clearance Project that began in June 2018. A further 246,380m² was cleared by military demining units of the gendarmerie in Iğdır and Doğubeyazıt provinces.⁹³

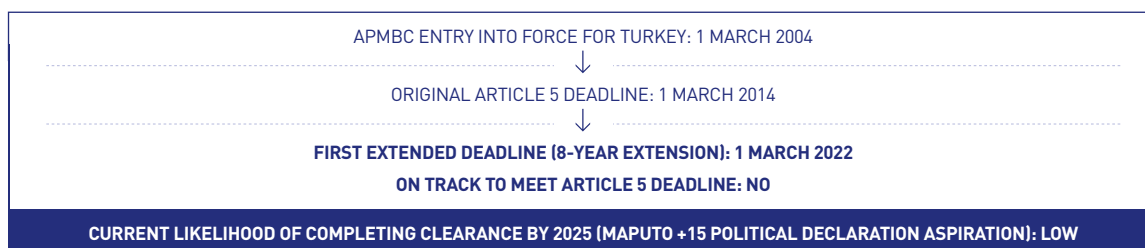
On the **Syrian border**, a total of 1,090 anti-personnel mines and 14 anti-vehicle mines were destroyed in 2018, by Turkish army demining units.⁹⁴ Clearance along the border was primarily as part of demining in support of the Border Security Surveillance System, as well as four demining teams that cleared 398,385m² of mined area in the Karkamış and Elbeyli regions on the border, during which 75 mines were found and destroyed,⁹⁵ with the land handed to relevant authorities for use as customs areas.⁹⁶

In **non-border areas**, 277,427m² of mined area was cleared by Turkish army demining units at a former military range in Muş (Malazgirt) province and handed over to the relevant authorities. During clearance, 665 items of UXO were found and destroyed, but no anti-personnel mines.⁹⁷

In addition, Military Engineer/Explosive Ordnance Disposal (EOD) teams conducted counter-IED operations in non-border areas within the scope of national security operations. A number of IEDs emplaced by terrorist organisations were found and destroyed, but are not reflected in Turkey's reporting under the APMBC.⁹⁸ Turkey has not specified if, or how many, of the IEDs destroyed, are victim-activated IEDs that meet the definition of an anti-personnel mine and therefore fall under Turkey's APMBC Article 5 and 7 obligations.

No mine clearance was conducted in 2018 along Turkey's borders with Armenia or Iraq.⁹⁹

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the eight-year extension granted by states parties in 2013), 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 and 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.¹⁰⁰ Turkey also revealed in its 2013 extension request that since 1998 it had only cleared a total of 1.15km² 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.¹⁰¹

Since the Third Review Conference in Maputo in 2014, Turkey has made significant progress in putting in place the systems and processes required to implement Article 5. The adoption in January 2015 of a mine action law, and the subsequent establishment of TURMAC were very positive developments and are central to Turkey's national ownership of its mine action programme. With capacity development support from UNDP and the GICHD, TURMAC has made steady progress towards becoming fully operational and assuming management and coordination of mine action in Turkey.

Initiating clearance along its eastern borders in June 2016, as part of the EU Project, funded by the EU (75% of funding), Turkey (24%), and the UN (1%), was also a welcome development.¹⁰² Phase 1 of the project was completed by the end of 2017, and Phase 2, which commenced in June 2018, was expected to be completed by the end of 2019. As at July 2019, Turkey reported that funding had been secured for Phase 3 of the project, but the "procedures will continue" until 2020. TURMAC reported that the EU will dedicate €18.5 million for clearance and Turkey will contribute €2.2 million for non-technical survey.¹⁰³ The non-technical survey planned for 2020 will help give TURMAC a better idea of a predicted date for completion.¹⁰⁴

Completion of the Border Security Surveillance System along all of Turkey's border with Syria should allow survey and clearance to finally take place all along the border. This is significant, as mined areas on the Syrian border, which are mapped, account for two thirds of the mines and more than 85% of the remaining CHA in the country.

In the five-year period since 2014, Turkey has cleared only some 3.2km² of mined area, albeit with 2018 seeing a significant increase compared to previous years (see Table 3).

Table 3: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	1.18
2017	*0.82
2016	0.12
2015	0
2014	0.16
Total	2.28

*Also included previously unreported clearance output relating to 2016.

Challenges in Article 5 implementation, as identified by TURMAC, include funding, difficult terrain, weather conditions limiting the demining window each year, and challenges posed by the sensitive security situation in certain provinces.¹⁰⁵ By far the main obstacle, though, has been lack of political will in Turkey to fulfil its international legal obligations under the APMBC. Indeed, despite a marked increase in clearance output in 2018, Turkey's total mine clearance to date still only amounts to a tiny fraction of its overall mine contamination, and more than 15 years after becoming a state party to the APMBC, Turkey has only made marginal progress in addressing mine contamination. Based on the current rate of clearance, Turkey will not complete implementation of Article 5 by its deadline in 2022 and is also not on track to complete by 2025, as per the APMBC Maputo+15 political declaration.

That said, Turkey is planning to commence systematic survey and clearance of the Syrian border, and to dramatically upscale non-technical survey. Turkey announced in May 2019 that it plans to conduct non-technical survey on 20km² of mined area in 2019, which would represent a dramatic increase in survey.¹⁰⁶

Turkey's updated workplan for Article 5 implementation, submitted in March 2015, only included plans to address a small portion (10%) of total mine contamination, and it is unclear how and when the remaining contamination will be addressed. It is therefore essential that TURMAC approves and publishes the national strategic mine action plan for 2019–21, without further delay, as this also reportedly includes plans for survey of SHA and CHA in the south-eastern/Iraqi border, the Syrian border, and non-border areas.¹⁰⁷

Turkey should also report on plans for clearance of mined areas under its control in Northern Cyprus, in order to meet all of its APMBC Article 5 obligations.

- 1 Article 7 Report (for 2018), Form D; and Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 2 Email from Maj. Can Ceylan, Head of QM Section, TURMAC, 11 July 2019.
- 3 Article 7 Report (for 2017), Form D.
- 4 Email from Maj. Can Ceylan, Head of QM Section, TURMAC, 11 July 2019.
- 5 2013 Article 5 deadline Extension Request, pp. A-1 and A-5.
- 6 Article 7 Report (for 2017), Form D.
- 7 2013 Article 5 deadline Extension Request, p. A-1.
- 8 Ibid., pp. A-1 and A-5.
- 9 Response to Landmine Monitor questionnaire by Elif Comoglu Ulgen, Head, Disarmament and Arms Control Department, Ministry of Foreign Affairs, 14 July 2008; and email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 10 2013 Article 5 deadline Extension Request, p. A-5.
- 11 Article 7 Report (for 2015), Form C.
- 12 2013 Article 5 deadline Extension Request.
- 13 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.
- 14 Article 7 Report (for 2014), "Workplan for mine clearance activities", Annex 1; and CCW Amended Protocol II Article 13 Report, Form A, 2015.
- 15 Article 7 Report (for 2014), Form F.
- 16 Interview with Gen. Celalettin Coban, Director, TURMAC, and Col. Ali Güngör, Mine Action Officer, Strategic Planning Branch, TURMAC, in Geneva, 18 February 2016.
- 17 Presidency Decree No. 1 of 10 July 2018; Article 7 Report (for 2018), Form A; and Statement of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018.
- 18 Article 7 Report (for 2018), Form A.
- 19 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 20 Statement of Turkey, Standing Committee on Enhancement of Cooperation and Assistance, Geneva, 24 May 2019.
- 21 Article 7 Report (for 2016), Form A; and Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 8 June 2017.
- 22 Article 7 Report (for 2017), Form A; and Statement of Turkey, 16th Meeting of States Parties, Vienna, 20 December 2017.
- 23 Article 7 Report (for 2018), Form A.
- 24 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 25 Ibid.
- 26 Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 27 Statement of Turkey, Standing Committee on Enhancement of Cooperation and Assistance, Geneva, 24 May 2019.
- 28 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 29 Ibid.
- 30 Interview with Col. Ali Güngör, TURMAC, Geneva, 18 February 2016.
- 31 Statement of Turkey, 16th Meeting of States Parties, Vienna, 20 December 2017.
- 32 Statements of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019; and on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018; email from Maj. Can Ceylan, TURMAC, 11 July 2019; and Article 7 Report (for 2018), Form A.
- 33 Interview with Hans Risser, UNDP Istanbul Regional Hub, Geneva, 7 September 2016.
- 34 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; Statement of Turkey, 16th Meeting of States Parties, Vienna, 20 December 2017; and Article 7 Report (for 2017), Form A.
- 35 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 36 Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 37 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 38 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 39 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 40 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 41 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.
- 42 Statement of Turkey, 15th Meeting of States Parties, Santiago, 29 November 2016.
- 43 Article 5 deadline Extension Request, 29 March 2013, pp. A-2, A-13, and A-14.
- 44 Article 7 Report (for 2014), "Workplan for mine clearance activities", pp. 3 and 8; and Statement of Turkey, 15th Meeting of States Parties, Santiago, 29 November 2016.
- 45 Interview with Col. Zaki Eren, Director of Operations Department and Acting Director of TURMAC, and Maj. Can Ceylan, TURMAC, in Vienna, 20 December 2018.
- 46 Article 7 Reports (for 2016, 2017, and 2018), Form A.
- 47 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 48 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 49 2013 Article 5 deadline Extension Request, p. A-14.
- 50 Ibid., pp. A-3, A-14, and A-15.
- 51 Article 7 Report (for 2014), "Workplan for mine clearance activities", p. 6.
- 52 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016.
- 53 Interview with Gen. Celalettin Coban and Col. Ali Güngör, TURMAC, in Geneva, 18 February 2016.
- 54 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, in Vienna, 20 December 2018; and Article 7 Report (for 2017), Form A.
- 55 Statements of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018 and Intersessional Meetings, Geneva, 22 May 2019.
- 56 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 57 Article 7 Report (for 2018), Form A; and Statements of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018 and Standing Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 58 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 59 Article 7 Report (for 2018), Form A.
- 60 Article 7 Report (for 2014), "Workplan for mine clearance activities", pp. 7 and 8; and email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 61 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 62 Article 7 Report (for 2014), "Workplan for mine clearance activities", pp. 5 and 6.
- 63 Ibid., p. 4.
- 64 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017; and Article 7 Report (for 2017), Form A.
- 65 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016; and Article 7 Report (for 2015), Form F.
- 66 Article 7 Report (for 2017), Form A; and Statements of Turkey, 16th Meeting of States Parties, Vienna, 20 December 2017 and 17th Meeting of States Parties, Geneva, 29 November 2018.
- 67 Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019; and Article 7 Report (for 2018), Form A.
- 68 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 69 Interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, in Vienna, 20 December 2018; and Article 7 Report (for 2018), Form A.
- 70 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.
- 71 Article 7 Report (for 2018), Form A; statements of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018 and Standing Committee on Article 5 Implementation, Geneva, 22 May 2019; and email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 72 UNDP, "Turkey, UNDP begin clearing landmine along eastern borders", 4 April 2016.
- 73 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.
- 74 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 75 Ibid.
- 76 Ibid.
- 77 Article 7 Report (for 2017), Form A; and Statement of Turkey, 16th Meeting of States Parties, Vienna, 20 December 2017.
- 78 Statement of Turkey, 16th Meeting of States Parties, Vienna, 20 December 2017. Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019; and Article 7 Report (for 2018), Form A.
- 79 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 80 Ibid.
- 81 Article 7 Report (for 2017), Form A.
- 82 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 83 Ibid.
- 84 Article 7 Report (for 2018), Form D.

- 85 Article 7 Report (for 2018), Form A; Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019; and email from Maj. Can Ceylan, Head of QM Section, TURMAC, 11 July 2019.
- 86 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.
- 87 Article 7 Report (for 2018), Form A; and Statement of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018.
- 88 Article 7 Report (for 2018), Form D.
- 89 Email from Maj. Can Ceylan, Head of QM Section, TURMAC, 11 July 2019.
- 90 Interview with Col. Zaki Eren and Maj. Can Ceylan, TURMAC, 20 December 2018, Vienna.
- 91 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.
- 92 Article 7 Report (for 2018), Forms A and D; and Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 93 Article 7 Report (for 2018), Form A; and Statements of Turkey on Clearance, 17th Meeting of States Parties, Geneva, 29 November 2018; and Standing Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 94 Article 7 Report (for 2018), Forms A and D.
- 95 Ibid., Form A.
- 96 Statement of Turkey on Clearance, APMBC 17th Meeting of States Parties, Geneva, 29 November 2018.
- 97 Article 7 Report (for 2018), Form A.
- 98 Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 99 Article 7 Report (for 2018), Form D.
- 100 2013 Article 5 deadline Extension Request, p. A-13.
- 101 Ibid., 29 March 2013, pp. A-8 and A-9.
- 102 Emails from Lt.-Col. Halil Şen, TURMAC, 21 June 2017, and Cpt. Ahmet Gun, TURMAC, 16 November 2017.
- 103 Email from Maj. Can Ceylan, TURMAC, 11 July 2019.
- 104 Ibid.
- 105 Statement of Turkey, Standing Committee on Article 5 Implementation, Geneva, 22 May 2019.
- 106 Ibid.
- 107 Email from Lt.-Col. Halil Şen, TURMAC, 21 June 2017.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 JUNE 2021
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

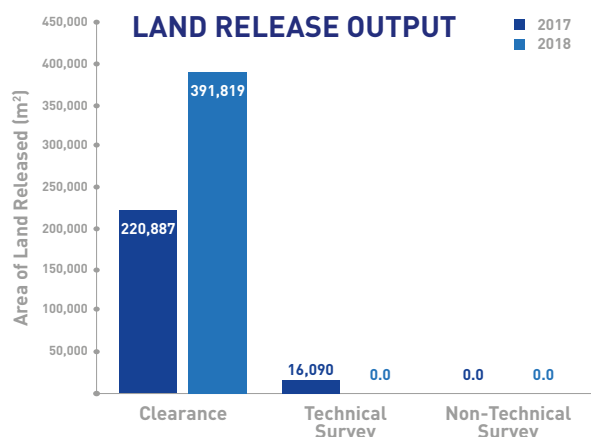
MEDIUM, 10_{km}²
(ESTIMATED)

AP MINE CLEARANCE IN 2018

391,819_m²

AP MINES DESTROYED IN 2018

8 (including 3 destroyed
during spot tasks)



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

In 2018, Ukraine sought and was granted a five-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline, bringing it back into compliance with the Convention. Reports continue that all parties to the conflict, including the national government forces, continue to use anti-personnel mines. While some survey and clearance did take place in 2018, the full extent of demining operations is not known as Ukraine has not reported with any detail. With the adoption of national mine action legislation, Ukraine is in a position to establish a properly functioning mine action programme.

RECOMMENDATIONS FOR ACTION

- Ukraine should cease all use of landmines.
- Ukraine should formally establish a national mine action authority and a functioning national mine action centre to manage clearance of anti-personnel mines.
- Ukraine should undertake a baseline survey of anti-personnel mine contamination in areas to which it has effective access.
- Ukraine should elaborate a national strategic plan for mine action.
- Ukraine should systematically collect data on contamination from mines, cluster munition remnants (CMR) and other explosive remnants of war (ERW), as well as progress in survey and clearance, and establish a centralised database for planning purposes.
- Ukraine should consult with mine action stakeholders and elaborate standardised national criteria for the prioritisation of anti-personnel mine clearance.
- Ukraine should establish a quality management system for demining operations.
- Ukraine should elaborate a gender policy and implementation plan for mine action.
- Ukraine should revise its recently adopted legislation, which imposes liability for released land directly on the clearance operator for a period of 10 years, rather than on the national authorities that have taken the decision to release it.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	3	Exact extent of anti-personnel mine contamination in Ukraine is not known and while some survey is being conducted it is not being systematically reported. Reports of new anti-personnel mine use persist.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	5	The Ministry of Defence (MoD) continues to have organisational control of mine action operations. The adoption of mine action legislation in late 2018 allows both a national mine action authority and a national mine action centre to be set up. The Ukrainian government and international donors are funding clearance of explosive remnants of war (ERW) and mines.
GENDER (10% of overall score)	2	Ukraine does not have a gender policy for mine action and does not report on whether gender is mainstreamed within its programmes.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	4	There are two mine action databases in Ukraine which a national mine action centre should consolidate into a national mine action information system. An online map has been published by the MoD with mine and unexploded ordnance (UXO) contamination. Ukraine submitted its Article 5 deadline extension request in 2018 but does not report in a manner consistent with the international mine action standards (IMAS).
PLANNING AND TASKING (10% of overall score)	3	There is no national strategic plan for mine action or standardised criteria for prioritising tasks in Ukraine. In May 2019, Ukraine submitted its annual action plan with a list of planned activities.
LAND RELEASE SYSTEM (20% of overall score)	5	National mine action standards were elaborated in 2018 but were still awaiting formal adoption by the government as of July 2019. External quality management is being introduced with the first handover of cleared land by international operators taking place in 2019.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	Ukraine is not on track to meet its Article 5 deadline. The Ukrainian government does not exercise effective control in all mined areas of the country, impeding access for demining. Clearance is restricted in areas on the government side due to the ongoing conflict and mines continue to be emplaced in zones of conflict.
Average Score	4.0	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT

- No national mine action authority or mine action centre
- Ministry of Defence (MoD)

NATIONAL OPERATORS

- State Emergency Services of Ukraine (SESU)
- Security Service
- State Special Transport Service (SSTS)
- State Border Service
- Demining Team of Ukraine
- Demining Solutions

INTERNATIONAL OPERATORS

- The HALO Trust
- Danish Demining Group (DDG) – Not active in demining in 2018
- Swiss Foundation for Mine Action (FSD) – Operations suspended in 2019

OTHER ACTORS

- Organization for Security and Co-operation in Europe (OSCE) Project Coordinator in Ukraine (PCU)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Mine Action Sub-cluster chaired by United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

The extent of anti-personnel mined area in Ukraine is not known. The heaviest mine and ERW contamination is believed to be inside the 15km buffer zone on either side of the Line of Contact between the warring parties within the Donetsk and Luhansk regions, but access to this area for survey and clearance operations is severely limited.¹ In 2017, Ukraine estimated, highly improbably, that total contamination by mines and ERW could extend over 7,000km².² The Ukrainian Ministry of Defence (MoD) accepted that this is a “rough” estimate.³ In its statement at the May 2019 APMBC Intersessional Meetings, Ukraine estimated, also improbably, that more than 8% of the Donetsk and Luhansk regions have been contaminated by anti-personnel mines.⁴ Ukraine cannot reliably estimate the overall extent of mine contamination until surveys have been completed.⁵

In its latest APMBC Article 7 transparency report, covering actions in 2018, Ukraine noted that technical survey had been conducted by non-governmental organisations (NGOs) in the Popasnyansky district, Lugansk region and in the Slavic and Volnovansky districts, Donetsk region but no anti-personnel mines were found. Ukraine also reported that NGOs also conducted non-technical survey in the Limansky district of the Donetsk region.⁶ Since The HALO Trust began operations in Ukraine, it has confirmed 6.6km² as anti-personnel mined area. In 2018, The HALO Trust identified 24 new mined areas with a total surface area of 1.4km².⁷ The Organization for Security and Co-operation in Europe (OSCE) Project Coordinator in Ukraine (PCU) suggests that the national mine action centre, due to be established in 2019, initially focus on non-technical survey outside the 15km buffer zone in order to better define the scale of the problem. Areas within the buffer zone will continue to be under the jurisdiction of the MoD and not within the direct remit of the national mine action centre.⁸

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,⁹ including by Ukrainian armed forces, though the full nature and extent of contamination is likely to remain unclear until an effective cessation of hostilities. Prior to the current conflicts, Ukraine was affected by residual contamination of mines and other ordnance, mostly as a result of heavy fighting between German and Soviet forces in the Second World War, but also from combat in the First World War.

MoD engineering units partially cleared affected areas in the mid-1970s, suggesting that a problem may remain, but the location and extent of any mine threat is not known.

Ukraine is also contaminated with CMR, the extent of which is not known, and by considerable quantities of other ERW used during the current conflict (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Ukraine for further information).

NEW CONTAMINATION

Over the last few years, the OSCE's Special Monitoring Mission (SMM) in Ukraine has frequently reported on the use of anti-personnel and anti-vehicle mines.¹⁰ 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.”¹¹ In 2018, the OHCHR called on all parties involved in hostilities to “cease the use of victim-activated devices”.¹²

At the May 2019 APMBC Intersessional Meetings, Ukraine claimed that it had not used, and is not planning to use, anti-personnel mines since it acceded to the APMBC in June 2006 but accused Russia of having used anti-personnel mines in its territory since 2014. According to Ukraine these mines have been planted by Russia-backed illegal armed groups in the Donetsk and Luhansk regions and Russia has also emplaced mines on the administrative border between Crimea and the rest of Ukraine's territory.¹³ Ukraine stated that illegal armed groups had used different types of mines, including those banned by the APMBC and which Ukraine does not possess. The mines which Ukraine alleged have been used by the opposition groups include PMN-1, PMN-2, PMN-4, POM-2R, OZM-72, and MON-50 mines with tripwire.¹⁴ In the past, Ukraine has reiterated that its armed forces are authorised to use MON-series and OZM-72 mines only in command-detonated mode (through electrical initiation), which is not prohibited under the APMBC. According to Ukraine, all mines planted in command-detonated mode are recorded and secured, and access to the area is restricted.¹⁵ In 2019, Ukraine reported that there were six registered cases of the use of PMN-2 mines, which had been supplied by Russia to these illegal armed groups. Eight members of the Ukrainian armed forces were wounded by these devices.¹⁶

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

All areas of mine action in the Donetsk and Luhansk region, including humanitarian demining operations, are currently planned, coordinated, and controlled by the MoD.¹⁷ 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); the Security Services; the Ministry of Temporarily Occupied Territories and Internally Displaced Persons; the State Special Transport Services (STSS) of the MoD; the National Police; and the State Border Service.¹⁸

The MoD has organisational control of operations while SESU is generally responsible for conducting 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 explosive ordnance disposal (EOD) teams) involved in technical and non-technical survey, demining, internal quality control (QC) of SESU units, information management, and handover of land cleared by SESU to local authorities, as well as risk education.¹⁹

Ukraine's national mine action legislation was adopted by parliament on 6 December 2018 and signed into law by the President on 22 January 2019. It establishes a framework for humanitarian demining, divides responsibilities among state institutions, and envisages the creation of a mine action authority and mine action centre. Members of the national mine action authority (NMAA) will be appointed by the Cabinet of Ministers. A national mine action centre (NMAC) will be responsible for survey and clearance outside the contact line and buffer zone, and once staffed, will prepare a strategic mine action plan. The MoD will maintain responsibility for demining of the contact line and buffer zone. According to the OSCE PCU, the NMAA and NMAC would be in place by the end of 2019, following presidential and parliamentary elections in September.²⁰

The HALO Trust and Danish Demining Group (DDG) reported that they have actively participated in roundtables and public hearings on mine action legislation, organised by the MoD, the OSCE PCU, and the Verkhovna Rada (VR), the Ukrainian Parliament, Defence and Security Committee. During these meetings, The HALO Trust and DDG supported the adoption of national legislation and shared best practices and lessons learned from other countries.²¹

Once the mine action law is fully implemented, this should provide the mechanisms for government bodies to assist operators with visas and importation of equipment: issues that are currently handled by the operators themselves.²² In 2018, The HALO Trust faced challenges, which it overcame, importing armoured machinery that was classed as military equipment and, as such, could not be imported by a civilian organisation without the support of an executive branch of government.²³

National funding is provided for clearance of mines and ERW.²⁴ Ukraine also receives support from foreign partners (OSCE and NATO) for demining equipment.²⁵

The Geneva International Centre for Humanitarian Demining (GICHD) has been working with the OSCE PCU to help foster mine action institutions, including legislation.²⁶ The OSCE PCU, has received funding until October 2020 to support Ukraine in establishing the NMAA and the NMAC and adopting national standards (now that the mine action legislation has been passed).²⁷ DDG is focusing on working with SESU to equip, train, and support their survey and clearance capacities as the mine action sector evolves and national standards come into force.²⁸ In 2018, The HALO Trust organised or facilitated training courses and workshops for both state bodies and international operators in non-technical survey, land release, quality management, EOD, and geographic information systems (GIS).²⁹

GENDER

As at July 2019, no information had been provided on whether there is a gender policy and associated implementation plan for mine action in Ukraine.

DDG has a gender and diversity policy and implementation plan. It ensures that all affected groups, including women and children, are consulted during survey and community liaison activities. However, DDG acknowledges its survey and community and liaison teams are not gender balanced, with only 15% of operational roles being filled by women, although 38% of its managerial/supervisory positions are occupied by women.³⁰

The HALO Trust uses mixed gender non-technical survey and community liaison teams. HALO Trust began recruiting women for clearance roles in 2017, employing the first female deminers in Ukraine. As at May 2019, 15% of operational survey and clearance staff were female while more than half of managerial/supervisory staff were women.³¹

INFORMATION MANAGEMENT AND REPORTING

There are two functioning Information Management System for Mine Action (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.³² The databases are claimed to be complementary, as they are separated based on region, thematic area, and operational purpose.³³ It will be the task of NMAC to create a central national IMSMA database.³⁴ An online map has been published by the MoD, with technical support from The HALO Trust, with areas of anti-personnel mine and UXO contamination surveyed by DDG, FSD, The HALO Trust, and a commercial company, Demining Solutions.³⁵

Ukraine submits Article 7 transparency reports in a timely manner but does not report on its progress in a manner consistent with the international mine action standards (IMAS). According to its Article 7 obligation, Ukraine should report on "the types and quantities of all anti-personnel mines destroyed after ... entry into force ... in accordance with Articles 4 and 5" but no survey or clearance data was provided in its latest Article 7 report. In 2018, Ukraine finally submitted, and was granted, a five-year extension to its APMBC Article 5 deadline. Prior to the submission of its extension request, Ukraine had been in serious violation of the APMBC by not submitting a request following the new use of anti-personnel mines during the ongoing conflict.

PLANNING AND TASKING

In May 2019, Ukraine submitted its “Annual Action Plan for humanitarian demining in liberated areas in Donetsk and Luhansk” for 2019, as requested by the APMBSC Seventeenth Meeting of States Parties.³⁶ Annually, the MoD produces an operational plan for all operators, based on information provided by national agencies and international operators working in Ukraine.³⁷ Planned activities for 2019 included development of information management systems for mine action, the creation of an EOD call-out response, improvement in quality management processes, as well as non-technical survey, technical survey, and clearance of populated areas, transport routes, and infrastructure.³⁸ In the plan, Ukraine also stated that the MoD intends to publish information on its website every six months that details newly identified SHAs, the progress of demining activities and the handover of cleared land.³⁹

Following a 2015 order from the Prime Minister of Ukraine, 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. However, this was put on hold pending the approval and implementation of mine action legislation. As at July 2019, there was no national strategic plan for mine action in Ukraine.

There are currently no standardised criteria at national level for task prioritisation.⁴⁰ Until the NMAC is established, all tasking of operators is managed by the MoD in line with its annual action plan.⁴¹ Local government have been helping the MoD prioritise tasks based on humanitarian criteria.⁴²

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

National mine action standards (NMAS) were finalised by the MoD in September 2018 after multi-year input and review from key stakeholders.⁴³ The NMAS were published in April 2019 but, in accordance with the new mine action law, are awaiting formal adoption by the government before they can become operational.⁴⁴ In April 2019, the Cabinet of Ministers approved Resolution 372 on “Regulations on marking mine and ERW hazards”, which are said to follow the provisions in the IMAS.⁴⁵

In May 2018, the GICHD, at the request of the OSCE PCU, aided a review of the national standards and also planned in-country training on standards quality management, and non-technical survey. These activities will be implemented in 2019–20, depending on the progress in establishing the NMAA and NMAC, in accordance with the new law. GICHD will also be working with Ukrainian training centres, in standardising their demining and survey training packages.⁴⁶

OPERATORS

The MoD and several other ministries continue to deploy units that undertake clearance and destruction of mines and ERW. This includes engineer-sapper units of the Armed Forces of Ukraine; the National Guard of Ukraine; the Ministry of Internal Affairs, which conducts clearance through SESU and also has an engineering department that conducts EOD; the Security Service; the State Special Transport Service, which is responsible for demining national infrastructure; and the State Border Service, which conducts demining in areas under its control on land and in the sea.⁴⁷ As at June 2018, the Ukrainian authorities were deploying 55 demining teams (totalling 259 personnel), of which 37 teams were deployed by the MoD.⁴⁸

Three international demining organisations – DDG, FSD, and The HALO Trust – are operating in Ukraine.⁴⁹ DDG did not conduct any survey or clearance of mined areas in 2018. FSD suspended operations in 2019 due to lack of funding, however, they are actively looking for opportunities to extend their programme.⁵⁰

In addition, the Ukrainian organisations, Demining Team of Ukraine and Demining Solutions are active in demining in eastern Ukraine.⁵¹

As at June 2018, The HALO Trust had 244 staff of whom 218 were engaged in survey, mine clearance, or battle area clearance (BAC). By September 2018, this had increased to a total of 360 staff.⁵² 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.⁵³ HALO Trust expected the expansion of its operations to continue, as at June 2019, it had 418 staff including 25 manual and 2 mechanical clearance teams, five survey teams and two mechanical support teams.⁵⁴

In 2018, DDG deployed four non-technical survey and five technical survey personnel along with 28 clearance personnel for BAC tasks. DDG expected to expand both its survey and clearance capacity in 2019.⁵⁵ FSD conducted training for additional non-technical survey personnel in 2018.⁵⁶

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.⁵⁷

Currently operators conduct their own quality management but it is expected that the formal development of external quality management will take place in 2019 following the adoption of the mine action law.⁵⁸ In August 2019, HALO Ukraine handed over its first 11 cleared areas to local administrations in Luhansk oblast after successfully passing an external quality inspection by the MoD's Kamyanets-Podilsky Demining Centre.⁵⁹

OPERATIONAL TOOLS

In 2018, The HALO Trust deployed its first mechanical clearance asset, the first operator in Ukraine to do so.⁶⁰ As at June 2019, HALO deployed three mechanical clearance assets, two armoured front end loaders and one armoured excavator.⁶¹

DDG plans to use drones to create high-resolution maps for their tasks but, as at June 2019, the mechanism for acquiring permission to fly was not yet in place.⁶² DDG does not use any mechanical assets.⁶³

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

Ukraine did not report its clearance output for 2018. In its latest Article 7 report Ukraine stated that mine clearance work is underway by NGOs in Stanichko-Lugansk district, Lugansk region and Bakhmutsky district, Donetsk region but did not provide any clearance data. Of the international operators, The HALO Trust cleared 391,819m² and destroyed five anti-personnel mines. The HALO Trust also identified 24 new anti-personnel mined areas with a total surface area of 1.4km².

CLEARANCE IN 2018

In 2018, the HALO Trust cleared 391,819m², destroying in the process five anti-personnel mines. This is an increase from 2017 when the HALO Trust cleared 220,887m², also destroying five anti-personnel mines. According to HALO Trust, some confirmed hazardous areas (CHAs) are being cleared that prove not to contain anti-personnel mines. There have been incidents of local people removing the mines themselves, particularly in the case of above-ground threats such as directional fragmentation mines and tripwire-initiated hand grenades (which function as anti-personnel mines).⁴⁴

Table 1: Mine clearance in 2018⁴⁵

District/village	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Stanychno Luhanskyi/Krasna Talivka	9	241,271	3	40	1
Lymanskyi/Ozerne	2	57,348	0	0	8
Bakhmutskyi/Kodema	1	2,780	1	0	2
Bakhmutskyi/Novoluhanske	3	16,527	0	0	18
Lymanskyi/Kryva Luka	1	7,938	0	0	1
Slovianskyi/Andriivka	2	19,680	0	0	3
Stanychno-Luhanskyi/Shyrokyi	2	27,259	0	0	1
Volnovaskyi/Volnovakha	1	19,016	1	0	1
Totals	21	391,819	5	40	35

AP = Anti-personnel AV = Anti-vehicle

In addition, the HALO Trust destroyed three anti-personnel mines during EOD spot tasks in 2018.⁴⁶

ARTICLE 5 DEADLINE AND COMPLIANCE

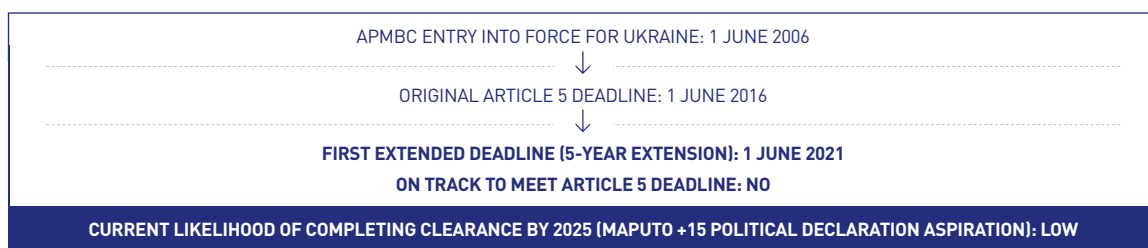


Table 2: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (m ²)
2018	391,819
2017	220,887
2016	52,887
2015	N/R
2014	N/R
Total	665,593

N/R = Not Reported

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.⁴⁷

Ukraine submitted and was granted its Article 5 extension request in 2018 bringing it back to compliance with Article 5 of the APMBC. However, Ukraine provided very little information on outstanding mine contamination or the outputs from ongoing survey and clearance activities making it very difficult to know the true extent of mine contamination in Ukraine or track progress in survey and clearance efforts. Within government-controlled areas, there is limited demining close to the contact line as mined areas are deemed to serve a tactical purpose and will not be demined until there is total de-escalation of the conflict.

Clearance data is not available from areas outside of government control although it is understood that pro-Russian rebels are conducting some clearance operations.⁴⁸ While Russia is not a state party or signatory to the APMBC it 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.

The long-awaited adoption of national mine action legislation at the end of 2018 is a positive step forward for Ukraine.

This provides the framework for humanitarian demining in Ukraine and should lead to the establishment of the NMAA and the NMAC, the implementation of national standards, and development of a national strategy with concrete milestones in place for survey and clearance outside of the buffer zone in Ukraine. However, the MoD will continue to be responsible for demining within the buffer zone and it is difficult to see how Ukraine will achieve completion of anti-personnel mine clearance during an ongoing conflict when there are reports that both sides are continuing to emplace mines.

- 1 Email from Yuri Shahramanyan, Programme Manager, HALO Trust Ukraine, 5 July 2018.
- 2 "Measures to ensure compliance", presentation by Col. Viktor Kuzmin, Deputy Chief, Engineer Troops, Armed Forces of Ukraine, provided to the APMBBC Implementation Support Unit at the APMBBC Intersessional Meetings, Geneva, 9 June 2017, at: bit.ly/2Zk2MUJ.
- 3 Interview with Maksym Komisarov, Chief of Mine Action Department, Ministry of Defence, in Geneva, 8 June 2018.
- 4 Statement of Ukraine, Committee on Article 5 implementation, Geneva, 22 May 2019.
- 5 "Mine Action in Ukraine", Side-event presentation by Lt.-Col. Yevhenii Zubarevskiy, Ministry of Defence (MoD), at the 19th International Meeting, Geneva, 17 February 2016; and Statement of Ukraine, Intersessional Meetings, Geneva, 19 May 2016.
- 6 Article 7 Report (for 2018), Form C.
- 7 Email from Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019.
- 8 Interview with Miljenko Vahtavic, OSCE PCU, 7 February 2019.
- 9 Human Rights Watch, "Landmines in Ukraine: Technical Briefing Note", 6 April 2015, at: bit.ly/2ym1k80; Protection Cluster Ukraine, "Eastern Ukraine: Brief on the need for humanitarian mine action activities", at: bit.ly/2Zh8uGA; "Minefields Kill 261, Wound 479", Kyiv Post, 21 January 2016, at: bit.ly/32WRBmE; and "Ukraine's desperate attempt to defuse landmines – as more are planted", The Guardian, 4 April 2016, at: bit.ly/2YezSbP.
- 10 See: "Daily and spot reports from the Special Monitoring Mission to Ukraine", at: bit.ly/2K4lFms.
- 11 OHCHR, "Report on the human rights situation in Ukraine 16 August to 15 September 2017", December 2017, p. 5.
- 12 OHCHR, "Report on the human rights situation in Ukraine 16 February to 15 May 2018", June 2018, p. 29.
- 13 Statement of Ukraine, Committee on Article 5 implementation, Geneva, 22 May 2019.
- 14 Government of Ukraine, "Measures to ensure compliance", Geneva, 9 June 2017; Statement of Ukraine on Article 5, APMBBC 15th Meeting of States Parties, Santiago, 29 November 2016; and Preliminary observations of the committee on cooperative compliance, "Ukraine", Intersessional Meetings, Geneva, 8–9 June 2017.
- 15 Preliminary observations of the committee on cooperative compliance, "Ukraine", Intersessional Meetings, Geneva, 8–9 June 2017.
- 16 Statement of Ukraine, Committee on Article 5 implementation, Geneva, 22 May 2019.
- 17 Email from Lt.-Col. Yevhenii Zubarevskiy, MoD, 27 June 2017.
- 18 Ibid.; and emails from Anton Shevchenko, OSCE, 14 June 2016; and Gianluca Maspoli, Country Focal Point for Ukraine, GICHD, 20 June 2017 and 5 July 2018.
- 19 Ibid.; National Security and Defence Council and the SESU, "Humanitarian demining in Ukraine: current issues and challenges", Side event, APMBBC 14th Meeting of States Parties, Geneva, 2 December 2015; and National Defence and the Canadian Armed Forces, "Operations UNIFIER"; and "Humanitarian mine and UXO clearing of the territory of Ukraine conducted by the State Emergency Service of Ukraine", Side-event presentation by Col. Oleh Bondar, SESU, Geneva, 17 February 2016; and email from Lt.-Col. Yevhenii Zubarevskiy, MoD, 17 June 2016.
- 20 OSCE, "Ukrainian parliament adopts legal framework for mine action, with OSCE advice provided", 10 December 2018, at: bit.ly/2QdTaQo; interview with Miljenko Vahtavic, OSCE PCU, 7 February 2019; and email, 13 June 2019.
- 21 Emails from Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019; and Henry Leach, DDG Ukraine, 25 September 2018.
- 22 Email from Henry Leach, DDG Ukraine, 2 May 2019.
- 23 Email from Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019.
- 24 Interview with Col. Oleksandr Shchebetiuk, Ukrainian Armed Forces, in Geneva, 26 June 2015.
- 25 Statement of Ukraine, Convention on Certain Conventional Weapons (CCW) Protocol V Meeting of Experts, Geneva, April 2015.
- 26 GICHD, "Conference on Ukraine's current security, humanitarian demining and ERW challenges", News release, Geneva, 24 April 2015.
- 27 "Mine Action Activities", Side-event presentation by Amb. Vaidotas Verba, Head of Mission, OSCE Project Co-ordinator in Ukraine, at the 19th International Meeting, 17 February 2016; and interview with Miljenko Vahtavic, OSCE PCU, 7 February 2019.
- 28 Email from Henry Leach, DDG Ukraine, 25 September and 1 October 2018.
- 29 Email from Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019.
- 30 Email from Henry Leach, DDG Ukraine, 2 May 2019.
- 31 Emails from Yuri Shahramanyan, HALO Trust Ukraine, 24 May 2017 and 16 May 2019.
- 32 Emails from Lt.-Col. Yevhenii Zubarevskiy, MoD, 21 October 2016 and 27 June 2017; Gianluca Maspoli, GICHD, 20 June 2017; and Inna Cruz, Information Management Advisor, GICHD, 5 July 2018.
- 33 Email from Gianluca Maspoli, GICHD, 20 June 2017.
- 34 Email from Miljenko Vahtavic, OSCE PCU, 30 April 2018.
- 35 Emails from Yuri Shahramanyan, HALO Trust Ukraine, 16 May and 31 May 2019.
- 36 Decisions on the request submitted by Ukraine for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the APMBBC, 17MSP, 30 November 2018.
- 37 Email from Gianluca Maspoli, GICHD, 25 September 2018.
- 38 Annual Action Plan for humanitarian demining in liberated areas in Donetsk and Luhansk, 6 May 2019.
- 39 Ibid.
- 40 Emails from Henry Leach, DDG Ukraine, 2 May 2019; and Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019.
- 41 Analysis of the request submitted by Ukraine for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 22 November 2018.
- 42 Interviews with Lt.-Col. Yevhenii Zubarevskiy, Ministry of Defence, in Geneva, 20 May 2016; and Maksym Komisarov, MoD, in Geneva, 8 June 2018.
- 43 Emails from Gianluca Maspoli, GICHD, 25 September 2018; and Miljenko Vahtavic, OSCE PCU, 25 September 2018; and interview with Miljenko Vahtavic, OSCE PCU, 7 February 2019.
- 44 Email from Miljenko Vahtavic, OSCE PCU, 31 May 2019.
- 45 Email from Miljenko Vahtavic, OSCE PCU, 13 June 2019; and Ministry for Temporarily Occupied Territories and Internally Displaced Persons, "Danger! Mines! Cabinet Of Ministers Of Ukraine Approved Regulations of Marking Mine And ERW Hazards, Developed By MTOT", 4 May 2019, at: bit.ly/2lO6vCA.
- 46 Email from Armen Harutyunyan, Advisor Land Release and Operational Efficiency, GICHD, 21 June 2019.
- 47 Interview with Col. Oleksandr Shchebetiuk, Ukrainian Armed Forces, in Geneva, 26 June 2015; email from Anton Shevchenko, OSCE, 23 June 2015; "Mine Action in Ukraine", Side-event presentation by Lt.-Col. Yevhenii Zubarevskiy, MoD, Geneva, 17 February 2016; and Article 7 Report (for 2018), Form F.
- 48 Interview with Maksym Komisarov, MoD, in Geneva, 8 June 2018.
- 49 Ibid.; and Article 7 Report (for 2018), Form F.
- 50 FSD Ukraine, Facebook post, 12 August 2019, at: bit.ly/2kVg1vJ
- 51 Email from Gianluca Maspoli, GICHD, 20 June 2017; "Tightening with the process of mine clearance in the East of Ukraine can lead to a new crisis", military-informant, 25 July 2016, at: bit.ly/2Qf1jeg; and "Presentation of the Demining team of Ukraine", SD Crisis, 26 April 2017, at: bit.ly/2wb6DG7.
- 52 Emails from Yuri Shahramanyan, HALO Trust Ukraine, 29 June and 25 September 2018.
- 53 Emails from Adam Jasinski, HALO Trust, 18 May 2016; and Yuri Shahramanyan, HALO Trust Ukraine, 24 May 2017.
- 54 Email from Yuri Shahramanyan, HALO Trust Ukraine, 19 June 2019.
- 55 Email from Henry Leach, DDG Ukraine, 2 May 2019.
- 56 Email from Anthony Connell, FSD Ukraine, 15 June 2018.
- 57 Protection Cluster Ukraine, "Eastern Ukraine: Brief on the need for humanitarian mine action activities".
- 58 Email from Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019.
- 59 Email from Yuri Shahramanyan, HALO Trust Ukraine, 15 August 2019.
- 60 Email from Yuri Shahramanyan, HALO Trust Ukraine, 17 May 2019.
- 61 Email from Yuri Shahramanyan, HALO Trust Ukraine, 19 June 2019.
- 62 Email from Henry Leach, DDG Ukraine, 11 June 2019.
- 63 Email from Henry Leach, DDG Ukraine, 2 May 2019.
- 64 Email from Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019.
- 65 Ibid.
- 66 Ibid.
- 67 Emails from Yuri Shahramanyan, HALO Trust, 24 May 2017; and Henry Leach, Head of Programme, DDG Ukraine, 29 May 2017.
- 68 Side-event presentation by Mark Hiznay, HRW, in Geneva, February 2015; and interview, 18 February 2015.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2024
ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

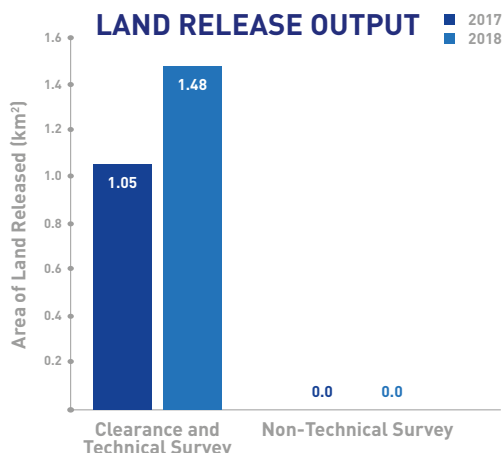
MEDIUM, 6.1 km²
(ESTIMATED)

AP MINE
CLEARANCE IN 2018

1.48 km²

AP MINES
DESTROYED IN 2018

588



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **HIGH**

KEY DEVELOPMENTS

In 2018, the United Kingdom requested and was granted a further five-year extension to its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline until 1 March 2024. The United Kingdom again made good progress in 2018, releasing nearly 1.5 km² of mined area on the Falkland Islands,¹ in addition to conducting technical survey of the eight mined areas that will remain as at the end of the current phase of demining in March 2020.

RECOMMENDATIONS 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) through type of survey and through clearance.
- The United Kingdom should update APMBC states parties on the results of technical survey of the remaining eight mined areas in Yorke Bay and on the planned timeline for contracting and completing clearance of this final phase of demining.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	The United Kingdom has established a reasonably accurate baseline of remaining anti-personnel mine contamination, though past assessments, based on the best information at the time, have tended to overstate the extent of the problem.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	9	There is strong national ownership of mine action on the Falkland Islands, with oversight from a National Mine Action Authority and a Demining Project Office, and 100% national funding for all survey and clearance. The United Kingdom is now making good progress in implementing its obligations under APMBC Article 5.
GENDER (10% of overall score)	6	Good gender policies and procedures are in place to cover mine action in the Falkland Islands, including at the level of the UK Foreign and Commonwealth Office (FCO), the National Mine Action Authority, the land release contractor (currently SafeLane Global), and the Demining Project Office (currently Fenix Insight). While one third of management positions in SafeLane Global in the Falkland Islands are held by women, none of the survey or clearance personnel is female. This is despite equal employment opportunities.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	6	The United Kingdom has a well-functioning information management system in place, to record and monitor progress in land release operations on the Islands. However, land released through technical survey is not disaggregated from release through clearance in the United Kingdom's reporting.
PLANNING AND TASKING (10% of overall score)	8	The United Kingdom has a clear workplan in place to address remaining mined areas on the Islands, as well as measures in place to address residual risk, post completion.
LAND RELEASE SYSTEM (20% of overall score)	6	The United Kingdom does not have its own national mine action standards, but survey and clearance operations on the Islands are said to meet or exceed the International Mine Action Standards (IMAS). While the land release methodology could potentially be viewed as overly risk-adverse, based on full clearance of 11 uncontaminated areas, despite the conduct of technical survey prior to clearance, the United Kingdom maintains clearance was necessary for full assurance and to ensure all reasonable effort, given the lack of minefield records.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	The United Kingdom released nearly 1.5km ² of mined area in 2018 and conducted technical survey of the eight mined areas which will remain as at the end of the current phase of demining in March 2020. The United Kingdom has committed to fulfil its Article 5 obligations by March 2024.
Average Score	7.1	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT

- National Mine Action Authority (chaired by the United Kingdom Foreign and Commonwealth Office (FCO) and comprising representatives from the Ministry of Defence, the Falkland Islands government, and a strategic advisor)
- Fenix Insight (current Demining Project Office)

NATIONAL OPERATORS

- SafeLane Global (formally Dynasafe BACTEC, and current land release contractor)

INTERNATIONAL OPERATORS

- None

OTHER ACTORS

- None

UNDERSTANDING OF AP MINE 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 1982.² As at the end of Phase 5(a) of clearance, in March 2018, only 35 mined areas remained to be cleared, totalling over 6.1km².³ As at the end of December 2018, contamination had been reduced to 22 mined areas, totalling 3.9km² (see Table 1).⁴

The United Kingdom has a fully funded programme in place (Phase (b) clearance) to reduce contamination by 31 March 2020, to only eight remaining mined areas in Yorke Bay, totalling 0.16km².⁵

Table 1: Contamination by province (at end 2018)⁶

Area	Mined areas	Area (m ²)
Fox Bay	6	2,017,912
Port Howard	1	1,021,979
Darwin and Goose Green	0	0
Murrell Peninsula	5	582,287
Stanley Area 2	2	89,861
Stanley Area 3	0	0
Yorke Bay	8	205,800
Totals	22	3,917,839

Some clearance was undertaken in the early 1980s immediately following the Falklands conflict, during which 1,855 mines were removed and destroyed from mined areas.⁷ 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.⁸

In its 2008 Article 5 extension request, the United Kingdom reported that 117 mined areas remained over an estimated total area of 13km², and containing some 20,000 anti-personnel and anti-vehicle mines.⁹ On the basis of additional information

obtained during demining operations, the estimate for the total contaminated area was increased to 13.5km².¹⁰ 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.¹¹

During the first four phases of clearance (from October 2009 to March 2016), 35 mined areas were released, totalling just over 2km², 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 2km² 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.¹²

Phase 5(b) began in April 2018 and was expected to conclude at the end of March 2020.¹³ At the end of this Phase, it is expected that only eight mined areas will remain, covering an estimated 163,460m², all located in Yorke Bay.¹⁴

There are two further areas, Don Carlos Bay and Beatrice Cove, which have never been considered as mined, and which were not included 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.¹⁵ Two further tasks, BAC 1, which was suspected to contain booby-traps based on anecdotal evidence, and BAC 2, a building suspected of being booby trapped, were completed in December 2018.¹⁶

The United Kingdom has reported that no civilian has ever been killed or injured by mines on the islands.¹⁷ Over the years, very few civilians have deliberately or inadvertently entered a minefield. It is a criminal offence on the Falkland Islands to enter a minefield.¹⁸

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

A National Mine Action Authority (NMAA) was established in 2009 to regulate, manage, and coordinate mine action on the Falkland Islands. The NMAA is chaired by United Kingdom 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), and the land release contractor (SafeLane Global; formerly, Dynasafe BACTEC) and the Demining Project Office (currently Fenix Insight), are invited “where appropriate”.¹⁹

In addition, there is a Suspect Hazardous Area Land Release Committee (SHALARC), which is a body based in the Falkland Islands, composed of a range of local officials and a representative of the United Kingdom military. SHALARC provides a forum for the contractors to discuss issues of concern or interest to the committee, and includes explanation of the land release process, including when land has been released for public use.²⁰

Survey and clearance operations in the Falkland Islands are entirely funded by the UK Government.²¹

GENDER

The NMAA requires SafeLane Global and Fenix Insight to meet contractual conditions to prevent unlawful discrimination either directly or indirectly on protected characteristics such as race, colour, ethnic or national origin, disability, sex or sexual orientation, religion or belief, or age. The provisions also set out that the Contractor shall adhere to the current relevant codes of practice or recommendations published by the Equality and Human Rights Commission.²²

Fenix Insight has an organisational gender policy which it applies to its demining, though there is limited opportunity to pursue it on the Falklands given the deployed “team” is composed of only one (male) person. SafeLane Global has an equal opportunities policy and selects employees based on qualification and experience, without gender restrictions. Of management level positions employed by SafeLane Global in the Falkland Islands, one is occupied by a woman, but none of the survey or clearance staff is female.²³

In 2018, the UK Government wrote to suppliers setting out safeguarding policies and procedures in light of sexual exploitation and abuse in the aid sector, which raised questions regarding the ethical behaviour of organisations being funded by UK taxpayers’ money and the safeguarding of the communities across the world that it is intended to support. The contractors working to deliver the UK’s Falkland Islands Demining Programme were contacted as part of this wider engagement.²⁴

Women are involved in key positions at the FCO: Senior Responsible Officer, Deputy Senior Responsible Officer, and Project Manager.²⁵

INFORMATION MANAGEMENT AND REPORTING

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 Article 5 deadline extension request). This forms the basis of the declarations to the APMBC 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.²⁶

Historically, the United Kingdom has not collated data on area cancelled and on area reduced,²⁷ and does not disaggregate land released through technical survey from land released through clearance in its reporting.²⁸

The United Kingdom submits annual Article 7 transparency reports and reports on its progress in Article 5 implementation at the APMBC intersessional meetings and meetings of states parties.

PLANNING AND TASKING

At present, the United Kingdom is undertaking the fifth phase of demining operations in the Falkland Islands. The government has committed to spend more than £27 million on this phase (2016–20), which aims to release 79 mined areas covering an estimated total of just under 10.86km².²⁹

Phase 5(a) commenced in November 2016 and concluded in March 2018.³⁰ 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.³¹ 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 APMBC.³²

The current stage of demining, Phase 5(b), which began in April 2018, is due to conclude on schedule by the end of March 2020.³³ At the end of this Phase, it is expected that only eight mined areas will remain, covering an estimated 163,460m², and located in the environmentally sensitive beach and sand dune area known as Yorke Bay.³⁴ As part of Phase 5(b), technical survey of these eight mined areas has been completed, enabling the United Kingdom to plan, cost, and contract the final phase of demining operations.³⁵

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 resultant priority list formed the basis of the UK Government’s invitation to tender for the contract for Phase 5 demining.³⁶

The land release contract sets out a task list (the workplan), which must be completed within the two-year window (1 April 2018 to 31 March 2020).³⁷ The Demining Project Office (Fenix Insight) monitors the Land Release Contractor (now SafeLane Global) to ensure that it completes the task list according to the contract standards and completion date. Fenix Insight reports regularly to the FCO, and both Fenix Insight and SafeLane Global report to the National Mine Action Authority on progress made against timescales.³⁸

Full and accessible records of all survey and clearance undertaken will be retained by national authorities in the Falkland Islands and the United Kingdom. The enduring UK military presence on the Falkland Islands includes an explosive ordnance disposal (EOD) team from the Royal Air Force Armament Engineering Flight. They hold responsibility for EOD activity on the Falkland Islands. The team will deal with residual explosive threats, post Article 5 completion.³⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The United Kingdom does not have its own national mine action standards, but survey and clearance operations on the Falkland Islands 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.⁴⁰ Each project's Statement of Requirement contains the standards specific to the tasks being addressed.⁴¹ 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.⁴²

However, it is possible that the land release methodology adopted in the Falkland Islands might be overly risk adverse, based on the fact that eleven mined areas in 2018 were technically surveyed, but were then fully cleared, and found to contain no anti-personnel mines. According to the United Kingdom, full clearance was undertaken of these areas (which were included in the original 122 fenced and marked areas) for "full assurance", because of the lack of minefield records, and to ensure all reasonable effort was taken.⁴³

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. SafeLane Global (formerly Dynasafe 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.⁴⁴ Capacity for Phase 5 operations was increased from previous phases, with a total of 108 personnel. Mechanical equipment includes one anti-vehicle mine machine, three anti-personnel mine machines, and two armoured excavators, in addition to the required transportation equipment.⁴⁵

The 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. Fenix Insight has been awarded responsibility for the Demining Project Office for all five stages of demining so far.⁴⁶

The United Kingdom has noted that the Falkland Islands has limited capacity in terms of accommodation and medical/aerial casevac 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.⁴⁷

SafeLane Global undertakes its own internal Quality Assurance (QA) and Quality Control (QC). Fenix Insight monitors this quality management and can also conduct its external QA and QC.⁴⁸ The size of the sampled areas at each task is decided by the quality contractor based on the guidance set out in IMAS 09.20.⁴⁹

OPERATIONAL TOOLS

In addition to manual survey and clearance, mechanical assets are also deployed extensively as part of land release operations on the Falkland Islands.⁵⁰ Flails and tillers are to aid technical survey while excavators, bulldozers, dumper trucks, and sand-sifting machines are deployed on sandy areas such as Yorke Bay. All mechanically prepared ground is subsequently processed by deminers using visual search, detector search, raking, or full manual excavation drills.⁵¹

Drones have been used for reconnaissance over large areas not accessible behind minefield fences and for aerial mapping. Use of drones to overfly suspected hazardous areas (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.⁵²

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

In 2018, a total of 1.48km² of mined area, across 24 SHAs, was released through clearance and technical survey in 2018, with the destruction of 588 anti-personnel mines, 31 anti-vehicle mines, and 26 items of UXO. No mined area was cancelled through non-technical survey.

In addition, technical survey was conducted in 2018 on the remaining areas, including at Yorke Bay and the Murrell Peninsular, but no results had been made available as at May 2019.

SURVEY IN 2018

In 2018, technical survey was conducted as part of land release operations, but no data was reported on the amount of mined area reduced through survey, which is instead included in reported clearance output (see Tables 2 and 3 overleaf).

In addition, a major focus in 2018 was on conducting technical survey on the remaining areas, including at Yorke Bay and the Murrell Peninsular (including Don Carlos Bay),⁵³ to enable the United Kingdom to plan for the final phase of clearance. As at May 2019, no results of the technical survey had been made public.⁵⁴

No areas were cancelled through non-technical survey in 2018.⁵⁵

CLEARANCE IN 2018

In 2018, of total of over 1.48km² of mined area was released through clearance (0.58km² during Phase 5(a) and 0.9km² during Phase 5(b)) with the destruction of 588 anti-personnel mines,⁵⁶ 31 anti-vehicle mines, and 26 items of UXO. This comprised nearly 0.58km² cleared between January and March, as part of Phase 5a of land release operations (see Table 2);⁵⁷ and a further 0.9km² cleared between April to December 2018, as part of Phase 5b of land release operations (see Table 3).⁵⁸

Clearance Phase 5(b)

Phase 5(b) of clearance operations (April 2018 to March 2020), which began on schedule in April 2018, is planned to cover more than 5.95km² of mined area.⁵⁹

Between April and December 2018, 0.9km² of mined area was cleared, with the destruction of 249 anti-personnel mines and 12 anti-vehicle mines (see Table 3).⁶⁰

Table 2: Mine clearance Phase 5(a) (November 2016 to March 2018)⁶¹

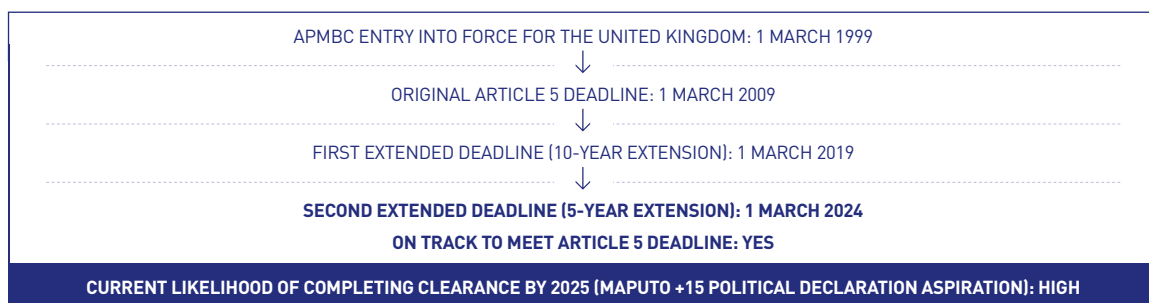
Time period	Geographic area	Areas released	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
November to December 2016	Stanley Area 2 and 3	7	426,346	1,314	19	1
January to December 2017 (including three month stand down during Austral winter)	Darwin and Goose Green, Stanley Area 2, 3, and 4	34	1,050,080	2,557	207	17
January to March 2018		11	577,474	352	19	26
Totals		52	2,053,900	4,223	245	44

AP = Anti-personnel AV = Anti-vehicle

Table 3: Mine clearance Phase 5(b) (April 2018 to December 2018)

Time period	Geographic area	Areas released	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
April to December 2018	Cluster 3	1	14,844	28	11	0
	Cluster 2	12	887,653	221	1	0
Totals		13	902,497	249	12	0

ARTICLE 5 DEADLINE AND COMPLIANCE



Under Article 5 of the APMBC (and in accordance with the second extension (of five years) granted by states parties in 2018), the United Kingdom 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 2024. The United Kingdom stated in April 2019 that it is strongly committed to meeting this deadline.⁶²

The overwhelming majority of clearance activity (Phase 5) already has funding allocated and contracts in place, and is on schedule to complete by 31 March 2020, notwithstanding the general risks to timelines posed to all mine clearance in the Falkland Islands, such as poor weather forcing stand-downs.⁶³ Phase 5(a) of survey and clearance operations finished as scheduled at the end of March 2018 and Phase 5(b) began immediately afterwards in April 2018.

The United Kingdom expects that eight remaining mined areas, covering an estimated 163,460m², will remain upon completion of Phase 5(b) in March 2020. The eight 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.⁶⁴ 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".⁶⁵

The United Kingdom "retains the strong intention that the clearance of Yorke Bay will be possible within the five-year extension request".⁶⁶ 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 displaced 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 2024.⁶⁷

In its 2018 extension request, the United Kingdom reported that "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."⁶⁸ As at April 2019, technical survey of the eight mined areas in Yorke Bay had been completed as part of Phase 5(b). According to the United Kingdom, officials and contractors are working through the operational and commercial processes, and the national authorities planned to share further information with States Parties once available.⁶⁹ The eight mined areas in Yorke Bay pose the greatest challenges to date and demining is expected to be complex due to the challenges of the sandy environment.⁷⁰

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.⁷¹

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-down in the winter months.⁷² 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.⁷³ 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 increased its funding commitment for Phase 5.⁷⁴

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 over 4km² of mined area has been cleared in the last five years (see Table 4).

Table 4: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)*
2018	1.48
2017	1.05
2016	0.94
2015	0.59
2014	0
Total	4.06

* Based on the year in which clearance was completed

The United Kingdom government funds all mine-clearance operations in the Islands.⁷⁵ The first four stages of demining (2009 to March 2016) cost £11 million (approx. US\$14.5 million).⁷⁶ 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. As at April 2019, the United Kingdom was to develop and costing a clearance plan for the release of the eight mined areas that will remain as at March 2020.⁷⁷

The United Kingdom has committed to providing updated information on progress and next steps at subsequent meetings of the APMBC and in its treaty reporting.⁷⁸

- 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 APMBBC Article 5 clearance deadline until 2020.
- 2 2008 Article 5 deadline Extension Request.
- 3 2018 Article 5 deadline Extension Request.
- 4 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 3 September 2019. The United Kingdom reported that there is a difference between the size of mined area estimated in the Feasibility Study and the actual size of area cleared, which can result in a discrepancy in contamination date. In addition, mined area SA013 in Yorke Bay was increased in size from 5,300m² to 76,500m², in order to show all reasonable effort.
- 5 2018 Article 5 deadline Extension Request, 29 March 2018, p. 3.
- 6 2018 Article 5 deadline Extension Request, Additional Information received 6 August 2018; and corrected Annex B.
- 7 2018 Article 5 deadline Extension Request, p. 6.
- 8 Analysis of 2008 Article 5 deadline Extension Request, 18 November 2008.
- 9 2008 Article 5 deadline Extension Request, p. 2.
- 10 Ibid.; and "Preliminary observations of the committee on Article 5 implementation – observations on the implementation of Article 5 by the United Kingdom", 23 June 2015.
- 11 2018 Article 5 deadline Extension Request, p. 5.
- 12 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 26 June 2018.
- 13 2018 Article 5 deadline Extension Request.
- 14 Ibid., pp. 7 and 14.
- 15 Ibid., p. 13.
- 16 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 28 October 2019.
- 17 Statement of the United Kingdom, Standing Committee meetings, Geneva, 8 June 2017; and 2018 Article 5 deadline Extension Request, p. 4.
- 18 2018 Article 5 deadline Extension Request, p. 10.
- 19 Ibid., p. 8.
- 20 Ibid., p. 9.
- 21 2018 Article 5 deadline Extension Request.
- 22 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 23 Ibid.
- 24 Ibid.
- 25 Ibid.
- 26 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 21 August 2018.
- 27 2018 Article 5 deadline Extension Request, Annex A.
- 28 Article 7 Report (for 2018), Form F; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 15 March 2019.
- 29 2018 Article 5 deadline Extension Request, Additional Information received 6 August 2018, Annex 3 (update to the UK Extension Request).
- 30 2018 Article 5 deadline Extension Request, p. 3.
- 31 Emails from an official in the Counter Proliferation and Arms Control Centre, 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: bit.ly/2NTHVWD.
- 32 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 11 October 2017.
- 33 2018 Article 5 deadline Extension Request (), p. 7; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 15 March 2019.
- 34 2018 Article 5 deadline Extension Request, pp. 7 and 14.
- 35 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 36 Emails from an official in the Counter Proliferation and Arms Control Centre, FCO, 21 September 2016 and 28 July 2017.
- 37 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 38 Ibid.
- 39 APMBBC 2018 Article 5 deadline Extension Request, Additional Information received 6 August 2018; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 40 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 26 June 2018; 2018 Article 5 deadline Extension Request, pp. 3 and 7; and Article 7 Report (for 2016), Form F.
- 41 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 15 July 2016.
- 42 Article 7 Report (for 2016), Form F.
- 43 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 44 2018 Article 5 deadline Extension Request, p. 9.
- 45 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 28 July 2017.
- 46 2018 Article 5 deadline Extension Request, p. 9.
- 47 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 28 July 2017; and 2018 Article 5 deadline Extension Request, p. 3.
- 48 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019; and 2018 Article 5 deadline Extension Request, p. 9.
- 49 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 1 July 2016.
- 50 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 28 July 2017.
- 51 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 52 Emails from an official in the Counter Proliferation and Arms Control Centre, FCO, 15 July 2016, 28 July 2018, and 24 April 2019; and 2018 Article 5 deadline Extension Request, p. 8.
- 53 Article 7 Report (for 2018), Form F; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 54 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 55 Ibid.
- 56 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 3 September 2019. There is a small discrepancy in the 588 anti-personnel mines confirmed as destroyed in 2018, and the total of 601 anti-personnel mines destroyed in 5a (January to March 2018) and 5b (April to December 2018).
- 57 2018 Article 5 deadline Extension Request, Annex A; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 58 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 59 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 26 June 2018.
- 60 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 61 2018 Article 5 deadline Extension Request, Annex A. There is a small discrepancy between the mined area cleared and the number of mines destroyed, as reported previously for 2016 (6 areas released, 423,210m² 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, 426,346m² 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.
- 62 Ibid.
- 63 Ibid.
- 64 2018 Article 5 deadline Extension Request, pp. 7 and 14.
- 65 Ibid., p. 15.
- 66 Ibid., p. 14; and email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 67 2018 Extension Request, p. 15.
- 68 2018 Extension Request, p. 10.
- 69 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 70 Statement of the United Kingdom, Intersessional Meetings, Geneva, 22 May 2019.
- 71 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 28 July 2017; and 2018 Extension Request, pp. 3 and 11.
- 72 2018 Extension Request, p. 4.
- 73 Statement of the United Kingdom, Intersessional Meetings, Geneva, 8 June 2017; and 2018 Extension Request, p. 3.
- 74 Statement of the United Kingdom, Intersessional Meetings, Geneva, 8 June 2017; and 2018 Article 5 deadline Extension Request, p. 3.
- 75 Email from an official in the Arms Export Policy Department, FCO, 3 June 2015.
- 76 2018 Article 5 deadline Extension Request, pp. 3 and 10.
- 77 Email from an official in the Counter Proliferation and Arms Control Centre, FCO, 24 April 2019.
- 78 2018 Article 5 deadline Extension Request, pp. 12 and 14; and Statement of the United Kingdom, Intersessional Meetings, Geneva, 22 May 2019.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 1 MARCH 2020 THREE-YEAR INTERIM EXTENSION REQUESTED TO 1 MARCH 2023

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

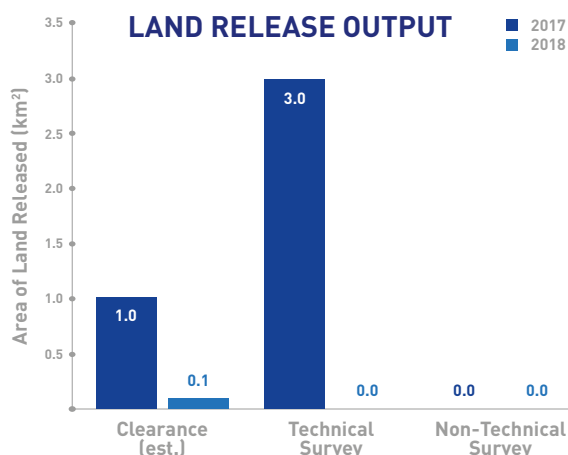
HEAVY, 50km²
(ESTIMATED)
at least

AP MINE
CLEARANCE IN 2018

0.1km²
(ESTIMATED)

AP MINES
DESTROYED IN 2018

1,691
(ESTIMATED)



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **LOW**

KEY DEVELOPMENTS

Intensive conflict continued between the Saudi Arabia-led Gulf coalition supporting the Aden-based internationally recognised government and Houthi rebels controlling Sana'a and much of the north. Houthi forces reportedly laid significant numbers of mines, including those of an improvised nature during 2018 and 2019. Yemen submitted an Article 5 deadline extension request, seeking three years beyond March 2020 to determine the extent of contamination, after which it will submit a further request setting out a strategy for survey and clearance. Five SafeLane international staff died in a single incident in January 2019 while transporting mines and seven other deminers were killed in a detonation at a storage area holding mines and explosive remnants of war (ERW) in May 2019.

RECOMMENDATIONS FOR ACTION

- The Yemen Executive Mine Action Centre (YEMAC) should strengthen coordination between its operations in government-controlled and Houthi-controlled areas to ensure consistent application of national standards in management and operations.
- YEMAC should conduct a nationwide survey to generate a baseline of mine contamination.
- In the absence of a long-term plan, YEMAC should draw up an annual workplan for deployment of available assets on priority regions and tasks.
- YEMAC should update national standards and expand them to cover survey and clearance of mines of an improvised nature.
- Yemen should facilitate access and deployment by international mine action operators to achieve a rapid expansion of capacity, raise standards, and accelerate survey and clearance.
- YEMAC should drastically improve data collection and reporting to meet its Anti-Personnel Mine Ban Convention (APMBC) transparency obligations providing comprehensive reports on the location, scope, and results of mine action operations, including disaggregated data detailing release of mined land through survey and clearance and items destroyed.

- YEMAC should address the causes of the high level of fatalities among deminers in the course of operations in 2018 and 2019.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	The Yemen Executive Mine Action Centre (YEMAC) reports the level of contamination as unknown. Contamination data included hundreds of square kilometres of suspected mined areas before the onset of conflict in 2015 which has resulted in significant but unknown amounts of additional contamination, including from mines of an improvised nature. YEMAC is seeking to develop a new baseline of contamination by March 2023.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	3	YEMAC is wholly dependent on international donor support. Conflict has undermined nationwide management of mine action, leaving YEMAC with two programmes, one for areas controlled by the Aden-based government and the second for areas controlled by Houthi forces controlling Sana'a, with little ability to coordinate between them.
GENDER (10% of overall score)	3	The demands of Yemen's mine action emergency have eclipsed the issue of gender, which is not mentioned in Yemen's Article 5 extension request. UNDP support to YEMAC seeks to integrate gender mainstreaming into YEMAC data collection.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	3	YEMAC said its mine action database was no longer fit for purpose. No information was available to operators on areas surveyed or cleared and the sparse operating results available did not disaggregate clearance of mines from clearance of explosive remnants of war (ERW).
PLANNING AND TASKING (10% of overall score)	5	Yemen does not have a national strategy or plan, but continued operations on an emergency basis focused on life-saving interventions.
LAND RELEASE SYSTEM (20% of overall score)	4	Yemen had national standards that YEMAC said were out of date. It also complained that its equipment is obsolete and levels of deminer training were inadequate, particularly for dealing with mines of an improvised nature.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	YEMAC clearance of area and items appears to have fallen in 2018 but lack of comprehensive data disaggregating mine clearance from clearance of ERW prevents a clear determination of outputs.
Average Score	4.0	Overall Programme Performance: POOR

DEMINING CAPACITY

MANAGEMENT

- Yemen Executive Mine Action Centre (YEMAC)

NATIONAL OPERATORS

- YEMAC
- Yemen Army Engineers

INTERNATIONAL OPERATORS

- Danish Demining Group (DDG)
- SafeLane/Dynasafe
- The HALO Trust (since 2019)
- Norwegian People's Aid (NPA) (due to start in 2019)

OTHER ACTORS

- United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

YEMAC states that “the level of contamination and the subsequent impact by AP mines in Yemen is not known.”¹

A Landmine Impact Survey in 2000 found mine contamination in 18 of Yemen's 21 governorates resulting from conflicts in 1962–69 and 1970–83, as well as mines laid in border areas between North and South Yemen before they unified in 1990, and mines from successive conflicts that erupted since 1994. Operators have also encountered large quantities of abandoned explosive ordnance, including some stockpiles of mines. The continuing conflict that flared in March 2015 has “changed the extent and complexity of contamination dramatically.”²

NEW CONTAMINATION

Houthi officials have acknowledged using landmines³ and Houthi forces reportedly laid mines in at least six governorates in 2016.⁴ Since 2017, Houthi and associated forces have laid large numbers of anti-personnel mines and anti-vehicle mines, including mines of an improvised nature, in particular along Yemen's west coast, in a bid to stall the advance of pro-government Yemeni and Saudi coalition forces towards the strategic port town of Hodeida. Some anti-vehicle mines were reportedly modified to detonate with the weight of a person,⁷ making them anti-personnel mines falling within the APMBC.

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 from improvised devices activated remotely or by photo-electric cells. Mines of an improvised nature as well as other improvised devices have been produced in Yemen “on an industrial scale” and laid along roads, inside buildings, and built into house walls, posing a serious hazard to displaced families returning to their property.⁸

Yemen's second Article 5 deadline extension request submitted in 2014 identified 107 confirmed minefields covering a total of 8.1km² but also an additional 438 suspected hazardous areas covering 338km². By 2017, YEMAC said it had 569 suspected mined areas affecting 323.5km².³ YEMAC believed a significant proportion of this might be released or reduced through survey. However, Yemen's continuing conflict has largely halted survey of suspected hazardous areas (SHAs) and resulted in the addition of new contamination by mines, including mines of an improvised nature, preventing a determination of the extent and the recontamination of previously cleared areas.⁴

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.⁷ The UN reported the appearance of improvised sea mines in the Red Sea since 2017. These were probably deployed by Houthi forces and pose an obvious threat to shipping.¹⁰

A panel of international experts reported to the UN Human Rights Council in August 2019 that it had confirmed civilian casualties caused by anti-personnel and anti-vehicle mines emplaced by Houthi fighters in Aden, Hudayda, Lahej, and Taiz governorates.¹¹

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Yemen's inter-ministerial National Mine Action Committee (NMAC), which formulated national mine action policy, was reported in 2019 to have disbanded leaving YEMAC as regulator and implementing agency with responsibility for setting policy, planning and coordinating mine action, and as the sole national operator.¹²

YEMAC was established in Sana'a in January 1999 as a national mine action agency. Since conflict flared between the internationally-recognized government, based in the south, and the Houthi movement controlling much of the north, YEMAC has in practice split into two, centred round a headquarters in Aden running operations in government controlled areas and the Sana'a office running operations in the north. YEMAC said its Aden headquarters issued quarterly task orders and maintained records of the work conducted.

YEMAC is supported by Regional Executive Mine Action Branches (REMABs) in Aden, set up in 1999; al-Mukalla (Hadramout governorate), which opened in March 2004; and Saada (April 2016).¹³ The extent to which they are operational is not clear. In 2019, YEMAC planned to open new offices in Taiz to support operations around Hodeida and in Marib for operations in al-Jawf governorate.¹⁴

YEMAC planned to open a coordination centre in 2019 to separate its management and operational functions, a development which it expected would accelerate clearance. Among its responsibilities, the coordination office would be responsible for accrediting operators. As at May 2019, YEMAC was identifying premises for the coordination office and expected to have it operational before the end of the year.¹⁵

The United Nations supported mine action in Yemen from 1999 to 2003 through a programme implemented by the UN Office for Project Services (UNOPS). From 2003, the programme came under full national management. The UN Development Programme (UNDP) deployed an international adviser to YEMAC at the end of 2014 to support planning and programme management. In 2018, its international staff included a chief technical adviser and a planning and reporting specialist in Sana'a and a technical advisor based in Aden. National staff included two posts in Sana'a and

one in Aden. In 2019, UNDP planned to recruit up to eight additional international staff and three or more national staff to strengthen the programme capacity.¹⁶

Yemen's mine action is funded by international donors. UNDP estimated total funding required for Phase V at \$39.9 million. Funding received in 2018 amounted to a little over \$9 million in 2018, approximately the same level as in 2017.¹⁷ Additionally, Saudi Arabia's King Salman Fund agreed with Dynasafe Middle East Project Management in 2018 to finance a US\$40 million demining project.¹⁸

GENDER

Mine action plans and priorities set out in Yemen's latest Article 5 deadline extension request make no reference to gender. UNDP reported placing emphasis on mainstreaming gender principles into plans aiming for equal participation as beneficiaries, employees, and decision-makers in mine action. This included ensuring survey information is collected by organisations representing women and girls as well as men and boys; that data collected is disaggregated by gender and age; and that risk education materials address the risks associated with all gender roles.¹⁹

INFORMATION MANAGEMENT AND REPORTING

YEMAC maintains an Information Management System for Mine Action (IMSMA) database but its Article 5 deadline extension request described it as "outdated" and "not usable."²⁰ UNDP observed that the system, although outdated, was becoming more reliable. In 2019, it added an international information management specialist to its Aden-based staff.²¹

PLANNING AND TASKING

Yemen does not have a strategic plan or annual workplans for tackling mines, improvised devices, or any ERW. Mine action in 2018 continued to be conducted on an emergency basis. The priority set out in Yemen's Article 5 deadline extension request in 2019 was to conduct nationwide survey to generate a baseline of contamination that would provide a basis for long-term planning. YEMAC reportedly intended to assign its planned coordination office the task of drawing up a new planning system.²²

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Yemen has national mine action standards which were based on the International Mine Action Standards (IMAS) when they were drawn up in 2007, but they have not been updated. YEMAC said they are out of date and that its deminers do not apply standing operating procedures (SoPs) based on the standards consistently. YEMAC has also said efficiency was lowered by its deminers' lack of training, particularly for coping with mines of an improvised nature, and by old or obsolete equipment.²³

YEMAC had an unspecified number of quality assurance (QA) teams that it said conduct regular field visits and sampling of cleared land but it said QA/quality control (QC) had become "disjointed" as SoPs were not always followed and there was no systematic collection of QA/QC reports.²⁴

OPERATORS

YEMAC is the main operator, with about 900 deminers at the start of 2019, one half of them managed by YEMAC headquarters in the south and the other half by YEMAC's Sana'a office.²⁵

SafeLane/Dynasafe operated with 304 staff and 32 demining teams. By early 2019, SafeLane reported the project employed 19 internationals, while national staff were mainly seconded from YEMAC. It expected the number of personnel to rise to around 400 in 2019.²⁶

Danish Demining Group (DDG) had a staff of 16 by the end of 2018, including two internationals and five national staff in Aden; six national staff in Mokha, Taiz; and three other national staff in Ataq, Shabwah. Activities have focused on risk education but a three-person non-technical survey team started working in Taiz from November 2018.²⁷

Norwegian People's Aid (NPA) was due to start a two-year programme supporting YEMAC's mine detection dog (MDD) programme in the last quarter of 2018 but after delays obtaining the necessary visas was expected to start work in 2019. The project calls for NPA to provide training for mine dog instructors, veterinarians, field supervisors, and three MDD groups to improve operational efficiency and expertise in survey and land release. It was also due to boost YEMAC's existing MDD capacity of 15 active dogs and 5 puppies and to look at improving its dog breeding capacity.²⁸ An NPA assessment mission visited Aden in June 2019 but as at August 2019, delays in issuing visas prevented it from deploying staff full time. NPA had selected 12 MDDs for the programme but they remained at NPA's Global Training Centre in Bosnia and Herzegovina.²⁹

YEMAC was preparing for increasing its engagement with international operators. HALO Trust received approval to operate in Yemen in May 2019 and opened an office in Aden in June. It planned to run courses on explosive ordnance disposal (EOD) and survey for YEMAC and to have teams mentored by HALO Trust international staff deployed in the field in the last quarter of 2019. YEMAC was also in discussion with the Swiss Foundation for Mine Action (FSD) on the possibilities of establishing a presence in Yemen.³⁰

OPERATIONAL TOOLS

YEMAC conducted manual mine clearance in 2018 with limited support from mine detection dogs, focusing on emergency clearance of high-impact spot tasks rather than large area clearance, giving priority to civilian and social infrastructure.³¹ YEMAC said land release through survey had decreased but was "sometimes used in specific cases." Through greater engagement with international operators, YEMAC planned to build up capacity for survey and increase the possibilities for land release by means other than manual clearance.³²

DEMINER SAFETY

YEMAC sustained heavy casualties in the course of clearing mines and improvised devices, reporting 14 deaths in 2018.³³ Disaggregated data on casualties and devices causing them was not available. A YEMAC deminer was also reportedly shot dead by a sniper in Taiz.³⁴

SafeLane/Dynasafe sustained 12 fatalities in the first half of 2019. Five international staff were killed in January 2019. KSrelief said they died in an accidental explosion as they were transporting mines from the project headquarters to a remote location for demolition.³⁵ SafeLane said later that ordnance in the truck contributed to the scale of the explosion but initial detonation was caused by an improvised explosive device (IED) placed under the passenger seat of their vehicle.³⁶ YEMAC said two government investigations into the incident found no evidence that SafeLane had been targeted by any armed group.³⁷ Six SafeLane deminers were killed in April in an explosion in a depot holding mines and ERW for destruction in the port city of Mokha. A seventh operator died of his injuries a day later. The nationality of those killed was not reported.³⁸

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

Yemen's progress towards compliance with the APMBBC continued to be overshadowed by the conflict between the internationally recognised government, backed by the Saudi-led coalition, and Houthi forces controlling the capital which added new contamination and obstructed clearance. YEMAC has a clear position that the humanitarian imperative to mitigate the immediate threat to civilians posed by all types of explosive threats takes precedence over deadlines set under the APMBBC.³⁹

LAND RELEASE OUTPUTS IN 2018

YEMAC was able to conduct field operations in 81 districts of 16 governorates in 2018 and UNDP reported it released a total of 6,661,954m² through clearance, but this included all types of explosive items and only a small amount of mined area.⁴⁰ Mine Action Review has conservatively estimated clearance in 2018 to be of 0.1km². YEMAC was previously experienced mainly in clearing legacy minefields but these have become a low priority since the upsurge in conflict in 2015 when it increasingly had to tackle mines of an improvised nature and a wide range of ERW.

UNDP attributed the fall-off in productivity in 2018 to a number of factors, including stricter regulations on counting ERW; a minor cash flow issue in the second quarter of the year; and the transfer of staff from YEMAC to the Dynasafe/SafeLane operation funded by Saudi Arabia.⁴¹

SURVEY IN 2018

No data were available on land released through survey. UNDP said YEMAC conducted desk assessments, non-technical survey, and technical survey on a total area of over 825,000m² in nine different governorates.⁴²

CLEARANCE IN 2018

YEMAC did not release mine clearance results for 2018 but its Article 5 deadline extension request in March 2019 reported that in 2016–18 it cleared a total of 646,455m² of mined area, and destroyed 14,021 anti-personnel mines, of which 1,576 were destroyed in 2017 and 988 in 2018.⁴³ The high number reported destroyed in 2016 is believed to have included large numbers of mines found in warehouses and stockpiles.⁴⁴ UNDP recorded clearance by YEMAC in 2018 of 680 anti-personnel mines together with 8,047 anti-vehicle mines, 1,163 IEDs, and 106,019 items of unexploded ordnance (UXO).⁴⁵

Table 1: YEMAC clearance in 2018⁴⁶

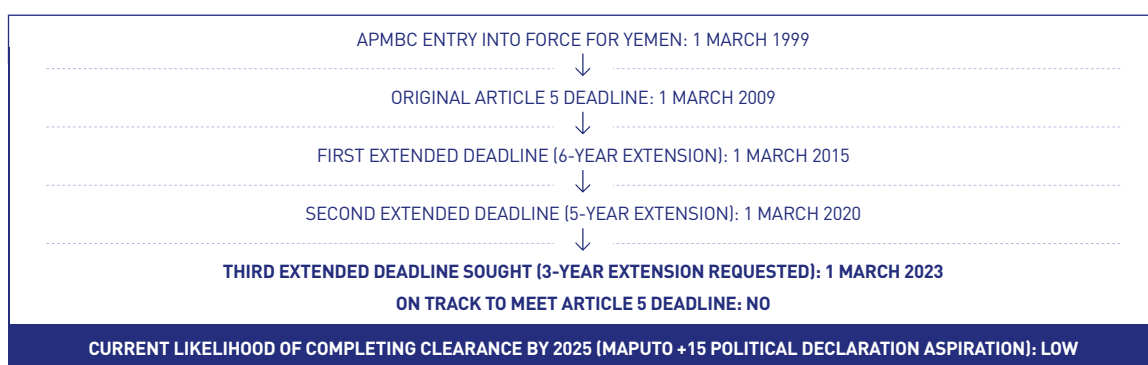
	Area cleared (m ²)	AP mines	AV mines	UXO	IED
YEMAC	6,661,954	680	8,047	106,019	1,163

Dynasafe/SafeLane did not report to YEMAC but separately reported clearing 2,523,500m² in 10 governorates in 2018, more than half of it in Taiz governorate, and destroying 1,011 anti-personnel mines.

Table 2: Dynasafe/SafeLane clearance operations 2018⁴⁷

	Area cleared (m ²)	AP mines	AV mines	UXO	IED
Dynasafe/SafeLane	2,523,500	1,011	27,314	21,980	2,793

ARTICLE 5 DEADLINE AND COMPLIANCE



Systematic mine clearance in Yemen has largely stalled in the past five years due to the upsurge in conflict in 2015 and a persistent shortage of funding and other resources. YEMAC reported total mine clearance of only 0.65km² for 2016–18. YEMAC was able to carry out emergency operations in 16 of Yemen's 21 governorates in 2018 but clearance in the last three years has mostly targeted UXO and improvised devices. The data in Table 3 below should be treated with caution.

Table 3: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	*0.1
2017	*1.00
2016	*3.00
2015	0
2014	0.34
Total	4.44

* Mine Action Review estimates

- 1 2018 Article 5 deadline Extension Request, March 2019, p. 19.
- 2 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.
- 3 Article 7 Report (for 1 April 2016 to 30 March 2017), Form D.
- 4 Article 7 Report (for 2018), Form D.
- 5 J. Gambrell and M. Harb, "Landmines will be hidden killer decades after war", *Associated Press*, 24 December 2018.
- 6 Human Rights Watch, "Yemen: Houthi-Saleh forces using landmines", 20 April 2017. The affected governorates included Abyan, Aden, Lahej, Marib, Sana'a, and Taiz.
- 7 Human Rights Watch, "Yemen: Houthi landmines kill civilians, block aid", 22 April 2019.
- 8 Minutes of Yemen Mine Action Technical Working Group meeting, Amman, 26 July 2018.
- 9 Conflict Armament Research, "Mines and IEDs Employed by Houthis on Yemen's West Coast", September 2018, pp. 5–6, 11.
- 10 UN Security Council, Final Report of the Panel of Experts, UN doc. S/2018/68, 26 January 2018, Annexes 40 and 41, pp. 166–171.
- 11 "Situation of human rights in Yemen, including violations and abuses since September 2014", Report of the Group of Eminent International and Regional Experts, UN doc. A/HRC/42/17, 9 August 2019, pp. 8–9.
- 12 Article 7 Report (for 2018), Form A.
- 13 Email from Stephen Bryant, Chief Technical Advisor, UNDP, 22 July 2018.
- 14 2019 Article 5 deadline Extension Request, pp. 5, 22.
- 15 Interview with Ameen Saleh Alaqili, Director, NMAP/YEMAC, in Geneva, 23 May 2019.
- 16 UNDP, "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, p. 9.
- 17 *Ibid.*, p. 27; UNDP, Phase V, "Emergency Mine Action Project", Project Document, p. 1.
- 18 Email from Chris Clark, Global Operations Director, Dynasafe MineTech, 6 August 2018.
- 19 UNDP, "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, pp. 18–19.
- 20 2019 Article 5 deadline Extension Request, p. 10.
- 21 UNDP, "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, pp. 10–11.
- 22 Interview with Ameen Saleh Alaqili, Director, NMAP/YEMAC, in Geneva, 23 May 2019.
- 23 2019 Article 5 deadline Extension Request, p. 16.
- 24 *Ibid.*, p. 17.
- 25 *Ibid.*, p. 12.
- 26 Email from Chris Clark, Safelane Global, 17 April 2019.
- 27 Email from Marie-Josée Hamel, Head of Programme, DDG Yemen, 3 April 2019.
- 28 UNDP, "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, p. 13.
- 29 Email from Kenan Muftic, Head of Global Training Centre for MDDs/EDDs, NPA, 9 August 2019; "Capacity Building of the YEMAC MDD Program, 1st Quarterly Report, NPA, undated but 2019; email from Stephen Robinson, UNDP, 14 August 2019.
- 30 Interview with Ameen Saleh Alaqili, NMAP/YEMAC, in Geneva, 23 May 2019; emails from Nick Torbet, Global Chief Technical Adviser (IEDD)/Head of Programme Development, HALO Trust, 29 May 2019; and interview with Alex van Roy, Regional Coordinator Middle East and Africa, FSD, 3 July 2019.
- 31 UNDP, "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, p. 12.
- 32 2019 Article 5 deadline Extension Request, p. 21.
- 33 Interview with Ameen Saleh Alaqili, NMAP/YEMAC, in Geneva, 23 May 2019.
- 34 Interview with Stephen Robinson and Aleksandar Mihailov, UNDP, in Geneva, 5 February 2019.
- 35 KSrelief, "KSrelief mourns loss of life following explosion related to Masam demining project in Yemen", Statement, 21 January 2019.
- 36 Emails from Chris Clark, Safelane Global, 17 and 23 April 2019.
- 37 Interview with Ameen Al-Aqili, YEMAC, in Geneva 23 May 2019.
- 38 Agence France Presse, "Six deminers killed in Yemen blast", 26 April 2019.
- 39 2019 Article 5 deadline Extension Request, p. 9.
- 40 UNDP "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, Annex A, YEMAC Productivity Sheet, p. 26.
- 41 UNDP, "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, p. 12.
- 42 *Ibid.*, p. 11. The governorates were Abyan, Aden, Al Dhale'e, Al Hodeidah, Amran, Hajjah, Lahej, Saada, and Taiz.
- 43 2019 Article 5 deadline Extension Request, Tables 5 and 7, pp. 14–15.
- 44 Email from Stephen Robinson, UNDP, 4 August 2019.
- 45 UNDP, "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, Annex A, YEMAC Productivity Sheet, p. 26.
- 46 Email from UNDP, "Emergency Mine Action Project, Annual Report 2018", 20 January 2019, Annex A, YEMAC Productivity Sheet.
- 47 Email from Chris Clark, Safelane Global, 17 April 2019.

ANTI-PERSONNEL MINE BAN CONVENTION ARTICLE 5 DEADLINE: 31 DECEMBER 2025 ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

MEDIUM, **13km²**
(NATIONAL ESTIMATE)

AP MINE CLEARANCE IN 2018

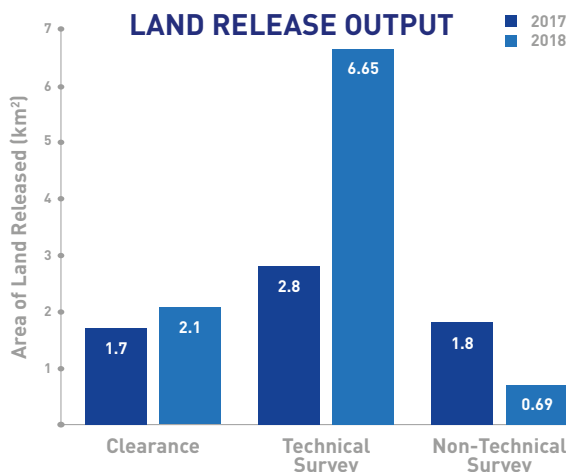
2.1km²

AP MINES DESTROYED IN 2018

22,139

(including 126 destroyed during spot tasks)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per Maputo +15 Political Declaration aspiration): **HIGH**

KEY DEVELOPMENTS

Zimbabwe remained on track to meet its end-2025 Anti-Personnel Mine Ban Convention (APMBC) Article 5 mine clearance deadline, exceeding its annual target for land release in 2018. The primary challenges facing Zimbabwe's mine action programme are chiefly financial. Major survey operations have been completed, and remaining mine contamination, while extensive, is well quantified and defined. The national mine action programme is well managed and coordinated by the Zimbabwe Mine Action Centre (ZIMAC), with clear strategic direction, annual targets, and transparent budget forecasts in its National Mine Action Strategy and revised Article 5 workplan, which were officially launched in March 2018 and in April 2019, respectively. The main challenge is to ensure sufficient financial support to enable Zimbabwe to expand mine action capacity and achieve completion by its end-2025 deadline.

RECOMMENDATIONS FOR ACTION

- Zimbabwe should meet the revised annual mine clearance targets published in April 2019 and continue implementing its National Mine Action Strategy for 2018–25.
- Zimbabwe should expand its use of integrated demining methodologies first introduced in 2017, including mechanical assets and mine detection dogs (MDDs), and officially incorporate their use into the national mine action standards.
- Increased resources should be allocated to ZIMAC to enable it to effectively manage a fast-growing national mine action programme.
- The Government of Zimbabwe should help ZIMAC to procure additional resources to enable its relocation to outside restricted-access military facilities.
- ZIMAC should increase efforts to secure additional national and international funding in order to meet its 2025 clearance completion deadline. Greater linkages between mine action and national development, along with enhanced cooperation among government ministries, would assist this endeavour.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	8	Zimbabwe has a good understanding of remaining mine contamination. Nationwide non-technical survey was completed in 2016 leaving only confirmed hazardous areas (CHAs) remain to be addressed. Considerable further release through survey is expected.
NATIONAL OWNERSHIP & PROGRAMME MANAGEMENT (10% of overall score)	8	Zimbabwe's mine action programme is entirely nationally owned, with a consistent amount of government support. The sum of US\$500,000 has been provided by the government annually for the Zimbabwe Mine Action Centre (ZIMAC) and the National Mine Clearance Unit (NMCU) since 2010, while the army contributes to the demining unit and staff salaries. The mine action programme is well managed by ZIMAC, with a high degree of consultation and collaboration with operators.
GENDER (10% of overall score)	6	The importance of gender is acknowledged in the National Mine Action Strategy. The National Mine Action Standards do not contain a specific standard on gender mainstreaming, though they do refer to the importance of gender, for example in the deployment of mixed community liaison teams. ZIMAC is considering developing an internal gender and diversity policy.
INFORMATION MANAGEMENT & REPORTING (10% of overall score)	8	Improvements in information management continued to be evident in 2018, with ZIMAC fully transitioning to the use of Information Management System for Mine Action (IMSMA), with assistance from the Geneva International Centre for Humanitarian Demining (GICHD). ZIMAC's National Mine Action Strategy, subsequent revised Article 5 workplan, and Article 7 report for 2018 all continued to demonstrate consistently accurate and detailed reporting, which was once a weak point for the national mine action programme.
PLANNING AND TASKING (10% of overall score)	8	Zimbabwe's first ever National Mine Action Strategy for 2018–25 was officially launched by the government in March 2018 following two years of support from the GICHD. The Strategy, and a subsequent revised workplan published in 2019, accompany Zimbabwe's Article 5 extension through to 2025, and present a realistic estimate of remaining contamination and annual milestones for land release, identifying the resources, time, and funding needed to complete clearance.
LAND RELEASE SYSTEM (20% of overall score)	8	Zimbabwe made significant strides to increase efficiency of land release, with better use of mechanical assets and mine detection dogs (MDD) in 2018. Further efforts were made to refine clearance methodology for ploughshare mine belts. With ongoing improvements in land release and increasing capacity, and the nature of Zimbabwe's densely laid minefields, operators continue to clear tens of thousands of anti-personnel mines annually with among the world's highest number of mines per square metre.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	8	A total of nearly 9.4km ² of land was released in 2018, notably surpassing Zimbabwe's 2018 target for land release under its National Mine Action Strategy and revised Article 5 extension workplan, and a sizeable increase on land release in 2017. With limited additional funding and capacity, Zimbabwe can meet its Article 5 deadline of end 2025, which will be a considerable achievement for one of the world's most heavily mined countries in a particularly challenging political and economic context.
Average Score	7.8	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT

- National Mine Action Authority of Zimbabwe (NMAAZ)
- Zimbabwe Mine Action Centre (ZIMAC)

NATIONAL OPERATORS

- Zimbabwean Armed Forces' National Mine Clearance Unit (NMCU)

INTERNATIONAL OPERATORS

- APOPO (not operational as at August 2019)
- The HALO Trust
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2018, Zimbabwe reported a total of just over 52.6km² of confirmed mined area remaining (see Table 1).¹ This is a decrease from the nearly 62km² reported as at the end of 2017.² According to the operators, this is a “very well defined” understanding of the problem.³ In fact, as ZIMAC explained to Mine Action Review in October 2019, of the total confirmed mined area, only about one quarter (some 13km²) is thought to be actually contaminated with considerable area between mine lines that can be released through survey.⁴

Zimbabwe's mine contamination, the overwhelming majority of which is of anti-personnel mines, originates from the laying of minefields in the late 1970s during a 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.⁵ Initially, anti-personnel

mines were laid in very dense belts (on average 2,500 mines per kilometre of frontage) to form a “cordon sanitaire”, with up to 5,500 mines per kilometre in some places. Over time, this cordon sanitaire was breached or subject to erosion. In response, in many sections, a second belt of “ploughshare” directional fragmentation mines protected by anti-personnel mines was laid “inland” of the cordon sanitaire.⁶ Anti-vehicle mines were used extensively by armed groups but most were detonated by vehicles or have since been cleared.⁷

All areas remaining to be addressed are CHAs and no suspected hazardous areas (SHAs) remain in Zimbabwe following the completion of significant re-survey in 2016.⁸ While this remained the case in 2018, according to ZIMAC, a total of close to 295,700m² was added to the total estimate of contamination due to expansion of existing CHAs during pre-clearance re-surveys.⁹

Table 1: Anti-personnel mined area (at end 2018)¹⁰

Location	Area of CHA (m ²)
Manicaland (Rusitu to Muzite Mission and Sheba Forest to Leacon Hill)	11,912,371
Mashonaland East (Mazowe to Rwenya)	11,391,037
Mashonaland Central (Musengezi to Mazowe)	9,750,767
Matabeleland North (Lusulu)	56,000
Masvingo (Crooks Corner to Sango Border Post)	19,527,360
Total	52,637,535

NATIONAL OWNERSHIP AND 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.¹¹

As at August 2019, ZIMAC's office remained located inside of a military cantonment, which limited civilian access. Zimbabwe has pledged to relocate the ZIMAC office many times, once the Ministry of Defence has secured the necessary funds.¹²

According to ZIMAC's most recent 2019 projections, a total of close to US\$130 million is required to meet its extended Article 5 deadline by 2025, with, on average, close to US\$16.2 million per year.¹³ ZIMAC confirmed that in 2018, the Government of Zimbabwe provided US\$500,000 towards the operational and administrative costs of both the National Mine Clearance Unit (NMCU) and ZIMAC. The salaries and allowances and transport expenses of staff were covered by the army. ZIMAC informed Mine Action Review that the economic downturn in 2018 was likely to limit the government's potential to increase any funding for mine action; though it expected existing funding levels to be maintained.¹⁴ According to ZIMAC, the Government of

Zimbabwe has committed US\$500,000 to the NMCU and for the operational costs of ZIMAC every year since 2010.¹⁵

As part of its focus for 2019, ZIMAC reported comprehensive resource mobilisation efforts will include building parliamentary awareness of the national mine action programme and encouraging greater engagement from relevant government ministries with a role to play in mine action, including the Ministry of Health and Child Care and the Ministry of Public Service, Labour, and Social Welfare.¹⁶

With assistance from the Geneva International Centre for Humanitarian Demining (GICHD) and the International Committee of the Red Cross (ICRC), ZIMAC developed a Communication and Resource Mobilisation Strategy in 2018, which was finalised in the first half of 2019. As at August 2019, the Strategy had received government approval and was awaiting an official launch. ZIMAC informed Mine Action Review that top priorities for which it hoped to procure additional resources included funding for a planned national mine and explosive remnants of war (ERW) victim survey, website hosting, relocating the office outside of the military cantonment, equipping the NMCU better, and additional funding for the international demining operators to expand.¹⁷

GENDER

Zimbabwe's National Mine Action Strategy 2018–2025 includes reference to the importance of addressing gender and diversity considerations.¹⁸ While there is not a specific standard on gender mainstreaming in the National Mine Action Standards (NMAS), reference to gender is contained within the standards, such as NMAS 07 (Management of Demining Operations) which requires that “special efforts should be made to ensure gender balance and diversity of background for Community Liaison Officers”.¹⁹

In July 2019, ZIMAC informed Mine Action Review that while at present, ZIMAC did not have a separate internal gender and diversity policy in place, the issue had been discussed and efforts will be made to develop one. ZIMAC confirmed that all community groups are routinely consulted in survey and community liaison activities, with efforts undertaken to ensure that all age and gender groups are consulted. Survey and community liaison teams are gender-balanced and also make use of school teachers and children to further their outreach. All mine action data is also collected on a disaggregated basis by sex and age.²⁰

ZIMAC reported that gender is taken into account during the planning and prioritisation of minefields for clearance, such as consideration of the risks taken usually by women and girls to cross minefields to fetch water and that of men and boys who often heard cattle or plough near to mined areas.²¹ However, given the nature of the minefields, which are essentially one long and continuous line, operational access constraints often dictate clearance priorities as much as other factors.²² At the same time, according to The HALO Trust, post-clearance

surveys reflect the gendered impact of clearance, such as women and children who often are reportedly the major beneficiaries of clearance, as they are responsible for more than 80% of water collection, with clearance providing safer and more direct access to water sources.²³

According to ZIMAC, women are specifically encouraged to apply for operational positions in job advertisements, and 30% of operational roles in the national mine action programme were held by women in 2018, while 35% of managerial roles were held by women. Yet ZIMAC stated that this fell short of “required” levels, and noted that Zimbabwean women were somewhat reluctant to work in mine action. More effort is to be placed on raising awareness among women and ensuring equal opportunities to employment, regardless of gender. The NMCU, however, had the lowest level of female employment, with less than 5% women members. This was due to the fact that the NMCU staff are recruited from the corps of military engineers, where very few women are engaged.²⁴

International operators confirmed that each organisation had gender policies in place for their programme staff, with a focus on achieving equal access to employment, gender-balanced survey and clearance teams, gender-focused community liaison outreach, disaggregated data collection, and a gender focus to be employed during pre- and post-clearance assessments.²⁵ All operational organisations reported increasing efforts to encourage women to apply for operational, as well as managerial positions, and positive trends in the increasing number of women employed in programmes as a result.²⁶

INFORMATION MANAGEMENT AND REPORTING

Over the past few years, ZIMAC's information management capabilities have increased significantly, with clear evidence of improvement in the quality and accuracy of its reporting, including in its most recent Article 5 deadline extension request, which established an accurate picture of remaining contamination and set, for the first time, a date for the completion of mine clearance. ZIMAC's National Mine Action Strategy, subsequent revised Article 5 workplan, and most recent Article 7 report all continued to demonstrate consistently good quality reporting, something which was once a weak point for the national mine action programme.

In 2018, ZIMAC fully transitioned to the use of the Information Management System for Mine Action (IMSMA) database. A GICHD information management advisor convened 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 it contained. ZIMAC noted that workshops, trainings, and international expert support for information management had produced significant results and remained important to ensure the ZIMAC database is up to date and accurate.²⁷

Operators likewise confirmed that using IMSMA in 2018 had improved the quality of data management.²⁸ Quarterly meetings with ZIMAC and all operators also enhanced coordination and communication.²⁹ The HALO Trust highlighted that monthly meetings with ZIMAC were also held to cross-reference data, which it said was extremely positive.³⁰ ZIMAC informed Mine Action Review that work was ongoing in 2019 to import data on mine and ERW victims led by the ZIMAC IMSMA focal point.³¹

PLANNING AND TASKING

Zimbabwe's first ever national mine action strategy, National Mine Action Strategy 2018–2025, developed by ZIMAC with support from the GICHD and input from government ministries, the NMCU, and international mine action organisations, was officially launched on 9 March 2018 by the Vice President and Minister of Defence and War Veterans Affairs in a public event.³² The strategic plan complements Zimbabwe's Article 5 deadline extension request, approved in December 2017, for a period of eight years, until the end of 2025. Operators have lauded the Strategy for its comprehensiveness and its realistic outlook on delivery, which it is hoped will encourage donor funding in its clarity on the resources and efforts needed to make the 2025 deadline a feasible achievement.³³

In April 2019, Zimbabwe published an updated workplan to support compliance with its Article 5 deadline of 31 December 2025. The workplan was based on revised

estimates of remaining contamination and, accounting for progress during 2018, updated annual targets for the remainder of the extension period. These included 8.2km² to be addressed in 2019; 8.3km² to be addressed in 2020; 8.1km² to be addressed in 2021; 8.3km² to be addressed in 2022; 8.3km² to be addressed in 2023; 6.9km² to be addressed in 2024; and the remaining 4.6km² to be addressed in 2025.³⁴

Two strategy workshops and one information management workshop were convened by ZIMAC, supported and facilitated by the GICHD, with all operators invited to participate. On the matter of potential "residual" contamination that might be found after completion of major clearance operations, ZIMAC informed Mine Action Review that plans are in place. It will fall to ZIMAC, the NMCU, and the army engineers, who are stationed in all provinces, to deal with any new explosive devices discovered.³⁵

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national legislation specific to mine action in Zimbabwe.

In July 2019, ZIMAC informed Mine Action Review that following the successful pilot projects to introduce the use of MDDs and mechanical assets by Norwegian People's Aid (NPA) and The HALO Trust, revisions to the national mine action standards in these areas were underway, in consultation with operators, and would be completed during the year.³⁶ Expanded use of mechanical and MDD methodologies with other operators was also being explored.³⁷

During 2018, operators and ZIMAC continued to work together on refining clearance techniques on ploughshare mine belts in order to focus narrowly on individual mine rows and maximise area reduction between the rows. An ongoing challenge for operators and ZIMAC continued to be the search for technical solutions to decrease the time spent on "missing mine drills" when gaps in the mine pattern are found.³⁸

The HALO Trust reported that its dual-sensor Handheld Standoff Mine Detection System (HSTAMIDS) detectors were adding significant value in efficiency, with up to 16,000 rapid excavations being conducted per month, saving the equivalent of three additional mine clearance teams per month.³⁹

Regarding quality management, ZIMAC quality assurance (QA) monitors were present on site at operations on a daily basis during 2018.⁴⁰ An independent quality control (QC) team was regularly sent to conduct QC by sampling a minimum of 10% of completed tasks.⁴¹ Operators confirmed that the ZIMAC QA/QC process was rigorous, with well trained and experienced staff. The HALO Trust noted that the combination of a separate sampling team and a highly accessible monitoring team worked especially well, with the former providing thorough external oversight and the latter helping teams to work through any problems.⁴²

OPERATORS

The Zimbabwean Armed Forces' NMCU and, since 2013, The HALO Trust and NPA, all conduct land release in Zimbabwe. Mines Advisory Group (MAG) became operational in December 2017, and APOPO, while accredited in 2017, was yet to commence operations as at August 2019.⁴³

According to ZIMAC, the total deminers deployed by the NMCU rose by 12 in 2018, from 135 in 2017 to 147 in 2018, with additional deminers employed to start re-survey of the Lusulu minefield to verify the size of contamination prior to clearance.⁴⁴

NPA reported that as a result of lost funding at the end of 2017, the number of manual clearance teams deployed was reduced from seven to three; however, capacity was later increased to five manual clearance teams from September 2018 when additional funding was secured.⁴⁵

In 2018, The HALO Trust deployed 25 manual demining teams and 2 mechanical teams to conduct combined clearance and technical survey. In addition, one community outreach team was also deployed to conduct risk education and community liaison. A total of 375 people were employed as part of HALO's operations during the year.⁴⁶

At the start of 2018, MAG deployed one manual clearance team, which increased to three teams during the year with additional funding, for a total of 35 deminers and requisite field and support staff.⁴⁷

Despite its accreditation to start mine action operations in 2017, as at August 2019, APOPO still had not managed to secure the funding required to start operations. APOPO reported it is tasked to survey and clear a 7km² area along the course of a 37km-long stretch of minefield along the border with Mozambique. The minefield begins in Chiredzi district, Masvingo province, in south-eastern Zimbabwe, in a conservation area just outside Gonarezhou national park in an area known as the Sengwe Wildlife Corridor. In July 2019, APOPO informed Mine Action Review that its priorities were to secure funding for one or more manual teams to be deployed by late 2019.⁴⁸

OPERATIONAL TOOLS

While the majority of clearance in Zimbabwe continued to be manual in 2018, mechanical assets and MDDs were being actively integrated into the national mine action programme. As at end 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.⁴⁹

MAG did not deploy any mechanical assets or MDDs in 2018, but reported that discussions with ZIMAC were ongoing in 2019 to explore their potential use in future operations.⁵⁰

DEMINEING SAFETY

The HALO Trust reported that a demining accident occurred during clearance of a dense R2M2 minefield after a deminer excavated a signal in an unauthorised manner, initiating an R2M2 mine, resulting in the loss of two fingers. The incident was investigated by a team comprising HALO Trust personnel, ZIMAC, and an external consultant and findings were shared with ZIMAC for wider distribution in the mine action sector.⁵¹

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2018

A total of nearly 9.4km² of land was released in 2018, with close to 8.7km² of mined area released through clearance and technical survey and just under 0.7km² cancelled through non-technical survey.⁵² Notably, this surpassed Zimbabwe's 2018 target for land release of 7.16km² under its National Mine Action Strategy 2018–2025 and mine action workplan.⁵³

SURVEY IN 2018

Just over 7.3km² of land was released through survey in 2018: nearly 0.7km² was cancelled through non-technical survey while close to 6.6km² was reduced through technical survey.⁵⁴ In 2017, nearly 4.6km² of land was released through survey (just under 1.8km² cancelled and 2.8km² reduced).⁵⁵

Since the cancellation of huge amounts of land during survey in 2014–16, no new significant survey has been undertaken or required. According to ZIMAC, the few areas of cancellation in 2018 were the result of pre-clearance re-survey of a number of polygons carried out to confirm previous data of surveyed areas or where stretches of polygons were found not to contain mines.⁵⁶

Positively, area reduced through technical survey more than doubled in 2018, due to an increase in area reduced by the NMCU as they moved further down the Mwenezi to Sango Border Post minefield and the perimeter fencing of the area and corresponding polygon widened but the three mine rows maintained the same width, enabling greater area reduction between the mine rows and perimeter fencing.⁵⁷ The comprehensive use of MDDs by NPA in technical survey also proved effective, resulting in larger outputs of land reduced.⁵⁸ ZIMAC reported that the NMCU likewise had high reduction output through technical survey due to distinct mine lines within a well-marked minefield in its areas of operations.⁵⁹

Table 2: Cancellation of mined area through non-technical survey in 2018⁶⁰

Area	Operator	Area cancelled (m ²)
Rushinga	HALO Trust	125,533
Gozi	MAG	16,932
Muzite to Rusitu	NPA	354,985
Leacon Hill to Sheba Forest	NPA	196,073
Total		693,523

Table 3: Reduction of mined area through technical survey in 2018⁶¹

Area	Operator	Area reduced (m ²)
Musengezi to Mazowe	HALO Trust	947,617
Mazowe to Rwenya	MAG	274,828
Mwenezi to Sango Border Post	NMCU	3,984,435
Rusitu to Muzite	NPA	672,756
Sheba Forest to Leacon Hill	NPA	766,621
Total		6,646,257

CLEARANCE IN 2018

Clearance of anti-personnel mined area increased in 2018 to 2.1km² up from 1.7km² cleared in 2017. The number of anti-personnel mines destroyed fell, however, from nearly 30,500 in 2017 to just over 22,000 in 2018. This was primarily caused by a sharp decrease in the number of anti-personnel mines destroyed by NPA during the year, which fell from nearly 13,500 in 2017 to just over 600 in 2018. According to NPA, this significant decrease was due to the fact that the

sectors of minefield it was working on in 2018 contained only one mine row, while in 2017 its teams were deployed to parts of the minefield that contained six mine rows at a time.⁶²

In addition, a total of 126 anti-personnel mines were destroyed during explosive ordnance disposal (EOD) spot tasks in 2018: 95 anti-personnel mines destroyed by The HALO Trust, 25 anti-personnel mines destroyed by NPA, and 6 mines destroyed by MAG.⁶³

Table 4: Mine clearance in 2018⁶⁴

Area	Operator	Area cleared (m ²)	AP mines destroyed
Musengezi to Mazowe	HALO Trust	1,245,435	19,137
Mazowe to Rwenya	MAG	130,208	211
Mwenezi	NMCU	192,831	2,060
Rusitu	NPA	311,351	8
Sheba Forest to Leacon Hill	NPA	232,605	597
Totals		2,112,430	22,013

AP = Anti-personnel AV = Anti-vehicle

ARTICLE 5 DEADLINE AND COMPLIANCE



Table 5: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	2.11
2017	1.66
2016	1.67
2015	0.71
2014	0.49
Total	6.64

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 broadly on track to meet this deadline.

ZIMAC confirmed in July 2019 that the 31 December 2025 deadline is achievable, provided that some additional funding is secured. The revised targets for land release in 2019 were on track to be met, with some organisations surpassing their targets. This, it is hoped, will offset the fact that APOPO has yet to start operations or fulfil any of its land release targets. ZIMAC was optimistic that, with the approval and official launch of the Communications and Resource Mobilisation Strategy in 2019, the additional funding required to meet the 2025 deadline will be secured.⁶⁵

All international mine action operators were in agreement that based on existing capacity alone, it will be challenging for Zimbabwe to meet its 2025 target, but optimistically also concurred that, with relatively small additions in funding and capacity, it is still possible.⁶⁶ This is hard to sustain if the current estimate of mined area is robust. With less than seven years to go and some 50km² to release, this would require massive increases in clearance productivity.

The HALO Trust emphasised that the more teams that can be put on the ground now will save additional costs and expenditure on equipment needed in the future. It also reiterated that if Mozambique could be persuaded to release the demining equipment it was holding, three and a half years after declaring itself mine free, the equipment could be transferred across the border and would be a great help to demining efforts in Zimbabwe.⁶⁷

MAG echoed these concerns about funding, emphasising that the challenges presented by the internal economic situation and external funding perceptions were considerable. The chronic failings of the national economy have led to continuing shortages of basic goods, lengthy fuel queues, inconsistent supplies, and inflation levels at nearly 200%. These economic limitations, combined with changes in currency regulations and the rising cost of fuel, is putting a strain on already finite funding sources for all operators, it said.⁶⁸

A further concern as noted above, the revised workplan and budget also include projections for APOPO as an implementing partner, and, as at August 2019, as they were yet to be operational, other operators will either need to increase their land release output or Zimbabwe risks falling short of its targets.

At the same time, there are many, clearly positive aspects of Zimbabwe's mine action programme, such as having a strong, nationally-owned mine action centre led by experienced and dedicated staff members; a realistic estimate of the remaining problem and national mine action strategy; and a collaborative working environment in which operators can quickly ramp up capacity and output, putting additional funds immediately to use towards an achievable goal.

- 1 Email from Capt. Cainos Tamanikwa, Operations Coordinator, ZIMAC, 31 July 2019.
- 2 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 3 Email from Sam Fricker, Programme Manager, HALO Zimbabwe, 18 September 2019.
- 4 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 October 2019.
- 5 2013 Article 5 deadline Extension Request, Executive Summary, p. 1; and email from Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017.
- 6 HALO Trust, "Zimbabwe, History of Minelaying", accessed 10 February 2014; 2013 Article 5 deadline Extension Request, Executive Summary; and Analysis of Zimbabwe's 2013 Article 5 deadline Extension Request, submitted by the President of the 13th Meeting of States Parties on behalf of the States Parties mandated to analyse requests for extensions, 18 June 2014, p. 3.
- 7 HALO Trust, "Zimbabwe, History of Minelaying", undated but accessed 10 February 2014.
- 8 Article 7 report (for 2017), Form D.
- 9 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 10 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; and Article 7 Report (for 2018), p. 13. According to ZIMAC, for the purpose of monitoring progress as well as handing over completed areas, these five CHAs were further divided into smaller areas, which by end 2018 included 171 (ongoing and open) areas recorded in the IMSMA database. As noted by the Article 5 Committee, there is a "minor discrepancy in Zimbabwe's report in which Form D, page 2, indicates Zimbabwe having addressed 6,218,692 square metres in 2017, and 9,452,120 square metres in 2018 for a total of 15,670,812 square metres compared to a reported accumulative area addressed of 13,493,754 square metres as indicated in the Zimbabwe's workplan (page 13)".
- 11 2013 Article 5 deadline Extension Request, p. 7.
- 12 2017 Article 5 deadline Extension Request, received 9 August 2017, p. 39.
- 13 Article 7 Report (for 2018), pp. 4–5.
- 14 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 15 Article 7 Report (for 2017), Form D.
- 16 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; and Article 7 Report (for 2018), p. 8.
- 17 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 18 Email from Tom Dibb, HALO Trust, 22 February 2018.
- 19 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 20 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 21 Ibid.
- 22 Emails from Sam Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, Regional Director West Africa & Latin America, Mines Advisory Group (MAG), 1 August 2019.
- 23 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 24 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 25 Ibid.; and emails from Sam Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, Programme Manager, NPA, 15 July 2019.
- 26 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; Sam Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, Norwegian People's Aid (NPA), 15 July 2019.
- 27 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 28 Emails from Sam Fricker, HALO Trust, 20 July 2019; and Chimwemwe Tembo, NPA, 15 July 2019.
- 29 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; and Sam Fricker, HALO Trust, 20 July 2019.
- 30 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 31 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 32 Email from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018.
- 33 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 34 Article 7 Report (for 2018), p. 36.
- 35 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 36 Ibid.
- 37 Email from Adam Komorowski, MAG, 1 August 2019.
- 38 Emails from Sam Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, MAG, 1 August 2019.
- 39 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 40 Ibid.; and emails from Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, NPA, 15 July 2019.
- 41 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 12 June 2018.
- 42 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 43 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 4 September 2018.
- 44 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; and Article 7 Report (for 2018), p. 37.
- 45 Email from Chimwemwe Tembo, NPA, 15 July 2019.
- 46 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 47 Email from Adam Komorowski, MAG, 1 August 2019.
- 48 Email from Ashley Fitzpatrick, Program Manager, APOPO Zimbabwe, 27 July 2019.
- 49 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018; and Chimwemwe Tembo, NPA, 21 August 2019.
- 50 Email from Adam Komorowski, MAG, 1 August 2019.
- 51 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 52 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 53 Statement of Zimbabwe, Intersessional Meetings, Geneva, 8 June 2018; and Article 7 Report (for 2017), Annex A: Revised Workplan for 2018–25.
- 54 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 55 Emails from Capt. Cainos Tamanikwa, ZIMAC, 12 June 2018; Chimwemwe Tembo, NPA, 13 February and 27 August 2018; Tom Dibb, HALO Trust, 22 February 2018; and Adam Komorowski, MAG, 13 April 2018.
- 56 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019 and 12 June 2018.
- 57 Emails from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019; Sam Fricker, HALO Trust, 20 July 2019; and Adam Komorowski, MAG, 1 August 2019.
- 58 Email from Chimwemwe Tembo, NPA, 15 July 2019.
- 59 Article 7 Report (for 2018), p. 37.
- 60 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019. The HALO Trust reported that the 125,533m² was cancelled as a result of a data review exercise, in which a number of overlapping polygons left over from old survey data were cancelled. Email from Sam Fricker, HALO Trust, 21 August 2019.
- 61 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 62 Email from Chimwemwe Tembo, NPA, 15 July 2019.
- 63 Ibid.; and emails from Sam Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; and Chimwemwe Tembo, NPA, 15 July 2019.
- 64 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019. Slightly different figures for the number of anti-personnel mines destroyed were provided by MAG and NPA. NPA reported a total of 697 mines destroyed in the Sheba Forest to Leacon Hill minefield. Email from Chimwemwe Tembo, NPA, 15 July 2019.
- 65 Email from Capt. Cainos Tamanikwa, ZIMAC, 31 July 2019.
- 66 Emails from Sam Fricker, HALO Trust, 20 July 2019; Adam Komorowski, MAG, 1 August 2019; Ashley Fitzpatrick, APOPO, 27 July 2019; and Chimwemwe Tembo, NPA, 15 July 2019.
- 67 Email from Sam Fricker, HALO Trust, 20 July 2019.
- 68 Email from Adam Komorowski, MAG, 1 August 2019.

STATES NOT PARTY

The background of the page is composed of several overlapping geometric shapes in two shades of blue: a medium blue and a darker navy blue. These shapes create a dynamic, abstract pattern that fills the entire page. The shapes include large triangles, parallelograms, and irregular polygons that interlock and overlap, creating a sense of depth and movement. The text 'STATES NOT PARTY' is positioned in the upper left quadrant, set against a dark blue background, which makes the white text stand out clearly.

RECOMMENDATIONS FOR ACTION

- Armenia should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Armenia has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- Armenia should clarify the extent of remaining mine contamination, including in military restricted zones.
- Armenia should mobilise the necessary resources to finish mine clearance and set a deadline for the completion of operations.

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2018, Armenia had more than 5.7km² of confirmed mined area and a further 3.8km² 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).¹ Of 96 confirmed hazardous areas (CHAs), 56 contain anti-personnel mines, totalling just over 2.9km². Three of the six suspected hazardous areas (SHAs), totalling just over 0.1km², may also be contaminated by anti-personnel mines.² Territory seized from Azerbaijan during the conflict is believed to be significantly contaminated by mines and ERW, including unexploded submunitions.³ However, the precise extent of contamination in those districts is unknown.

Table 1: Mined area (at end 2018)⁴

Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
AP mines	42	2,192,049	3	105,500
AV mines	40	2,807,879	3	3,728,442
AP and AV mines	11	706,046	0	0
AP mines and UXO	2	12,769	0	0
AP and AV mines and UXO	1	4,842	0	0
Totals	96	5,723,585	6	3,833,942

AP = Anti-personnel AV = Anti-vehicle

Four of Armenia's eleven provinces still contain mined areas. Three are contaminated with both anti-personnel and anti-vehicle mines, while the fourth – Vayots Dzor – is contaminated solely with anti-vehicle mines, as set out in Table 2.⁵ The difference in total mine contamination between the end of 2017 and end of 2018 cannot be explained or reconciled by the total area released during the intervening 12 months.

Table 2: Mined area by province (at end 2018)⁶

Province	Type of contamination	CHAs	Area (m ²)	SHAs	Area (m ²)
Gegharkunik	AP mines	3	584,022	2	105,123
	AV mines	5	2,428,128	3	3,728,442
Syunik	AP mines	33	1,440,476	1	377
	AV mines	22	296,696	0	0
	AP and AV mines	8	676,617	0	0
	AP mines and UXO	2	12,769	0	0
	AP and AV mines and UXO	1	4,842	0	0
Tavush	AP mines	6	167,551	0	0
	AV mines	10	15,603	0	0
	AP and AV mines	3	29,429	0	0
Vayots Dzor	AV mines	3	67,452	0	0
Totals		96	5,723,585	6	3,833,942

A Landmine Impact Survey was conducted in Armenia in 2005, followed by partial survey of 17 sites by The HALO Trust in 2012, and then again, in 2012–13, by the Swiss Foundation for Mine Action (FSD). FSD found 17 SHAs estimated to cover 26km² and 114 CHAs that covered 21km² in four districts bordering Azerbaijan. Thirteen of these areas, totalling 1.8km², contained only UXO and not mines.⁷ In 2018, the Center for Humanitarian Demining and Expertise (CHDE) stated that it planned to conduct non-technical survey in Gegharkunik province but that the military-restricted zones continued to be off limits for survey and clearance.⁸

Mine and explosive remnants of war (ERW) contamination in Armenia is primarily the consequence of armed conflict with Azerbaijan in 1988–94, in which both sides used mines. The heaviest contamination 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.⁹ While non-technical survey in 2012–13 by the FSD did not find evidence of mines outside the buffer zones in Ararat province, which borders Turkey, certain areas on that border remain unsurveyed because they are controlled by Russian border troops.¹⁰

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The CHDE was established by the Armenian government in 2011 as a civilian, non-commercial state body responsible for conducting survey and clearance and identifying contaminated areas. In 2013, the CHDE was made Armenia's national mine action centre.¹¹ The CHDE can negotiate with international demining organisations, accept international funding, sign contracts, and receive international assistance.¹² The CHDE has an advisory board, composed of representatives from the Ministries of Defence, Emergency Situations, Territorial Administration, Education, and Justice.¹³

In 2013, in conformity with a government decree, the CHDE began developing national mine action legislation. The CHDE began drafting the law in 2015¹⁴ with the support of the OSCE office in Yerevan.¹⁵ As at April 2019, the CHDE expected to submit the draft mine action law to the new Parliament of Armenia for discussion before the end of the year following which it will need to receive government approval and be adopted by parliament.¹⁶

In 2018, the Armenian government allocated AMD212 million (approx. US\$433,000) to cover the costs of the CHDE. No separate funding was provided for survey and/or clearance operations. In 2019, the government allocated AMD339 million (approx. \$691,000) of which AMD110 million was for survey and clearance operations. Armenia does not receive any donor funding for mine action.¹⁷

The CHDE receives capacity development support from the Geneva International Centre for Humanitarian Demining (GICHD) and the International Committee of the Red Cross (ICRC). CHDE staff have been trained in land release, risk education, and information management.¹⁸

GENDER

The CHDE does not have a gender policy and implementation plan but has reported that gender has been mainstreamed in Armenia's draft national mine action strategy. During community liaison activities, all groups affected by mine contamination are consulted, including women and children. The CHDE is said to offer equal employment opportunities for both men and women. Two the department heads within the CHDE are female and out of a total of 47 employees 15 are women (32%), most of whom occupy senior or specialist roles. However, there are no women working in the survey or clearance teams.¹⁹

INFORMATION MANAGEMENT AND REPORTING

With FSD's support, the CHDE set up and manages the national Information Management System for Mine Action (IMSMA) database.²⁰ In 2018, the CHDE had planned to install IMSMA Core but this was deferred to 2019.²¹

PLANNING AND TASKING

The draft National Strategic Plan on Mine Action was approved by the Armenian government in 2018 and it was expected that it would be adopted in 2019. The main objectives of the draft Plan are to address, as a priority, anti-personnel mines in CHAs that have a humanitarian impact, increasing community safety in support of the achievement of the 2030 Sustainable Development Goals.²²

Priority for clearance is based on CHDE criteria. Priority is given first to contaminated areas that are up to 1km away from a population centre, then to those near agricultural land, and finally to contaminated areas that negatively affect the environment. These are mostly located in the mountains. To optimise efficient deployment of resources, clearance plans are typically drawn up on a community-by-community basis.²³

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

In 2013, with the assistance of FSD, the CHDE developed the Armenian National Mine Action Standards (NMAS) and submitted them for government approval. The NMAS were approved by the government in April 2014.²⁴ In 2018, amendments were made to the NMAS for mine risk education, accreditation of demining organisations, and mine detection dogs (MDDs). According to CHDE, reviews of the NMAS are conducted following the International Mine Action Standards (IMAS) and international best practice.²⁵

The CHDE will further develop its standing operating procedures (SoPs) once the draft law on mine action has been adopted.²⁶ SoPs on manual mine clearance and battle area clearance (BAC) have already been elaborated.²⁷

OPERATORS

All demining in Armenia is conducted by the Armenian Peacekeeping Engineering Brigade (PKEB) and the CHDE. In 2018, the PKEB deployed three teams of seven clearance personnel. In addition, the CHDE deployed one technical survey team. In 2019, both technical survey and clearance capacity were planned to be increased.²⁸

Quality management is conducted in accordance with IMAS and the NMAS. Quality assurance (QA) is conducted by dedicated officers who make regular field visits to inspect cleared land.²⁹ Quality control (QC) is conducted once clearance of the land has been completed, but prior to handover.³⁰

OPERATIONAL TOOLS

Six MDDs were introduced in Armenia but failed their accreditation in 2017 and were returned so could not be involved in demining operations as planned.³¹ As at April 2019, there were no plans to bring back MDDs to Armenia although the CHDE is open to discuss the possibility of involving MDDs in its operations in the future.³²

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2018

No anti-personnel mined area was cancelled or reduced through survey in 2018. A total of 46,881m² of ERW-contaminated area was reduced in the Chambarak locality in Gegharkunik province.

In 2018, a total of 9,237m² of anti-personnel mined area was cleared from Davit Bek CHA in the Kapan locality in Syunik province. During clearance, only one anti-personnel mine was found. In addition, in 2018, the CHDE implemented the following clearance activities: clearance of 3,128m² of anti-vehicle mined area in Tegh in Syunik province and clearance of 6,676m² of ERW in Kornidzor in Syunik province.

No target date has been set for the completion of mine clearance in Armenia, due to the uncertainty over future capacity and funding.³³ Moreover, over the past five years, demining in Armenia has been slow and productivity rates paltry, as Table 3 illustrates. In 2018, very little demining took place. Armenia claims that challenges in its mine and ERW clearance include the low level of contamination and the random distribution of mines.³⁴

Operational capacity was expected to increase in 2019 with clearance continuing of the Davit Bek CHA. This is near a highway directly affecting people's safety and will be used for pasture once clearance is completed.³⁵ Going forward Armenia will struggle to complete clearance without a significant increase in funding and capacity.

Table 3: Mine clearance in 2014–18

Year	Area cleared (km ²)
2018	*0.01
2017	0
2016	0.02
2015	0.07
2014	0.04
Total	*0.14

* Area rounded up.

1 Email from Margaret Lazyan, Head of Mine Risk Education and Victim Assistance, Center for Humanitarian Demining and Expertise (CHDE), 8 August 2018.

2 Ibid.

3 Azerbaijan National Agency for Mine Action (ANAMA), "ANAMA 2017".

4 Email from Margaret Lazyan, CHDE, 10 September 2019.

5 Ibid.

6 Ibid.

7 CHDE, "FSD non-technical mine action survey", Yerevan, 2013, p. 12.

8 Email from Margaret Lazyan, CHDE, 19 April 2019.

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 Email from Ruben Arakelyan, CHDE, 8 June 2015.

12 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.

13 Email from Margaret Lazyan, CHDE, 27 September 2018.

14 Email from Varsine Miskaryan, CHDE, 8 August 2016.

15 Email from Ruben Arakelyan, CHDE, 28 April 2017.

16 Email from Margaret Lazyan, CHDE, 19 April 2019.

17 Ibid.

18 Ibid.

19 Ibid.

20 Email from Ruben Arakelyan, CHDE, 19 March 2014.

21 Email from Margaret Lazyan, CHDE, 19 April 2019.

22 Ibid.

23 Email from Ruben Arakelyan, CHDE, 28 April 2017.

24 Email from Margaret Lazyan, CHDE, 19 April 2019.

25 Ibid.

26 Email from Varsine Miskaryan, CHDE, 8 August 2016.

27 Email from Margaret Lazyan, CHDE, 8 August 2018.

28 Emails from Margaret Lazyan, CHDE, 19 April 2019 and 23 August 2019.

29 Email from Ruben Arakelyan, CHDE, 8 June 2015.

30 Email from Margaret Lazyan, CHDE, 8 August 2018.

31 Email from Margaret Lazyan, CHDE, 27 September 2018.

32 Email from Margaret Lazyan, CHDE, 19 April 2019.

33 Ibid.

34 Ibid.; and email from Ruben Arakelyan, CHDE, 28 April 2017.

35 Email from Margaret Lazyan, CHDE, 19 April 2019.

RECOMMENDATIONS FOR ACTION

- Azerbaijan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Azerbaijan has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- Azerbaijan should complete the countrywide re-survey of anti-personnel mine contamination.
- Azerbaijan should ensure that clearance is only conducted in areas where there is firm evidence of contamination.

UNDERSTANDING OF AP MINE 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 Azerbaijan National Agency for Mine Action (ANAMA) has suggested that contamination in areas occupied by Armenia may cover between 350km² and 830km², and contain between 50,000 and 100,000 mines.¹

At the end of 2018, Azerbaijan reported 33 mined areas in regions under its control totalling 4.1km² (see Table 1). A more precise estimate of contamination will only be known after completion of a countrywide re-survey but as at April 2019, no such survey was planned. In 2018, however, an additional 98,887m² of mined area was added to the database.²

As at the end of 2018, Azerbaijan estimated that it had 14 anti-personnel mined areas covering a total of more than 1.6km² (see Table 2). Before this latest estimate, the previous assessment of anti-personnel mine contamination provided by ANAMA was 69.9km² in 2015.³

Table 1: Mined area by type (at end 2018)⁴

Contamination	CHAs	Area (m ²)	SHAs that may contain mines	Area (m ²)
Anti-personnel mines	6	1,142,486	7	503,000
Anti-vehicle mines	10	1,302,960	9	1,195,720
Totals	17	2,445,446	16	1,698,720

CHAs = Confirmed hazardous areas SHAs = Suspected hazardous areas

Table 2: Anti-personnel mined area by region (at end 2018)

Region	CHAs	Area(m ²)	SHAs	Area (m ²)
Jabrayil	1	98,887	2	250,000
Fizuli	3	815,462	2	85,000
Khojavend	1	226,500	0	50,000
Garadagh	1	1,637	1	48,000
Aghdam	0	0	1	70,000
Aghjabedi	0	0	1	0
Totals	6	1,142,486	7	503,000

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 the report on Nagorno-Karabakh in this report 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 both mines and unexploded ordnance (UXO).⁵

Azerbaijan is also suspected to be contaminated with cluster munition remnants and other ERW: both UXO and abandoned explosive ordnance (AXO), the extent of which is not known (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Azerbaijan for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

ANAMA, the *de facto* national mine action authority and mine action centre, 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). No commercial company is active in mine action in Azerbaijan.⁶

UNDP provides capacity development to ANAMA and will continue to do so until 2020. The five main project activities are: maximising the socio-economic impact of clearance; supporting the institutional capacity of ANAMA for mine/UXO clearance according to international and national mine action standards; promoting ANAMA as an international mine action centre; procurement and upgrading of equipment;

and introducing a gender-sensitive approach to mine action to Azerbaijan.⁷ According to ANAMA, as at end April 2019, project outputs included improvements to ANAMA's regional structure, enhanced international training services, better training equipment, and support for the training centre.⁸

As at April 2019, Azerbaijan was still in the process of adopting a national mine action law, with draft legislation under review by the Cabinet of Ministers.⁹ Once adopted, it will regulate mine action in Azerbaijan, governing issues such as licensing, accreditation, quality assurance (QA), and tender procedures.¹⁰

The Azerbaijani government funds 90% of ANAMA's operating costs and 90% of all survey and clearance activities in Azerbaijan.¹¹

GENDER

ANAMA does not have a gender policy. There are no women working in any operational roles in survey and clearance in Azerbaijan. However, women do participate in mine risk education sessions and are consulted during survey.¹²

One of the goals of the UNDP-ANAMA capacity strengthening project is to introduce a gender-sensitive approach to mine action to Azerbaijan.¹³ This is defined as delivering train the trainer sessions to mine action staff on a gender-sensitive approach to working with affected populations and the development of an accompanying training manual. No information on progress towards this goal has been provided by ANAMA or UNDP.

INFORMATION MANAGEMENT AND REPORTING

ANAMA uses an old version of the Information Management System for Mine Action (IMSMA) database, and is working with the Geneva International Centre for Humanitarian Demining (GICHD) to upgrade this to the latest IMSMA Core during 2019–20.¹⁴

PLANNING AND TASKING

The existing mine action strategy was for 2013–18.¹⁵ Its main aims were said to be to continue mine and ERW clearance in support of government development projects and to provide safe conditions for the local population in affected regions.¹⁶ The strategy expired at the end of 2018 and has not yet been replaced.

ANAMA is integrated into the State Social and Economic Development programme and mine action is reported to be an integral part of the new state socio-economic development plan developed for 2019–22.¹⁷

ANAMA had annual workplans for both 2018 and 2019. In 2019, ANAMA was intending to continue mine clearance in Aghdam and Aghjabedi, Fizuli, Heybet, Jabrayil, and Terter regions. In the absence of a new multi year strategic plan, tasks are prioritised according to the state development plan and instructions from the government.¹⁸

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Azerbaijan has its own National Mine Action Standards (NMAS), which were adopted in 2001 and subsequently revised in 2003, 2004, and 2010 in accordance with the International Mine Action Standards (IMAS) and best practice.¹⁹ No major modifications to the standards were made in 2018.²⁰

ANAMA also has standing operating procedures (SoPs) in place, which were reviewed in 2018.²¹

OPERATORS

In 2018, ANAMA employed 613 operational and administrative staff across six regional centres (including the Regional Mine Action Resource and Training Centre).²²

The Training, Survey and Quality Assurance Division continued its quality management (QM)-related activities during 2018. There were both quality assurance (QA) and quality control (QC) sampling inspections. QA and QC were carried out on both ANAMA's operations and the operations by the two national NGOs.²³

OPERATIONAL TOOLS

Mine detection dogs (MDDs) and mechanical assets are used to support reduction through technical survey and manual clearance operations.²⁴ In 2018, Azerbaijan had 48 MDDs and 6 machines.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2018

No anti-personnel mined area was cancelled or reduced through survey in 2018.²⁵

In 2018, a total of 353,258m² of mined area was cleared, as set out in Table 3. In Aghdam and Aghjabedi only two anti-personnel mines were found in clearance of 1,500m² and 10,000m², respectively. In Jabrayil, no anti-personnel mines were found during clearance but only ten items of UXO. This is a marked decrease from clearance in 2017 when 7.69km² was cleared (or 4km² if you exclude cleared areas with no anti-personnel mine contamination). In addition, two anti-personnel mines were found and destroyed during EOD spot tasks.

Table 3: Mine clearance in 2018²⁶

Region	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Fizuli	ANAMA	3	238,396	25	1	2
Aghdam	RA	0	1,500	1	0	0
Aghjabedi	RA	0	10,000	1	0	0
Garadagh	ANAMA	1	4,475	2	0	150
Jabrayil	ANAMA	1	98,887	0	0	10
Totals		5	353,258	29	1	162

AP = Anti-personnel AV = Anti-vehicle

Azerbaijan submitted voluntary APMBC Article 7 transparency reports in 2008 and 2009 but has not submitted an Article 7 report in the last nine years. Over the last five years, 11.47km² of mined area has been cleared in Azerbaijan. Mine clearance output fell dramatically in 2018 after a large increase in 2017 (see Table 4). Accuracy of reporting of contamination, survey and clearance data continues to be an issue in Azerbaijan as does effectiveness and efficiency of land release methodology with many areas being cleared that prove to have little or no mine contamination. As at April 2019, no target date had been set for the completion of anti-personnel mine clearance in Azerbaijan.

Table 4: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	0.35
2017	*4.00
2016	0.83
2015	1.49
2014	4.80
Total	11.47

* A further 3.7km² was cleared but was found not to contain mines.

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- 1 ANAMA "Azerbaijan National Agency for Mine Action 2018", p. 5.
 - 2 Email from Sabina Sarkarova, Public Relations Officer, ANAMA, 2 April 2019.
 - 3 Email from Tural Mammadov, Operations Officer, ANAMA, 19 October 2016.
 - 4 Ibid.
 - 5 ANAMA "Azerbaijan National Agency for Mine Action 2018", p. 5.
 - 6 Email from Tural Mammadov, Operations Officer, ANAMA, 19 October 2016.
 - 7 UNDP, "Review & Recommendation to Azerbaijan National Agency for Mine Action (ANAMA) in Support of its Transformation into International Centre for Demining assessment 2018", 17 July 2018.
 - 8 Email from Sabina Sarkarova, ANAMA, 2 April 2019.
 - 9 Ibid.
 - 10 Email from Parviz Gidayev, ANAMA, 20 May 2015; and ANAMA, "Azerbaijan National Agency for Mine Action 2014".
 - 11 Email from Sabina Sarkarova, ANAMA, 2 April 2019.
 - 12 Ibid.
 - 13 UNDP, "Review & Recommendation to Azerbaijan National Agency for Mine Action (ANAMA) in Support of its Transformation into International Centre for Demining assessment 2018", 17 July 2018.
 - 14 Email from Maria Gurova, Programme Officer, GICHD, 22 August 2019.
 - 15 Email from Parviz Gidayev, Planning & Development Manager, ANAMA, 20 May 2015; and ANAMA, "Azerbaijan National Agency for Mine Action 2017", p. 10.
 - 16 Email from Sabina Sarkarova, ANAMA 2 May 2018.
 - 17 Email from Sabina Sarkarova, ANAMA, 2 April 2019.
 - 18 Ibid.
 - 19 Email from Tural Mammadov, ANAMA, 19 October 2016.
 - 20 Email from Sabina Sarkarova, ANAMA, 2 April 2019.
 - 21 Ibid.
 - 22 ANAMA, 2018 report, undated.
 - 23 Ibid.
 - 24 Email from Sabina Sarkarova, ANAMA, 2 April 2019.
 - 25 Ibid.
 - 26 Ibid.

RECOMMENDATIONS FOR ACTION

- China should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, China has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.

ANTI-PERSONNEL
MINE 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.¹ China's military estimated that around two million mines of a wide variety of types were emplaced on the Vietnam border alone.² China has not reported on mine contamination along its borders with Russia and India or on operations to clear them.

China conducted clearance operations along its border with Vietnam between 1992 and 1999,³ between 2005 and 2009,⁴ and between 2015 and 2018.⁵ In 2009, China said it had completed demining along the Yunnan section of its border with Vietnam and that this "represents the completion of mine clearance of mine-affected areas within China's territory."⁶ This was followed by a statement in 2011 when a Foreign Ministry official reported that China maintains a small number of minefields "for national defence".⁷ Two months later, at the Eleventh Meeting of States Parties, China said that large-scale demining activities had "on the whole eliminated the scourge of landmines in our territories".⁸ At the Maputo Review Conference in 2014, China said it had "basically eradicated landmines on its own territory".⁹

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 1997–99.¹⁰ However, these two campaigns did not deal with minefields located in disputed areas of the border, where

500,000 mines covered an estimated 40km². After a technical survey of mined areas, China embarked on a third clearance campaign in Guangxi Zhuang Autonomous Region and Yunnan province in 2005. China stated in 2009 that it had completed clearance of this border after clearing a total of 5.15km².¹¹

In early November 2015, however, China embarked on a further demining operation along the border with Vietnam.¹² In its Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency report submitted in March 2017, China reported that in November 2015–February 2017, the Chinese army cleared 18.4km² of minefields on the Yunnan border.¹³

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

Media accounts reported that mine clearance resumed in November 2017 in the Yunnan border area and in the Guangxi Zhuang Autonomous Region.¹⁴ Clearance was reportedly completed in November 2018, with 2,300 explosive items found and destroyed across 1.5km² in Guangxi province.¹⁵ In Yunnan province an estimated 200,000 explosive items were found and destroyed in over 50km² of mined area between November 2015 and November 2018.¹⁶

1 US Department of State, "Hidden Killers 1994", Washington, DC, September 1998, p. 18, and Table A-1.

2 "Landmine sweeping on Sino-Vietnam border nearly completed", Xinhua, 31 December 2008, at: on.china.cn/31F8D7u.

3 Ministry of Defence, "Post-war Demining Operations in China", December 1999, p. 11. Before the clearance operations, there were said to be more than 560 minefields covering a total area of more than 300km².

4 Interview with Shen Jian, Ministry of Foreign Affairs, Beijing, 1 April 2008; and Huizi and Yun, "Chinese soldiers nearly done with landmine sweeping on the Sino-Vietnam border", Xinhua, 31 December 2008.

5 "Yunnan completes de-mining mission along Sino-Vietnamese border", Xinhua, 16 November 2018, at: bit.ly/2yYXXnL.

6 Statement of China, Second Review Conference, Cartagena, 4 December 2009.

7 Email from Lai Haiyang, Attaché, Department of Arms Control & Disarmament, Ministry of Foreign Affairs, 7 September 2011.

8 Statement of China, APMBC 11th Meeting of States Parties, Phnom Penh, 29 November 2011.

9 Statement of China, Third APMBC Review Conference, Maputo, 26 June 2014.

10 "Landmine sweeping on Sino-Vietnam border nearly completed", Xinhua, 31 December 2008.

11 Statement of China, Second APMBC Review Conference, Cartagena, 4 December 2009.

12 P. Scally, "Huge land mine clearance underway in Wenshan, Honghe", Blog post, Gokunming, 5 November 2015, at: bit.ly/20WbdVe.

13 CCW Amended Protocol II Article 13 Report (for 2016), Form B. Unofficial translation.

14 "Land mine removal resumes on border", China Daily, 29 November 2017, at: bit.ly/2ZXUwtr; and "China's Guangxi completes de-mining mission along Sino-Vietnam border", China Daily, 26 November 2018, at: bit.ly/33xCdNT.

15 "China's Guangxi completes de-mining mission along Sino-Vietnam border", China Daily, 26 November 2018, at: bit.ly/33xCdNT.

16 "Yunnan completes de-mining mission along Sino-Vietnamese border", Xinhua, 16 November 2018, at: bit.ly/2yYXXnL.

RECOMMENDATIONS FOR ACTION

- Cuba should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Cuba has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.

ANTI-PERSONNEL MINE 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."¹ 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.² According to a book published in 2008, mines laid around the naval base detonate "at least once a month",³ 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.⁴

PROGRAMME MANAGEMENT

There is no mine action programme in Cuba.

LAND RELEASE

Cuba has not conducted clearance in its minefields around the US naval base at Guantánamo over the last ten years.

1 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: bit.ly/2KytDH9.

RECOMMENDATIONS FOR ACTION

- Egypt should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Egypt has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.

ANTI-PERSONNEL MINE CONTAMINATION

The precise extent of anti-personnel mine contamination in Egypt remains unknown and past estimates have been unreliable. Egypt is contaminated with mines in the Western Desert, which date from the Second World War, and in the Sinai Peninsula and Eastern Desert, which are a legacy of wars with Israel between 1956 and 1973. Some recent mine incidents in Sinai may have been caused by mines emplaced by anti-government jihadist groups.¹ It was reported in August 2016 that Islamic State had been digging up Second World War-era landmines and re-using them.²

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.³ 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.⁴ Major General Mahrous Kilani, Head of the General Secretariat for Mine Clearance, reported that while the mine maps are an indication of possible mine locations many mines have been found in areas that are unmarked by the maps.⁵

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.⁶

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.⁷ 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.⁸ In this regard, in October 2017, it was reported by the European Union (EU)'s ambassador to Egypt that 2,680km² of land in the North West Coast was claimed to still be contaminated.⁹

In August 2010, the Executive Secretariat for the Demining and Development of the North West Coast (Executive Secretariat) reported to donors that the army had destroyed 2.9 million mines while clearing 38km² in five areas, leaving "more than 16 million mines" covering an estimated area of 248km².¹⁰ 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 105km² in the Western Desert, which it had reportedly cleared of mines and unexploded ordnance (UXO). Details of clearance operations were not reported. Minister of Housing Tarek Wafiq was quoted as saying that with completion of the project one-fifth of the Western Desert had been cleared.¹¹

In August 2016, it was reported that Islamic State had been harvesting the explosives from Second World War mines still uncleared in Egypt. According to Ambassador Fathy el-Shazly, formerly the head of Egypt's Executive Secretariat for Mine Clearance, "We've had at least 10 reports from the military of terrorists using old mines. Even now, these things trouble us in different ways."¹² 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".¹³ 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 2017.¹⁴ 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.

PROGRAMME MANAGEMENT

In 2018 as in previous years, the mine action programme in Egypt was not functioning effectively.

A joint project between the Egyptian government and the UN Development Programme (UNDP) "Support the North West Coast Development Plan and Mine Action Programme: Mine Action" was conducted in two phases from 2007 to 2014 and from 2015 to 2017. The project provided for the 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.¹⁵ It was acknowledged in May 2015 by the Director of the Executive Secretariat that past results had been "disappointing".¹⁶ It was reported that a total area of 1,096km² has been "cleared" since 2009 and that there were plans to establish an eco-oriented city, the "New City of Alamein".¹⁷ 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 by the Mine Clearance Branch of the Egyptian Armed Forces Engineering Authority using both manual and mechanical demining techniques.¹⁸ 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.¹⁹ 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.²⁰

In May 2017, Kuwait granted Egypt an aid package of almost US\$1 million for mine clearance in the North-West Coast area.²¹ In January 2019, Egypt called for renewed international support for mine clearance, especially around El Alamein. Parliament member Mohamed el-Ghoul resubmitted a 2017 motion demanding financial compensation from the countries that laid mines in Egypt, mainly Germany and the United Kingdom.²²

LAND RELEASE

Egypt has not reported with any credibility on its release of mined areas in recent years and no target date has been set for the completion of mine clearance.

- 1 "Sinai landmine kills three soldiers", News24, 9 March 2015, at: bit.ly/31LTzVp.
- 2 P. Schwartzstein, "ISIS Is Digging Up Nazi Land Mines in Egypt", Newsweek, 10 August 2016, at: bit.ly/2KBMtgz.
- 3 A. Nayder, "Helping Landmine Victims in Marsa Matruh-And Preventing More", Because, 3 November 2016, at: bit.ly/2Hbsl2V.
- 4 Egypt and Libya: Land Mines: Written question – 122961, 16 January 2018, at: bit.ly/2Z4gJsB.
- 5 "MG: We cleared 130,000 acres of mines in El Alamein and there was no single incident", Times of Egypt, 26 February 2018, Unofficial translation at: bit.ly/33EQrMO.
- 6 Egypt and Libya: Land Mines: Written question – 122961, 16 January 2018, at: bit.ly/2Z4gJsB.
- 7 State Information Services, "Landmines in Egypt", 20 July 2009; Mohamed Abdel Salam, "First phase of demining in Egypt complete", Bikyamasr (blog), 18 April 2010.
- 8 UN Mine Action Team, "Egypt Mine Action Inter-agency Assessment", 14–18 April 2009, p. 11.
- 9 "Egypt battles landmines 75 years after El Alamein", Agence France-Presse, 28 October 2017, at: bit.ly/2H92GYA.
- 10 "Egypt Mine Action Project Northwest Coast: Phase I Accomplishments", Presentation by Amb. Fathy El Shazly, Director, Executive Secretariat, Cairo, August 2010.
- 11 N. al Behairy, "20% of the Sahara in West Egypt cleared of landmines", Daily News, 20 March 2013.
- 12 P. Schwartzstein, "ISIS Is Digging Up Nazi Landmines From World War 2 As Explosives", Newsweek, 10 August 2016.
- 13 UN Security Council meeting, UN doc. SC/12866, 13 June 2017, at: bit.ly/2YSmjPL.
- 14 "How Egyptian security dealt with IEDs threat?", Egypt Today, 1 January 2018, at: bit.ly/2HbRwCe.
- 15 UNDP, "Support to the North West Coast Development and Mine Action Plan", undated.
- 16 M. Samir, "UNDP, USAID provide EGP 13.8m for WWII landmines clearance programme", Daily News Egypt, 20 May 2015, at: bit.ly/2P8DzM6.
- 17 European Commission "Joint Staff Working Document 2018: The European Union's Support for Mine Action across the World", 14 February 2018, p. 23.
- 18 "MG: We cleared 130,000 acres of mines in El Alamein and there was no single incident", Times of Egypt, 26 February 2018, Unofficial translation, at: bit.ly/33EQrMO.
- 19 See: mineaction.eg/demining.
- 20 "Egypt to invest \$17.5M in Anti-Mines Action Project", APA News, 11 August 2017, at: bit.ly/2z1ChYn.
- 21 "Kuwait provides KWD 300,000 to help clear landmines from Egypt's north coast", Ahran Online, 8 May 2017, at: bit.ly/33Grilg.
- 22 "Cairo seeks international help to clear millions of land mines", Al-Monitor, 11 February 2019, at: bit.ly/2Z9k18K.

RECOMMENDATIONS FOR ACTION

- Georgia should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Georgia has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- 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.

UNDERSTANDING OF AP MINE CONTAMINATION

The full extent of mine contamination in Georgia is not known. According to estimates, as set out in Table 1, Georgia more than 2.3km² of mined areas across nine minefields. 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.¹

Table 1: Mined area (at end 2018)²

Region	District/ Municipality	Village	Contamination	Mined areas	Area (m ²)
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
Totals				8	2,314,143

AP = Anti-personnel AV = Anti-vehicle UXO = Unexploded ordnance N/K = Not known

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 4.5km² in estimated area.³ Of the 15 SHAs and CHAs in total, ten contained mines and five were contaminated with unexploded ordnance (UXO).⁴ Between 2009 and the end of 2012, HALO Trust cleared five of the minefields that had a humanitarian impact.⁵

The Red Bridge minefield is an unfenced 7km-long minefield consisting of densely packed lines of anti-personnel and anti-vehicle mines at the "Red Bridge" border crossing between Azerbaijan and Georgia. Laid in 1991 by Azerbaijan during the Nagorno-Karabakh war, it is Georgia's largest minefield and the last major minefield not in the vicinity of a functioning military establishment. As at April 2019, there had been 88 accidents, 22 involving humans and 66 involving livestock.⁶

Abkhazia was declared mine-impact free in 2011 after 14 years of mine clearance. In 2017, there was an explosion at a local military ammunition store close to the village of Primorsky which scattered mines and UXO over a 4.5km² area.⁷ There may also be mined areas in South Ossetia as a result of the 1990–92 Georgian–Ossetian war, and the more recent 2008 conflict with Russia. The HALO Trust has planned to conduct non-technical survey in South Ossetia, but, to date, has not been granted access. South Ossetia is effectively subject to Russian control and is inaccessible to both Georgian authorities and international non-governmental organisation (NGO) demining operators.

Georgia is believed to be free of cluster munition remnants (CMR), with the possible exception of South Ossetia, which is occupied by Russia and inaccessible to both the Georgian authorities and international mine action NGOs (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Georgia for further information).⁸ Georgia remains contaminated by other UXO, likely in South Ossetia and also within Georgia in former firing ranges.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The Humanitarian Demining Control Division (HDCD), renamed after a reorganisation in January 2019, sits under the State Military Scientific Technical Centre, known as DELTA, within the Ministry of Defence (MoD).⁹ The primary task of the HDCD is to coordinate mine action in Georgia, including overseeing the national mine action strategy and quality assurance (QA)/quality control (QC), and facilitating the development and implementation of Georgian National Mine Action Standards, in accordance with the International Mine Action Standards (IMAS).¹⁰

For all mine action-related issues, The HALO Trust communicates with DELTA.¹¹ The Georgian authorities are supportive of the granting of visas for international staff and the importation of demining equipment. HALO Trust submitted several requests to the MoD seeking access to the remaining minefields, the last of which was submitted in April

2018. As at May 2019, HALO Trust had received permission to begin clearing two of the five remaining minefields at Khojali and Kadoeti, respectively. As at June 2019, permissions for the remaining three minefields had not been granted.¹²

The Georgian government funds the running costs of the HDCD as well as the Engineering Brigade, which carries out some battle area clearance (BAC).¹³

The national authority has received capacity development support from HALO Trust and the Geneva Centre for Humanitarian Demining (GICHD). The HALO Trust has provided training on clearance and survey techniques and, in 2018, donated a mine action vehicle to the HDCD.¹⁴ The GICHD has provided training for HDCD staff on the Information Management System for Mine Action (IMSMA) database, IMAS, and ammunition storage.¹⁵

GENDER

DELTA and The HALO Trust each have gender and diversity policies. HALO Trust supports use of mixed-gender teams to conduct survey, which allows for greater engagement with women and children.¹⁶ If HALO Trust is given permission to work in the remaining minefields in Tbilisi Administered Territories (TAT), community liaison and survey teams will be mixed gender and inclusive of ethnic minorities.¹⁷

There is equal access to employment for qualified women and men in survey and clearance teams in Georgia, including for managerial level/supervisory positions although proportionately the number of women remains low. In Abkhazia, The HALO Trust worked with local women's organisations during its July 2018 recruitment drive in an effort to achieve gender parity. As at April 2019, 30% of its operational and management staff were female.¹⁸

INFORMATION MANAGEMENT AND REPORTING

The HDCD uses the IMSMA database and, according to The HALO Trust, the data is accurate. Data archives go back to 2009 and are regularly updated, based on HALO Trust's operations reports and on work by the Engineering Brigade.¹⁹ The IMSMA database is administered by a certified specialist within the HDCD, trained by the GICHD, who receives regular refresher training in the latest procedures.²⁰

The data in the national information management system is accessible to The HALO Trust.²¹ HALO Trust uses its own IMSMA-compatible data collection forms that DELTA have approved while the HDCD QA/QC team, also have their own forms.²²

PLANNING AND TASKING

Georgia has a national mine action strategy. Its main aims and targets are focused on the remaining clearance of anti-personnel mines and other areas contaminated with ERW.²³ The annual workplans for 2018 and 2019 centred on battle area clearance (BAC) and minefield clearance within TAT.²⁴

In April 2019, due to access not being granted to the remaining minefields, The HALO Trust had suspended all operations in Georgia, apart from one two-month

task clearing abandoned ordnance at Chonto, near the Administrative Boundary Line with South Ossetia. The Abkhazia programme will continue operations at Primorsky and HALO will also respond to explosive ordnance disposal (EOD) call-outs.²⁵

Georgia is said to have a long-term capacity to address anti-personnel mine contamination, with plans in place for dealing with residual risk and liability.²⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

As at April 2019, Georgian National Mine Action Standards and National Technical Standards and Guidelines were still under development. The IMAS and International Ammunition Technical Guidelines are being translated into Georgian.²⁷

The HALO Trust has standing operating procedures (SoPs) in place for all its activities, including survey, mine clearance, and EOD. No modifications or enhancements were made to these SoPs in 2018 or early 2019.²⁸

OPERATORS

The HALO Trust, which is the only international operator working in the country, conducts survey and both BAC and mine clearance.²⁹ DELTA retains a small demining and EOD capacity in TAT. The Engineering Brigade has been carrying out BAC in Gonio, a former military polygon in the Adjara region, and also responds to EOD call-outs. The State Security Service of Georgia also carries out EOD spot tasks. In Abkhazia, the emergency services (EMERCOM) have a small EOD capacity, though HALO Trust is generally relied upon to deal with all items of UXO.³⁰

Within The HALO Trust, operational staff deployed in 2018 were responsible for both survey and clearance. In TAT, HALO's operational staff decreased from 38 in 2017 to 18 in 2018. In 2019, HALO made all operational staff in TAT redundant. In Abkhazia, the programme began 2018 with 28 staff, which increased to 77 in July to cope with expanded operations at Primorsky. This was reduced to 35 staff at the beginning of 2019.³¹

In TAT, quality management (QM) is conducted by DELTA. In Abkhazia, The HALO Trust is responsible for its own QM.³²

OPERATIONAL TOOLS

In 2018, The HALO Trust had two mechanical assets deployed in Anaklia region in western Georgia, for UXO clearance. The Abkhazia programme also has two mechanical assets which it used for clearance at the Primorsky ammunition store explosion site. The HALO Trust also uses a drone to collect aerial footage of a task.³³

Mine detection dogs (MDDs) were used by the Engineering Brigade during BAC in the Gonio former military polygon, Adjara region. The State Security Service of Georgia has several MDD teams which it uses for EOD spot tasks.³⁴

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2018

A total of 415,604m² of mine and ERW contaminated area was released in 2018, of which 377,846m² was cleared, and 37,758m² was reduced through technical survey. A total of 664 mines were destroyed, including those destroyed during EOD spot tasks.

SURVEY IN 2018

There was no non-technical survey undertaken in 2018. The HALO Trust reduced 37,758m² through technical survey in Anaklia village in Samegrelo-Svaneti region.³⁵ This is a slight reduction from the 39,568m² reduced through technical survey in 2017.

CLEARANCE IN 2018

In 2018, The HALO Trust cleared 389,204m² and destroyed 556 anti-personnel mines (see Table 2). In TAT, no mines were found in the areas cleared; only 33 items of UXO.³⁶ This is a large increase from the 9,256m² cleared at the Chognari minefield in 2017. The HALO Trust conducted BAC in 2018, focusing its mine clearance on Abkhazia.

Table 2: Mine clearance by The HALO Trust in 2018

Region / Village	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Shida Kartli, Dvani	1	102,551	0	0	11
Shida Kartli, Dzevera	1	5,600	0	0	22
Abkhazia, Primorsky	1	269,695	556	4	38,021
Totals	3	377,846	556	4	38,054

In addition, national operators destroyed nine anti-personnel mines in TAT while The HALO Trust destroyed 99 anti-personnel mines in Abkhazia during EOD spot tasks in 2018. None of the mines found in Abkhazia had been laid; they were all either being stored in personal stockpiles or had been discarded in uninhabited areas.³⁷

No target date has been set for completion of anti-personnel mine clearance in Georgia. Georgia has identified clearance of the Red Bridge minefield as one of its key strategic mine action priorities.³⁸ Georgia previously reported plans to start clearance of the Red Bridge minefield in 2015.³⁹ Georgian and Azerbaijani representatives met in 2015 to discuss demining the minefield,⁴⁰ 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.⁴¹ Georgia reported discussing with Azerbaijan during 2018 regarding the clearance of Red Bridge minefield.⁴² However, as at April 2019 The HALO Trust had not been granted permission to restart clearance there.⁴³

In Abkhazia, the main priority is the clearance of Primorsky, where an unplanned explosion in 2017 contaminated the surrounding territory with mines and UXO. In 2018, HALO received funding from the European Union, the United Kingdom, and the United States. With adequate funding, HALO Trust hopes to finish the clearance of Primorsky by 2021.⁴⁴

- 1 Email from Oleg Gochashvili, Head of Division, DELTA, 25 April 2018.
- 2 Email from Oleg Gochashvili, DELTA, 28 March 2019.
- 3 Email from Irakli Kochashvili, Deputy Head, International Relations and Euro-Atlantic Integration Department, Ministry of Defence, 6 September 2009.
- 4 Email from Andrew Moore, HALO Trust, 4 June 2015.
- 5 The HALO Trust, "Where we work: Georgia", accessed 11 July 2019, at: bit.ly/2yTgNwu.
- 6 Email from Matthew Walker, Programme Officer, HALO Trust, 8 April 2019.
- 7 The HALO Trust, "Where we work: Georgia", accessed 11 July 2019, at: bit.ly/2yTgNwu.
- 8 Emails from Oleg Gochashvili, Head of Division, DELTA, 28 March 2019; and Matthew Walker, Programme Officer, HALO Trust, 8 April 2019.
- 9 Ibid.; Decree 897 issued by the Minister of Defence, 30 December 2010; and email from Oleg Gochashvili, DELTA, 20 June 2016 and 10 June 2019; Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 21 March 2017 to 31 March 2018), Form A.
- 10 Email from Oleg Gochashvili, DELTA, 6 July 2015.
- 11 Email from Michael Montañ, Programme Officer, HALO Trust, 21 June 2019.
- 12 Ibid.
- 13 Email from Oleg Gochashvili, DELTA, 28 March and 10 June 2019.
- 14 Emails from Matthew Walker, HALO Trust, 8 April 2019; and Oleg Gochashvili, DELTA, 10 June 2019.
- 15 Email from Oleg Gochashvili, DELTA, 28 March and 10 June 2019.
- 16 Email from Matthew Walker, HALO Trust, 8 April 2019.
- 17 Ibid.
- 18 Ibid.
- 19 Ibid.
- 20 Ibid.
- 21 Email from Matthew Walker, HALO Trust, 8 April 2019.
- 22 Emails from Oleg Gochashvili, DELTA, 28 March 2019; and Matthew Walker, HALO Trust, 8 April 2019.
- 23 Email from Oleg Gochashvili, DELTA, 28 March 2019.
- 24 Ibid and 10 June 2019; and email from Matthew Walker, HALO Trust, 8 April 2019.
- 25 Email from Matthew Walker, HALO Trust, 8 April 2019.
- 26 Email from Oleg Gochashvili, DELTA, 28 March 2019.
- 27 Ibid.
- 28 Email from Matthew Walker, HALO Trust, 8 April 2019.
- 29 Email from Irakli Chitanava, HALO Trust, 2 May 2017.
- 30 Emails from Oleg Gochashvili, DELTA, 28 March 2019; and Matthew Walker, HALO Trust, 8 April 2019.
- 31 Email from Matthew Walker, HALO Trust, 8 April 2019.
- 32 Email from Oleg Gochashvili, DELTA, 28 March 2019.
- 33 Email from Matthew Walker, HALO Trust, 8 April 2019.
- 34 Ibid.
- 35 Ibid.
- 36 Ibid.
- 37 Ibid., and email from Oleg Gochashvili, DELTA, 28 March 2019.
- 38 Email from Oleg Gochashvili, DELTA, 3 April 2017.
- 39 Interview with George Dolidze, Ministry of Foreign Affairs, in Geneva, 28 May 2009; and response to Mine Action Review questionnaire by Oleg Gochashvili, DELTA, 3 June 2015.
- 40 Interview with Oleg Gochashvili, DELTA, in Geneva, 19 February 2016.
- 41 Emails from Andrew Moore, HALO Trust, 18 October 2016; Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.
- 42 Email from Oleg Gochashvili, DELTA, 28 March 2019.
- 43 Email from Matthew Walker, HALO Trust, 8 April 2019.
- 44 Ibid.

RECOMMENDATIONS FOR ACTION

- India should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, India has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.

ANTI-PERSONNEL MINE CONTAMINATION

The extent of anti-personnel mine contamination is not known. Large-scale mine-laying was conducted by government forces on and near the Line of Control (LoC) separating India and Pakistan during the 1971 war and the 2001–02 stand-off between the two states. Anti-personnel and anti-vehicle mines were laid on cultivated land and pasture, as well as around infrastructure and a number of villages.

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 20km² of irrigated land was still mined in the Akhnoor sector of the LoC alone.¹ 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 2001.²

Landmine incidents continue to be reported, primarily involving Indian army personnel, but also civilians. According to a list compiled from media reports and police sources, from January to December 2018, 25 military personnel were injured by anti-personnel mines near the LoC. During the same period, nine civilians were injured by mines and one man was killed when he stepped on an anti-personnel mine near the LoC in the Poonch district.³

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.⁴ However, mine types are usually not specified and may include command-detonated explosive devices as well as mines (i.e. victim-activated explosive devices).⁵

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 2018. The Army Corps of Engineers is responsible for clearing mines placed by non-state armed groups.⁶ 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.⁷ 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.⁸

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 2006.⁹ In August 2016, India stated that "mines used for military operations were laid within fenced and marked perimeters and were cleared after operations".¹⁰

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- 1 "Heavy rainfall worsening landmine peril for Kashmiri farmers", Thomson Reuters Foundation, 5 November 2013, at: tmsnrt.rs/33xqBun.
 - 2 "Farmers Hope to Return to Fields as Army Clears Landmines on Line of Control", NDTV, 27 June 2016, at: bit.ly/2Z1AJIL.
 - 3 "Death-traps along the border: Why are Indian landmines killing Indians?", National Herald, 9 December 2018, at: bit.ly/2N1DZRF; "Elderly Man Dies In Mine Blast Near LoC In Poonch", Kashmir Observer, 31 May 2018, at: bit.ly/33vIECc.
 - 4 "Jawans unearth 15 landmines on rebel turf", The Telegraph India, 6 July 2018, at: bit.ly/33ycUeu.
 - 5 See, e.g., "15 police, driver killed by suspected Maoist landmine in western India", Daily Sabah, 1 May 2019, at: bit.ly/2yZgobW; "Jharkhand: Six Jaguar Force jawans killed in Maoist landmine blast", The Indian Express, 27 June 2018, at: bit.ly/2Z1R6st; "Farmer hurt in blast", The Telegraph India, 3 May 2018, at: bit.ly/303gBqv; and "Three killed in landmine blast triggered by Maoists in Chhattisgarh", Hindustan Times, 19 January 2017, at: bit.ly/301Cvuk.
 - 6 Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (for 2006), Form B.
 - 7 "Advanced tech to help soldiers map minefields", The Times of India, 10 July 2017, at: bit.ly/2KyoVt7.
 - 8 "IEDs pose huge challenge in efforts to counter Naxals: Police", The Indian Express, 24 July 2017, at: bit.ly/2MgNRrb.
 - 9 CCW Amended Protocol II Article 13 Report (for 1 April 2018 to 31 March 2019), Form B.
 - 10 Statement of India, "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.

RECOMMENDATIONS FOR ACTION

- Iran should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Iran has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- Iran should report publicly on the extent and location of mined areas and prepare a plan for their clearance and destruction.

ANTI-PERSONNEL MINE CONTAMINATION

Iran is contaminated by anti-personnel and anti-vehicle mines, mainly as a result of the 1980–88 war with Iraq. The extent of the remaining mined areas is unknown, but mine contamination is concentrated in five western provinces bordering Iraq.

Minister of Defence Hossein Dehghan said in 2014 that the 4,500km² of mine and explosive remnants of war (ERW) contamination left by the Iran–Iraq war in the five western provinces had been reduced to 280km².¹ In February 2014, the Iran Mine Action Centre (IRMAC) reported that the five Western provinces had remaining contamination totalling 250km².²

According to online media sources, flooding that hit large parts of Iran in March and April 2019 exposed mines and unexploded ordnance (UXO) remaining in western provinces of Iran.³

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.⁴ Sources report that security forces continue to emplace mines in areas close to Iran's borders in order to deter cross-border smugglers and infiltration by anti-regime groups. There are also mined areas around military bases.

A further complication for contamination estimates are reports of continuing casualties in areas that were supposed to have been cleared, calling into question to whether mine clearance has been conducted to international standards.

Iran also has cluster munition remnant contamination (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Iran for further information).

PROGRAMME MANAGEMENT

IRMAC was established as the national mine action centre in 2005, taking the place of a Mine Action Committee within the Ministry of Defence. IRMAC is responsible for planning, data, managing survey, procurement, and the accreditation of demining operators. It also sets standards, provides training for clearance operators, concludes contracts with demining operators, and ensures monitoring of their operations. It coordinates mine action with the General Staff of the Armed Forces, the Ministry of Interior, the Management and Planning Organisation of Iran, and other relevant ministries and organisations, and handles international relations.⁵ Several IRMAC staff are believed to be serving or former military personnel, including its Director, while others are civilians employed by the Ministry of Defence.

IRMAC has a branch in every affected province. Available demining assets, such as mechanical assets, vary from province to province.

In March 2019, Iran hosted a three-day international roundtable on "humanitarian mine action: challenges and best practices", attended by representatives from other states, national and international demining organisations, the International Committee of the Red Cross (ICRC), and the United Nations Mine Action Service (UNMAS). The aim of the roundtable was to share knowledge and experience on mine action, challenges, and best practices.⁶

INFORMATION MANAGEMENT

IRMAC actively maintains a national mine action database but it is not known if it is comprehensive.

LAND RELEASE SYSTEM

OPERATORS

IRMAC combines the roles of regulator and operator, with demining teams and support staff deployed in five affected provinces.⁷ In Kurdistan province, IRMAC is conducting verification, mainly through mechanical clearance. IRMAC also responds to calls from the local community reporting landmines or items of UXO. Demining capacity in Kurdistan province is believed to stand at around 12 personnel, a downsize compared to previous capacity.⁸

Commercial operators include AOM, Immen Sazan Omran Pars International, Immen Zamin Espadana, and Solh Afarinan-e Bedoun-e Marz (SABM). Three other companies, Imen Gostaran Mohit (IGM), Moshaver Omran Iran, and ZPP International, undertake quality assurance/quality control (QA/QC).⁹

Petroleum Engineering and Development Company (PEDEC), the development arm of the National Iranian Oil Company (NIOC), contracts and monitors commercial operators conducting clearance of Iran's oil and gas producing areas which are concentrated in mine-affected areas of south western Iran bordering Iraq.¹⁰

The Iranian Army and Iranian Revolutionary Guard Corps assisted demining efforts to support the response to the flash flooding which affected Iran in March and April 2019.¹¹

International operators are not believed to have been active in Iran since 2008.

There is no available information on quality management procedures. In the past, very high levels of casualties were recorded during demining in Iran.

LAND RELEASE OUTPUTS

No data was available on any mine survey or clearance in 2018, as was the case in the previous year.

Iran is believed to have dedicated significant resources and effort to clearing mined areas on its territory, but the results of survey and clearance, and the standards to which clearance has been conducted, have not made publicly available.

- 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 "Unexploded Ordnance Threatening Iranian Lives in Flood-Hit Areas", IFP News, 5 April 2019, at: bit.ly/33Tsp0K; and "Nationwide Flood Alert In Iran As Emergency Declared In Oil-Producing Province", Radio Farda, 31 March 2019, at: bit.ly/2zjb3MJ.
- 4 "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.
- 5 IRMAC PowerPoint Presentation, Tehran, 9 February 2014; and IRMAC, "Presentation of IRMAC".
- 6 "Tehran hosts international roundtable on humanitarian mine action", Mehr news agency, 12 March 2019, at: bit.ly/2Z4LsIE; and ICRC, "International roundtable on 'humanitarian mine action: challenges and best practices'", 15 March 2019, at: bit.ly/2QH3cR6.
- 7 Information provided by mine action expert on condition of anonymity.
- 8 Information provided by Reza Amaninasab, Director, Ambassadors for development without borders, September 2019.
- 9 Ibid.
- 10 Information provided by mine action expert on condition of anonymity.
- 11 Information provided by Reza Amaninasab, Director, Ambassadors for development without borders, September 2019.

RECOMMENDATIONS FOR ACTION

- Israel should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Israel has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- The Israeli National Mine Action Authority (INMAA) should consider conducting external quality assurance and quality control (QA/QC) itself, rather than outsourcing it to commercial companies, which proves costly for international donors to fund.

ANTI-PERSONNEL MINE CONTAMINATION

The exact extent of mine contamination in Israel is not known. Israel reported 41.58km² of confirmed mined area and a further 48.51km² of suspected mined area, as at the end of 2017,¹ but did not report the amount of mined area as at the end of 2018. The combined 90km² as at end 2017, represents only the area affected by mines that are not deemed essential to Israel's security. The size of other mined areas is not made public. The total figure includes 18.38km² of mined area in the Jordan Valley (11.84km² of anti-personnel mined area, 6.19km² of anti-vehicle mined area, and 0.35km² of mixed mined area) and the West Bank² (see the report on Palestine in this work for further information).

Israel's mine problem dates back to the Second World War. Subsequently, Israel laid significant numbers of mines along its borders, near military camps and training areas, and near civilian infrastructure. In August 2011, Israel's military reported planting new mines to reinforce minefields and other defences along its de facto border with Syria in the Golan Heights.³

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.⁴

Table 1: Mined area (at end 2017)⁵

Type of contamination	CHAs	Area (km ²)	SHAs	Area (km ²)
AP mines only	201	19.93	5	39.54
AV mines only	29	17.00	8	1.17
AP and AV mines	2	4.65	9	7.80
Totals	232	41.58	22	48.51

AP = Anti-personnel AV = Anti-vehicle CHA = Confirmed hazardous area SHA = Suspected hazardous area

PROGRAMME MANAGEMENT

A March 2011 law on minefield clearance established the INMAA to undertake a "comprehensive programme of mine clearing projects inside Israel".⁶ 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."⁷

In February 2019, the Director of INMAA reported that new legislation had been passed, in the form of a regional law, giving the INMAA responsibility for former military bases and for addressing abandoned explosive ordnance (AXO), unexploded ordnance (UXO), and anti-vehicle mines. Prior to this, the INMAA had only had responsibility for addressing anti-personnel mines, and for mixed mined areas.⁸

The INMAA, which has 10 staff, was established in the Ministry of Defence, with ministry staff responsible for planning mine action.⁹ As a result of the new law, staffing at the INMAA was expected to expand by at least 50%, but as at February 2019 it was unclear if the budget would be increased to enable this to occur.¹⁰

The INMAA manages a “minefield information bank” that is open for public queries concerning demining plans and programmes.¹¹

In 2017, the annual mine action budget for Israel was NIS41.7 million (approx. US\$11.5 million), of which NIS27 million was from the INMAA's budget and the remaining NIS14.7 million from additional external funding by various infrastructure development companies and state authorities.¹² The size of the 2018 budget is not known.

A number of development projects funded by local electricity, water, and infrastructure companies and authorities also pay for mine clearance.¹³

PLANNING AND TASKING

The INMAA has an approved annual mine clearance plan¹⁴ and 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,¹⁵ executed by civilian local operators.¹⁶

In addition, the INMAA continues to oversee HALO Trust clearance projects in Area C of the West Bank, funded by the European Union (EU), the United Kingdom, and the United States (via ITF Enhancing Human Security).¹⁷

Furthermore, at the start of 2017, the INMAA began surveying 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 mined area in the Jordan Valley, and is using

various technologies and scientific tools to assess mine drift possibilities. The INMAA has planned to invest around NIS 900,000 (approximately US\$250,000) in this project in 2017–19¹⁸. Progress in non-technical survey continued in 2018.¹⁹

The INMAA, “defines clearance policies, sets the national priorities and implements them in coordination with other relevant governmental ministries, the IDF, and local authorities.”²⁰ 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.²¹ The INMAA has been studying the social and economic impacts of land released over the last four years, as well as on the potential impact for future clearance sites.²²

LAND RELEASE SYSTEM

National mine action standards, which concern rules and regulations concerning clearance methods, quality management, legislation, and insurance, are contained on the INMAA website.²³

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.²⁴

In 2017, 106 demining personnel and 36 machines were deployed for clearance operations.²⁵ The clearance companies contracted in 2018, and their demining capacity, is not known.

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.²⁶ 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.²⁷

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 2019.²⁸ The HALO Trust works under the auspices of both the INMAA and the Palestine Mine Action Centre (PMAC), primarily with funding from international donors²⁹ (see the report on Palestine in the current work for further information).

Every mine clearance project in Israel has an INMAA supervisor, a QA/QC contractor, and a clearance operator. Five QA/QC contractors were formally registered for 2018: 4CI Security, Dexagon, Ga-man, Israteam, and Zeev Levanon.³⁰

OPERATIONAL TOOLS

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.³¹ Some of these operations are conducted by Israel directly, while others are performed by contractors.³²

Throughout 2018, the INMAA continued to be supported by the Geneva International Centre for Humanitarian Demining (GICHD) in developing its animal detection system capacity.³³ A pilot project using mine detection dogs (MDDs) conducted in 2017³⁴ found that dogs would not be a valuable tool.³⁵ However, after investigating and conducting further research into animal detection and behaviour, the INMAA planned to conduct further trials.³⁶

LAND RELEASE OUTPUTS

LAND RELEASE OUTPUTS IN 2018

Under CCW Amended Protocol II, Israel reported that the INMAA had overseen clearance of approximately 1.2km² in 2018, destroying 1,350 mines and explosive remnants of war (ERW). In addition, 0.7km² was cancelled through non-technical survey,³⁷ in areas south of the Dead Sea.³⁸ However, no details were provided on what proportion of 1.2km² cleared and 0.7km² cancelled was release of mined area (as opposed to battle area) or whether the area cleared also included clearance in Palestinian territory in the West Bank.

The INMAA typically plans for mine clearance at a targeted rate of 1.5km² per year (including in the West Bank), based on its current budget.³⁹

IDF demining is implemented independently of the INMAA, using military methods and techniques.⁴⁰ The area cleared or otherwise released by the IDF is unknown.

In addition, The HALO Trust continued its clearance of minefields in Area C of the West Bank in 2018, working under the auspices of both the INMAA and PMAC, primarily with international funding (see the report on Palestine in this work for further information).

Based on the clearance rates of the past few years and the INMAA's forecasted clearance rate of 1.5km² per year, it will take many years to clear remaining contamination. The INMAA is seeking additional funding and assistance to speed up operations.⁴¹

1 Email from Michael Heiman, formerly Director of Technology and Knowledge Management, Israeli National Mine Action Authority (INMAA), 26 May 2018.

2 Ibid.

3 "Israel army plants new mines along Syria border", Associated Press, 13 August 2011.

4 "New Golan mine-clearing project to begin this summer", The Jerusalem Post, 16 March 2017, at: bit.ly/2MyEKBc.

5 Ibid.

6 Minefield Clearance Law 5771-2011 of March 2011, unofficial translation at: bit.ly/2GD0QgJ; 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.

7 Minefield Clearance Law 2011 (MCL 5771-2011).

8 Interview with Marcel Aviv, Director, INMAA, in Geneva, 7 February 2019.

9 Email from Michael Heiman, formerly INMAA, 26 May 2018.

10 Interview with Marcel Aviv, INMAA, Geneva, 7 February 2019.

11 CCW Amended Protocol II Article 13 Report (for 2018), Form A.

12 Email from Michael Heiman, formerly INMAA, 26 May 2018.

13 Email from Michael Heiman, then INMAA, 19 September 2016.

14 CCW Amended Protocol II Article 13 Report (for 2018), Form B.

15 Email from Michael Heiman, formerly INMAA, 26 May 2018.

16 CCW Amended Protocol II Article 13 Report (for 2018), Form B.

17 Interviews with Tim Porter, Regional Director, HALO Trust, in Geneva, 15 February 2018 and 6 February 2019.

18 Emails from Michael Heiman, then INMAA, 23 July and 10 August 2017.

19 Interview with Marcel Aviv, INMAA, in Geneva, 7 February 2019.

20 CCW Amended Protocol II Article 13 Report (for 2017), Form B.

21 Email from Michael Heiman, then INMAA, 23 July 2017.

22 Email from Michael Heiman, then INMAA, 19 September 2016.

23 CCW Amended Protocol II Article 13 Report (for 2018), Form B.

24 Email from Michael Heiman, formerly INMAA, 26 May 2018.

25 Ibid.

26 Email from Eran Yuvan, Ministry of Foreign Affairs, 29 April 2014; and CCW Amended Protocol II Article 13 Report (for 2017), Form B.

27 CCW Amended Protocol II Article 13 Report (for 2017), Form B.

28 Email from Michael Heiman, then INMAA, 23 July 2017.

29 HALO Trust, "West Bank", accessed 17 July 2018.

30 CCW Amended Protocol II Article 13 Report (for 2018), Form G.

31 Ibid., Form C.

32 Email from Michael Heiman, then INMAA, 23 July 2017.

33 CCW Amended Protocol II Article 13 Report (for 2018), Form E.

34 Email from Michael Heiman, then INMAA, 23 July 2017.

35 Email from Michael Heiman, formerly INMAA, 26 May 2018.

36 Interview with Marcel Aviv, INMAA, Geneva, 7 February 2019.

37 CCW Amended Protocol II Article 13 Report (for 2018), Form B.

38 Interview with Marcel Aviv, INMAA, in Geneva, 7 February 2019.

39 Email from Michael Heiman, formerly INMAA, 26 May 2018.

40 Ibid.; and email from Eran Yuvan, Ministry of Foreign Affairs, 29 April 2014.

41 CCW Amended Protocol II Article 13 Report (for 2017), Form B.

RECOMMENDATIONS FOR ACTION

- Kyrgyzstan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Kyrgyzstan has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- 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.

ANTI-PERSONNEL MINE CONTAMINATION

Kyrgyzstan is suspected to be contaminated by mines, though the precise location and extent of any mined areas is not known. According to the Minister of Defence, contamination in the southern Batken province bordering Tajikistan and Uzbekistan, the result of mine use by Uzbekistan's military between 1999 and 2000, was cleared by Uzbek forces in 2005.¹ It was reported, however, that rainfall and landslides had caused some mines to shift.²

In 2003, Kyrgyz authorities claimed that Uzbek forces had also laid mines around the Uzbek enclaves of Sokh and Shakhimardan located within Kyrgyzstan. Press reports have suggested that Uzbek troops partially cleared territory around the Sokh enclave in 2004–05 and that they completely cleared mines around the Shakhimardan enclave in 2004.³ In October 2017, Uzbek President Islam Karimov, and his Kyrgyz counterpart, Almazbek Atambaev, signed an agreement to demarcate some 85% of the countries' nearly 1,300km-long border and began discussing options for the 36 disputed sectors.⁴

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.⁵ In June 2011, a government official confirmed: "We do not have any minefields on the territory of Kyrgyzstan."⁶

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.⁷ 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.⁸

PROGRAMME MANAGEMENT

Kyrgyzstan has no functioning mine action programme.

LAND RELEASE

There are no reports of any survey or clearance of mined areas occurring in 2018.

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. Zhmagulov and O. Borisova, "Kyrgyzstan Tries to Defend Itself from Uzbek Mines", Navigator (Kazakhstan), 14 March 2003; and "Borders are becoming clear", Blog post, at: bit.ly/2z0s7qU.

4 "Tug-Of-War: Uzbekistan, Kyrgyzstan Look To Finally Settle Decades-Old Border Dispute", Radio Free Europe, 14 December 2017, at: bit.ly/2yXsrXt.

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: bit.ly/31Fwd44.

8 Ibid.

RECOMMENDATIONS FOR ACTION

- Lao People's Democratic Republic (Lao PDR) Lao PDR should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a State Party to the APMBC, Lao PDR has obligations under international human rights law to clear landmines in areas under its jurisdiction or control as soon as possible.

UNDERSTANDING OF AP MINE CONTAMINATION

While by far the greatest contamination in Lao PDR is from explosive remnants of war (ERW), in particular cluster munition remnants (CMR) (see the *Clearing Cluster Munition Remnants* report on Lao PDR for further information), Lao PDR is also contaminated by anti-personnel and anti-vehicle mines, 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.¹ A Handicap International survey in 1997 found mines in all 15 provinces it surveyed, contaminating 214 villages.²

The remote location of many of these areas means that mines have little impact and are not a clearance priority. Of 91,468 items of unexploded ordnance (UXO) destroyed by operators in 2018, only 28 (0.03%) were mines.³ 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."⁴

The NRA reports that "gravel mines" had all degraded but remaining mine types included United States (US)-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.⁵

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.⁶

In July 2019, HALO Trust's EOD team leader responded to a call-out in Phalanxai district in Savannakhet province, near the site of an old US military base, during which a cache of M-16 mines, a couple of other laid M-16 mines, and a PMN mine were discovered. Villagers told HALO Trust that there had been accidents in the immediate area in the 1980s, but that the PMN had been discovered last year while ploughing the land and was moved to its current position.⁷

As at August 2019, Humanity and Inclusion (HI) had discovered the presence of M-16, M-14, MBV-78A1, and POMZ anti-personnel landmines in sixteen villages in Houamuang district, in Houaphanh province, in which it had conducted non-technical survey.⁸ This will have a significant impact on the methodology HI employs and will impede CMR land release operations. As at March 2019, HI planned to try to better determine the probable location of landmines to help reduce the probability of its teams operating in unknown mined areas. HI also planned to suggest a new standing operating procedure (SoP) to the NRA for a combined technical survey/area clearance.⁹

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The NRA, created by government decree in 2004 and active since mid 2006, has an interministerial board composed of representatives from government ministries and is chaired by the Minister of Labour and Social Welfare.¹⁰ The Prime Minister of Lao PDR approved a new decree, "On the Organisation and Operations of the National Regulatory Authority for UXO in Lao PDR", in February 2018. The decree defines the position, role, duties, rights, organisational structure, and the working principles and methods of the NRA.¹¹

The NRA acts as the coordinator for national and international clearance operators and serves as the national focal point for the sector. This includes overall management and consideration of policy, planning, projects, and coordination of land release operations nationwide, as well as NRA planning and coordination functions at the provincial and district levels.¹² While the NRA has the central role of UXO Sector coordination, increased coordination and collaboration between all stakeholders, including line ministries, local authorities, UXO operators, development partners, and others are essential for the NRA to fulfil its coordination role.¹³

The Lao Government's national strategy, "Safe Path Forward II, 2011–20", was reviewed in June 2015, when the NRA set a number of specific targets for the remaining five years up to 2020.¹⁴ There is a corresponding multi-year workplan 2016–20 for implementation of the Safe Path Forward II strategy,¹⁵ but both Safe Path Forward II and the corresponding workplan predominantly focus on CMR, and do not include a strategy or plans for addressing mined areas.

According to the NRA, responsibility for clearance of mined areas in Lao PDR predominantly falls under the remit of the Lao armed forces.¹⁶

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.¹⁷ In 2018, further capacity development in information management, quality management, and operations support, was provided primarily to UXO Lao, and to a lesser extent the NRA, through a US-funded grant manager, Janus Global Operations. As part of its work in 2018, Janus supported UXO Lao with survey and data analysis and correction as a follow-on to training they conducted in 2017.¹⁸ Effective 31 December 2018, Tetra Tech replaced Janus as the US-funded grant manager in Lao PDR.¹⁹

LAND RELEASE SYSTEM

Lao PDR's national standards make a clear distinction between UXO clearance (including CMR) and mine clearance, and for the purposes of the national standards, "UXO does not include hand laid mines but it may include disposal of 'one off' mines located during EOD roving tasks."²⁰ As such, the National Standard on UXO clearance only relates to UXO clearance operations and not to mine clearance operations.²¹

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."²²

According to Lao PDR's national standard on 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."²³ However, in practice, determining whether a mine is part of a bigger mined area can prove challenging, especially if field-based personnel are not trained to address anti-personnel mine contamination. Therefore, at the July 2019 technical working group meeting on clearance, HI proposed an addendum to the standard to help address this.²⁴

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."²⁵

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."²⁶

LAND RELEASE OUTPUTS

No planned or systematic mine clearance was conducted during 2018, though 28 mines of 91,468 items of UXO were reported to have been destroyed by operators in 2018, according to Lao PDR's transparency reporting under the Convention on Cluster Munitions (CCM) and the Convention on Certain Conventional Weapons (CCW).²⁷

UXO Lao reported destroying five anti-personnel mines and one anti-vehicle mine during its operations in 2018.²⁸ The HALO Trust, HI, Mines Advisory Group (MAG), and NPA did not report destroying any mines in 2018.²⁹

- 1 NRA website, "UXO types: Mines", undated but accessed 24 July 2019 at: bit.ly/2XZyv04.
- 2 Handicap International, "Living with UXO, National Survey on the Socio-Economic Impact of UXO in Lao PDR", Vientiane/Brussels, 1997, p. 7.
- 3 Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 2018), Form A. This is a slight discrepancy with the 97,624 items of UXO destroyed, of which 31 were mines, reported by Lao PDR in its Convention on Cluster Munitions (CCM) Article 7 Report (for 2018), Form F.
- 4 NRA website, "UXO types: Mines", 24 July 2019.
- 5 Ibid.
- 6 Email from Ulric Eriksson, Operations Manager, NPA, 1 May 2018.
- 7 Email from Miles Hawthorn, Deputy Programme Manager, HALO Trust, 20 August 2019.
- 8 Email from Julien Kempeneers, Humanitarian Mine Action Coordinator, HI, 27 August 2019.
- 9 Email from Julien Kempeneers, HI, 22 March 2019.
- 10 2019 Convention on Cluster Munitions (CCM) Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 18.
- 11 Government Decree No. 67, dated 12 February 2018; CCM Extension Request 2019, Part B, Detailed Narrative, p. 17; and Statement of Lao PDR on National Implementation Efforts, CCM Eighth Meeting of States Parties, Geneva, 3 September 2018.
- 12 2019 Article 4 deadline Extension Request 2019, Part B, Detailed Narrative, p. 18.
- 13 Statement of Lao PDR on National Implementation Efforts, CCM Eighth Meeting of States Parties, Geneva, 3 September 2018.
- 14 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 4 May 2016.
- 15 CCM Extension Request 2019, Part B, Detailed Narrative, p. 26.
- 16 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018.
- 17 Interview with Olivier Bauduin, UNDP, Vientiane, 2 May 2018; and email, 10 July 2018.
- 18 Interview with Hugh Hosman and Marco Heuscher, Janus Global Operations, Vientiane, 2 May 2018.
- 19 Email from Nigel Orr, Technical Advisor Survey and Clearance, Tetra Tech, 14 June 2019.
- 20 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 0: Introduction and Glossary", accessed on NRA website on 14 September 2018, p. xi.
- 21 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 7: UXO Clearance Operations", accessed on NRA website on 14 September 2018, p. 5.
- 22 Ibid., p. 13.
- 23 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 12: Mine Clearance Operations", accessed on NRA website on 14 September 2018, p. 5.
- 24 Email from Julien Kempeneers, HI, 27 August 2019.
- 25 Lao PDR National UXO/Mine Action Standards (NS), "Chapter 12: Mine Clearance Operations", p. 5, note 1.
- 26 Ibid., p. 5.
- 27 CCW Protocol V Article 10 Report (for 2018), Form A. This is a slight discrepancy with the 97,624 items of UXO destroyed, of which 31 were mines, reported by Lao PDR in its CCM Article 7 Report (for 2018), Form F.
- 28 Email from Saomany Manivong, Chief of Programme Office and Public Information, UXO Lao, 10 May 2019.
- 29 Emails from Fiona Kilpatrick, Programme Manager, HALO Trust, 29 March 2019; Julien Kempeneers, HI, 22 March 2019; Blossum Gilmour, Programme Manager, MAG, 21 March 2019; and Aubrey Sutherland, Country Director, NPA, 25 March 2019.

KEY DEVELOPMENTS

In March 2018, the Lebanon Mine Action Center (LMAC) released its revised National Mine Action Standards (NMAS), which incorporated significant and welcome improvements to its accepted methodology for survey and clearance of anti-personnel mines. These included, among others, reduction of the required clearance depth from 20cm to 15cm and adjustments to the fade-out specifications for clearance in pattern minefields. Furthermore, Mines Advisory Group (MAG) and Norwegian People's Aid (NPA) were tasked to conduct non-technical survey in 2018, which previously had been executed mainly by the Lebanese Armed Forces (LAF).

RECOMMENDATIONS FOR ACTION

- Lebanon should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a State Party to the APMBC, Lebanon has obligations under international human rights law to clearance landmines in areas under its jurisdiction or control as soon as possible.
- Wherever possible, non-technical survey and technical survey should be used to more accurately define areas of actual mine contamination. This would help to more accurately establish a national baseline of mine contamination.
- LMAC should review empirical data from clearance operations on the Blue Line, and, in consultation with operators and partners, assess whether the required fade-out 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.
- The integration and consolidation of the LMAC and Regional Mine Action Center (RMAC) databases and servers should be completed as soon as possible.

ANTI-PERSONNEL MINE CONTAMINATION

At the end of 2018, Lebanon had more than 19.6km² of confirmed mined area, including the Blue Line, across 1,399 confirmed hazardous areas (CHAs) (see Table 1).¹ This includes 27,197m² of confirmed mined area recorded in Jroud Aarsal, in the north-east of Lebanon, which is new contamination resulting from fighting that spilled over from the Syrian conflict.²

At the end of 2017, Lebanon reported a little over 20km² of confirmed mined area, including the Blue Line, across 1,415 CHAs.³

Table 1: Mined area by province (at end 2018)⁴

Province	CHAs	Area (m ²)
Al Beqaa	46	967,267
Al Janoub and Al Nabatiyeh (south Lebanon)	995	7,927,953
Jabal Loubnan (Mount Lebanon)	307	10,466,303
Al Shimal (north Lebanon)	51	254,438
Totals	1,399	19,615,961

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 2019* report on Lebanon for further information).

In addition, "Dangerous Areas" totalling nearly 15km² are suspected to contain nuisance mines, booby-traps, or other ERW other than CMR.⁵ 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,⁶ for which further investigation/survey is required in order to confirm the type and extent of suspected contamination.⁷

Lebanon's mine problem is largely a legacy of 15 years of earlier civil conflict and Israeli invasions of south Lebanon (in 1978 and 1982) and subsequent occupations that ended in May 2000, and there is a small amount of new mine contamination on the north-east border with Syria, resulting from spill-over of the Syrian conflict onto Lebanese territory in 2014–17 (see New mine contamination section below).⁸

Mines affect the north and south of the country, and the Mount Lebanon governorate in the middle, though most 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.⁹

NEW MINE CONTAMINATION

A total of 27,197m² of new/previously unrecorded confirmed mined area was recorded through survey by MAG and NPA in “Jroud Arsaf” in the north-east along the border with Syria, as a result of spill-over in fighting from the Syrian conflict in 2014–17.¹⁰ The Lebanese territory in question was fully regained by the LAF in August 2017 and was assigned to LMAC for survey and clearance. Contamination also includes improvised explosive devices (IEDs), CMR, and other ERW.¹¹

NATIONAL OWNERSHIP AND 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. 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.¹²

LMAC, part of the LAF, is based in Beirut. Since 2009, the RMAC-N, based in Nabatiyeh, which is a part of LMAC, has overseen operations in south Lebanon and western Beqaa, under LMAC supervision.¹³ At the end of 2018, a new regional centre, RMAC-RB, was established in the north-east of Lebanon in the village of Ras Baalbek, to oversee the mine action operations in this region.¹⁴ 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. The current director of LMAC started in March 2019, replacing his predecessor who had served as director for two years.¹⁵

United Nations Development Programme (UNDP) personnel, funded by the European Union (EU), are also seconded to LMAC, providing support for capacity building, including transparency reporting, strategic reviews, Information Management System for Mine Action (IMSMA) database entry, community liaison, and quality assurance (QA). UNDP does not provide technical assistance on operational decisions.¹⁶ However, EU funding for UNDP institutional support to LMAC was due to finish at the end of 2019, which will result in a gap in capacity development.¹⁷

A “Mine Action Forum” has been established in Lebanon in close partnership between LMAC and Norway, providing an informal platform for LMAC to continue dialogue and collaboration with donors, clearance operators, and partner organisations, and to discuss priorities and needs in cluster munition and landmine survey and clearance at the national level. The forum meets twice a year, with UNDP designated as the secretariat to follow up and develop progress reports.¹⁸ It is an example of what a “Country Coalition” under the Convention on Cluster Munitions (CCM) could look like, but in the case of Lebanon it was agreed the forum should be broadened to include landmines.

The Mine Action Forum in Lebanon has resulted in better coordination and greater transparency and enhancements to land release methodology (enshrined in the revised NMAS). These measures have all served to strengthen donor confidence and mobilise additional resources.¹⁹ Lebanon secured an additional 43% of funding for mine action in 2018 compared to the previous year, for both mine- and CMR-related work.²⁰

There is good coordination and collaboration between LMAC/the RMACs and clearance operators, with the operators consulted before key decisions are taken.²¹ International clearance operators reported that an enabling environment exists for mine action in Lebanon, with no obstacles regarding visas for international staff, approval of MoUs, or the importation of equipment.²²

A technical working group (TWG) was established in March 2018, under the auspices of LMAC, following the release of the revised NMAS. The TWG, which meets quarterly, provides a useful forum for LMAC/the RMACs to meet collectively with clearance operators to review and discuss field issues, including implementation of revisions to the NMAS, and potential ways to improve operational efficiencies.²³

As in the previous year, Lebanon reported contributing US\$9 million annually in 2018 towards mine action in Lebanon (for both mine and CMR-related work), to support costs associated with the running of LMAC (facilities and staff); the LAF Engineering Regiment companies working in demining; risk education; and victim assistance.²⁴

A Regional School for Humanitarian Demining in Lebanon (RSHDL) has been established in partnership between Lebanon and France, with technical mine action support provided by a French military officer, to support the development of the curriculum on EOD disposal (EOD levels 1, 2, and 3) in compliance with the International Mine Action Standards (IMAS).²⁵ The Regional School became operational in 2017, enabling civilian and military personnel from Arab and other countries to benefit from an array of courses and workshops on demining.²⁶

GENDER

LMAC reported that it has taken several actions to mainstream gender in its implementation plan, including through inclusive policies, data disaggregation in risk education and victim assistance, and participation in courses at the RSHDL.²⁷ In August 2019, LMAC reported that it had appointed a new gender focal point who will help mainstream gender-sensitive policies and procedures, and monitor their implementation across the mine action centre.²⁸ Women and children are consulted during survey and community liaison activities.²⁹ According to LMAC, within the overall humanitarian clearance operators in Lebanon, approximately 20% of survey and clearance staff are women and 15% of managerial level/supervisory positions.³⁰

Lebanon hosted a workshop on gender in mine action at the RSHDL in July 2018, attended by Iraq, Libya, Palestine, Somalia, Sudan, and Yemen, as part of the ARCP.³¹

HI, MAG, and NPA all reported having gender policies in place.³²

HI disaggregates relevant mine action data by sex and age. HI also ensures that all population groups, including women and children, are consulted during its survey and community

liaison activities. However, while up to 60% of HI managerial/supervisory positions are held by women, only 2% of its survey and clearance staff are women, with one female community liaison officer out of a total of 50 operational personnel.³³

MAG reported that it consults women during survey and community liaison activities; that all its community liaison teams are mixed; and that its data is disaggregated by sex and age. Overall, women account for 15% of operational roles in MAG's survey and clearance teams in Lebanon, and 30% of managerial level/supervisory positions.³⁴

As at April 2019, NPA was in the process of developing an implementation plan for its organisational gender policy for Lebanon, with support from the Geneva-based Gender and Mine Action Programme (GMAP, a programme of the Geneva International Centre for Humanitarian Demining (GICHD)), which was due to be finalised in 2019. NPA reported that its survey and community liaison teams are gender balanced, and 15% of employees in operational roles in NPA's survey and clearance team are women; 9% in managerial level/supervisory positions. NPA disaggregates data by sex and age.³⁵

INFORMATION MANAGEMENT

IMSMA is used by LMAC and RMAC to record contamination and land release in Lebanon. As at April 2019, efforts were underway to integrate RMAC's information management database with the LMAC server.³⁶ As at end 2018, there was a single IMSMA database and a synchronisation procedure in place between the two LMAC and RMAC databases, pending a hardware upgrade to establish a direct connection.³⁷ Full harmonisation and consolidation of the servers was expected to be achieved in the course of 2019, 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 while decreasing maintenance costs.³⁸

Furthermore, LMAC is migrating from its current version of IMSMA (IMSMA New Generation) to IMSMA Core, which it hopes will help facilitate the production of clearer reports

that can be translated into dashboards for stakeholders, including donors, to monitor and follow.³⁹ Migration to IMSMA Core requires regular IMSMA back-ups and corrections to data. Migration is forecast to be achieved only in 2020.⁴⁰

Some clearance tasks result in a clearance output in excess of the task size originally recorded in IMSMA, often due to fade-out. LMAC has reported that the system for database entry now more accurately reflects operational data.⁴¹ Now, any area cleared in excess of the original task size is no longer recorded as additional tasks in the database, but as "productivity".⁴²

In 2018, LMAC changed requirements for clearance operators to report operational data monthly in favour of daily and weekly reporting instead. According to NPA, this has resulted in closer and more regular checks of data by LMAC and RMAC QA officers.⁴³

PLANNING AND TASKING

In September 2011, LMAC adopted a strategic mine action plan for 2011–20.⁴⁴ 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,⁴⁵ which will not be met.

A first interim review of 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 and suffered from underfunding (with consequently fewer operating teams).⁴⁶

A second interim assessment, this time for 2014–16, was undertaken in 2016, but the results were only released in March 2018. The results similarly highlighted the huge gap between actual mine clearance output and planned output (when compared to the original strategic plan). This 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 towards completion.⁴⁷

Prior to 2016, demining along the border with Israel had been said to depend on "political developments",⁴⁸ but the Lebanese government subsequently took the decision to initiate larger-scale, planned clearance on the Blue Line⁴⁹ and clearance by humanitarian demining operators began in November 2016.⁵⁰

LMAC is now preparing a new strategic mine action strategy, planned by the end of 2019, through which a more accurate estimate for completion of mine clearance will be available, taking into consideration the updated NMAS and new methodologies. LMAC is also developing a long term clearance plan for each region, with yearly benchmarks.⁵¹

Lebanon has set four levels of priority for its land release. The first is to address infrastructure (e.g. housing, roads, hospitals, and schools); the second is to address utilities (e.g. water, electricity, drainage, and telephone lines); the third is to release agricultural land and grazing areas for livestock; and the fourth is to release land for other activities (e.g. nature reserves or areas used by wildlife).⁵² In some

instances, task prioritisation is also influenced by requested specifications from donors, for example based on the geographical location.⁵³

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.⁵⁴

Clearance operators in Lebanon believe that reprioritisation is needed, as all of the current tasks fall between priorities 2 and 3, and reprioritisation has not occurred for some time.⁵⁵

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Lebanon developed its first NMAS in 2010.⁵⁶ Over the last two years, LMAC worked with UNDP and other partners, under a project funded by the EU, to revise the standards.⁵⁷ The aim of the revision has been to enhance efficiency by harmonising national standards with IMAS, as well as to add new modules not present in the original Standards.⁵⁸ LMAC adopted a consultative and constructive approach to the revision process.⁵⁹ The revised NMAS, formally approved in March 2018, have a solid focus on land release and evidence-based decision-making, in line with the IMAS, and based on recommendations and analysis of operational data. Notable enhancements include reduction of the required clearance depth from 20cm to 15cm; revision of fadeout specifications for pattern minefields, and enhancements in how rapid response tasks are addressed and recorded.⁶⁰ These changes should improve the efficiency of land release in Lebanon.⁶¹

In March 2018, the new NMAS were presented to operators during a workshop at the RSHDL, during which LMAC discussed next steps in operationalising the new standards.⁶² Demining NGOs have updated their standing operating procedures (SoPs) according to the new NMAS.⁶³ Furthermore, operators now have an opportunity to discuss specific land release considerations with LMAC for assigned clearance tasks, which arise during the pre-clearance assessment stage of operations. Such discussions might result in the refining of the task size or approved land release specifications (e.g. use of technical survey, for all or part of the task, rather than full clearance).⁶⁴

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 operations officers and clearance operators.⁶⁵ Previously, full clearance had been required for 15 metres from the mine rows, but in the revised NMAS this has been changed to a required fade-out of five metres from the mine rows, and technical survey (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, for minefields in which the lanes have not been disrupted. Following discussions in the TWG, the 30% technical survey requirement was subsequently reduced to 10%.⁶⁶ If there is no fence, 10 metres of technical survey is required from the edge of the 5-metre fade-out. Fade-out for anti-vehicle mines has been reduced from 20 metres to 10.⁶⁷

Previously, operators have been required to fully clear the area between the mine rows and the minefield fence, plus an additional two metres outside the fence, with one asset.⁶⁸

MAG and NPA also noted that to further enhance efficiencies, fade-out 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 five metres from the outer mine row, in minefields in which the lanes have not been disturbed. In the operators' opinion, technical survey beyond the five-metre fadeout (up to the minefield fence or for ten 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.⁶⁹ As mentioned above, it has been agreed that, on the Blue Line, technical survey beyond fade-out can be reduced to 10%, on a case-by-case basis, targeted to areas where there were missed mines in the mine rows.⁷⁰ MAG believes the five-metre fade-out could even be reduced to three metres, or double the distance of the mine row.⁷¹

Anti-vehicle minefields represent another challenge on the Blue Line because of their proximity to the fence. As at April 2019, LMAC was discussing the best way to render safe the anti-vehicle mines and move them away, in order to save time on anti-personnel mine clearance. LMAC and MAG were due to start various destruction trials in August/September 2019.⁷²

Four new HSTAMIDS detectors were planned to be introduced for use on Blue Line operations in 2019, which were expected to increase efficiency. A training area prepared by MAG at the Hammana school, was completed in August 2019 and the detectors were due to arrive in late 2019 or early 2020.⁷³

Since the release and implementation of the revised NMAS, national authorities in Lebanon have actively promoted the use of non-technical survey and technical survey, in order to define the presence or absence of an explosive threat.⁷⁴ This is evidenced by deployment of MAG and NPA teams to conduct non-technical survey of new contamination in the north-east region of Lebanon, bordering Syria.⁷⁵ Prior to 2018, the only non-technical survey capacity that was permitted was that of the LAF.⁷⁶ In 2019, LMAC was discussing with the NGO operators the option for each to have a non-technical survey team to re-survey for each new task prior to starting clearance, in addition to conducting survey of other mined areas.⁷⁷ As at August 2019, MAG was deploying five non-technical survey teams and NPA was deploying, one team, while HI had submitted a proposal for two teams.⁷⁸

OPERATORS

In 2018, manual mine clearance was conducted by international operators DanChurchAid (DCA) (one team), Humanity and Inclusion (HI) (four teams), MAG (nine teams), NPA (two teams), and by the Engineering Regiment of the LAF (two teams).⁷⁹ In addition, four mechanical teams were operated by the Engineering Regiment of the LAF and one by MAG; and seven MDD teams operated by the Engineering Regiment.⁸⁰ All LAF engineering companies have two teams of EOD-qualified personnel.⁸¹ In addition, UNIFIL also has sufficient demining capacity to enable it to conduct its operations on the Blue Line.⁸²

Non-technical survey capacity in 2018 consisted of 12 personnel from the LAF and 9 from MAG, plus the MAG and NPA non-technical survey teams deployed to the new contamination in "Jroud Aarsal" in the north-east of the country along the border with Syria. Technical survey capacity in 2018 consisted of just one team, at one site, but clearance teams can also be deployed for technical survey.⁸³ In 2019, LMAC intends to have specific plans for technical survey for all sites which non-technical survey recommends for reduction.⁸⁴

In 2018, DCA deployed only one manual mine clearance team, as its other team moved to conduct battle area clearance (BAC).⁸⁵

HI deployed four mine clearance teams in north Lebanon in 2018, totalling 28 deminers, plus supervisors, team leaders, and support staff.⁸⁶ This represents the same capacity as the previous year. HI's prioritisation of tasks is based on proximity to populated area, but mine clearance operations in north Lebanon and the Mount Lebanon area are also determined by seasonal factors: clearance of low altitude minefields during winter (October to April), and then clearance tasks above 2,000 metres begin in April and continue through the summer, depending on snow.⁸⁷ 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.⁸⁸ According to LMAC, HI has expressed an interest in deploying a non-technical survey team in 2019.⁸⁹

LAMINDA began mine clearance in 2018, having moved two BAC teams to manual mine clearance instead.⁹⁰

MAG deployed nine manual clearance teams in 2019 (an increase of six teams compared to 2017), in addition to one mechanical team.⁹¹ As at August 2019, MAG had seven multi-task teams operating in the "Jroud Aarsal" area in the north-east along the border with Syria, clearing conventional and improvised munitions.⁹²

NPA deployed two manual mine clearance teams totalling 18 personnel, including 2 medics, from January to September 2018, with capacity then increasing to 26 personnel from October 2018.⁹³ In addition, NPA deployed five non-technical survey personnel in 2018 in the "Jroud Aarsal" area and will deploy non-technical survey staff in southern Lebanon in 2019.⁹⁴ NPA clearance capacity in the "Jroud Aarsal" increased to four multi-task teams in June 2019, with the teams becoming operational from August.⁹⁵

The 2018 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.⁹⁶

UNIFIL was established in 1978⁹⁷ 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.⁹⁸ 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,⁹⁹ and also to clear mines close to UNIFIL posts or which pose a danger to UNIFIL patrols. The UN Mine Action Service (UNMAS) continues to engage with UNIFIL regarding the possibility of UNIFIL re-engaging in humanitarian mine action.¹⁰⁰ LMAC is in ongoing discussions with UNIFIL to discuss an MoU for cooperation on humanitarian mine clearance.¹⁰¹

In 2018, 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 2019 remained the same as the previous year and comprised five manual clearance teams, two EOD teams, and one mechanical team.¹⁰²

UNMAS carries out confirmatory training with UNIFIL demining units when they rotate into the country.¹⁰³

OPERATIONAL TOOLS

The LAF uses MDDs for technical survey and as a secondary asset. The LAF also uses mechanical assets, and in addition, MAG has a demining machine. In Lebanon, machines are mostly used as secondary assets to support clearance teams (e.g. ground preparation, rubble removal etc. or for fadeout); in areas where manual clearance is difficult; and for technical survey and LTHA.¹⁰⁴ MAG, however, believes that mechanical assets could also usefully be deployed as a primary asset in South Lebanon, when the terrain permits.¹⁰⁵ In 2017, MAG was given permission by LMAC to use mechanical assets for missing mine excavations, which is saving considerable time.¹⁰⁶ Often, however, the terrain is not suitable for MDDs or machines.

DEMINER SAFETY

There were three demining accidents in 2018. A MAG site supervisor was injured when an uncontrolled demolition occurred during demolition of Israeli No. 4 mines.¹⁰⁷ An NPA deminer was injured in June 2018 during clearance of an Israeli No. 4 mine,¹⁰⁸ and in October 2018, an NPA site supervisor was injured from the explosion of an Israeli No. 4 mine fuze.¹⁰⁹ All accidents were investigated internally by the two respective NGOs, and by the LMAC Board of Inquiry, typically formed by QA, quality control, and operations officers. Investigation reports are then disseminated to all stakeholders, including NGOs.¹¹⁰

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2018

A total of more than 0.4km² of mined area (i.e. area suspected or confirmed to contain anti-personnel mines) was released in 2018, of which nearly 0.39km² was cleared, nearly 0.03km² was cancelled through non-technical survey, and a small amount (7,646m²) was reduced through technical survey. Nearly 0.03km² of new mined area was added to the database in 2018, following non-technical survey in Arsal, in the north-east of Lebanon bordering Syria.

SURVEY IN 2018

In 2018, 28,633m² of land classified as being minefield (MF), was cancelled through non-technical survey and 7,646m² was reduced by MAG through technical survey.¹¹¹ This compared to the 1.2km² of mined area cancelled through non-technical survey in 2017 and a decrease on the 99,694m² reduced through technical survey.¹¹²

A further 2,817,200m² of "Mined Area" was cancelled in 2018, but strangely, in Lebanon the term "Mined Area" is used to denote dangerous areas entered into the database when the first impact survey was executed, which were not accessible, and where the type of hazard was not identified. Therefore, these areas are not the same as those suspected or confirmed to contain anti-personnel mines. According to LMAC, in 2019, all mined area in the database has been cancelled because access to all these areas is now possible.¹¹³

In addition, the first stage of non-technical survey by MAG and NPA of "Jroud Arsal" in the north-east¹¹⁴ began in July

2018 and was completed in October, with immediate follow-on clearance.¹¹⁵ The survey resulted in 27,197m² of new/previously unrecorded confirmed mined area.¹¹⁶ An additional 410,329m² was identified as containing "IEDs",¹¹⁷ many of which are also anti-personnel mines of an improvised nature. NPA confirmed discovering 70 anti-personnel mines of an improvised nature during the survey, including tripwire-activated devices.¹¹⁸

Information for the survey was based on information available from LAF units present in the area and from locals, in particular shepherds. There are, however, still areas where no information is available, and these will constitute the second phase of survey, which began in March 2019.¹¹⁹

In 2019, the focus for the "Jroud Arsal" operations is technical survey and clearance, however non-technical survey will be an ongoing process according to needs and priorities.¹²⁰

CLEARANCE IN 2018

Lebanon reported clearing just under 0.39km² of mined area in 2018, destroying in the process 13,074 anti-personnel mines and 90 anti-vehicle mines (see Table 2).¹²¹ Clearance in 2018 was down compared to the 0.51km² of mined area cleared in 2017.¹²²

Table 2: Mine clearance in 2018¹²³

Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
DCA	1,003	1	0	0
HI	116,578	2,409	1	133
MAG	68,825	7,242	21	0
NPA	26,675	2,775	0	0
LAMINDA	1,735	71	0	0
LAF	180,070	576	68	*11,097
Totals	394,886	13,074	90	11,230

AP = Anti-personnel AV = Anti-vehicle *destroyed during BAC and mine clearance

Table 2 above includes the destruction of 442 anti-personnel mines during spot tasks in 2018: 408 anti-personnel mines destroyed by the Engineering Regiment and 34 by the Combat Engineer companies in the Brigades.¹²⁴

Furthermore, UNIFIL found and destroyed 2,372 anti-personnel mines during its 2018 operations along the UNIFIL patrol road, in the far south of Lebanon near the Blue Line.¹²⁵

HI's clearance output decreased slightly in 2018, compared to the previous year, due to having to conduct full excavation for undetectable anti-personnel mines, and also working in narrow polygons which restricted deployment of full capacity due to required safety distances.¹²⁶

HI reported that of the 16 tasks it cleared in 2018, 4 were found not to contain anti-personnel mines, representing 7% of HI's total clearance output.¹²⁷ 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. 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.¹²⁸

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.¹²⁹

PROGRESS TOWARDS COMPLETION

It has been stated that “While Lebanon is not signatory to the Ottawa Convention, LMAC works in spirit of the treaty”,¹³⁰ and that LMAC adheres to its noble causes and tries to work along with the Maputo Action Plan.¹³¹

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.¹³² 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 reported that in addition to a lack of funding, 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).¹³³

Lebanon has cleared less than 4km² of mined area in the last five years, as detailed in Table 3. Based on almost 20km² of total mined area as at the end of 2018, and average clearance rates of less than 1km² per year, it will take many years for Lebanon to become mine-free. However, progress in land release is expected to be accelerated by adoption of better land release procedures in 2018, as enshrined in the revised NMAS. Crucially, LMAC's demonstrated commitment to enhance the use of non-technical and technical survey will help to cancel or reduce areas more efficiently.¹³⁴

Table 3: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km ²)
2018	0.39
2017	0.51
2016	0.55
2015	0.92
2014	1.28
Total	3.65

- 1 Email from Maj. Fadi Wazen, Operations Section Head, LMAC, 5 April 2019.
- 2 Ibid.; and LMAC, “Annual Report 2018”, p. 14.
- 3 Email from Brig.-Gen. Ziad Nasr, Director, LMAC, 27 April 2018; and LMAC, “Annual Report 2017”, p. 12.
- 4 Email from Maj. Fadi Wazen, LMAC, 5 April 2019. There is a slight discrepancy with the 19,473,287m² baseline of mine contamination, as per LMAC’s “Annual Report 2018”, p. 14.
- 5 LMAC, “Annual Report 2018”, p. 13; and email from Maj. Fadi Wazen, LMAC, 31 May 2019.
- 6 Interview with Brig.-Gen. Elie Nassif then Director, and Brig.-Gen. Fakhri, then Head of Operations, LMAC, Beirut, 18 April 2016.
- 7 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 18 April 2016.
- 8 Emails from Maj. Fadi Wazen, LMAC, 7 March 2019; David Willey, Programme Manager, MAG, 7 March 2019; and Emile Ollivier, Grants Coordinator, NPA, 19 March 2019.
- 9 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 10 Email from Maj. Fadi Wazen, LMAC, 5 April 2019, and presentation in Beirut, 8 April 2018; and LMAC, “Annual Report 2018”, p. 14.
- 11 Email from Maj. Fadi Wazen, LMAC, 7 March 2019 and presentation in Beirut, 8 April 2018; and LMAC, “Annual Report 2018”, p. 14.
- 12 LMAC, “Mid-term Review to Strategy 2011–2020, Milestone 2013”, August 2014, pp. 4–5.
- 13 LMAC, “Lebanon Mine Action Strategy 2011–2020”, September 2011, p. 4.
- 14 Email from Maj. Fadi Wazen, LMAC, 21 August 2019.
- 15 Email from Brig.-Gen. Ziad Nasr, LMAC, 26 March 2019.
- 16 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 1st Quarter Progress Report, March 2018”.
- 17 LMAC, “2018 Annual Report Lebanon Mine Action Centre”, p. 36; interview with Brig.-Gen. Jihad Bechelany, LMAC Director, Maj. Fadi Wazen, LMAC, and Ariane Elmas, UNDP, Beirut, 16 April 2019; and email from Emile Ollivier, NPA, 19 March 2019.
- 18 LMAC, “2018 Annual Report Lebanon Mine Action Centre”, p. 23.
- 19 Email from Maj. Fadi Wazen, LMAC, 7 March 2019; and LMAC, “Annual Report 2018”, p. 23.
- 20 LMAC, LMAC, “Annual Report 2018”, p. 17.
- 21 Emails from Emile Ollivier, NPA, 19 March 2019; David Willey, MAG, 7 March 2019; and Mahmoud Rahhal, POD, 8 March 2019.
- 22 Emails from Emile Ollivier, NPA, 19 March 2019; and David Willey, MAG, 7 March 2019.
- 23 LMAC, “2018 Annual Report Lebanon Mine Action Centre”, pp. 4, 7, and 17; and emails from Maj. Fadi Wazen, LMAC, 7 March 2019; and Emile Ollivier, NPA, 19 March 2019.
- 24 Email from Maj. Fadi Wazen, LMAC, 31 May 2019.
- 25 LMAC, “Lebanon Mine Action Strategy. Second Milestone Review 2014–2016”, March 2018.
- 26 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; CCM Article 7 Report (for 2018), Form A; and Statement of Lebanon on International Cooperation and Assistance, CCM Seventh Meeting of States Parties, Geneva, 4–6 September 2017.
- 27 LMAC, LMAC, “Annual Report 2018”, p. 5; and email from Major Fadi Wazen, LMAC, 7 March 2019;
- 28 Email from Maj. Fadi Wazen, LMAC, 21 August 2019.
- 29 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 30 Email from Maj. Fadi Wazen, LMAC, 7 March 2019.
- 31 LMAC, LMAC, “Annual Report 2018”, pp. 5 and 19.
- 32 Emails from Emile Ollivier, NPA, 19 March 2019; David Willey, MAG, 7 March 2019; and David Ligneau, HI, 23 August 2019.
- 33 Email from David Ligneau, HI, 23 August 2019.

- 34 Email from David Willey, MAG, 7 March 2019.
- 35 Email from Emile Ollivier, NPA, 19 March 2019.
- 36 LMAC, "Annual Report 2018", p. 15.
- 37 Email from Rana Elias, GICHD, 17 June 2019.
- 38 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and interview with Maj. Ali Makki, Information Management Section Head, LMAC, and Ariane Elmas, UNDP, Beirut, 16 April 2019.
- 39 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; email from LMAC Operations Department, 28 June 2018; "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018"; and LMAC, "2018 Annual Report Lebanon Mine Action Centre", p. 14.
- 40 Email from Rana Elias, GICHD, 17 June 2019.
- 41 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 42 LMAC, "Annual Report 2018", p. 14; and interview with Maj. Ali Makki, LMAC, Beirut, 16 April 2019.
- 43 Email from Emile Ollivier, NPA, 19 March 2019.
- 44 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.
- 45 Response to Cluster Munition Monitor questionnaire by Brig.-Gen. Imad Odiemi, LMAC, 2 May 2014.
- 46 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014.
- 47 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018; LMAC, "2017 Annual Report Lebanon Mine Action Centre", undated; and email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 48 Presentation by Maj. Bou Maroun, RMAC, Nabatiye, 4 May 2012; and response to Landmine Monitor questionnaire by Leon Louw, Programme Manager, UN Mine Action Support Team (UNMAST), 7 May 2014.
- 49 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 50 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.
- 51 Email from Maj. Fadi Wazen, LMAC, 5 April 2019; and interview, Beirut, 16 April 2019.
- 52 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 53 Interview with Maj. Fadi Wazen, LMAC, Beirut, 16 April 2019 and email, 5 April 2019.
- 54 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 55 Email from Dave Willey, MAG, 19 August 2019.
- 56 Email from Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.
- 57 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Rory Logan, 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.
- 58 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Rory Logan, NPA, 20 April 2015.
- 59 Emails from Dave Willey, MAG, 27 April 2018 and 7 March 2019; and Craig McDiarmid, NPA, 17 April 2018 and 19 March 2019.
- 60 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Dave Willey, MAG, 27 April 2018; and LMAC, "Annual Report 2018", p. 17.
- 61 "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018"; LMAC, "2017 Annual Report Lebanon Mine Action Centre", undated; and emails from Dave Willey, MAG, 27 April 2018; and Craig McDiarmid, NPA, 17 April 2018.
- 62 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Dave Willey, MAG, 27 April 2018.
- 63 Emails from Emile Ollivier, NPA, 19 March 2019; David Willey, MAG, 7 March 2019; and Mahmoud Rahhal, POD, 8 March 2019.
- 64 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016; and with Maj. Fadi Wazen, LMAC, Beirut, 16 April 2019.
- 65 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 66 Email from Dave Willey, MAG, 19 August 2019.
- 67 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.
- 68 Email from Ali Nasreddine, MAG, 24 July 2018.
- 69 Emails from Ali Nasreddine, MAG, 24 July 2018; and Craig McDiarmid, NPA, 17 April 2018 and 8 April 2019.
- 70 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 71 Emails from Ali Nasreddine, MAG, 24 July 2018; and Dave Willey, MAG, 19 August 2019.
- 72 Emails from Maj. Fadi Wazen, LMAC, 5 April and 21 August 2019; and Dave Willey, MAG, 19 August 2019.
- 73 Ibid.
- 74 Emails from Dave Willey, MAG, 27 April 2018; and Craig McDiarmid, NPA, 17 April 2018.
- 75 Emails from David Willey, MAG, 7 March 2019; and Craig McDiarmid, NPA, 8 April 2019; and LMAC, "2018 Annual Report Lebanon Mine Action Centre", p. 14.
- 76 Telephone interview with Craig McDiarmid, NPA, 15 June 2018; emails from David Willey, MAG, 7 March 2019; Emile Ollivier, NPA, 19 March 2019, and Maj. Fadi Wazen, LMAC, 5 April 2019.
- 77 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 78 Email from Maj. Fadi Wazen, LMAC, 21 August 2019.
- 79 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
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- 81 Email from LMAC Operations Department, 28 June 2018; and email from Maj. Fadi Wazen, LMAC, 7 March 2019.
- 82 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 83 Ibid.
- 84 Ibid.
- 85 Ibid.
- 86 Email from David Ligneau, HI, 9 April 2019.
- 87 Emails from Chris Chenavier, HI, 7 April 2016 and David Ligneau, HI, 9 April 2019.
- 88 Email from David Ligneau, HI, 29 August 2018.
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- 90 Ibid.
- 91 Ibid.
- 92 Email from Dave Willey, MAG, 19 August 2019.
- 93 Email from Craig McDiarmid, NPA, 8 April 2019.
- 94 Emails from Maj. Fadi Wazen, LMAC, 5 April 2019; and Craig McDiarmid, NPA, 8 April 2019.
- 95 Email from Jon Jensen, Interim Programme Manager, NPA, 20 August 2019.
- 96 Emails from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017 and 14 September 2018; and LMAC, "Annual Report 2017", p. 11.
- 97 UN Security Council Resolutions 425 (1978) and 426 (1978).
- 98 UNIFIL, "UNIFIL Mandate", at: bit.ly/2YpCwuD.
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- 100 Emails from Henri Francois Morand, UNMAS, 18 September 2017; and Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 101 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 102 Email from Hassan Nouredine, UNMAS, 16 August 2019.
- 103 Email from Alan Macdonald, UNMAS, 15 August 2019.
- 104 Emails from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017; Samuel Devaux, HI, 4 April 2017; Dave Willey, MAG, 25 April 2017; and Maj. Fadi Wazen, LMAC, 5 April 2019.
- 105 Interview with Bekim Shala, MAG, Nabatiye, 14 April 2016.
- 106 Email from Ali Nasreddine, MAG, 24 July 2018.
- 107 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 108 Email from Craig McDiarmid, NPA, 8 April 2019.
- 109 Emails from Maj. Fadi Wazen, LMAC, 5 April 2019, and Craig McDiarmid, NPA, 8 April 2019.
- 110 Ibid.
- 111 Email from Maj. Fadi Wazen, LMAC, 5 April 2019; and LMAC, "Annual Report 2018", pp. 11 and 12.
- 112 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 13.
- 113 Email from Maj. Fadi Wazen, LMAC, 21 August 2019.
- 114 Email from Maj. Fadi Wazen, LMAC, 5 April 2019, and presentation in Beirut, 8 April 2018; and LMAC, "2018 Annual Report Lebanon Mine Action Centre", p. 14.
- 115 Emails from Craig McDiarmid, NPA, 8 April 2019; and Maj. Fadi Wazen, LMAC, 5 April 2019.
- 116 Email from Maj. Fadi Wazen, LMAC, 5 April 2019, and presentation in Beirut, 8 April 2018; and LMAC, "Annual Report 2018", p. 14.

- 117 LMAC, "Annual Report 2018", p. 14.
- 118 Email from Craig McDiarmid, NPA, 8 April 2019.
- 119 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 120 Email from Craig McDiarmid, NPA, 8 April 2019.
- 121 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 122 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 123 LMAC, "Annual Report 2018", pp. 10 and 11; and emails from Maj. Fadi Wazen, LMAC, 5 April 2019; Craig McDiarmid, NPA, 8 April 2019; David Ligneau, Mine Action Programme Manager, HI, 9 April 2019, and Hiba Ghandour, Programme Officer, MAG, 27 August 2019. There were some discrepancies between data reported by LMAC and what was reported by HI, MAG, and NPA. HI reported destroying 2,419 (rather than 2,409) anti-personnel mines and 144 (rather than 133) other items of UXO during mine clearance in 2018. MAG reported clearing 102,890m² of mined areas and destroying 62 items of UXO, in addition to the 7,242 anti-personnel mines and 21 anti-vehicle mines. NPA reported destroying two items of UXO, in addition to 2,775 anti-personnel mines. DCA did not provide clearance data to Mine Action Review, so cross-verification was not possible.
- 124 Email from Maj. Fadi Wazen, LMAC, 5 April 2019.
- 125 Email from Hassan Nouredine, UNMAS, 16 August 2019.
- 126 Email from David Ligneau, HI, 9 April 2019.
- 127 Ibid.
- 128 Interview with Chris Chenavier, HI, Toulou, 18 April 2016.
- 129 Ibid.
- 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 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and emails from Craig McDiarmid, NPA, 17 April 2018; and Dave Wiley, MAG, 27 April 2018.

RECOMMENDATIONS FOR ACTION

- Libya should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Libya has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- All parties to the conflict in Libya should ensure that forces loyal to them do not use anti-personnel mines.
- As soon as political conditions permit, Libya should enact mine action legislation, establish an interministerial national mine action authority, and adopt a national mine action strategy.
- Libya should, at the earliest opportunity possible and as soon the security situation permits, conduct a baseline survey to identify the extent of contamination from anti-personnel mines and begin systematic clearance.

UNDERSTANDING OF AP MINE CONTAMINATION

Mine contamination in Libya is a legacy of the Second World War (mainly in the east and mostly anti-vehicle mine contamination), as well as subsequent armed conflict with Egypt in 1977 (pattern minefields mapped, fenced and marked), and with Chad in 1980–87, which resulted in mines being laid on Libya's borders with these two neighbours.¹ The border with Tunisia is also believed to be affected. During Colonel Muammar Qaddafi's four decades in power, mines were emplaced around a number of locations, including military facilities and key infrastructure.

Mines were used by both the government and the opposition forces during the 2011 conflict leading to Colonel Qaddafi's overthrow. According to the Libyan Mine Action Centre (LibMAC) around 30,000–35,000 mines were laid in five regions and cities, including Misrata, but were "largely cleared" after the downfall of the Qaddafi regime by volunteers with previous military experience.²

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.³ The escalation of conflict in Libya in 2014 brought new reports of mine use by armed groups fighting around Tripoli airport.⁴ There were also allegations of landmine use by non-state armed groups between 2016 and 2018.⁵ Contamination since 2015 is believed to be mainly in Benghazi, Derna (in the east of Libya), and Sirte.⁶

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.⁷ In July 2017, the engineering divisions of Operation Dignity⁸ 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.⁹

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 LibMAC Information Management System for Mine Action (IMSMA) database, reported six confirmed hazardous areas (CHAs) four in Sirte and two in Misrata, totalling almost 41.5km², contaminated by anti-personnel mines, while a seventh CHA, in Sirte, of some 7.5km², was contaminated by anti-vehicle mines. A massive single SHA, of almost 223km², was suspected to contain only anti-vehicle mines.¹⁰ It is likely that further survey will drastically reduce these figures, but at the same time many further suspected areas have not been surveyed.

The United Nations Mine Action Service (UNMAS) advocates for survey to help quantify the scale and type of contamination, but the ongoing security situation poses major challenges to operationalising the necessary survey.¹¹ According to the UN Support Mission in Libya (UNSMIL), the presence of landmines, improvised explosive devices (IEDs), and unexploded ordnance (UXO) poses a persistent threat to the Libyan population and also hinders the safe return of internally displaced people and restricts access for humanitarian workers.¹²

Libya is also contaminated by cluster munition remnants (CMR) (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Libya for further information), and ongoing conflict has left significant quantities of other explosive remnants of war (ERW) in cities across Libya.¹³

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. It has subsequently faced opposition from two rival governments and a host of militia forces. In April 2019, Khalifa Haftar, a military commander based in the west of the country, launched an offensive to take control of Tripoli and topple the Government of National Accord. As at July 2019, the offensive was ongoing, with combat in part of the city.¹⁴

LibMAC was mandated by the Minister of Defense to coordinate mine action in December 2011.¹⁵ As at May 2019, 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 Benghazi¹⁶ and Misrata.¹⁷ 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).¹⁸

GENDER

LibMAC is not thought to have a gender policy for mine action in place.

HI reported that it has a gender policy in place and that it planned to elaborate an implementation plan in 2019.¹⁹ It also reported that it disaggregates data by sex and age. HI’s risk education team, which also conducts community liaison, is gender balanced. While two of its project managers and two project officers are female, HI reported that unfortunately women are not currently employed in survey and clearance, as it is deemed culturally unacceptable for now.²⁰

INFORMATION MANAGEMENT

LibMAC receives technical support for IMSMA from the Geneva Centre for Humanitarian Demining (GICHD) and UNMAS. In March 2019, HI reported that LibMAC had recently announced details of a new effort to bring the IMSMA database up to date and ensure the data are reliable.²¹ IMSMA is accessible to clearance organisations and data collection forms are reported to be consistent and enable collection of necessary data.²²

PLANNING AND TASKING

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.²³ According to an international clearance operator, LibMAC generally tasks according to geographic area and the nearest available assets.²⁴

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national mine action legislation in Libya, but National Mine Action Standards (LibMAS), in Arabic and English, have been elaborated with the support of the GICHD and UNMAS, and were approved by the Government of National Accord in August 2017. The LibMAS are available on the LibMAC website.²⁵ According to an international clearance operator, the national mine action standards are aligned to the International Mine Action Standards (IMAS).²⁶

HI has updated its standing operating procedures (SoPs) for mine action in Libya in line with the LibMAS.²⁷

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 Defence.²⁸ The NSA is mandated to conduct EOD in civilian areas.²⁹ 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. As at February 2019, international clearance operators active in Libya included DanChurchAid (DCA), DDG, HALO Trust, HI, and GCS.³⁰ National NGO operator, Free Fields Foundation (3F), was also operational and another national operator, the Libyan Demining Group (LDG) was in the process of becoming established as at February 2019.³¹ Local organisations, Peace Organization from Zintan and World Without War (3W) from Misrata, which had been trained by HI in 2016 and received accreditation for non-technical survey,³² subsequently had their operations suspended for not fully following standards and in addition, neither organisation had secured funding.³³

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.³⁴ Despite the relocation of the programme to Tunisia due to poor security in 2014, UNMAS Libya continues to coordinate with national authorities and implementing partners and to carry out mine action activities and provide technical advice and advisory support on arms and ammunition management. The UNMAS Libya Programme is an integral part of UNSMIL.³⁵

Since 2015, UNMAS has trained more than 70 Civil Defence operators and military engineers in advanced EOD, 30 officers from eastern Libya in non-technical survey, and provided advanced medical first-responder training to 72 EOD operators from Benghazi and several operators addressing the threat from explosive ordnance in Sirte.³⁶ Military engineers reportedly lack mine detectors and are working with basic tools.³⁷

DCA is operational in Libya clearing ERW and providing risk education. Now in its eighth year of working in Libya, DCA has offices in Benghazi, Misrata, and Tripoli³⁸ and is operational in three areas of Libya: Benghazi; Sabha, in the south-west; and Tripoli.³⁹ DDG set up in Benghazi in December 2017 and 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 had one non-technical survey team and one EOD team, which it was managing remotely. Security issues in the south continue to disrupt mine action operations and prevent continuous operations. In Tripoli, DDG works through its national implementing partner, 3F. 3F operates under DDG's accreditation and SoPs, and has an operational personnel of 37, composed in three EOD teams and one non-technical survey team.⁴⁰

GCS is working in partnership with Libyan NGO, 3F, to clear ERW from an ammunition storage area on a military airbase in Misrata. The area comprises 37 bunkers destroyed by NATO airstrikes in 2011.⁴¹

The HALO Trust has been present in Libya since November 2018, and, as at June 2019, had offices in Misrata and Sirte, in addition to a small administrative office in Tripoli. The HALO Trust is working in partnership with DCA in Sirte, with HALO leading on mechanical clearance and DCA providing the supporting EOD capacity, along with a joint non-technical survey team and mine risk education (MRE) team. HALO Trust and DCA have conducted a socio-economic assessment of Sirte and a field assessment for areas of possible mine and ERW contamination which potentially require mechanical clearance.⁴²

As at June 2019, HALO Trust was in the process of armoured two machines for mechanical clearance and was set to begin training of two mechanical teams and one non-technical survey team. Ongoing conflict in Tripoli and delays in registration prevented HALO from becoming operational in June, as planned, but it expected to begin clearance activities over the summer. HALO also planned to begin training of a further two mechanical teams later in 2019; to introduce additional technical assets; and to work with LibMAC to expand operations to other parts of Libya and to conduct all humanitarian mine action activities, including manual clearance and battle area clearance (BAC).⁴³

As at March 2019, HI's main office for Libya was in Tripoli, with operational offices in Misrata and Benghazi, and an administrative base being maintained by HI in Tunis.⁴⁴ In 2018, HI deployed six manual clearance personnel in Libya, and an existing EOD team planned to also conduct non-technical survey in 2019.⁴⁵ As at March 2019, HI was operational in Benghazi, Misrata, and Tripoli, but security issues had temporarily hindered its 2019 operations in Tawerga, in Misrata, forcing teams to deploy elsewhere.⁴⁶ As at March 2019, HI had no implementing partners in mine action in Libya.⁴⁷

A number of other Libyan civil society organisations are also reported to carry out mine action operations, but they are not accredited by LibMAC.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2018

There were no reports of planned mine clearance during 2018 although several operators engaged in EOD operations. No mined area was reported to have been released through survey in 2018 either.

SURVEY IN 2018

There were no other known reports of anti-personnel survey during 2018, although data from LibMAC and some clearance operators was not made available.

CLEARANCE IN 2018

There were no known reports of anti-personnel clearance during 2018, although data from LibMAC and some clearance operators were not made available.

PROGRESS TOWARDS COMPLETION

LibMAC describes the following challenges to implementation of mine action operations: the high level of contamination; ongoing conflict and the continued presence of Islamic State; the difficulty in convincing internally displaced persons to delay their return until the ERW threat is addressed; security and access to priority areas; the limited ERW and EOD capacity in Libya; the vast geographical area; and limited governmental and international support.⁴⁸ Security conditions continued to pose a challenge to mine action in Libya.

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 UN Member States "to expand their funding to activities in priority areas equipment".⁴⁹

- 1 Interview with Col. Turjoman, Director, LibMAC, in Geneva, 7 February 2019.
- 2 Ibid.
- 3 Human Rights Watch, "Landmines in Libya: Technical Briefing Note", 19 July 2011, at: bit.ly/1iPLaFE.
- 4 Human Rights Watch, "Libya: New evidence of landmine use", 5 November 2014.
- 5 Landmine Monitor, "Libya: Mine Ban Policy", last updated 9 October 2018, at: bit.ly/2Kj5mn8; email from Lutz Kosewsky, DDG, 22 February 2017; and telephone interview with Darren Devlin, DDG, 20 June 2018.
- 6 Interview with Col. Turjoman, LibMAC, in Geneva, 7 February 2019.
- 7 "Libya forces de-mine and clear Sirte after liberation from Isis militants", *The Independent*, 11 August 2016.
- 8 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: bit.ly/2tXKhJb.
- 9 Landmines in Africa blog, July 2017, at: bit.ly/2YoeCAw.
- 10 Emails from Abdullatif Abujarida, LibMAC, 20 February and 9 March 2017.
- 11 Email from Lance Malin, Chief, UNMAS Libya, 11 September 2018.
- 12 "Lives and Limbs Shattered by Libya Mines", *Asharq Al-Awsat*, 5 April 2018.
- 13 UNMAS, "Programmes: Libya", accessed 16 May 2019, at: bit.ly/2WMTzTk.
- 14 "Global action is needed to end the fighting in Libya", *Financial Times*, 11 July 2019, at: on.ft.com/2XXRLdM.
- 15 LibMAC website, accessed 16 May 2019, at: bit.ly/2JqVr0S.
- 16 Email from Jakob Donatz, Associate Programme Officer, UNMAS, 21 June 2018.
- 17 Email from Roman Turšič, Head of Implementation Office Libya/Afghanistan, ITF, 26 February 2017; and interview with Col. Turjoman, LibMAC, in Geneva, 10 January 2017.
- 18 Email from Roman Turšič, ITF, 26 February 2017.
- 19 Email from Catherine Smith, HI, 12 March 2019.
- 20 Ibid.
- 21 Ibid.
- 22 Ibid.
- 23 Telephone interview with Darren Devlin, Programme Manager Libya, DDG, 20 June 2018; and email, 4 July 2018.
- 24 Email from Catherine Smith, HI, 12 March 2019.
- 25 LibMAC website, accessed 16 May 2019, at bit.ly/2JFIhFE; Report of the Secretary-General on the UNSMIL, UN doc. S/2018/140, 12 February 2018, p. 12; and UNMAS, "Programmes: Libya", accessed 16 May 2019.
- 26 Email from Catherine Smith, HI, 12 March 2019.
- 27 Ibid.
- 28 Interview with Col. Turjoman, LibMAC, in Geneva, 10 January 2017.
- 29 Email from Diek Engelbrecht, UNMAS Libya, 20 July 2013.
- 30 Interview with Col. Turjoman, LibMAC, in Geneva, 7 February 2019.
- 31 Ibid.
- 32 Email from Catherine Smith, HI, 22 February 2017.
- 33 Interview with Col. Turjoman, LibMAC, in Geneva, 7 February 2019.
- 34 UNMAS, "Programmes: Libya", accessed 16 May 2019, at: bit.ly/2WMTzTk; 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 UNSMIL, UN doc. S/2018/140, 12 February 2018, p. 12.
- 35 Email from Jakob Donatz, UNMAS, 21 June 2018.
- 36 UNMAS, "Programmes: Libya", accessed 16 May 2019.
- 37 "Mine still claim legs and lives in Libya's Benghazi, months after war ceased", *Reuters*, 21 January 2018.
- 38 DCA website, accessed 16 May 2019, at: bit.ly/2vYatmb.
- 39 Telephone interview with Darren Devlin, DDG, 20 June 2018; and email, 4 July 2018.
- 40 Ibid.
- 41 GCS website, "GCS successfully collects 200 tons of explosive remnants of war in Libya", accessed 16 May 2019, at: gcs.ch/libya.
- 42 Email from Liam Chivers, Programme Manager, HALO Trust, 10 June 2019.
- 43 Ibid.
- 44 Emails from Catherine Smith, HI, 12 March and 11 June 2019.
- 45 Email from Catherine Smith, HI, 12 March 2019.
- 46 Emails from Catherine Smith, HI, 12 March and 11 June 2019.
- 47 Email from Catherine Smith, HI, 12 March 2019.
- 48 PowerPoint presentation by Col. Turjoman, LibMAC, at the UN National Programme Director's Meeting, Geneva, 8 February 2017.
- 49 Report of the Secretary-General on UNSMIL, UN doc. S/2018/140, 12 February 2018, p. 16.

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. It should clarify in greater detail the extent of contamination remaining to be addressed and implement and report on progress according to international standards for land release methodology.
- Morocco should establish a timeline for completion of clearance of all mined areas on territory under its jurisdiction or control.
- 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 to other relevant stakeholders to facilitate survey and clearance of affected areas.

UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of contamination from mines and explosive remnants of war (ERW) in the area of Western Sahara controlled by Morocco, on the west side of the Berm,¹ is not known. In the past, Morocco declared, highly improbably, that a total of 120,000km² of area was contaminated,² although the threat is undoubtedly 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.³

At the end of 2018, Morocco continued to report 10 localities as containing mines: Bir Anzarane, Douiek, Gerret Auchfaght, Gor Lbard, Gor Zalagat, Hagounia, Idriya, Imlili, Itgui, and Tarf Mhkinza. It claims these contain contamination as the result of "haphazard" mine laying across the south of Morocco by the Polisario Front in 1975–91.⁴

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Morocco does not have a national mine action authority or a mine action centre. The Royal Moroccan Army (RMA) carries out demining, which it reports are conducted in collaboration with the United Nations Mission for the Referendum in Western Sahara (MINURSO) observers.⁵

In 2018, the RMA continued to receive training from the United States (US) Marines on demining and explosive ordnance disposal (EOD) techniques, along with continued support from the National Guard of the US state of Utah through the State Partnership Programme, and additionally reported participating in a number of regional mine action trainings and workshops during the year.⁶

GENDER

Morocco is not believed to have a gender policy in place for its demining operations.

INFORMATION MANAGEMENT AND REPORTING

Morocco does not use the Information Management System for Mine Action.

PLANNING AND TASKING

It is not known how Morocco plans its demining operations. Operations are carried out in collaboration with MINURSO.

LAND RELEASE SYSTEM

Morocco appears to use only manual demining techniques, which is not efficient given the size and type of terrain being released.

STANDARDS AND LAND RELEASE EFFICIENCY

Morocco has not adopted national mine action legislation or standards, but has reported that “normal safety and environmental protection standards have been followed” in clearance of mines and ERW.⁷

OPERATORS

All mine clearance in Morocco is conducted by the RMA. In 2017, it reported that 16 demining modules and 89 demining detachments were operational and responded to

175 interventions during the year.⁸ Morocco did not provide further detail and did not report on the RMA's demining capacity in 2018.

OPERATIONAL TOOLS

Previously, in 2010, Morocco declared it had employed 10,000 deminers, though only 400 detectors were at their disposal at that time.⁹ This raised serious questions both about the procedures being used and the accuracy of clearance figures being reported.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Morocco has not reported in detail on its release of mined areas in recent years, nor given any indication of implementing land release methodology. The figures it does provide are not credible and should be taken as an indication of land released or declared as clear of contamination rather than land physically cleared.

In a voluntary Article 7 report for 2018, Morocco reported “clearance” of a total area of 313.4km², with the destruction of 232 anti-personnel mines, 18 anti-vehicle mines, and 574 items of ERW.¹⁰ This compares to 2017, when Morocco reported “clearance” of 232km², with the destruction of 69 anti-personnel mines, 82 anti-vehicle mines, and 595 items of ERW.¹¹

In his October 2018 report to the UN Security Council, the UN Secretary-General reported that, since April of that year, the RMA claimed to have cleared more than 84km² of land west of the berm, with the destruction of 344 items, consisting of 268 items of unexploded ordnance, 74 anti-personnel mines, and 2 anti-vehicle mines.¹² Previously, in his April 2018 report, the UN Secretary-General noted that the RMA had reported “clearing” nearly 145km² 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 2018.¹³ No further details were provided.

Morocco has reported that since 1975, as at end April 2019, a total of 96,704 mines, including 49,316 anti-personnel mines, and a further 20,132 items of ERW had been destroyed and a total of almost 5,440km² was cleared during demining operations.¹⁴

Morocco initiated major demining efforts in 2007, following an increase in the number of incidents. In April 2016, Morocco was reportedly planning 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.¹⁵

Morocco is not a state party to the APMBC, but nonetheless has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible. Morocco has stated on numerous occasions its determination to voluntarily comply with the provisions of the APMBC, including completion of stockpile destruction of anti-personnel mines and demining. It has provided annual voluntary Article 7 reports to the APMBC regularly over the past decade. It has not, however, indicated when it might complete mine clearance.

1 The Berm refers to the defensive wall built by Morocco in 1982–87 to secure the north-western corner of Western Sahara. It is constituted of earthen walls some three metres in height. Morocco controls the area located on the west side of the Berm.

2 Statement of Morocco, Intersessional Meetings, Geneva, 25 May 2009.

3 Voluntary Article 7 Report (for 2014), Form C.

4 Voluntary Article 7 Report (for 2018), Form D. Idiriya is spelled “Jdiriya” in the 2018 report. From 2015, the area of Glibat Jadiane, which had been listed as contaminated in earlier years, was no longer included on the list of mined areas.

5 Voluntary Article 7 Report (for 2018), Form D.

6 Voluntary Article 7 Report (for 2018), Form H; and AFRICOM, “Humanitarian Mine Action Increases demining capacity in Morocco”, 2 May 2019, at: bit.ly/2LltXKS.

7 Voluntary Article 7 Report, (for 2018), Form D.

8 Statement of Morocco, APMBC 16th Meeting of States Parties, Vienna, 21 December 2017.

9 Statement of Morocco, Intersessional Meetings, Geneva, 23 June 2010.

10 Voluntary Article 7 Report (for 2018), Form C.

11 Voluntary Article 7 Report (for 2017), Form C.

12 “Report of the Secretary-General on the situation concerning Western Sahara”, UN doc. S/2018/889, 3 October 2018, para. 48.

13 “Report of the Secretary-General on the situation concerning Western Sahara”, UN doc. S/2018/277, 29 March 2018, para. 43.

14 Statement of Morocco, Intersessional Meetings, Geneva, 24 June 2019.

15 “Morocco to Deploy Highly Qualified Team to Remove Sahara Landmines”, Sahara Question, 25 March 2016, at: bit.ly/2Llu9d4.

RECOMMENDATIONS FOR ACTION

- Myanmar should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Myanmar has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- 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.

UNDERSTANDING OF AP MINE CONTAMINATION

Myanmar is heavily mine-affected as a result of conflicts between the Tatmadaw and numerous non-state armed groups affiliated with ethnic minorities. There is no estimate of the extent of mine contamination but 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. While there is no systematic collection of landmine casualty data in Myanmar, of the recorded

incidents in recent years, Kachin and Shan States have among the highest number of landmine casualties, and numbers are increasing.¹

In 2018, MAG identified 671,244m² of anti-personnel mined area across 42 suspected hazardous areas (SHAs) and 21,126m² across 9 confirmed hazardous areas (CHAs) across Kayah, Kayin, and Shan states and the Tanintharyi region (see Table 1).²

Table 1: Anti-personnel mined area by township or state (at end 2018)³

Township/ State	CHAs	Area (m ²)	SHAs	Area (m ²)
Bawlawhae/Kayah	0	0	1	16,482
Hpasawng/Kayah	0	0	2	27,065
Hpruso/Kayah	1	14,819	14	28,428
Loikaw/Kayah	0	0	15	19,059
Mese/Kayah	0	0	1	27,028
Kawkareik/Kayin	1	2,400	0	0
Langkho/Shan(South)	0	0	1	500,000
Mongkaung/Shan(South)	0	0	3	51,225
Pekon/Shan(South)	7	3,907	5	1,957
Totals	9	21,126	42	671,244

In 2018, DDG conducted non-technical survey in Kayah state (in Hpruso and Hpasawng townships) visiting a total of 102 villages. A total of nine CHAs totalling 613,366m² were identified in nine contaminated villages.⁴

In addition, in 2018, The HALO Trust identified 163,832m² across 58 hazardous areas by non-technical survey in Kayin and Shan States. In 2019, as at August, a further 25 hazardous areas had been identified covering 550,287m². These contaminated areas indicate the presence of both mines and explosive remnants of war (ERW).⁵

The Independent International Fact-Finding Mission on Myanmar established by the United Nations Human Rights Council 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 mines 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.”⁶

It was also reported that mines had been laid by the Tatmadaw soldiers along the border with Bangladesh in the lead up to and following the “clearance operations” intended to target fleeing Rohingya civilians and to prevent those who had already left from returning. In April 2017, it was reported that the Myanmar and Bangladesh governments had agreed to remove mines and improvised explosive devices (IEDs) from the border area. By August, however, the Tatmadaw was laying mines along the border, not removing them, and in September Bangladesh made a formal complaint with Myanmar regarding its use of mines.⁷

In September 2019, the Independent International Fact-Finding Mission on Myanmar reported that Northern Myanmar is “heavily contaminated with landmines” and that the parties to the conflict, including the Tatmadaw, the KIA, the SSA-S, and the SSA-N, all continue to lay landmines and use IEDs.⁸

The Tatmadaw uses anti-personnel mines most of which are produced in state-owned factories.⁹ 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.¹⁰

The violence in Myanmar 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.

NATIONAL OWNERSHIP AND 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 2012 with NPA’s support, 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.¹¹ The Nationwide Ceasefire Agreement signed in October 2015 included a dedicated article on demining, but as at August 2019, the government had not formulated a clear direction for mine action or established a centre to coordinate it.¹²

The Ministry of Social Welfare, Relief and Resettlement and the United Nations Children’s Fund (UNICEF) co-chair the Mine Risks Working Group (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).¹³ In 2018–19, the MRWG was guided by a strategic workplan whose six main priorities are: inter-ministerial and inter-agency coordination mechanisms; mine risk education (MRE); victim assistance; data collection and information management; advocacy; and land release operations, including non-technical survey.¹⁴ UNICEF hosts quarterly MRWG meetings at union and state level.¹⁵

MAG and NPA both reported that the Government of Myanmar, including the military, became more engaged with mine issues at state and union level in 2018.¹⁶ There

is a regular and well attended MRE working group, with active participation from state and union level government representatives. As at August 2019, the development of a non-technical survey working group was under discussion.¹⁷

The Government of Myanmar drafted a countrywide internally displaced person (IDP) camp closure strategy, which has identified a need for landmine clearance to enable IDPs to return to their villages of origin. While this strategy does not provide any further details of how and when such clearance will take place it has allowed mine action partners to engage in further discussions about clearance with key stakeholders such as the Minister for Social Welfare, Relief and Resettlement. Although further permissions are still needed from the Ministry of Defence before such humanitarian clearance can begin, this marks a positive change in engagement.¹⁸

In 2018, operators facilitated workshops and cooperative visits between government delegates from Myanmar and neighbouring countries. This included a study tour to Cambodia in collaboration with the ASEAN Regional Mine Action Centre (ARMAC) and the Cambodian Mine Action and Victim Assistance Authority (CMAA) where delegates learned about land release, national standards, Standing Operating Procedures (SoPs) and information management, as well as about Cambodia’s experience in adhering to the APMBC. A similar trip to Thailand was planned for 2019.¹⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Myanmar does not have standards and therefore operators have followed the International Mine Action Standards (IMAS) and their own SoPs.

In 2018, operators successfully advocated for the Government of Myanmar to include physical marking (with warning signs) of SHAs and CHAs as part of the non-technical survey process. The government now approves marking of polygons on a case-by-case basis dependent on approval from local authorities.²⁰ The HALO Trust has since marked two hazardous areas in Kayin state with the agreement of the authorities and local community.²¹

OPERATORS

Six international demining organisations have offices in Yangon and some provincial locations: DanChurchAid (DCA), Danish Demining Group (DDG), The HALO Trust, Humanity and Inclusion (HI), Mines Advisory Group (MAG), and Norwegian People's Aid (NPA). Tatmadaw engineers have reportedly conducted some mine clearance but operations are not systematic or recorded.

In 2018, MAG deployed a total of 12 community liaison teams and 44 community liaison staff. MAG also deployed a Community Liaison Manager, four Community Liaison Supervisors and three Community Liaison Team Leaders during 2018. In 2019, this was reduced by two community liaison teams and one Community Liaison Team Leader.²²

DDG employed three international staff and forty-two national staff in 2018 (four in their Yangon office, sixteen in Kayah for non-technical survey and MRE and twenty-two in Shan and

Kachin for MRE). In 2019, DDG increased capacity in its Kayah office by relocating staff from Yangon and hiring an additional staff member.²³

In 2018, NPA supported its local civil society partners in the activities of one non-technical survey team and two MRE/ community liaison teams. In 2019, NPA plans to support the deployment of three non-technical survey teams with its civil society partners, which will conduct non-technical survey and MRE primarily in the south-east of the country where there are ceasefires in effect.²⁴

The HALO Trust employed 49 staff in 2018 based between Yangon, Hpa-An (Kayin), and Lashio (Shan) states, deploying seven teams to deliver MRE, conduct survey, and assist victims in Kayin and Shan states. In addition, HALO Trust operates with two local partners in Shan state, which increases access to ethnic Kachin and Shan communities.²⁵

LAND RELEASE OUTPUTS

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 have conducted risk education and community liaison activities, which in recent years have included limited community mapping of hazardous areas in some locations. Operators were authorised to conduct non-technical survey in some locations in 2018. 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.

In 2018, MAG submitted a concept note for clearance of a small number of tasks in Kayah state. The sites selected were not of military strategic importance and clearance will bring significant benefits for community safety and tourism. During 2019, MAG will continue to push for state and union level approval for this initiative. MAG has secured permission to conduct non-technical survey in Thanintharyi and Kayin state, which began in 2019.²⁶

DDG continued non-technical survey in 2018 and as well as identifying CHAs the survey teams also identified 26 items of unexploded ordnance (UXO) across 26 villages. In 2019, DDG was invited by the Kayah Government to seek authorisation to conduct explosive ordnance disposal (EOD) but before any such authorisation could be granted, the military stopped the process and asserted their responsibility over EOD. DDG provided the military with information about all the dangerous items identified during the survey process and encouraged the military to take action to remove and destroy those items.²⁷

NPA supported its civil society partners for the activities of one non-technical survey team in November 2018 in Mon state, but no CHAs or SHAs were discovered between November and December 2018. In 2019, NPA was focusing on three areas of work: national ownership and capacity development, non-technical survey and MRE with civil society partners, and emergency response by local and national partners.²⁸

1 "Report of the Detailed Findings of the Independent International Fact Finding Mission on Myanmar", UN doc. A/HRC/39/CRP.2., 17 September 2018, p. 94.

2 Email from Bekim Shala, Country Director, MAG, 16 August 2019.

3 Email from Bekim Shala, MAG, 16 August 2019.

4 Email from Pascal Simon, Head of Programme, DDG, 20 August 2019.

5 Email from Geoff Moynan, Programme Manager, HALO Trust, 3 September 2019.

6 "Report of the Detailed Findings of the Independent International Fact Finding Mission on Myanmar", UN doc. A/HRC/39/CRP.2, 17 September 2018, p. 94.

7 Ibid., pp. 285–86.

8 "Detailed findings of the Independent International Fact-Finding Mission on Myanmar", UN doc. A/HRC/42/CRP.5, 16 September 2019, pp. 155–58.

9 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.

10 Information provided by mine action stakeholders on condition of anonymity, 2018.

11 Roger Fasth and Pascal Simon, "Mine Action in Myanmar", Journal of Mine Action, Issue 19.2, July 2015.

12 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 emails from Melissa Andersson, Programme Manager, NPA, Yangon, 27 September 2017; and Bekim Shala, MAG, 16 August 2019.

13 UNICEF, "Landmines and explosive remnants of war threaten children and communities across Myanmar", 4 April 2018.

14 UN Portfolio of Mine Action Projects, "Myanmar 2019".

15 Email from Bekim Shala, MAG, 16 August 2019.

16 Emails from Bekim Shala, MAG, 16 August 2019; and Kyaw Lin Htut, Programme Manager, NPA, 21 August 2019.

17 Ibid.

18 Email from Bekim Shala, MAG, 8 September 2019.

19 Emails from Bekim Shala, MAG, 16 August 2019; and Kyaw Lin Htut, NPA, 21 August 2019.

20 Ibid.

21 Email from Geoff Moynan, The HALO Trust, 3 September 2019.

22 Ibid.

23 Email from Pascal Simon, DDG, 21 August 2019.

24 Email from Kyaw Lin Htut, NPA, 21 August 2019.

25 Email from Geoff Moynan, Programme Manager, 3 September 2019.

26 Email from Bekim Shala, MAG, 16 August 2019.

27 Email from Pascal Simon, DDG, 20 August 2019.

28 Email from Kyaw Lin Htut, NPA, 21 August 2019.

RECOMMENDATIONS FOR ACTION

- North Korea should cease all use of anti-personnel mines.
- North Korea should clear all mines from the Demilitarised Zone (DMZ) as soon as possible.
- North Korea should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, North Korea has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.

ANTI-PERSONNEL MINE CONTAMINATION

The extent of North Korea's mine problem is not known. North Korea admitted in 1998 that it had laid mines in the DMZ, a 1,000km² strip of land between the north and south of the peninsula believed to be one of the most densely contaminated areas in the world. Mined areas are reported to be marked and fenced but mines are also believed to have shifted as a result of flooding and landslides.¹ In early 2006, officials commented to the APMBC Implementation Support Unit (ISU) that North Korea had not laid mines elsewhere in the country,² despite fears that, among others, sections of the east coast were also mined.

Under an agreement on measures to ease tensions, North and South Korea completed clearance of the Joint Security Area (of the DMZ) in Panmunjom in October 2018. Additional clearance was conducted around Arrowhead Hill (also known as Hill 281) in Cheolwon, Gangwon Province.³

In 2016, South Korean officials alleged new use of mines by North Korea near the village of Panmunjom inside the DMZ, which is jointly administered by North Korea and the United Nations (UN) Command. South Korea said North Korean soldiers were observed laying several mines on the North's side of the "Bridge of No Return", which spans the military demarcation line.⁴ North Korean forces were also reported to have used anti-personnel mines along the DMZ border in 2015 and 2016, apparently to prevent North Korean soldiers from fleeing to South Korea.⁵

PROGRAMME MANAGEMENT

North Korea has no functioning mine action programme.

In September 2018, the North Korean and South Korean Ministers of Defence signed a military agreement, the Panmunjom declaration, which mandated North Korea, South Korea, and the United Nations Command (UNC) to "remove all mines in the Joint Security Area (of the DMZ) in Panmunjom within 20 days, beginning on October 1, 2018".⁶

LAND RELEASE

South Korean officials confirmed on 22 October 2018 that clearance of the Joint Security Area in Panmunjom by North and South Korea had been completed.⁷ They reported North Korea had cleared 636 mines while South Korea found none.⁸ The north also reportedly cleared a 1.3km-long mine belt in the Arrowhead Hill region.⁹ No other land release is known to have occurred.

1 Statement of North Korea, United Nations (UN) General Assembly, New York, 4 December 1998, UN doc. A/53/pv79, pp. 8–9; Choe Sang-Hun, "Koreas start clearing landmines at DMZ in effort to ease tensions," New York Times, 1 October 2018.

2 Email from Kerry Brinkert, Director, APMBC ISU, 1 February 2006.

3 Song Young-moo and No Kwang Chol, Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain, National Committee on North Korea, 19 September 2018, Annex 2, p. 7, at: bit.ly/2XXbuXd; and "Korean leaders sign agreement for North Korea to take further steps to denuclearize", ABC News, 20 September 2018, at: abc7.ws/2XZM0bq.

4 "North Korea planting landmines at border with South, claims UN", The Independent, 23 August 2016, at: bit.ly/2JTjflq; and "Bridge of No Return: Seoul Accused Pyongyang of Planting Landmines on Border", Sputnik International, 28 August 2016, at: bit.ly/30xQ0Se.

5 "N. Korea lays land mines near border to prevent defection by soldiers: sources", Yonhap, 23 August 2016, at: bit.ly/2YaeT90; and "North Korea plants landmines in DMZ apparently to prevent soldiers fleeing", Yonhap, 14 June 2015, at: bit.ly/2YYNALZ.

6 Agreement on the Implementation of the Historic Panmunjom Declaration in the Military Domain, National Committee on North Korea, 19 September 2018, Annex 2, p. 7; and "Korean leaders sign agreement for North Korea to take further steps to denuclearize", ABC News, 20 September 2018.

7 "Koreas finish removing land mines from border village", Associated Press, 22 October 2018, at: bit.ly/2GhPFvn.

8 "Two Koreas Complete Mine Removal in JSA", KBS World Radio, 19 October 2018, at: bit.ly/2XT18Kk; "Minister: N. Korea eliminated 636 mines from Panmunjom area", Yonhap, 12 November 2018, at: bit.ly/2Nbv2Fc.

9 Powerpoint presentation by Maj. Gen. (ret.) Han Cheol Ki, Side event to the Intersessional Meetings, Geneva, 24 May 2019.

RECOMMENDATIONS FOR ACTION

- Pakistan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Pakistan has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.

ANTI-PERSONNEL MINE CONTAMINATION

The extent of anti-personnel mine contamination in Pakistan is not known. Pakistan remains affected by mines and other explosive ordnance resulting from the Soviet occupation of Afghanistan (1979–89) and three wars with India, as well as from more recent and continuing conflicts in areas bordering Afghanistan, including, in particular, the Federally Administered Tribal Areas (FATA).

In 2018, 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.¹

In 2018, Pakistan stated that non-state armed groups (NSAGs) have employed improvised explosive devices (IEDs) including mines during attacks.² In fact, according to media reports across Pakistan in 2018–19, civilian mine casualties were from mines of an improvised nature laid by NSAGs, from mines laid by troops along the Line of Control (LoC) between India and Pakistan, and from mines and other explosive hazards in South Waziristan (in an area that had been cleared and declared safe by the military).³ According to Action on Armed Violence (AOAV), in 2018, of the 1,538 deaths and injuries from explosive violence in Pakistan, 2% were caused by landmines.⁴ In 2017, according to a report from Geneva International Centre for Humanitarian Demining (GICHD), Pakistan had the world’s highest number of recorded casualties from anti-vehicle mines, amounting to 28% of the global total.⁵

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.⁶

LAND RELEASE

There are no reports of formal survey or clearance of mined area in 2018. Pakistan reported a total of 232 attacks causing casualties due to improvised explosive devices (IEDs, which include anti-personnel and anti-vehicle mines, although the figures are not disaggregated) “all over the country”.⁷

According to a media report, on 15 December 2018 an unnamed senior security official said that 22 demining teams were being formed by the Pakistani Army to defuse and remove IEDs and mines in the North Waziristan District of Khyber Pakhtunkhwa and in the FATA. These deminers would be in addition to the reported 43 teams already working in the seven former tribal districts.⁸

1 Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 Report (for 2018), Form B; and Statement of Pakistan, 16th Meeting of the States Parties to the APMBC, 18–21 December 2017.

2 CCW Amended Protocol V Article 13 Report (for 2018), Form E.

3 See, e.g., “Two tribal elders killed in Orakzai Agency landmine blast”, The Express Tribune, 15 February 2018, at: bit.ly/2KyGTMc; “Summer brings with it landmines in Azad Kashmir”, Pakistan Today, 6 July 2018, at: bit.ly/2Z033yN; “Landmines killing people in Pakistan’s South Waziristan”, Al Jazeera, 5 February 2018, at: bit.ly/33r8RAG; “Kargil: The forgotten victims of the world’s highest war”, BBC News, 26 July 2019, at: bbc.in/2KKibY3; and “Woman loses her leg to a landmine in South Waziristan”, Samaa Digital, 5 April 2019.

4 AOAV, “Pakistan”, accessed 10 August 2019, at: bit.ly/2YJMd82

5 “Global Mapping and Analysis of Anti-Vehicle Mine Incidents in 2017”, GICHD and the Stockholm International Peace Research Institute (SIPRI), Geneva, 2018.

6 Interviews with Khalil Ur Rehman, Director, Disarmament Division, Ministry of Foreign Affairs, Islamabad, 9 April 2011; with Muhammad Kamran Akhtar, 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.

7 CCW Amended Protocol II Article 13 Report (for 2018), Form B and F.

8 Pakistan: IEDs And Continuous Haemorrhage – Analysis, Eurasia Review, 24 July 2019, at: bit.ly/31xt1qW.

RECOMMENDATIONS FOR ACTION

- Russia should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Russia has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.

ANTI-PERSONNEL MINE CONTAMINATION

There is no accurate estimate of the extent of mine contamination but Russia is heavily contaminated with mines and explosive remnants of war (ERW) as a result of the Second World War, the two Chechen wars (1994–96 and 1999–2009), and armed conflicts in the Caucasian republics of Dagestan, Ingushetia, and Kabardino-Balkaria.

Anti-personnel and anti-vehicle mines were used extensively in the two major conflicts in Chechnya. Estimates of the extent of contamination vary greatly because no systematic effort has been undertaken to assess the scope or impact of the problem.¹ In 2010, Russia's deputy prime minister and presidential special envoy to the Caucasus, Aleksandr Khloponin, claimed that mines affected 14km² of land and posed a major obstacle to development.² In contrast, Chechen officials and human rights organisations have previously

estimated that 245km² of land was mined, including 165km² of farmland and 73km² of woodland.³

In January 2017, a commander in the Russian Armed Forces reportedly told press agency Interfax that more than 100km² of land remained to be cleared in Chechnya, and a further 20km² in neighbouring Ingushetia.⁴ According to the online media report, areas cleared to date had nearly all been in lowland Chechnya and remaining mined area is in more mountainous terrain, complicating demining efforts.⁵

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.⁶

ALLEGED USE OF MINES IN CRIMEA IN 2014

Reports of minefields emplaced to demarcate border areas after Russia's annexation of the Crimea, appear to have concerned either "phoney minefields" or areas containing trip-flares. Trip-flares are not covered by the APMBC.⁷

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."⁸ 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.⁹ 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".¹⁰

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.¹¹ 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.¹²

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.¹³ 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".¹⁴

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" Centre for Special Tasks).¹⁵

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.¹⁶

In 2018, Russia reported that 6,135 military personnel were involved in clearance operations in 136 demining teams. Clearance was carried out by the Air and Space Forces, by the Western, Southern, Central and Eastern Region Military Forces, by the North Navy Forces, by the Strategic Rocket Forces and by the Military Engineers.¹⁷

LAND RELEASE

In 2018, Russia reported that it cleared 657.8km² of ERW-contaminated area across the Russian Federation and abroad with 129,818 items of unexploded ordnance (UXO) found and destroyed.¹⁸

1 UNMAS, "Portfolio of Mine Action Projects 2009", New York, 2008, p. 284.

2 "Medvedev emphasizes vision of Chechnya's future with personal visit", *Russia Today*, 14 June 2010, at: bit.ly/33H4BgO.

3 "MoE sappers to demine arable land in Chechnya", *Caucasian Knot*, 3 April 2009, at: www.kavkaz-uzel.ru; "In Chechnya MES deminers destroyed 25 explosive devices", *Caucasian Knot*, 5 October 2009; and "Human rights activists: 25,000 hectares of Chechen territory are still mined", *Caucasian Knot*, 7 May 2008.

4 "Landmine threat in Chechnya still prevalent", *OC Media*, 23 January 2017, at: bit.ly/33HxfOT.

5 Ibid.

6 Email from Eliza Murtazaeva, Project Officer, Child Protection, UNICEF Vladikavkaz, 2 May 2011.

7 Convention on Certain Conventional Weapons (CCW) Amended Protocol II defines a phoney minefield as "an area free of mines that simulates a minefield. The term 'minefield' includes phoney minefields." Art. 2(8), CCW Amended Protocol II.

8 A. Pfeffer, "Shots fired to warn off European monitors from Crimea", *Haaretz*, 8 March 2014, at: bit.ly/33CeDv.

9 "Between Crimea and Ukraine there are already minefields, armoured vehicles and army camps", *Novaya Gazeta*, 8 March 2014, at: bit.ly/2H9CehE.

10 Landmine Monitor, Mine Ban Policy Ukraine; and "email from George Henton to HRW", 10 March 2014.

11 ICBL, "Reports of Russian landmine use in Crimea requires immediate response", Geneva, 10 March 2014, at: bit.ly/20XjAzL.

12 Ibid.

13 Presentation by Dr. Kateryna Bila, Ukrainian Ministry of Foreign Affairs, "Implementation of the Protocol II by Ukraine", CCW Amended Protocol II Meeting of Experts, Geneva, 1 April 2014.

14 Statement of Russia, CCW Amended Protocol II Meeting of Experts, Geneva, 1 April 2014.

15 See, e.g., "It is planned to establish special groups for demining of lands within MES", *Caucasian Knot*, 23 July 2009; and "Autumn demining is completed in Chechnya", *Vesti Kavkaza*, 28 October 2009.

16 CCW Protocol V Article 10 Report, Form B, 31 March 2015; and meeting with Andrey Grebenshchikov, First Secretary, Department for Nonproliferation and Arms Control, Russian Ministry of Foreign Affairs, in Geneva, 9 April 2015.

17 CCW Protocol V Article 10 Report (for 2018), Form A.

18 Ibid., Form B.

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.
- Despite not yet being a state party to the APMBC, South Korea has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible. In particular, South Korea should clear all anti-personnel mines within the Demilitarised Zone (DMZ) as soon as possible.
- South Korea should enact long-awaited legislation permitting mine clearance by accredited civilian demining organisations.

ANTI-PERSONNEL MINE CONTAMINATION

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 3km² in the northern parts of Gyeonggi-do and Gangwon provinces, below the CCZ.¹ A National Defence Committee report in 2010 said that South Korea had about 1,100 “planned” mined areas covering 20km² and some 209 unconfirmed mined areas covering almost 98km².² A report presented to a side event at the 2019 APMBC Intersessional Meetings showed the number of mined areas

as almost unchanged at 1,308 but provided no estimate of the size of the affected areas.³

An investigation by the United States (US)-led United Nations (UN) Command Military Armistice Commission into a 2015 mine incident that wounded two South Korean soldiers concluded that North Korean soldiers had planted box mines in the southern half of the DMZ along a known patrol route used by the South Korean army. Investigators concluded the mines were recently emplaced, and ruled out the possibility that these were legacy landmines that had drifted from their original placements due to rain or shifting soil.⁴ North Korea rejected the allegation, stating it would make “no sense” for it to use mines south of the border and that it only used mines in self-defence.⁵

Table 1: Mined area in South Korea⁶

Total mined areas	DMZ	North of CCL	South of CCL	Rear areas
1,308	786	433	22	67

CCL = Civilian Control Line

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 mines in the DMZ. The agency would be tasked with planning and executing the removal process.⁷

South and North Korea agreed in the Panmunjeom Declaration of April 2018 to transform the DMZ into a peace zone. Under the Pyongyang Joint Declaration signed in September 2018 the two countries agreed to expand the

cessation of hostilities into the removal of the danger of war across the peninsula. They also signed an Agreement on the Implementation of the Historic Panmunjom Declaration, which provided for clearance of all mines and other explosive devices from agreed areas with a view to the joint recovery of remains of soldiers killed in the Korean War. The agreement specified clearance operations would be conducted for four hours a day in designated times using agreed equipment and that the perimeter of cleared areas would be marked.⁸

South Korea's Ministry of Defence submitted a bill to parliament in 2013 that would allow civilian organisations to remove mines laid during the Korean War.⁹ As at September 2019, South Korea's National Assembly had not passed the bill.

LAND RELEASE

South Korean army engineers cleared the southern part of the Joint Security Area of the DMZ in October 2018. The North informed the South that it had cleared 636 mines; the South said it did not destroy any.¹⁰ South Korean engineers also cleared areas round Arrowhead Hill in Cheolwon, Gangwon province to facilitate exhumation of soldiers killed in action during the war. South Korea said it destroyed 27 mines and 1,479 items of unexploded ordnance.¹¹

Additionally, 635 army engineers cleared 151,738m² between March and December 2018, destroying 240 landmines (232 anti-personnel mines and 8 anti-vehicle mines), an increase on the 102,828m² cleared and 142 mines destroyed in 2017.¹²

1

Response by the Permanent Mission of South Korea to the UN, New York, 9 May 2006.

2

"Find One Million: War With Landmines", Korea Times, 3 June 2010.

3

Powerpoint presentation by Maj.-Gen. Han Cheol Ki (ret.), Side event to the APMBC Intersessional Meetings, Geneva, 24 May 2019.

4

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RECOMMENDATIONS FOR ACTION

- Syria should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Syria has obligations under international human rights law to clear mines in areas under its jurisdiction or control as soon as possible.
- Syria should establish a mine action authority and facilitate access for international demining organisations to facilitate development of a credible humanitarian demining programme.
- Syria should initiate a programme of mine survey and clearance as soon as possible and take other measures to reduce the risk to civilians of mines and explosive remnants of war.

ANTI-PERSONNEL MINE CONTAMINATION

Syria is heavily contaminated by mines and mines of an improvised nature used extensively by parties to the country's eight-year old conflict. It also has mined areas left by successive Arab-Israeli wars since 1948.

Landmines, whether commercial or of an improvised nature, affect all regions and vary according to the armed groups active there, but contamination appears to be particularly dense in areas that were occupied by Islamic State. Continuing hostilities and persistent use of mines have prevented a determination of the extent of contamination.¹ Mines and improvised explosive devices (IEDs) make up only part of Syria's massive contamination by explosive remnants of war (ERW).

The Syrian government reportedly laid mines along borders with Turkey and Lebanon in 2012 and Turkish authorities claimed five years ago that between 613,000 and 715,000 mines had been planted along the Turkish-Syrian border, making clear they were not emplaced by Turkish forces.² In Manbij, close to the Turkish border, heavy casualties from mines, including those of an improvised nature, occurred after Kurdish forces pushed out Islamic State in mid-August 2016 and were still occurring as a result of continuing conflicts in 2019.³ 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 2017.⁴

In Aleppo and neighbouring Idlib governorates, volunteers similarly report mines and other explosive devices planted in agricultural fields, next to roads, inside villages, and around schools and hospitals.⁵ 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.⁶

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.⁷ The Syrian Observatory for Human Rights said that between 24 February and 17 March 2019 it documented the death of 44 people in mine and IED explosions in Homs, Hama and Deir Ezzour. It also documented casualties from mines, including those of an improvised nature, around towns in the southern province of Dara.⁸

From Raqqa, former capital of the self-proclaimed Islamic State caliphate, to Hassakeh governorate in the north-east, and south to Deir ez-Zor and Barghuz (the last remaining Islamic State stronghold overrun in May 2019), 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 mines and other explosive devices it treated in north-east Syria doubled between November 2017 and March 2018. Half of them were children. Its patients reported discovering mines and booby-traps on roads, 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.⁹

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. In areas under government control, these have included Russian and Syrian military engineers, other parties to the conflict, and civil defence organisations.

Russia deployed several hundred military deminers from the Armed Forces Demining Centre from 2017 and conducted clearance with manual teams supported by mine detection dogs and Uran-6 mine detection robots. Russian troops also provided training courses for Syrian army engineers at Hmeimim air base 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.¹⁰

In 2018, Russia started to withdraw troops, including deminers, from Syria and appealed to other countries to provide support. Armenia became the first country to respond to the appeal, sending an 83-man team to Syria in February 2019, planning to focus its work on the northern governorate of Aleppo.¹¹ Armenia rotated a new team to replace the first after four months.¹²

National operators included Syrian Civil Defence (SCD), which, at the start of 2018, was working in five governorates (Dar'a, Hama, Homs, Idlib, and Quneitra) with the support of Mayday. SCD's three teams in Dar'a and two teams in Quneitra operated until early July 2018 when operations were halted and the teams disbanded. SCD also had one clearance team working in Hama governorate and another in Idlib in 2018. By mid-2019, SCD had five clearance teams working in three provinces: Hama (1 team), Idlib (2 teams) and Aleppo (2 teams). It also planned to deploy two non-technical survey teams, one each in Hama and Idlib.¹³ AFAK, a Syrian NGO working in partnership with The HALO Trust, conducted clearance in the southern provinces of Dar'a and Quneitra in the early part of 2019 until a Syrian army drive took control of the area.¹⁴

In areas outside government control in the north east, humanitarian demining organisations and commercial companies, including Tetra Tech, have conducted large-scale clearance in areas recaptured from Islamic State. A small national organisation, Roj Mine Control Organization (RMCÖ), was conducting clearance in north and north-east Syria but reportedly sustained heavy casualties among its deminers attempting clearance of improvised devices.¹⁵

Tetra Tech, started work in northern Syria in October 2016 but since 2017, worked in the north east operating in Raqqa, Deir Ezzour and, after its recapture in 2019, in Barguz. Funded by the US Department of States, Tetra Tech focused on critical infrastructure such as hospitals, schools, water pumping stations, and electricity generating plants. By 2018, Tetra Tech had approximately 400 personnel but after President Trump's December 2018 announcement of the US intention to withdraw from Syria it reduced capacity from seven multi-task teams to two, working with two risk education teams. Three international staff have been killed during clearance operations in Syria.¹⁶

The United Nations Mine Action Service (UNMAS) signed a Memorandum of Understanding (MoU) with the Syrian government in July 2018 under which it deployed two staff to Damascus. In January 2019, it started a first risk education training course for 26 Syrian personnel, of whom 16 were women.¹⁷ Russia announced in March 2019 it would provide funding of US\$1 million to support UNMAS's activities in Syria.¹⁸ In April 2019, UNMAS announced a "Humanitarian Mine Action Support to Syria (31 March 2019–31 March 2020)" project, supported by a \$1.4 million grant from Japan, which is expected to deliver risk education to 43,000 people and conduct contamination impact surveys in 85 communities, as well as marking and fencing off explosive hazards.¹⁹

LAND RELEASE

Continuing conflict prevented a coordinated national programme of mine action in 2018 and 2019. Mine action interventions reportedly gathered significant momentum, albeit at levels that varied in different regions according to the level of security. International operators have conducted significant amounts of clearance of land and buildings in the north east but did not release details. No coordinated and comprehensive information on outcomes of survey and clearance in other areas was available.

Syrian deminers were reported to have conducted clearance of mines and explosive devices in the Damascus suburbs of Eastern Ghouta and Douma after government forces and their allies retook control in April 2018.²⁰ As government forces extended their control in southern governorates in 2018, Syrian army deminers were reported clearing mines and ERW in Dar'a.²¹

Armenia's Centre for Humanitarian Demining and Expertise reported that the Armenian army engineers sent to Syria in February 2019 had cleared around 35,000m² by July, tackling 29 landmines and explosive devices. An Armenian deminer was injured in the explosion of a mine or IED in March resulting in amputation of a foot.²² They planned to clear five minefields near Aleppo covering a total area of about 1.3km² in operations coordinated with Russian and Syrian military engineers.²³ Between 8 June and 22 July 2019, the deminers reportedly cleared 8,534m².²⁴ Demolitions of cleared items are conducted by the Syrian military.²⁵

- 1 Email from Gilles Delecourt, Senior Programme Manager, United Nations Mine Action Service (UNMAS), 22 May 2018.
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- 3 See, e.g., "Rural Aleppo: explosions on the rise in Manbij City", Enab Baladi, 2 February 2019 at: [bit.ly/2MoBbxq](https://www.enab-baladi.com/en/aleppo-explosions-on-the-rise-in-manbij-city/); Omar Haj Kadour, "Bus blown up by landmine in Syria's Manbij: 1 dead, 5 injured", Agence France Presse, 2 February 2019.
- 4 Conference Paper by the Independent International Commission of Inquiry on the Syrian Arab Republic, UN doc. A/HRC/34/CRP.3, 10 March 2017, para. 90.
- 5 "Syrian volunteers risk lives to clear landmines", Al Jazeera, 8 April 2016, at: [bit.ly/2K2J8Hn](https://www.aljazeera.com/news/2016/04/syrian-volunteers-risk-lives-to-clear-landmines/).
- 6 "Inside Foua: A Shi'a town in the eye of the Syrian storm", Middle East Eye, 19 August 2018.
- 7 See, e.g., "5 killed, 6 injured in landmine blast in Hama countryside", IRNA, 3 September 2018; and "4 Civil Defence workers killed clearing landmines in northern Homs", Zaman al Wasl, 18 May 2018.
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- 16 Interview with Gareth Hawkins, Tetra Tech, 10 May 2019.
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- 20 "Work on demining buildings in Syria's Eastern Ghouta completed by 50% - Syrian sappers", Syria Times, 13 December 2018, at: [bit.ly/2KfwALE](https://www.syriatimes.com/news/2018/12/13/work-on-demining-buildings-in-syrias-eastern-ghouta-completed-by-50-syrian-sappers/).
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RECOMMENDATIONS FOR ACTION

- Uzbekistan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Uzbekistan has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- Uzbekistan should be more transparent in detailing the extent of its mine contamination and clearance operations.

ANTI-PERSONNEL MINE 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. While Tajikistan and Uzbekistan settled most of their 1,283km-long border dispute following the collapse of the Soviet Union, certain areas have not yet been delineated and therefore the exact location of mined areas is not known.¹ In 2010, the Secretary-General of the United Nations (UN), Ban Ki-moon, criticised as "unacceptable" Uzbekistan's emplacing of mines along parts of its border that have not been delineated.²

Soviet troops also laid mines on the Uzbek-Afghan border. Uzbekistan had reportedly cleared 95% of the minefields along the Tajik border by the end of 2007 in demining operations conducted by Uzbek army deminers in cooperation with Tajik border troops.³

The 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. Any demining operations will require agreement and cooperation between the two nations; as at July 2019, the Tajik Ministry of Foreign Affairs (MoFA) was reported to be in negotiation with the Uzbek MoFA regarding survey of the Tajik-Uzbek border (see Mine Action Review's *Clearing the Mines* report on Tajikistan for further information).⁴

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.⁵ 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.

LAND RELEASE

There are no reports of any survey or clearance occurring in 2018.

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3 Email from Jonmahmad Rajabov, Director, Tajikistan Mine Action Centre (TMAC), 16 February 2009; Tajikistan Anti-Personnel Mine Ban Convention Article 7 Report, "General situation", 3 February 2008, p. 3; and "Uzbekistan started demining on Tajik border", *Spy.kz*, 23 October 2007.

4 Emails from Muhabbat Ibrohimzoda, TNMAC, 27 April 2018 and 25 July 2019.

5 IRIN, "Kyrgyzstan-Tajikistan: Landmine threat along Uzbek border removed", at: www.irinnews.org.

RECOMMENDATIONS FOR ACTION

- Vietnam should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Despite not yet being a state party to the APMBC, Vietnam has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- Vietnam should prepare and publish a detailed assessment of remaining mined areas.
- The Vietnam National Mine Action Centre (VNMAC) should draw up a strategic plan for completing mine clearance.
- VNMAC should provide regular detailed reporting on the progress of demining.

UNDERSTANDING OF AP MINE 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 mines in 26 of 63 cities and provinces but gave no further details.¹ Between 2014 and 2019, Danish Demining Group (DDG) identified 13 previously unrecorded minefields in four districts in Quang Nam province and one district in Thua Thien Hue province. In 2018, DDG identified three anti-personnel mined areas of 12,652m² in A Luoi district, Thua Thien Hue province. Local residents were aware of the presence of mines and reported to DDG that they tended to avoid these areas.²

Most mines were left by conflicts in the 1970s with neighbouring Cambodia and China, and affect areas close to its borders with those countries.³ Clearance had been

reported by Vietnam along its northern border with China in the 1990s and from 2004 onwards, but mined areas further inland are believed to persist.⁴ It was reported in 2013 by the Engineering Command that clearance had been completed in the Cambodia border areas.⁵ Many ports and river deltas were mined extensively during the armed conflict with the United States and were not completely cleared when it ended. A number of sea mines have been found on the coast.⁶ Some mines have also been found around former United States (US) military installations.⁷

Vietnam also has extensive contamination from cluster munition remnants (CMR) and other explosive remnants of war (ERW) ("See Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Vietnam for further information").

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Vietnam's mine action programme is restructuring, but management and operations continue to depend largely on the armed forces. According to the Decree on the Management and Implementation of Mine Action Activities, issued in February 2019 (hereafter, the 2019 Decree), the Ministry of National Defence (MoD) will continue to elaborate and preside over the national mine action programme, as the lead authority, in coordination with other relevant ministries and sectors.⁸ It also designates the MoD as the focal point for international cooperation in mine action.⁹

The Vietnam National Mine Action Centre (VNMAC) was established in 2014 by Prime Ministerial decision (No. 738 of 2013) to strengthen the direction of mine action and provide

a focal point for mine action operations. The 2019 Decree instructed VNMAC, "under the direction of the Prime Minister and managed by Ministry of Defense, to monitor, coordinate and implement mine action tasks."¹⁰ Although the VMAC is not yet fully functional, 2019 is a crucial year as the national programme develops its legal framework, structure, policies, and standards.¹¹

Mines Advisory Group (MAG), Norwegian People's Aid (NPA), the United Nations Development Programme (UNDP), and Golden West all provide capacity development support in Vietnam.¹²

GENDER

As at August 2019, Vietnam has not provided information on whether it has a gender policy and implementation plan for mine action.

International operators DDG, MAG, and NPA all report having organisational gender and diversity policies and state that they consult both women and children during community liaison activities with male and female members of community liaison/survey teams. They say they provide equal opportunities during the recruitment process and are working towards gender-balanced employment.¹³

INFORMATION MANAGEMENT AND REPORTING

Data quality and accessibility continues to be a major challenge in Vietnam. VNMAC is responsible for national information management and uses the Information Management System for Mine Action (IMSMA). However, with the exception of the UNDP Korea-Vietnam Mine Action Project (KV-MAP) project data, information is not shared with mine action operators.¹⁴ The ERW impact survey report released in 2018 noted that “regulations on reporting demining activities have not been strictly followed” and authorities had received clearance data for only two provinces, Ha Tinh and Quang Tri, where international donors have supported operations.¹⁵

The VNMAC information management unit intends to consolidate mine action data from the Technology Centre for Bomb and Mine Disposal (BOMICEN), the UNDP KV-MAP project, and Quang Tri province into the national information management system. With support from NPA, VNMAC is equipped with the necessary technical capabilities and knowledge, but legislation governing the collection and sharing of mine action data was lacking.¹⁶ However, the forthcoming guiding Circular, which as at June 2019 was being elaborated, is expected to provide clarity on the collection and sharing of mine action data, including data the military allow to be made public.¹⁷

Vietnam has a National Mine Action Standard, a Technical Mine Action Regulation, and various mine action-related procedures, each of which have their own data collection forms. These data collection forms are not consistent, nor

are they used in a standard manner. However, this issue is expected to be addressed by the legal framework being developed.¹⁸

Mine action data collected by the provincial information management system in Quang Tri, also using IMSMA, is accessible to all mine action stakeholders. The database holds survey and clearance results, providing a basis for planning and tasking, as well as victim data. It has also received some data on clearance activity undertaken by the Provincial Military Command for 2000 to 2013.¹⁹ The data, which are believed to be accurate, up to date, and reliable, have been the catalyst for greater coordination across all stakeholders within the province.²⁰ Live operations data can be accessed via QTMAC’s website, while the other Vietnamese provinces with active mine action programmes do not have databases, and operators maintain their own.²¹

Development of information management is an aim of the KV-MAP project, the goal of which is to improve available information for the UXO/mine action sector to support informed policy making and task prioritisation.²² In 2018, Coordination Offices and Database Centres for Mine Action were established in Quang Binh and Binh Dinh provinces with training provided to provincial staff. As at June 2019, these centres manage the data from the KV-MAP project which is then fed into the VNMAC database but the aim is for the centres to be sustainable and in the future manage the mine action data for the province.²³

PLANNING AND TASKING

Decision 504, approved by the Prime Minister in April 2010, set out a National Mine Action Plan for 2010–25. The plan 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 ERW contamination clearance of 8,000km² between 2016 and 2025.²⁴

A VNMAC action plan for 2018 included three main targets²⁵:

- Finalise legislation, decrees, and guidelines for the mine action sector in order to provide a unified framework for the sector country-wide
- Clarify contamination estimates through the release of the landmine impact survey and develop risk education
- Clearance of some 300km² of ERW-affected land.

It is evident that at least partially these targets have been achieved: legislation has been introduced; clarifying guidelines are being developed; and the results of the ERW impact survey were released. As at May 2019, however, no

information had been formally provided by VNMAC on the realisation of its 2018 goals or on its goals for 2019.

As at May 2019, there was no national prioritisation system for mine clearance. The prioritisation processes implemented in Quang Tri and Quang Binh are predominantly for CMR contamination. In Quang Tri province, there is a prioritisation plan in place and an effective system for task allocation.²⁶ The prioritisation processes and accompanying forms were piloted in 2018 and were rolled out in May 2019, with QTMAC now managing the province-wide clearance task prioritization process.²⁷ The criteria are established based on consultation and agreement between QTMAC and operators. In Quang Binh province, MAG has been applying its own procedures and process to prioritise clearance tasks based on scores of consent, hazard assessment, and community benefits.²⁸ While DDG uses a consultative approach at the province, district and village level to prioritise its clearance tasks.²⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Vietnam has both National Technical Regulations (QCVNs), which are legally binding and similar in content to standing operating procedures (SoPs), and National Mine Action Standards (TCVN), closely aligned with the International Mine Action Standards (IMAS), but considered optional by VNMAC and the MoD.³⁰

OPERATORS

Most clearance in Vietnam is conducted by the Army Engineering Corps and military-owned commercial companies. Outside the central provinces its current strength and deployment are unknown. Officials have previously reported that it had 250 mine clearance and battle area clearance (BAC) teams nationally. The three Provincial Military Command (PMC) teams in the aforementioned provinces all conducted BAC throughout 2018. Vietnam reportedly has more than 70 military-owned companies undertaking clearance related to infrastructure and commercial and development projects.³¹

International operators active in 2018 included DDG, working in Quang Nam and Thua Thien Hue provinces; MAG, working in Quang Binh and Quang Tri provinces; NPA, working in Quang Tri and Thua Thien Hue provinces; and PeaceTrees Vietnam, which has been working in Quang Tri province since 1995.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

VNMAC has not shared any data on mine clearance activities in Vietnam in 2018 and operators did not report any anti-personnel mined area reduced or cancelled through survey or cleared in 2018.

In 2018, DDG identified 12,652m² of anti-personnel mined area in A Luoi district, Thua Thien Hue province.³² During explosive ordnance disposal (EOD) spot tasks, five anti-personnel mines were destroyed: one by DDG, one by MAG, and three by NPA.³³

Vietnam has not set a deadline for completion of anti-personnel mine clearance. In 2013–17, the Legacy of War Coordination Centre (renamed the Quang Tri Mine Action Centre in 2018), recorded clearance of 497 mines, 4% of the total number of items cleared, but the number of mines cleared annually has fallen steadily.³⁴ In Quang Tri province, from 2000 to 2018, 7.5% of the 635 incidents from explosive ordnance were due to landmines and of the 295,671 items of ordnance found through clearance during this time 6,866 (2.3%) were landmines.³⁵

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 Questionnaire from DDG.

3 Interview with Sr. Col. Phan Duc Tuan, Deputy Commander, Military Engineering Command, People's Army of Vietnam (PAVN), in Geneva, 30 June 2011.

4 Information provided by Sr. Col. Phan Duc Tuan, PAVN, in email from Vietnam Veterans of America Foundation (VVA), Hanoi, 24 September 2012; and in interview in Geneva, 30 June 2011.

5 Interview with Sr. Col. Nguyen Thanh Ban, Head of Bomb and Mine Department, Engineering Command, Hanoi, 18 June 2013.

6 Landmine Action, *Explosive Remnants of War and Mines Other than Anti-personnel Mines*, London, March 2005, p. 181.

7 Ibid.

8 Decree on Implementation and Management of Mine Action, No.18/2019, 1 February 2019.

9 Email from Simon Rea, MAG, 24 April 2019.

10 Draft Decree on the management and implementation of mine action activities, Hanoi, April 2018.

11 Emails from Simon Rea, MAG, 24 April 2019; and Resad Junuzagic, NPA, 6 May 2019.

12 For more information see Mine Action Review "Clearing Cluster Munition Remnants" 2019 report for Vietnam.

13 Emails from Simon Rea, MAG, 24 April 2019; Resad Junuzagic, NPA, 6 May 2019; and Clinton Smith, DDG, 29 May 2019.

14 Email from Resad Junuzagic, NPA, 6 May 2019.

15 VNMAC, "Report on Explosive Remnants of War Contamination in Vietnam", Hanoi, 2018, pp. 36–37.

16 Email from Resad Junuzagic, NPA, 6 May 2019.

17 Skype interview with Nils Christensen, UNDP, 13 June 2019.

18 Ibid.

19 Meeting with Christopher Ramsden, Senior Technical Adviser, LWCC, Nguyen Duc Thien, Manager, LWCC; Nguyen Van Duc, Data Processing Officer, LWCC; and Snr Lt. Tran Van Hai, Operations Officer, Provincial Military Command, in Dong Ha, Quang Tri, 19 April 2018.

20 Email from Resad Junuzagic, NPA, 6 May 2019.

21 Emails from Resad Junuzagic, NPA, 7 April 2017; Simon Rea, MAG, 11 April 2017 and 28 June 2019; and Clinton Smith, DDG, 23 March 2017.

22 UNDP, "Vietnam mine action project: Project brief", January 2019.

23 Skype interview with Nils Christensen, UNDP, 13 June 2019.

24 Prime Minister, "Decision on Approval of the National Mine Action Plan Period 2010–2025", Hanoi, 21 April 2010.

25 Interview with Nguyen Hang Phuc, VNMAC, Hanoi, 18 April 2018.

26 Email from Resad Junuzagic, NPA, 6 May 2019.

27 Email from Simon Rea, MAG, 16 June 2019.

28 Email from Simon Rea, MAG, 24 April 2019.

29 Email from Clinton Smith, DDG, 29 May 2019.

30 Email from Resad Junuzagic, NPA, 6 May 2019.

31 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; interviews with mine action stakeholders, Hanoi, 16–20 April 2018; and email from Lee Moroney, Golden West Humanitarian Foundation, 22 June 2019.

32 Questionnaire from DDG.

33 Emails from Simon Rea, MAG, 24 April 2019; Resad Junuzagic, NPA, 6 May 2019; and Clinton Smith, DDG, 29 May 2019.

34 LWCC database, accessed at: bit.ly/2KzobUH. 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.

35 QTMAC, "Facts and Figures: By Mine Action Component: Clearance", at: bit.ly/2Mh673I; and QTMAC, "Facts and Figures: By Mine Action Component: Accidents and Victims", at: bit.ly/2ZZdi5L.

OTHER AREAS

The background of the slide is composed of several overlapping triangles in different shades of blue, ranging from a deep navy blue to a lighter sky blue. The triangles are arranged in a way that creates a sense of depth and movement, with some triangles appearing to be in front of others. The overall effect is a modern, abstract design.

RECOMMENDATIONS FOR ACTION

- While formal accession to the Anti-Personnel Mine Ban Convention (APMBC) is not currently possible for Kosovo, as it is not yet recognised as a state by the depositary to the Convention, Kosovo should submit a letter to the United Nations (UN) Secretary-General stating that it intends to fully comply, on a voluntary basis, with the APMBC.
- This should include the submission of a voluntary Article 7 transparency report on an annual basis, as Kosovo has proposed in its Mine Action Strategy 2019–24.
- The Kosovo Mine Action Centre (KMAC) should continue its efforts to ensure timely and efficient clearance of anti-personnel mines, in line with the objectives in its latest mine action strategy and complete clearance by the end of 2024.
- KMAC and international mine action operators should increase their collaboration to seek additional funding and greater financial stability for mine action.

UNDERSTANDING OF AP MINE CONTAMINATION

Kosovo is contaminated by mines, cluster munition remnants (CMR), and other explosive remnants of war (ERW), primarily as a result of the conflict between the Federal Republic of Yugoslavia and the Kosovo Liberation Army (KLA) in the late 1990s, and between Yugoslavia and North Atlantic Treaty Organization (NATO) member states in 1999.¹ At the end of 2018, 44 confirmed hazardous areas (CHAs) remained, covering almost 1.2km² in total.²

Both anti-personnel and anti-vehicle mines were used during the conflict, in fixed-pattern minefields as well as more randomly in “nuisance” minefields. Many anti-personnel mines had minimal metal content.³ Although the total number of mines emplaced during the conflict is not known, the UN Mine Action Coordination Centre (UNMACC) reported, as at 31 May 2000, a total of 7,232 mines cleared in the preceding year (3,448 anti-personnel mines and 3,784 anti-vehicle mines).⁴ 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”,⁵ but further investigation revealed that considerably more contamination remained to be addressed.⁶

Mines are found mainly on Kosovo's borders with Albania and the then former Yugoslav Republic of Macedonia (now the Republic of North Macedonia), but also in the area of Dulie Pass in south-central Kosovo.⁷ Kosovo has gained an accurate assessment of remaining anti-personnel mine contamination on its territory as a result of 20 years of mine action operations, including surveys in 2013 and 2015.⁸

The 2013 survey of mined areas and cluster munition strikes across Kosovo, carried out by The HALO Trust and KMAC, confirmed 130 hazardous areas: 79 mined areas covering an estimated 2.76km² and 51 cluster munition strikes covering an estimated 7.63km².⁹ The total of 79 mined areas was a considerable increase on the 48 mined areas that had been identified at the end of 2012.¹⁰ By the end of 2014, KMAC reported the number of confirmed mined areas had fallen slightly, to 77 covering 2.75km².¹¹ During 2018, two areas of previously unrecorded anti-personnel mine contamination were added to the database with a total size of 55,166m².¹²

EXPLOSIVE REMNANTS OF WAR AND CLUSTER MUNITION REMNANTS

In addition to contamination from mines, Kosovo is contaminated with CMR (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Kosovo for further information) as well as other ERW. Kosovo Protection Force (KFOR) and Kosovo Security Force (KSF) explosive ordnance disposal EOD teams regularly dispose of ERW in response to information provided by the public and demining organisations.¹³

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In January 2011, the EOD Coordination Management Section became KMAC, responsible for managing survey and clearance of mines and ERW. KMAC prepares an annual workplan in cooperation with international demining NGOs and coordinates their operations along with the national demining teams of the KSF. It also coordinates survey, quality assurance, risk education, public information, and victim assistance activities.¹⁴ KMAC's role and responsibilities as head of the national mine action programme under the auspices of the Ministry of Defence were established and institutionalised by Kosovo's 2012 Law on Humanitarian Demining.¹⁵

In 2018, KMAC had five permanent staff: a Director, a Senior Quality Assurance (QA) Officer, a QA Inspector, a Mine Risk Education (MRE) Officer, and a Public Information Officer.¹⁶

Kosovo's mine action programme is fully nationally owned, with a strong, longstanding commitment from the national government. The dedicated team of permanent national staff have been employed with KMAC since its creation. This has benefitted the programme with the retention of experience and institutional memory.¹⁷

The Kosovo government provided approximately €135,000 in financial support to KMAC in 2018, consistent with the amount of funding for KMAC's operations provided the previous year. The KSF received €980,000 for mine and ERW clearance in 2018, also consistent with the funding it received from the Kosovo government the previous year.¹⁸ KMAC expected to receive similar levels of funding in 2019.¹⁹

Kosovo's current Mine Action Strategy 2019–24 sets out the objective of intensifying resource mobilisation efforts in order to gain greater financial stability.²⁰ While a specific strategy did not exist in 2018, operators reported that coordinated approaches with KMAC were made to potential donors such as the United States and the European Union.²¹

Unfortunately, the misperception that mine, CMR, and ERW clearance in Kosovo was completed in 2001 persists, whereas the reality is that significant contamination remains. Kosovo remains a poor country and needs economic assistance to help it complete clearance in a timely manner, possibly in less than five years if sufficient support is provided. In 2019, KMAC identified funding and logistical support as the two primary areas where it could most benefit from assistance from international donors and mine action operators.²²

GENDER

Kosovo's Mine Action Strategy 2019–24 reflects the commitment of the mine action programme to ensure that gender is taken into consideration in the planning, implementation, and monitoring of all mine action projects, with a view to promoting equality and quality.²³ The Strategy stipulates that all mine action activities and assistance must reflect the needs of different ages and gender in a targeted and non-discriminatory manner, and that mine action and community liaison data is also to be collected systematically disaggregated according to sex and age.²⁴

Both KMAC and KSF had gender policies in place in 2018. KMAC reported that the KSF's gender policy aims to facilitate the consultation of all groups affected by mines and ERW, expressly women and children. In 2018, a total of 8% of KSF staff employed in operational mine action roles were women, along with 5% of staff in managerial or supervisory positions. Within KMAC, one of its five staff was a woman.²⁵

Kosovo's mine action strategy recognises the barriers that exist against equal employment in Kosovo society, including significant differences in employment levels between men and women, despite the number of men and women of working age being broadly similar. The Strategy notes that, as at 2019, more than four-fifths of women of working age were not employed in Kosovo's labour market, and less than one in eight women of working age have been employed annually over the past five years. The primary reasons given by women for unemployment are child and family care obligations, which traditionally fall on women in Kosovo society. The Strategy notes the efforts of mine action operators to overcome these challenges and barriers to employment, such as through child care and parental leave, and gender-sensitive recruitment practices that encourage women to apply for positions traditionally seen as jobs for men. It further recalls the importance of employment of not only multi-gender, but also multi-ethnic, survey and clearance teams and the particular benefits of recruitment in areas affected by high unemployment and poor socio-economic conditions.²⁶

In 2018, The HALO Trust developed a gender policy in consultation with the Kosovo Women's Network, an advocacy network of more than 140 member organisations, including women's organisations of all ethnic backgrounds from throughout Kosovo, which was adopted in February. The policy aims both at increasing the recruitment of women, as well as retention of existing female employees through the provision of extra maternity leave and child care allowances. Recognising the significant deterrents to women's employment of affordable child care and traditional gender roles as family caregivers, The HALO Trust's gender policy provides female employees and single parents of either sex with stipends covering 75% of child care costs and increased the paternity leave allowance from four days as stipulated by national law, to two weeks of paternity leave.²⁷ By the end of 2018, the number of women working for The HALO Trust in Kosovo increased to close to 15%, up from 3% at the start of the year.²⁸

In 2018, The HALO Trust's dedicated Community Liaison Officer was female and the programme deployed a gender-balanced survey team, which tried to reach male and female respondents equally, including girls and boys with permission of their parents. As men are most often the primary respondents of the household, added effort was placed on access to, and inclusion of, women and girls in all project phases. The HALO Trust expected that with increasing community liaison and a stronger female presence within demining teams, further progress would be made to overcome the challenge of reaching women and encouraging women to take a greater interest in mine action in their communities. Data collected post-clearance is also disaggregated to ensure the understanding and analysis of impact of mine action activities also takes gender into consideration, it reported.²⁹

While The HALO Trust reported that it did not have any women in operational management positions in 2018, it stated that it was a priority for the programme address upward mobility for women within the organisation and was partnering with the Gender and Mine Action Programme (GMAP) in 2019 to this end. Additionally, in 2019, the programme planned to train more women in the use of Handheld Stand-off Mine Detection System (HSTAMIDS) mine detectors and to introduce new junior management positions into which women will have the opportunity to be promoted.³⁹

Norwegian People's Aid (NPA) reported that a target of 25% female staff was in place, and in 2018, 23% of its staff were women, including one of four team leaders, two of six medics,

and one of four staff in the management team. Women were especially encouraged to apply for staff positions, and given priority over male applicants with equivalent skills and experience. NPA confirmed its survey and community liaison teams were gender balanced and ensured that the participation of all relevant social groups is always taken into account when conducting activities in local communities.⁴¹ NPA's efforts to recruit and train multi-ethnic survey and clearance teams was also been a critical factor in allowing the deployment of teams in areas of particular ethnic and political sensitivities, extending the reach of mine action operations in north Kosovo, while also building bridges and friendships between the individual staff members and through their community liaison activities.⁴²

INFORMATION MANAGEMENT AND REPORTING

KMAC uses the Information Management System for Mine Action (IMSMA) New Generation version for its national mine action database. Data is disaggregated between mines, CMR, and ERW.³³ Operators were positive in their assessments of the quality and accessibility of data contained in the database and of KMAC's information management systems in general. Notably, operators report to KMAC on a weekly basis.³⁴

Both NPA and The HALO Trust also emphasised the constructive and proactive working relationship with KMAC.

Beyond weekly KMAC visits to operational sites, regular senior management coordination meetings between KMAC and mine action operators were held on a monthly basis in 2018, or more frequently when required, and quarterly meetings were also convened for operational planning.³⁵

According to its most recent mine action strategy, KMAC intends, as a means to show its commitment to the APMBC, to submit voluntary Article 7 transparency reports on an annual basis.³⁶

PLANNING AND TASKING

The Geneva International Centre for Humanitarian Demining (GICHD) supported the development of Kosovo's new Mine Action Strategy 2019–24, bringing together a wide range of national and international stakeholders in a strategy stakeholder workshop in Pristina in October 2018. The strategy, formally approved in January 2019 and launched by the Ministry of Kosovo Security Services on 4 April 2019, has three goals:

- Mine/ERW threats managed and reduced
- Communication and awareness raising
- Management of residual contamination.

The strategy declares that all known mined and CMR-contaminated areas will be addressed by the end of 2024, leaving only residual contamination to be managed accordingly. It contains annual projections for anti-personnel mine clearance, including:

- all high priority anti-personnel mine tasks (8 as at October 2018) will be cleared by 2020
- all medium-priority anti-personnel mine tasks (25 as at October 2018) will be cleared by 2022; and
- all low-priority anti-personnel mine tasks (15 as at October 2018) will be completed by 2024.³⁷

The strategy states it is based on a number of assumptions, including that the necessary funding will be secured and that no new mined or CMR-contaminated areas are identified. It notes, however, that "so far each year 3–4 different affected areas have been reported" and that should this trend continue, capacity and progress will need to be reassessed with regards to the 2024 deadline.³⁸

As per the strategy, KMAC will develop annual operational workplans to implement the strategy's goals.³⁹ KMAC will also request an external mid-term review of the strategy in 2022 to evaluate progress and make any adaptations according to contextual changes if required.⁴⁰ According to the strategy, a separate national strategy on the management of residual contamination will be developed by KMAC by 2023, in collaboration with other national actors, to clarify roles and responsibilities in order to manage a long-term residual contamination problem.⁴¹

In 2019, KMAC confirmed that it had developed annual operational workplans to target anti-personnel mined areas, according to impact-based criteria, including risk reduction, development priorities, and poverty reduction, along with the findings of a nationwide baseline socio-economic impact assessment carried out in 2018 by KMAC, with the support of The HALO Trust.⁴² The mine action strategy for 2019–24 also is in alignment with the objectives of Kosovo's National Development Strategy 2016–2021.⁴³

The HALO Trust reported prioritising in its areas of operations was based on impact, land use, seasonal access, and risk and contamination levels.⁴⁴ While NPA confirmed that its operations in northern Kosovo continued to focus on high-impacted areas, it noted that it was also important for NPA to ensure both Serbian and Albanian-populated areas are prioritised equally, with sensitivity towards political, cultural, and ethnic affiliations.⁴⁵

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

National mine action standards for land release are in place in Kosovo, which according to KMAC are in accord with the International Mine Action Standards (IMAS).⁴⁶

KMAC deployed two QA officers in 2018 who visited sites at least once a week to ensure compliance with the national standards and standing operating procedures (SoPs).⁴⁷ NPA reported increasing its internal QA/quality control (QC) capacity during the year and confirmed that KMAC made frequent visits to its tasks, which it said provided highly valued input for QA.⁴⁸ The HALO Trust confirmed that KMAC made weekly QA visits to its operations and reported it was exploring opportunities to restructure team management with the aim of enabling more effective QA/QC.⁴⁹

A 2014 evaluation of Kosovo's mine action programme, conducted on behalf of the International Trust Fund (ITF) Enhancing Human Security, concluded that an increase in capacity and improvements to land release methodology and equipment deployed would be necessary if Kosovo were to complete clearance operations by 2024. Since the 2014 evaluation, a number of significant improvements have been introduced to the mine action programme, including the use of HSTAMID detectors by The HALO Trust and large-loop detectors on certain tasks.⁵⁰

OPERATORS

In 2018, Kosovo's national mine action programme's capacity consisted of two international operators, The HALO Trust and NPA, and national operator, the KSF. KFOR supports the KSF and Kosovo Police with EOD response tasks and organising mine and ERW demolitions in Mitrovica and the north of Kosovo, including NPA's areas of operations.⁵¹ The demining season is from the end of March to the end of November, due to weather conditions.⁵²

In 2018, The HALO Trust maintained a 10-team-strong capacity to conduct both mine and CMR clearance. It reported that operational personnel are cross-trained and can move between activities, but generally the programme is split,

with seven teams dedicated to mine clearance and three dedicated to cluster munition clearance. At the end of 2018, the programme employed 97 operations personnel, of whom 14% were women.⁵³

KSF operated four platoons in 2018: three for demining and one for EOD. The demining platoons are divided into five teams with a total of 75 staff, and the EOD platoon consists of six teams of five persons each. Of these, three teams are on standby for EOD call-outs in Prizren and three teams in Pomozotin.⁵⁴ In 2018, KSF units conducted demining operations in five locations: Babaj i Bokës, Ferizaj, Ferizaj/Urosevac Park, Harilaq, and Paldenica.⁵⁵

OPERATIONAL TOOLS

Significant advances in operational productivity have been achieved by the use of tools such as HSTAMID detectors. NPA sought to introduce the use of mine detection dogs (MDDs) for a three-month pilot project to conduct targeted technical survey in areas contaminated with CMR, but as their use in CMR operations was not formally approved by KMAC in 2018 they were deployed for survey and clearance of mines instead. The presence of anti-personnel mines was not found

in any of the suspected mined areas and NPA discontinued plans to use MDDs in its areas of operations in north Kosovo.⁵⁶ In 2019, KMAC informed Mine Action Review that the use of MDDs could, however, be considered for KSF operations in remaining minefield tasks along the Kosovo-Albanian border.⁵⁷

According to The HALO Trust, there were plans to increase HSTAMID operator capacity and the number of HSTAMIDs in use per team in 2019.⁵⁸

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2018

A total of 0.33km² of mined area was released in 2018, including 0.22km² through clearance and a further 0.11km² reduced through technical survey.

SURVEY IN 2018

Non-technical survey of suspected mined areas was not carried out in 2018.⁵⁹ A total of close to 114,000m² was reduced through technical survey during the year.⁶⁰ This is a slight increase from 2017, when just under 89,000m² was reduced through technical survey, all by The HALO Trust.⁶¹

Table 1: Reduction of mined area through technical survey in 2018⁶²

Operator	Area reduced (m ²)
HALO Trust	76,771
KSF	26,500
NPA	10,550
Total	113,821

CLEARANCE IN 2018

In 2018, a total of just over 0.22km² of anti-personnel mined area was cleared, with 46 anti-personnel mines found and destroyed. This was close to results in 2017, when the KSF and HALO Trust cleared more than 0.23km².⁶³

Table 2: Mine clearance in 2018⁶⁴

Operator	Areas cleared	Area cleared (m²)	AP mines destroyed	UXO destroyed
HALO Trust	9	195,382	42	2
KSF	2	18,845	4	8
NPA	1	8,573	0	0
Total	12	220,800	46	10

AP = Anti-personnel AV = Anti-vehicle

A further six anti-personnel mines were destroyed by the KSF in EOD response tasks during the year.⁶⁵ As Kosovo has strict national procedures for the management of explosives, the KSF, with support from KFOR in northern Kosovo, carries out the destruction of mines, CMR, and other ERW found by The HALO Trust and NPA.⁶⁶

NPA deployed two MDDs in 2018 to verify information regarding landmines suspected to be inside cluster munition strikes in northern Kosovo. The dogs were deployed to Jerebinje, in Zubin Potok municipality, and Belo Brdo, in

Leposavic municipality to investigate information about mine belts inside the strike areas. The tasks are located on the border with Serbia, where mines were alleged to have been laid by the Yugoslav National Army to protect military installations from the KLA and NATO. NPA stated that since cluster munition clearance uses less sensitive detectors than does mine clearance, it was not possible to deploy a BAC team in an area with mine contamination. In Jerebinje, it was determined that the mines had likely been removed, and in Belo Brdo, NPA found five ‘training’ mines which did not contain explosives.⁶⁷

PROGRESS TOWARDS COMPLETION

Kosovo cannot formally adhere to the APMBC and therefore does not have a specific clearance deadline under Article 5. Nonetheless, it has obligations under international human rights law to clear anti-personnel mines as soon as possible.

As stated in Kosovo’s Mine Action Strategy 2019–24, which sets completion of mine and cluster munition clearance by the end of 2024, completion will only be achievable if sustained funding is secured.⁶⁸ Specific concerns are elaborated in the strategy about the need to upgrade old equipment, including vehicles to proceed without unnecessary stand-downs or costly repairs.⁶⁹

With adequate funding, KMAC and The HALO Trust predict that anti-personnel mine and cluster munition clearance will be completed by the end of 2024.⁷⁰ This would be 25 years after the end of the conflict between the FRY forces and NATO and more than 20 years after the UN claimed that clearance was largely complete.

In 2019, The HALO Trust reported that it could complete clearance of remaining mined areas within its areas of responsibility with existing capacity by the end of 2024. It cautioned, however, that sustaining capacity over the strategy period will prove a challenge, and any reductions in funding could impede progress towards meeting the 2024 target.⁷¹

Table 3: Five-year summary of AP mine clearance (2014–18)

Year	Area cleared (km²)
2018	0.22
2017	0.23
2016	0.15
2015	0.22
2014*	0.84
Total	1.66

* Mine and CMR clearance

- 1 See UN Mission in Kosovo (UNMIK), "UNMIK OKPCC EOD Management Section Annual Report 2005", Pristina, 18 January 2006, p. 2; and International Committee of the Red Cross (ICRC), *Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo*, Rev'd Edn, Geneva, June 2001, pp. 6 and 15, at: bit.ly/331PWfQ.
- 2 Email from Ahmet Sallova, Head of Mine Action Centre, KMAC, 11 July 2019.
- 3 ICRC, *Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo*, June 2001, p. 15.
- 4 Ibid.
- 5 "UNMIK Mine Action Programme Annual Report – 2001", Mine Action Coordination Cell, Pristina, undated but 2002, p. 1.
- 6 HALO Trust, "Failing the Kosovars: The Hidden Impact and Threat from ERW", Report, 15 December 2006, p. 1.
- 7 Email from Ahmet Sallova, KMAC, 30 July 2013.
- 8 Norwegian People's Aid (NPA), *Cluster Munition Remnants in Northern Kosovo: non-technical survey of contamination and impact*, September 2015; and email from Goran Peršić, NPA Bosnia and Herzegovina, 13 May 2016.
- 9 HALO Trust, "Action on cluster munitions in Kosovo", Side event, First Convention on Cluster Munitions (CCM) Review Conference, Dubrovnik, 10 September 2015.
- 10 Email from Ahmet Sallova, KMAC, 20 February 2014.
- 11 Email from Ahmet Sallova, KMAC, 18 March 2015.
- 12 Email from Ahmet Sallova, KMAC, 11 July 2019.
- 13 Email from Ahmet Sallova, KMAC, 1 August 2012.
- 14 Ibid.
- 15 Emails from Ahmet Sallova, KMAC, 16 June and 3 July 2017; and Ministry of Defence, "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.
- 16 Interviews with Terje Eldøen, NPA, Pristina, 5 April 2019; and Olivia Meader, Programme Manager, HALO Trust, Gjakova, 2–3 April 2019; and "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.
- 17 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 5–6.
- 18 Emails from Ahmet Sallova, KMAC, 30 April 2019 and 4 May 2018.
- 19 Email from Ahmet Sallova, KMAC, 30 April 2019.
- 20 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 14.
- 21 Email from Terje Eldøen, NPA, 25 April 2019.
- 22 Email from Ahmet Sallova, KMAC, 30 April 2019.
- 23 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 8.
- 24 Ibid.
- 25 Email from Ahmet Sallova, KMAC, 30 April 2019.
- 26 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 8–9.
- 27 Ibid., p. 8.
- 28 Email from Olivia Meader, HALO Trust, 1 May 2019; and "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 8.
- 29 Ibid.
- 30 Email from Olivia Meader, HALO Trust, 1 May 2019.
- 31 Email from Terje Eldøen, NPA, 25 April 2019.
- 32 Ibid.
- 33 Email from Ahmet Sallova, KMAC, 30 April 2019.
- 34 Emails from Olivia Meader, HALO Trust, 1 May 2019; and Terje Eldøen, NPA, 25 April 2019.
- 35 Emails from Olivia Meader, HALO Trust, 1 May 2019; Ahmet Sallova, KMAC, 30 April 2019; and Terje Eldøen, NPA, 25 April 2019.
- 36 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 13.
- 37 Ibid., p. 12.
- 38 Ibid., pp. 9–10.
- 39 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 9–10.
- 40 Ibid., p. 16.
- 41 Ibid., p. 15.
- 42 Emails from Ahmet Sallova, KMAC, 30 April 2019; and Tom Welling, HALO Trust, 7 May 2018.
- 43 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 1.
- 44 Email from Olivia Meader, HALO Trust, 1 May 2019.
- 45 Email from Terje Eldøen, NPA, 25 April 2019.
- 46 Email from Ahmet Sallova, KMAC, 30 April 2019.
- 47 Ibid.
- 48 Email from Terje Eldøen, NPA, 25 April 2019.
- 49 Email from Olivia Meader, HALO Trust, 1 May 2019.
- 50 Emails from Olivia Meader, HALO Trust, 1 May 2019; and Terje Eldøen, NPA, 25 April 2019.
- 51 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 4; and interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.
- 52 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.
- 53 Email from Olivia Meader, HALO Trust, 1 May 2019.
- 54 Email from Ahmet Sallova, KMAC, 4 May 2018.
- 55 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.
- 56 Email from Terje Eldøen, NPA, 25 April 2019.
- 57 Interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.
- 58 Email from Mike Newton, Deputy Head of Region (Europe), HALO Trust, 28 July 2019.
- 59 Email from Ahmet Sallova, KMAC, 11 July 2019.
- 60 Ibid.; and email from Mike Newton, HALO Trust, 28 July 2019.
- 61 Email from Ahmet Sallova, KMAC, 4 May 2018.
- 62 Emails from Ahmet Sallova, KMAC, 11 July 2019. Slightly different figures were reported by HALO Trust. Email from Mike Newton, HALO Trust, 28 July 2019.
- 63 Email from Ahmet Sallova, KMAC, 4 May 2018.
- 64 Email from Ahmet Sallova, KMAC, 11 July 2019. According to KMAC, of the nine areas reported cleared by The HALO Trust, seven were completed but two remained suspended at the end of the 2018 demining season due to weather conditions. Likewise, of the areas addressed by the KSF, clearance of one area was completed while the other was suspended due to weather conditions at the end of the season, as well as the one area in which NPA was operational in 2018. Slightly different figures were reported by NPA for MDD clearance.
- 65 Email from Ahmet Sallova, KMAC, 11 July 2019.
- 66 Interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.
- 67 Email from Terje Eldøen, NPA, 2 August 2019.
- 68 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 6.
- 69 Ibid.
- 70 Emails from Ahmet Sallova, KMAC, 4 May 2018; Tom Welling, HALO Trust, 7 May 2018; and Terje Eldøen, NPA, 7 May 2018.
- 71 Email from Olivia Meader, HALO Trust, 1 May 2019.

RECOMMENDATIONS FOR ACTION

- Nagorno-Karabakh should make a commitment to respect the Anti-Personnel Mine Ban Convention (APMBC) and set a deadline for the clearance all anti-personnel mines.
- Despite not being a state party to the APMBC, Nagorno-Karabakh has obligations under international human rights law to clear anti-personnel mines in areas under its jurisdiction or control as soon as possible.
- The Nagorno-Karabakh authorities should commit to never use anti-personnel mines and provide resources for mine survey and clearance.
- Information management should be improved as inaccuracies in reported anti-personnel mine contamination, survey, and clearance data continue to occur.

UNDERSTANDING OF AP MINE CONTAMINATION

At the end of 2018, 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 over 3.78km² across 70 mined areas (see Table 1).¹ Since 2017, the number of confirmed hazardous area (CHAs) has decreased (from 73 to 70), while total mined area has increased (from 3.56km² to 3.78km²).² The difference in total mine contamination between the end of 2017 and end of 2018 cannot be explained or reconciled by the total area released during the intervening 12 months. Anti-personnel and anti-vehicle mine contamination covered a total of 82 areas over 5.1km² as at the end of 2018.³

Table 1: Anti-personnel mined area by province (at end 2018)⁴

Region	CHAs	Area (km ²)
Askeran	7	0.33
Hadrut	20	1.90
Lachin	19	0.67
Martakert	18	0.54
Martuni	2	0.17
Shaumyan	4	0.17
Totals	70	3.78

The HALO Trust is currently conducting survey with a view to more accurately quantifying the mined area in Nagorno-Karabakh, covering areas that had not been surveyed in the past. In 2019, The HALO Trust doubled its survey capacity in order to try and complete the survey by the end of the year. In 2018, three CHAs were added to the database with an estimated area of 62,567m².⁵

All regions of Nagorno-Karabakh have been affected by mines and unexploded submunitions as a result of the 1988–94 conflict between Armenia and Azerbaijan and subsequent fighting. 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.⁶ The mines were of Soviet design and manufacture, and due to the nature of the conflict certain areas were mined several times.⁷ In 2013, new anti-personnel mines were laid along the Armenian-Azerbaijani "line of contact" east and north of the disputed territory. At the time the Minister for Foreign Affairs of Nagorno-Karabakh stated 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."⁸

Nagorno-Karabakh is also contaminated with submunitions, estimated at 71.62km² at the end of 2018, and other explosive remnants of war (ERW) (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Nagorno-Karabakh for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

In 2000, The HALO Trust established the Nagorno-Karabakh Mine Action Centre (NKMAC), which is now moribund. In theory, its role was to consolidate all mine action-related information and to respond to requests from the government ministries, non-governmental organisations (NGOs), and local communities. In reality, there is no viable or tangible mine action centre in Nagorno-Karabakh.⁹

A mine action coordination committee was responsible for liaising between the local authorities and The HALO Trust.¹⁰

Regular coordination committee meetings were held between the local authorities, The HALO Trust, and the International Committee of the Red Cross (ICRC) until 2018 when the head of the committee was moved to a new post. The position remains vacant, with HALO Trust continuing to lobby for a suitable candidate to fill the role.¹¹

The Nagorno-Karabakh authorities do not provide The HALO Trust with any funding to clear mined areas.¹²

GENDER

The HALO Trust has an organisational gender and diversity policy which is incorporated into HALO's Nagorno-Karabakh programme. In addition to fully briefing new recruits, HALO also conducts regular refresher training on all its policies, including its gender and diversity policy, for both national and international staff.¹³

All groups affected by anti-personnel mines, including women and children are said to be consulted during survey and community liaison activities. However, the non-technical survey teams have been predominantly male with the first female team member only recruited in 2019. The HALO trust aims to recruit more female non-technical survey team members.¹⁴

Relevant mine action data is disaggregated by sex and age.¹⁵ Gender is not taken into account in the prioritisation, planning, and tasking of survey and clearance activities.¹⁶

The HALO Trust is one of the largest civilian employers in Nagorno-Karabakh, with 270 Karabakhi Armenian staff.¹⁷ And while there is equal access to employment for qualified women and men in survey and clearance, the number of women employed in operational roles is still quite low. In 2018, out of the total of 210 deminers only 15 were women of whom 2 were team leaders. In addition, three women were employed in managerial level/supervisory positions, and six of the support staff were women.¹⁸

INFORMATION MANAGEMENT AND REPORTING

There is no national information management system in place. However, The HALO Trust operates its own country mine action database and is working to better tailor the database to its operations. For example, new fields were added to the database in 2018 to allow for further disaggregation of data. HALO Nagorno-Karabakh also continues to be supported by its United Kingdom-based specialist data management staff.¹⁹

The Nagorno-Karabakh Army Liaison Officer shares information with HALO Trust on items found, incidents, CHAs, and clearance on a regular basis. HALO is not authorised to share this data with others.²⁰

PLANNING AND TASKING

There is no national mine action strategy currently in place in Nagorno-Karabakh.²¹

The HALO Trust prioritised clearance of minefields in Nagorno-Karabakh that have confirmed accidents and which will be used immediately following clearance. In 2018, most mined areas remaining were only accessible during

the dry summer months of May to October, and HALO Trust expanded its clearance capacity over this period. Clearance outside of the Traditional Oblast was focused on high- and medium-priority tasks in the Lachin corridor, with private funding; with clearance of the remaining minefields within the Traditional Oblast boundary conducted using USAID funding. This approach continued into 2019.²²

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

No local mine action standards exist in Nagorno-Karabakh. As at April 2019, however, the Nagorno-Karabakh police were planning to lobby the government to develop standards and The HALO Trust was planning to work closely with the authorities to support the process.²³

The HALO Trust follows its own standing operating procedures (SoPs) for demining and battle area clearance.²⁴ As at April 2019, HALO's survey and anti-personnel mine clearance SoPs were under review, with a view to incorporating best practice from other HALO country programmes.²⁵

OPERATORS

Since 2000, The HALO Trust has been the main organisation conducting land release in Nagorno-Karabakh. The Nagorno-Karabakh Rescue Service conducts explosive ordnance disposal (EOD) spot tasks and one Nagorno-Karabakh army unit conducts limited demining. Since the April 2016 conflict, The HALO Trust has collaborated with the Nagorno-Karabakh Rescue Services when gathering information about mines and other ERW, and part of its quality assurance (QA) process involves participation in the official handover ceremony with community representatives.²⁶

The HALO Trust does not field separate teams dedicated solely to either mine or ERW clearance. Operational staff are trained and experienced in working in both tasks.²⁷ HALO is currently working to increase its non-technical survey capacity in support of its mine clearance operations, while decreasing its technical survey capacity. HALO recruited 30 new deminers in 2018. It had hoped to recruit more but a demining accident in March 2018 (see below) is thought to have deterred many potential applicants.²⁸

OPERATIONAL TOOLS

HALO conducts both manual and mechanical clearance in Nagorno-Karabakh. Machines are used to clear roads with a plastic anti-vehicle mine threat and in areas with high levels of metal contamination which makes manual clearance extremely inefficient.²⁹

DEMINER SAFETY

In March 2018, a HALO vehicle with a technical survey team on board detonated an anti-vehicle mine on their way to an anti-personnel mine clearance task, killing three staff and injuring two others.

The accident was internally investigated by The HALO Trust, which also commissioned an external expert investigation. A further investigation by the Nagorno-Karabakh police

was ongoing as at 1 May 2019. As a result of the internal investigation prodding was halted as a safety precaution until the exact causes of the accident were understood. Mechanical clearance and clearance with detectors have since superseded its use. Copies of HALO Trust's internal and external reports will be available once the police investigation is finalised.³⁰

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2018

A total of almost 0.26km² of mined area was released in 2018, of which 0.25km² was cleared, and 3,148m² was reduced through technical survey.

In addition, three CHAs were added to the database with an estimated area of 62,567m².³¹

SURVEY IN 2018

No anti-personnel mined area was cancelled through non-technical survey in 2018 but a total of 3.148m² was reduced through technical survey (see Table 2).³² This is a massive reduction from the 0.29km² of mined area cancelled through non-technical survey and 0.27km² reduced through technical survey in 2017.³³

CLEARANCE IN 2018

In 2018, a total of 253,804m² was cleared across 26 areas with 96 anti-personnel mines and 40 items of unexploded ordnance (UXO) destroyed (see Table 3).³⁴ This is a drop from the 292,176m² cleared in 2017 and 188 anti-personnel mines found and destroyed.³⁵ In 2017, The HALO Trust found one mine for every 1,974m² of land cleared while in 2018 it was one mine for every 2,644m² cleared.

Table 2: Reduction of mined area through technical survey in 2018³⁶

Province	Area reduced (m ²)
Askeran	1,429
Hadrut	376
Lachin	1,136
Martuni	207
Total	3,148

Table 3: Mine clearance in 2018³⁷

Province	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Askeran	2	8,849	3	0	4
Hadrut	9	116,306	23	0	13
Lachin	6	48,599	27	0	14
Martakert	7	69,398	43	0	8
Martuni	2	10,652	0	0	1
Totals	26	253,804	96	0	40

In addition, the HALO Trust destroyed 27 anti-personnel mines during 13 EOD spot tasks in 2018.³⁸

Progress in mine clearance has fluctuated over the last five years, as shown in Table 4, but with clearance output averaging below 0.5km² annually. As at 2014, 95% of mine contamination in Soviet-era Nagorno-Karabakh had been addressed, and this figure had risen to 97% by April 2017.³⁹ Following a commitment from the United States to fund the completion of clearance of all known remaining minefields within Soviet-era boundaries, the HALO Trust had previously reported that this could be achieved by the end of 2019.⁴⁰ However, in April 2019, the HALO Trust stated that it does not anticipate clearing the minefields within the Soviet-era boundaries by the end of 2019 or in the foreseeable future. The HALO Trust had based the original completion date on a rate of clearance it is no longer able to achieve due to difficulties in access, challenging terrain, high levels of contamination which in some cases can only be cleared using full excavation, and difficulties with staff recruitment and retention as a result of the March 2018 accident.⁴¹

In addition, there is significant mine contamination outside of the Soviet-era boundaries of Nagorno-Karabakh but the HALO Trust finds it difficult to secure funding for these areas. Since 2015, clearance has been conducted through private sources of funding.⁴²

Table 4: Five-year summary of mine clearance (2014–18)

Year	Area cleared (km ²)*
2018	0.25
2017	0.29
2016	0.12
2015	0.21
2014	0.54
Total	1.41

* Figures for clearance in 2014–17 include both anti-vehicle and anti-personnel mines.

1 Email from Asqanaz Hambardzumyan, Program Manager, HALO Trust, 10 April 2019.

2 Email from Amasia Zargarian, Programme Support Officer, HALO Trust, 21 September 2018.

3 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

4 Ibid. The difference between reported contamination in 2017 and 2018 (+0.22km²) is more than the amount of land that was confirmed as contaminated also taking into account the land that was released (0.06 - 0.26km = -0.2km²).

5 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

6 United States Agency for International Development (USAID), "De-mining Needs Assessment in Nagorno-Karabakh", September 2013, p. 2.

7 HALO Trust, "Our role in Nagorno-Karabakh: History", accessed 20 July 2019 at: bit.ly/2Zyu1KZ.

8 ICBL, "ICBL gravely concerned about use of anti-personnel mines by Nagorno-Karabakh", Geneva, 20 September 2013, at: bit.ly/2YHgCmr.

9 Emails from Andrew Moore, HALO Trust, 28 June 2013; and Asqanaz Hambardzumyan, HALO Trust, 26 April 2019.

10 Email from Andrew Moore, HALO Trust, 28 June 2013.

11 Emails from Andrew Moore, HALO Trust, 26 May 2016; and Asqanaz Hambardzumyan, HALO Trust, 26 April 2019.

12 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

13 Ibid.

14 Ibid.

15 Ibid.

16 Ibid.

17 The HALO Trust, "Our role in Nagorno-Karabakh", accessed 10 April 2019.

18 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

19 Ibid.

20 Ibid.

21 Ibid.

22 Ibid.

23 Email from Asqanaz Hambardzumyan, HALO Trust, 26 April 2019.

24 Email from Andrew Moore, HALO Trust, 26 May 2016.

25 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

26 Email from Amasia Zargarian, HALO Trust, 4 May 2018.

27 Email from Andrew Moore, HALO Trust, 22 May 2015.

28 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

29 Ibid.

30 Emails from Asqanaz Hambardzumyan, HALO Trust, 10 and 26 April and 1 June 2019.

31 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

32 Ibid.

33 Email from Amasia Zargarian, HALO Trust, 4 May 2018.

34 Ibid.

35 Email from Amasia Zargarian, HALO Trust, 4 May 2018.

36 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

37 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

38 Ibid.

39 Email from Ash Boddy, HALO Trust, 3 April 2017.

40 Email from Amasia Zargarian, HALO Trust, 31 August 2018.

41 Email from Asqanaz Hambardzumyan, HALO Trust, 10 April 2019.

42 Ibid.

RECOMMENDATIONS FOR ACTION

- The Saharawi Arab Democratic Republic (SADR) should reaffirm its written commitment to respect and implement the Anti-Personnel Mine Ban Convention (APMBC), including clearance of all anti-personnel mines east of the Berm, consonant with its human rights obligations.
- Facing significant challenges due to a decrease in operational capacity and funding for 2019, Western Sahara's mine action strategy targets for completing mine survey and clearance should be reassessed, and a revised mine action strategy developed.
- A resource mobilisation plan should be developed with the aim of attracting international donor support.
- Greater support should be provided to the Saharawi Mine Action Coordination Office (SMACO) to enable it to continue to coordinate mine action in Western Sahara and ensure that capacity development efforts are not lost.
- Mine action in Western Sahara must not become forgotten or overlooked by the international mine action community. Support must still be given to address remaining mine, cluster munition, and other explosive remnants of war (ERW) contamination.

UNDERSTANDING OF AP MINE CONTAMINATION

The exact extent of mine contamination across Western Sahara is not known, although the areas along the Berm¹ are thought to contain some of the densest mine contamination in the world.² The contamination is a result of fighting in previous decades between the Royal Moroccan Army (RMA) and the Popular Front for the Liberation of Saguia el Hamra and Rio de Oro (Polisario Front) forces.

According to the UN Mine Action Service (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; cluster munition remnants (CMR) are also a major hazard.³ As at end 2018, no areas suspected or confirmed to contain solely 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.⁴ 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.⁵

At the end of 2018, land in Western Sahara to the east of the Berm contained a total of 26 areas confirmed and suspected to contain mixed anti-personnel and anti-vehicle mine contamination covering a total of nearly 216.3km², as set out in Table 1.⁶ This is an overall decrease of one area with a size of approximately 1.85km² from that remaining at the end of 2017.⁷

In September 2018, UNMAS reported that following non-technical survey efforts, 10 of the then 27 mined areas, were reported to remain covering an estimated total of almost 120km², and are located within the 5km-wide buffer strip and are inaccessible for clearance.⁸ Clearance of the buffer strip of mines and ERW is not foreseen in United Nations Mission for the Referendum in Western Sahara (MINURSO) mission agreements, which, according to the UN, considerably limits the ability of MINURSO military observers to patrol and verify developments.⁹

Table 1: Mined area east of the Berm (at end 2018)¹⁰

Type of contamination	CHAs	Area (km ²)	SHAs	Area (km ²)	Total CHAs and SHAs	Total area (km ²)
AP mines	0	0	0	0	0	0
AV mines	2	0.11	0	0	2	0.11
AP/AV mines	14	90.19	10	125.96	24	216.15
Totals	16	90.30	10	125.96	26	216.26

AP = Anti-personnel AV = Anti-vehicle CHA = Confirmed hazardous area SHA = Suspected hazardous area

Both the north and south of Western Sahara are known or suspected to contain anti-personnel mines, with 24 areas confirmed or suspected areas with a total size of almost 216.3km² remaining to be addressed at the end of 2018, as set out in Table 2.¹¹ 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 169.5km².¹²

According to UNMAS, a total of six additional mined areas with a size of just over 367,200m² were added to the database in 2018.¹³

Table 2: Mined area containing anti-personnel mines by province east of the Berm (at end 2018)¹⁴

Province	CHAs	Area (km ²)	SHAs	Area (km ²)	Total CHAs and SHAs	Total area (km ²)
North Region	4	0.50	3	4.10	7	4.60
South Region	10	89.79	7	121.86	17	211.65
Totals	14	90.29	10	125.96	24	216.25

A survey in 2006–08 by an international non-governmental organisation (NGO), Landmine Action, later renamed Action on Armed Violence (AOAV), identified 37 mined areas east of the Berm, nearly half of which were in Bir Lahlou, followed by Tifariti, Mehaires, and Agwanit.¹⁵

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 2019, no survey had been carried out there.¹⁶

UNMAS reported in 2018 that there were areas of known contamination in the buffer strip that remained inaccessible for clearance due to military agreements.¹⁷ 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.¹⁸

OTHER EXPLOSIVE REMNANTS OF WAR AND CLUSTER MUNITION REMNANTS

Western Sahara also has a significant problem from CMR and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants 2019* report on Western Sahara for further information).¹⁹

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

UNMAS Western Sahara, formerly the MINURSO Mine Action Coordination Centre (MACC), manages and supports mine action activities, of which, survey and clearance activities were implemented by commercial contractor SafeLane Global (formerly Dynasafe MineTech Limited, DML) and humanitarian NGO Norwegian People's Aid (NPA) in 2018. On 30 April 2019, MINURSO's mandate was extended for an additional six months until 30 October 2019 under Security Council Resolution 2468 (2019). UNMAS Western Sahara serves as the UN focal point for mine action activities within the MINURSO area of operations. Its contracted teams work in areas east of the Berm only.

The Royal Moroccan Army operates its own demining operations in areas west of the Berm.

In 2013–14, the Polisario Front, with UN support, established the SMACO, which is responsible for coordinating mine action activities in Western Sahara east of the Berm, excluding the buffer strip.²⁰

In 2018, UNMAS continued to implement an ongoing capacity development project with SMACO, with funding from the German Federal Foreign Office, which concluded in October after 28 months.²¹ 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.²² UNMAS stated that efforts were also aimed at regularly raising the profile of SMACO within the local and wider international communities.²³

NPA also reported continuing its efforts in partnership with SMACO to develop the local staff capacity through on-the-job trainings in the support office as well as operationally.²⁴ It stated that SMACO's ability to coordinate operations improved significantly in 2018, but raised serious concerns about the cessation of funding from the German government for capacity development activities, noting that SMACO's running costs and ability to pay staff salaries were at risk.²⁵ UNMAS informed Mine Action Review, however, that it had allocated non-earmarked funding to cover SMACO's operating costs for 2019, and to include the development of a communications and resource mobilisation strategy during that year.²⁶

GENDER

UNMAS has reported that gender policies are implemented in accordance with UNMAS, the UN Office for Project Services (UNOPS), and MINURSO guidelines, as well as with direction from the Polisario.²⁷ NPA reported 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. 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, despite challenges presented by conducting survey activities targeting Bedouin populations.²⁸

In 2018, NPA reported that, during recruitment, the programme actively selected female candidates for interviews wherever possible. NPA has encouraged local journalists to highlight the work of female deminers and their ability to work equally well in a highly challenging environment, with the aim of overcoming widely held perceptions in local

communities that demining is a job only for men. It stated that six women were employed in operational roles in 2018, or just over 18% of the total operational staff. Two women held managerial roles, including Head of Finance and Head of Human Resources, making up 40% of NPA's management staff in Western Sahara.²⁹

INFORMATION MANAGEMENT AND REPORTING

According to UNMAS, the Information Management System for Mine Action (IMSMA) database for Western Sahara improved as a result of an ongoing data audit initiated at the end of 2015.³⁰ Routine database clean-up was conducted throughout 2018.³¹ The Geneva International Centre for Humanitarian Demining (GICHD) has also provided ongoing support to correct database errors, and an upgrade to the latest database software version, IMSMA Core, was scheduled to take place in August 2019.³²

PLANNING AND TASKING

In July 2019, UNMAS informed Mine Action Review that a new mine action strategy specific to Western Sahara was under development and would be completed in 2019, in line with the newly published global UN Mine Action Strategy 2019–2023.³³

The previous mine action strategy for Western Sahara foresaw the completion of non-technical survey in 2017 or 2018 and a 50% reduction in the total number of recorded SHAs and CHAs remaining on the territory of Western Sahara by the end of 2022.³⁴ In May 2019, UNMAS informed Mine Action Review that these targets were not met due to “changing priorities” for mine action. It reported that the new end state for completing the clearance of all known

hazards to the east of the Berm would be the end of 2023 in the forthcoming revised strategy, given enough funding and enabling political and security conditions.³⁵

UNMAS and SMACO identify priorities for clearance of both minefields and cluster munition strikes to the east of the Berm in conjunction with MINURSO. Priorities are identified based on humanitarian needs for the safety and freedom of movement of local populations, while UNMAS ensures that observation patrol routes are safe for military observers and the transport of logistical supplies.³⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Local mine action standards were in place and implemented in 2018.³⁷ The standards were developed and finalised in 2016 by UNMAS, together with SMACO, and in coordination with mine action partners. NPA has reported that operators duly updated their standing operating procedures (SoPs), and that the local mine action standards set realistic benchmarks for efficient operations.³⁸ A first annual review of the standards was completed in November 2018 with a review board consisting of representatives from UNMAS, SMACO, and all implementing partners. No significant changes were made, and UNMAS reported in June 2019 that translation of the standards into Arabic had been completed and shared with SMACO.³⁹

An external quality management system was in place in 2018 and implemented by UNMAS and SMACO to the east of the Berm.⁴⁰ NPA confirmed a considerable increase in quality assurance (QA) activities in 2018, which it said was due to the relocation of UNMAS to Tindouf, Algeria, with easier access to territory under Polisario control. NPA confirmed that SMACO and UNMAS QA officers conducted many QA site visits in 2018, conducted accreditation for new NPA staff, monitored progress on tasks, and conducted quality control of completed areas.⁴¹

OPERATORS

SafeLane Global (formerly DML) and NPA were the implementing operators conducting survey and clearance in Western Sahara in 2018. UNMAS reported no change in operational capacity during the year. The overall mine action capacity in Western Sahara in 2018 consisted of nine multi-task teams (MTTs) and one community liaison/survey team, with a total of 116 operational staff in the field. This included six DML teams and one community liaison/survey team. The total number of MTTs was reduced by one in July 2018.⁴²

In 2018, NPA continued to deploy one team to clear mined areas and two manual teams to address CMR in Bir Lahlou, along with five risk education teams operating in the Saharawi refugee camps in southern Algeria. The risk education project, funded by Germany and supervised by UNMAS/SMACO, ended in April 2018.⁴³ NPA made the “difficult decision” to close down its programme, effective on 1 January 2019, after releasing the last known contaminated areas in Bir Lehlou province in August 2018.⁴⁴

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2018

A total of nearly 3.71km² of mixed mined area was released in 2018: more than 2.38km² through clearance and 1.32km² through survey.⁴⁵

SURVEY IN 2018

According to UNMAS, of the 1.32km² released through survey in 2018, more than 0.87km² was cancelled through non-technical survey (see Table 3) and 0.45km² reduced through technical survey.⁴⁶

Table 3: Cancellation of mined area through non-technical survey in 2018⁴⁷

Region	Operator	Area cancelled (m ²)
North	SLG	182,868
North	NPA	346,359
South	SLG	342,198
Total		871,425

Table 4: Reduction of mined area through technical survey in 2018⁴⁸

Region	Operator	Area reduced (m ²)
North	NPA	265,492
North	SLG	185,264
Total		450,756

CLEARANCE IN 2018

In 2018, according to UNMAS, a total of just over 2.38km² of areas thought to contain mixed anti-personnel and anti-vehicle mine contamination was cleared, with the destruction of 37 anti-personnel mines, 35 anti-vehicle mines, and three items of UXO (see Table 5).⁴⁹ This was a substantial increase from 2017, when close to 0.28km² of area thought to contain anti-personnel mines contamination was cleared; however no anti-personnel mines were found. Thirty-two anti-vehicle mines and ten items of UXO were destroyed.⁵⁰

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".⁵¹

In July 2019, UNMAS informed Mine Action Review that a new mine action strategy specific to Western Sahara was under development and would be completed by the end of year, in line with the newly published global UN Mine Action Strategy 2019–2023.⁵²

The previous mine action strategy for Western Sahara foresaw the completion of non-technical survey before the end of 2018 and a 50% reduction in the total number of recorded SHAs and CHAs remaining in Western Sahara by the end of 2022.⁵³ In May 2019, UNMAS reported that the new end state for clearance of all known mine and ERW contamination to the east of the Berm would be set at the end of 2023.⁵⁴

This is almost two years earlier than UNMAS' previous estimate, which had sought to release all high and medium hazardous areas in Western Sahara east of the Berm by 2025.⁵⁵ UNMAS has reported that delays to clearing mined areas continued as a result of restrictions on accessing certain areas of the buffer strip established by various MINURSO mission agreements.⁵⁶ NPA has cited other challenges to operations, including working in a remote desert environment allied to serious difficulties with the procurement of certain equipment and materials.⁵⁷ Temperatures of up to 60 degrees Celsius, strong winds, sandstorms, and heavy rain during the wet season can also cause mine action activities to be suspended.⁵⁸

In 2019, with the loss of NPA as a key mine action implementer, along with the cessation of both German and Norwegian funding for mine clearance activities, the future of Western Sahara's mine action programme remained uncertain. Additional resources and capacity, along with support to SMACO, needed to be secured urgently. In July 2019, UNMAS informed Mine Action Review that mine action capacity had reduced by more than 50% and there was no indication of funding available to maintain capacity going forward.⁵⁹

Table 5: Mine clearance in 2018⁶⁰

Region	Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
North	NPA	2	1,040,387	37	5	2
North	SLG	3	508,228	0	8	0
South	DML	2	834,911	0	22	1
Totals		7	2,383,526	37	35	3

AP = Anti-personnel AV = Anti-vehicle

- 1 A 2,700km-long defensive wall, the Berm was built during the conflict, dividing control of the territory between Morocco on the west and the Polisario Front on the east. The Berm is 12 times the length of the Berlin Wall and second in length only to the Great Wall of China.
- 2 See UNMAS, "About UNMAS in Western Sahara", updated May 2015, at: bit.ly/2MEmsjN; and Action on Armed Violence (AOAV), "Making life safer for the people of Western Sahara", London, August 2011.
- 3 Email from Graeme Abernethy, UNMAS, 1 March 2018.
- 4 Emails from Robert Thompson, Chief of Operations, UNMAS, 31 July 2019; and Virginie Auger, UNMAS, 29 March 2017.
- 5 Email from Graeme Abernethy, UNMAS, 1 March 2018.
- 6 Email from Robert Thompson, UNMAS, 31 July 2019.
- 7 Email from Graeme Abernethy, UNMAS, 1 March 2018.
- 8 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: bit.ly/2Yxg1nv.
- 9 "Report of the Secretary-General on the situation concerning Western Sahara", UN doc. S/2017/307, 10 April 2017, p. 8.
- 10 Email from Robert Thompson, UNMAS, 31 July 2019.
- 11 Ibid.
- 12 "Report of the Secretary-General on the situation concerning Western Sahara", UN doc. S/2017/307, p. 8.
- 13 Email from Robert Thompson, UNMAS, 31 July 2019.
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ABBREVIATIONS AND ACRONYMS

AIM	Abandoned Improvised Mines (Afghanistan)
AP	Anti-personnel
AV	Anti-vehicle
BiH	Bosnia and Herzegovina
CHA	Confirmed hazardous area
DDG	Danish Demining Group
ERW	Explosive remnants of war
FSD	Swiss Foundation for Mine Action
GICHD	Geneva International Centre for Humanitarian Demining
GIS	Geographic information system
HI	Humanity and Inclusion
IMAS	International Mine Action Standards
IP	Implementing Partner
MAG	Mines Advisory Group
MAPA	Mine Action Programme of Afghanistan
MDD	Mine detection dog
NMAS	National Mine Action Standards
NPA	Norwegian People's Aid
QA	Quality assurance
QC	Quality control
SHA	Suspected hazardous area
SoP	Standing (or Standard) Operating Procedure
UNMAS	United Nations Mine Action Service
UXO	Unexploded ordnance

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