Acknowledgements
This report was researched and written by Nick Cumming-Bruce, Katherine Harrison, Lucy Pinches, and Stuart Casey-Maslen. Mine Action Review is project-managed by Lucy Pinches. The report was edited by Stuart Casey-Maslen and laid out by Optima Design in the United Kingdom. The HALO Trust, Mines Advisory Group (MAG), and Norwegian People’s Aid (NPA) are on the project’s Advisory Board. Mine Action Review would like to thank the Royal Norwegian Ministry of Foreign Affairs for funding its work as well as all those who contributed data and information.

Disclaimer
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Other information
The publication is available for download at www.mineactionreview.org

Mine Action Review conducted the mine action research in 2017, including on anti-personnel landmine survey and clearance, and shared all its country reports (excluding the sections on programme performance, performance commentary, and recommendations for action) with the International Campaign to Ban Landmines (ICBL) and Cluster Munition Coalition (CMC)’s Landmine Monitor.

Please send any comments to feedback@mineactionreview.org

Global contamination from anti-personnel mines
It is now 20 years since the adoption of the Anti-Personnel Mine Ban Convention, a landmark in conventional disarmament. The achievements of the Convention, especially the actions undertaken in furtherance of its Article 5, are astonishing. Collectively, since the 18th of September 1997, states parties and others have cleared more than 2,500km² of mined area and destroyed well over 4.3 million emplaced anti-personnel mines.

Countless lives have been saved as a direct consequence of mine action, and it is hard to exaggerate demining’s broader contribution to development. Precious few, if any, instruments of international law can lay claim to such a far-reaching impact. In the last 12 months Algeria has become the 28th state party to meet its Article 5 clearance obligations: we congratulate them on their achievement, which was a clear demonstration of national ownership and funding.

The global clearance effort could not have been achieved without the mobilisation of much of the international community. It was civil society that first called for effective international action to tackle the epidemic of mine injuries in the early 1990s. Many states responded positively to the challenge by negotiating and joining the Convention and steadily supporting its implementation. With their help, in addition to valuable financial contributions from some states not party to the Convention, we are proud to have played our part in this success story of human endeavour. But the success stories are also individual ones. Above all, we pay tribute to the dedication and skill of women and men who have worked to clear mines in 90 affected countries. Some have paid the ultimate price for their courage.

But while we celebrate progress and honour bravery, we are ever mindful that in many instances even greater headway could and should have been made. In the late 1990s, and even [albeit to a lesser extent] thereafter, millions of dollars given over to mine action have not been used effectively. Poor surveys have inflated the true problem in many countries rather than identifying and localising it. Far too many areas that were free of contamination have been painstakingly cleared, while lives and limbs were being risked and even lost nearby. Through constructive dialogue, challenging ourselves and each other, improvements and progress have been, and continue to be made. Evidence-based survey is at the heart of efficient land release. Where needed, re-survey should be embraced, supported by good information management and strong national ownership.

As a sector, the mine action community has learnt from its mistakes and in a changing environment it must continue to do so. For today, in addition to the work clearing minefields laid years ago, we are increasingly confronted with the emplacement of new mines, particularly in Iraq, Myanmar, Syria, and Ukraine, including many locally produced mines which are often unhelpfully referred to as IEDs. What is more, ongoing conflicts are preventing, or at least impeding, safe humanitarian access to some mined areas.

What we must not do as a global mine action community is to misrepresent the nature and scope of the new contamination, or to politicise it. Locally produced, victim-activated munitions are landmines wherever they are found, whether that it is Afghanistan, Colombia, Iraq, Sri Lanka, Syria, or elsewhere. It does not matter how these weapons were produced or employed, nor by whom they were laid. So whenever a munition falls within the definition in the Anti-Personnel Mine Ban Convention, it is an anti-personnel mine that must be cleared as soon as possible and reported on in accordance with the Convention’s requirements.

Our work as a mine action community must always be both rigorous and systematic, fully respecting the tenets of international law. The International Mine Action Standards (IMAS) Review Board should accelerate its work to ensure that the IMAS clearly encompass locally produced munitions, and also reflect the new, and often complex, realities of humanitarian demining today. Donors should do their part and insist that states and operators who receive their funding respect international law and consistently report locally produced, victim-activated munitions, as landmines, and not solely under the catch-all term “improvised explosive devices”. We must work together to reduce, not exacerbate, confusion.

We would like to thank the Mine Action Review for its work and especially to thank national authorities for their commitment to transparency that has enabled the Review team to produce this report. We believe it can continue to be an effective tool to focus our collective efforts and partnerships. So let us, together, commit to redoubling our efforts. As this year’s report reveals, we are fast approaching the moment of truth. Mine Action Review estimates that less than 2,000km² of land containing anti-personnel mines remains across the world. A landmine-free world by 2025, as called for in the Maputo +15 Declaration, will only come within our grasp if good practice in land release is applied in every contaminated country.
We must work hard to maintain the profile of mine action in both humanitarian and developmental settings, putting mine survey and clearance at the heart of peace agreements and ceasefires, and supporting the development of effective national coordination bodies. Of course, the funding and support of the international donor community and political will from all states also continue to be critical. For if people are left to confront the danger of anti-personnel mines on their own this is because the international community has chosen to do so. There is nothing inevitable about a landmine explosion.

As humanitarian demining organisations we pledge that we will continue to clear mines wherever we can: in safety, to the highest standards, and with the greatest speed. Twenty years after the adoption of Anti-Personnel Mine Ban Convention, we remain, as the Convention declares in its very first words, Determined to put an end to the suffering and casualties caused by anti-personnel mines.

STEINAR ESSEN
Head
Department for Humanitarian Disarmament
Norwegian People’s Aid

JANE COCKING
Chief Executive
Mines Advisory Group

JAMES COWAN CBE DSO
Chief Executive Officer
The HALO Trust
A total of 59 states and 3 territories are believed to be still contaminated with anti-personnel mines. Mine Action Review estimates that less than 2,000km² of land is actually mined and must be cleared. Algeria completed mine clearance in December 2016, the most heavily mined state to do so since the entry into force of the Anti-Personnel Mine Ban Convention (APMBC), and Mozambique successfully cleared legacy landmine contamination that was discovered in 2015 following an earlier declaration of full compliance with its Article 5 obligations. In addition, Mauritania was on course to complete clearance in early 2018. But new use of locally produced anti-personnel mines, especially those made and laid by Islamic State in Iraq and Syria, is adding extensive landmine contamination for the first time in more than a decade.

Recorded global mine clearance in 2016 remained roughly stable compared with the previous year at almost 172km² (although these annual figures were nearly 15% lower than clearance achieved in 2014), with the destruction of more than 232,500 anti-personnel mines and over 21,000 anti-vehicle mines. Nonetheless, output for 2016 does not include very significant clearance by China on its border with Vietnam, possibly as high as 20km², as Mine Action Review has been unable to confirm the details. It had been expected that Ecuador would meet its end-2017 Article 5 deadline for clearance. Not only did it fail to do so, it requested a five-year extension that calls into question its commitment to comply with its obligation under international law to complete clearance “as soon as possible”. Other states that submitted requests for deadline extensions in 2017 were Angola, Iraq, Thailand, and Zimbabwe. Zimbabwe was one of the relatively few states that improved its mine action programme performance significantly in 2016.

Among other affected states parties, only Chile, the Democratic Republic of Congo, and Mauritania were expected to comply with their respective Article 5 deadlines for survey and clearance without the need to seek further extensions. In 2016, Niger and Peru sought and were granted overly long additional periods of extension. They should be in a position to complete clearance far in advance of these new deadlines. Ukraine has still to seek a deadline extension as a result of new use of anti-personnel mines since conflict erupted in 2014 and remains in serious violation of the Convention. Cameroon and Nigeria, whose Article 5 deadlines expired several years ago, are affected by locally produced mines emplaced by Boko Haram insurgents in the past two years. Neither state has submitted its respective annual transparency report declaring this new contamination as Article 7 of the APMBC requires, much less requested a new Article 5 deadline. Following several years of non-compliance, Jordan similarly needs to seek a new legal deadline at the Sixteenth Meeting of States Parties in Vienna to ensure it returns to a state of compliance with Article 5.

The 2025 target for clearance set by the APMBC’s Third Review Conference in 2014 is proving challenging, even for several states parties that are not engaged in armed conflict. In 2018, Bosnia and Herzegovina, Croatia, Cyprus, Serbia, Sudan, and the United Kingdom are all expected to request a further extension to their respective Article 5 deadlines. Overall, improvements in mine action programmes are still patchy, with inadequate land release methodologies still plaguing too many programmes and too many operators. Many states parties have still to meet their legal obligations under Article 5 of the APMBC; a small number are even in violation. But the situation is assuredly not beyond remedy: if we work in partnership, apply best practice in land release, and are backed by sustained national and international funding through to completion, a landmine-free 2025 is still possible.
GLOBAL CONTAMINATION

As at September 2017, 35 states parties to the APMBC were confirmed or strongly suspected to contain anti-personnel mines, along with 24 states not party and 3 other areas [see Table 1]. As discussed below, this is a reduction of two states over the past 12 months following the completion of mine clearance by Algeria in December 2016 as well as by Mozambique (apart from a very small extent of suspected mined area that is persistently underwater).

In some states already known to be heavily mined, notably Iraq, Syria, and Yemen, ongoing armed conflicts have added new contamination. Myanmar and Ukraine are both believed to have emplaced new anti-personnel mines. In Myanmar’s case, this is a violation of international human rights law and international humanitarian law. In Ukraine’s case this is also a serious violation of its APMBC obligations “never under any circumstances” to use anti-personnel mines. There were also unconfirmed reports of new contamination from locally produced mines in Mali and Tunisia in 2016.

Table 1: Global anti-personnel mine contamination (as at September 2017)

<table>
<thead>
<tr>
<th>States parties</th>
<th>States parties</th>
<th>States not party</th>
<th>States not party</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Niger</td>
<td>Armenia</td>
<td>Russia</td>
</tr>
<tr>
<td>Angola</td>
<td>Nigeria</td>
<td>Azerbaijan</td>
<td>South Korea</td>
</tr>
<tr>
<td>Argentina*</td>
<td>Oman</td>
<td>China</td>
<td>Sri Lanka</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>Palau**</td>
<td>Cuba</td>
<td>Syria</td>
</tr>
<tr>
<td>Cambodia</td>
<td>Peru</td>
<td>Egypt</td>
<td>Uzbekistan</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Senegal</td>
<td>Georgia</td>
<td>Vietnam</td>
</tr>
<tr>
<td>Chad</td>
<td>Serbia</td>
<td>India</td>
<td>24 states not party</td>
</tr>
<tr>
<td>Chile</td>
<td>Somalia</td>
<td>Iran</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>South Sudan</td>
<td>Israel</td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td>Sudan</td>
<td>Kyrgyzstan</td>
<td></td>
</tr>
<tr>
<td>Cyprus</td>
<td>Tajikistan</td>
<td>Lao PDR</td>
<td></td>
</tr>
<tr>
<td>DR Congo</td>
<td>Thailand</td>
<td>Lebanon</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td>Turkey</td>
<td>Libya</td>
<td></td>
</tr>
<tr>
<td>Eritrea</td>
<td>Ukraine</td>
<td>Morocco</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>United Kingdom</td>
<td>Myanmar</td>
<td>Other areas</td>
</tr>
<tr>
<td>Iraq</td>
<td>Yemen</td>
<td>North Korea</td>
<td>Kosovo</td>
</tr>
<tr>
<td>Jordan</td>
<td>Zimbabwe</td>
<td>Pakistan</td>
<td>Nagorno-Karabakh</td>
</tr>
<tr>
<td>Mauritania</td>
<td></td>
<td>Palestine</td>
<td>Western Sahara</td>
</tr>
</tbody>
</table>

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

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

The total of 59 states and three other areas confirmed or strongly suspected to be mine-contaminated marks a welcome return to a longstanding downward trend in global contamination. As noted previously, Algeria completed mine clearance in 2016. In Mozambique, contamination that was not known when it declared completion of clearance was addressed early in 2017. Mozambique has undertaken to assess, as soon it is possible to do so, a small area of land, persistently underwater, where anti-personnel mines are suspected to remain.
EXTENT OF CONTAMINATION

In many affected states, contamination is relatively modest, and full clearance is achievable within months or a few years with the necessary approach and commitment. Table 2 summarises what is known or reasonably believed about the extent of mine contamination in affected states and other areas. It is therefore an assessment by Mine Action Review based on available evidence, as opposed to the claims of governments or mine action programmes.

Table 2: Extent of contamination in affected states and other areas (as at September 2017)*

<table>
<thead>
<tr>
<th>Massive (&gt;100km²)</th>
<th>Heavy (&gt;20km²)</th>
<th>Medium (2–20km²)</th>
<th>Light (&lt;2km²) or unclear</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Angola</td>
<td>Argentina**</td>
<td>Cameroon</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>Azerbaijan</td>
<td>Armenia</td>
<td>DR Congo</td>
</tr>
<tr>
<td>Cambodia</td>
<td>Chad</td>
<td>Colombia</td>
<td>Ecuador</td>
</tr>
<tr>
<td>Iraq</td>
<td>Croatia</td>
<td>Chile</td>
<td>India</td>
</tr>
<tr>
<td></td>
<td>Ethiopia</td>
<td>China</td>
<td>Kyrgyzstan</td>
</tr>
<tr>
<td></td>
<td>Iran</td>
<td>Cuba</td>
<td>Mauritania</td>
</tr>
<tr>
<td></td>
<td>Israel</td>
<td>Cyprus</td>
<td>Niger</td>
</tr>
<tr>
<td></td>
<td>Morocco</td>
<td>Egypt</td>
<td>Nigeria</td>
</tr>
<tr>
<td></td>
<td>Myanmar</td>
<td>Eritrea</td>
<td>Oman</td>
</tr>
<tr>
<td></td>
<td>North Korea</td>
<td>Georgia</td>
<td>Palau</td>
</tr>
<tr>
<td></td>
<td>Russia</td>
<td>Jordan</td>
<td>Palestine</td>
</tr>
<tr>
<td></td>
<td>South Sudan</td>
<td>Kosovo</td>
<td>Peru</td>
</tr>
<tr>
<td></td>
<td>Sri Lanka</td>
<td>Lao PDR</td>
<td>Senegal</td>
</tr>
<tr>
<td></td>
<td>Syria</td>
<td>Lebanon</td>
<td>Serbia</td>
</tr>
<tr>
<td></td>
<td>Thailand</td>
<td>Libya</td>
<td>Uzbekistan</td>
</tr>
<tr>
<td></td>
<td>Turkey</td>
<td>Nagorno-Karabakh</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Western Sahara</td>
<td>Nepal</td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Somalia</td>
<td>South Korea</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sudan</td>
<td>Tajikistan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tajikistan</td>
<td>Ukraine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ukraine</td>
<td>United Kingdom**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vietnam</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yemen</td>
<td></td>
</tr>
<tr>
<td>4 states</td>
<td>17 states and 1 other area</td>
<td>23 states and 2 other areas</td>
<td>15 states</td>
</tr>
</tbody>
</table>

* States parties to the APMBC are in bold.

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

A very significant and growing problem from the use of locally produced mines (also called improvised or artisanal mines) has occurred over the last two years, especially those produced and emplaced by Islamic State forces in Iraq and Syria. Loosely termed improvised explosive devices (IEDs) by some, despite their status under international law, these mines pose a major threat to civilians as well as to soldiers. Where the mines are designed to be exploded by the presence, proximity, or contact of a person and will have the effect of injuring or killing, they fall within the APMBC definition and are prohibited by the treaty. This is believed to be the case with the overwhelming majority of locally produced mines. It does not matter how these weapons were produced or employed for the purposes of the APMBC; if they fall within the definition of an anti-personnel mine and are used in areas under the jurisdiction or control of a state party, all the Convention's provisions apply, including the obligations to clear and report under Articles 5 and 7, respectively, just as they do to more conventionally produced anti-personnel mines.

Completed clearance

A total of 29 states and 1 other area are no longer suspected to be contaminated with mines since the APMBC was adopted in 1997. All but Nepal (a state not party) and Taiwan (other area) are states parties to the APMBC.

Table 3: Completion of landmine survey and clearance since 1997*

<table>
<thead>
<tr>
<th>State</th>
<th>State</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Germany</td>
<td>Nepal</td>
</tr>
<tr>
<td>Algeria</td>
<td>Greece</td>
<td>Nicaragua</td>
</tr>
<tr>
<td>Bhutan</td>
<td>Guatemala</td>
<td>Rwanda</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Guinea-Bissau</td>
<td>Suriname</td>
</tr>
<tr>
<td>Burundi</td>
<td>Honduras</td>
<td>Swaziland</td>
</tr>
<tr>
<td>Rep. of Congo</td>
<td>Hungary</td>
<td>Taiwan</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Former Yugoslav Republic of Macedonia</td>
<td>Tunisia</td>
</tr>
<tr>
<td>Denmark</td>
<td>Malawi</td>
<td>Uganda</td>
</tr>
<tr>
<td>France</td>
<td>Montenegro</td>
<td>Venezuela</td>
</tr>
<tr>
<td>The Gambia</td>
<td>Mozambique**</td>
<td>Zambia</td>
</tr>
<tr>
<td>Total</td>
<td>29 states and 1 other area</td>
<td></td>
</tr>
</tbody>
</table>

* States parties to the APMBC are in bold.

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

CLEARANCE IN 2016 AND NEW CLEARANCE CHALLENGES

In 2016, a total of almost 172km$^2$ of mined area was cleared with the destruction of more than 232,500 anti-personnel mines and over 21,000 anti-vehicle mines. This is roughly the same figure for recorded global clearance output in 2015, though that year saw destruction of only some 156,000 anti-personnel mines and 13,500 anti-vehicle mines. Table 4 summarises the outputs of major mine clearance operations in 2016, with a comparison to the previous year. More than 95% of all recorded clearance in 2016 was by states parties to the APMBC (overleaf).
Table 4: Global recorded anti-personnel mine clearance in 2016*

<table>
<thead>
<tr>
<th>State/area*</th>
<th>Area cleared (km²)</th>
<th>AP mines destroyed</th>
<th>Comparison to 2015 clearance (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>49.2</td>
<td>19,114</td>
<td>+ 13.8</td>
</tr>
<tr>
<td>Croatia</td>
<td>38.7</td>
<td>1,380</td>
<td>- 1.9</td>
</tr>
<tr>
<td>Cambodia</td>
<td>26.7</td>
<td>7,578</td>
<td>- 19.8</td>
</tr>
<tr>
<td>Iraq</td>
<td>16.4</td>
<td>17,113</td>
<td>+ 11.2</td>
</tr>
<tr>
<td>Algeria</td>
<td>12.0**</td>
<td>62,589</td>
<td>- 0.8</td>
</tr>
<tr>
<td>Chile</td>
<td>3.5</td>
<td>N/R</td>
<td>+ 1.6</td>
</tr>
<tr>
<td>Turkey</td>
<td>3.4</td>
<td>9,422</td>
<td>+ 3.4</td>
</tr>
<tr>
<td>Yemen</td>
<td>3.0</td>
<td>16,440</td>
<td>+ 3.0</td>
</tr>
<tr>
<td>South Sudan</td>
<td>2.6</td>
<td>585</td>
<td>- 2.4</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2.3</td>
<td>59,304</td>
<td>- 1.2</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1.7</td>
<td>23,193</td>
<td>+ 1.0</td>
</tr>
<tr>
<td>Jordan</td>
<td>1.4</td>
<td>100</td>
<td>+ 0.75</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>1.3</td>
<td>1,313</td>
<td>- 0.3</td>
</tr>
<tr>
<td>Angola</td>
<td>1.2</td>
<td>1,350</td>
<td>- 2.9</td>
</tr>
<tr>
<td>Somalia</td>
<td>1.1</td>
<td>121</td>
<td>- 2.2</td>
</tr>
<tr>
<td>Sudan</td>
<td>1.0</td>
<td>105</td>
<td>+ 0.6</td>
</tr>
<tr>
<td>Israel</td>
<td>0.9</td>
<td>4,313</td>
<td>+ 0.2</td>
</tr>
<tr>
<td>Azerbaijan***</td>
<td>0.8</td>
<td>17</td>
<td>- 0.7</td>
</tr>
<tr>
<td>Thailand***</td>
<td>0.4</td>
<td>1,231</td>
<td>- 1.6</td>
</tr>
<tr>
<td>Other programmes combined</td>
<td>4.2</td>
<td>7,430</td>
<td></td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>171.8</td>
<td>232,698</td>
<td></td>
</tr>
</tbody>
</table>

AP = Anti-personnel  N/R = Not recorded

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

** Estimated by Mine Action Review. Algeria has reported clearance of some 28km² though it has not been possible to verify the details of this clearance.

*** These states are included as their clearance in 2015 was considerably greater than 1km² even though in both cases clearance output in 2016 dropped significantly, falling to below 1km².

Afghanistan increased clearance by more than one third in 2016 compared to the previous year, after a huge drop in output in 2015. Iraq, even on the basis of partial data, more than tripled its clearance, the result of increased capacity and the use of mechanical assets for both technical survey and clearance by Mines Advisory Group (MAG) in the north, and clearance by BACTEC of mined areas north-east of Basrah along the border with Iran for oilfield development, the only major mine clearance in the centre and south of the country.

In other positive news, Turkey, for the first time since becoming a state party to the APMBC in 2004, conducted significant mine clearance, achieving output of more than 3km², most along its border with Syria to enable construction of a wall. Despite the conflict, Yemen also reported 3km² of clearance for the year. Seemingly, however, clearance in Cambodia saw another sharp drop in output in 2016, perhaps of more than 40%, after a similar decrease in 2015 compared to the year before. It may, though, be the case that as much as 4km² of clearance by the Cambodia Mine Action Centre (CMAC) in 2016 was not recorded in the national authority’s reporting due to delays in entering the data onto the Information Management System for Mine Action (IMSMA) database.

As noted above, the global clearance total does not include reported clearance of some 20km² by China along its border with Vietnam as it has not been possible to verify the details. Further significant clearance may also have occurred in Iran, Russia, and Syria.
New anti-personnel mine contamination, and the heightened misery these indiscriminate weapons wreak before risk education can be effective and before clearance can remove the threat, give rise to many challenges. As the International Mine Action Standards (IMAS) remind us, landmines are “first and foremost a humanitarian concern and should be addressed from the humanitarian perspective. In this regard, the framing of standards and their application to national mine action programmes and local projects should reflect the fundamental humanitarian principles of neutrality, impartiality, equality and humanity so that mine action is focused on giving support to those who are most vulnerable.”

Furthermore, in areas where hostilities are ongoing, clearance of mines (and other munitions, including those of improvised nature) may compromise organisational neutrality and may amount to direct participation in hostilities, depriving deminers of their protection as civilians under applicable rules of international humanitarian law. There is particular concern within the humanitarian demining community that the clearance activities of some companies operating under the activities framework of “mine action” are being undertaken in circumstances, and in a way, that may offer direct benefit to one party to an armed conflict to the detriment of another. Such acts could put at risk not only the lives of these deminers but also potentially the safety of all demining and other humanitarian personnel. They also infringe the 2009 Montreux Document in which participating states commit to assess whether services by private military and security companies (PMSCs) could cause PMSC personnel to become involved in direct participation in hostilities.

It is important, therefore, that the mine action community continues to evolve to meet the priorities and challenges that are being faced while respecting international humanitarian law and the principles, values, and guiding frameworks that underpin both the law and mine action.

### TREATY DEADLINES FOR CLEARANCE

In accordance with Article 5, each state has a deadline of ten years to complete survey and clearance of mined areas upon becoming party to the APMBC. It may request one or more periods of extension of up to ten years at a time if it is unable to complete clearance in time. Table 5 summarises progress towards these deadlines. Efficient release of mined areas depends primarily on high-quality survey. In addition, each affected state that has not yet done so should conduct a national baseline survey and develop an appropriately ambitious strategic plan to release all identified areas of mine contamination.

<table>
<thead>
<tr>
<th>State Party</th>
<th>Article 5 deadline</th>
<th>Status of progress</th>
<th>Priorities for action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecuador</td>
<td>31 December 2017</td>
<td>Extension requested</td>
<td>Accelerate demining to complete clearance within no more than two years</td>
</tr>
<tr>
<td>Angola</td>
<td>1 January 2018</td>
<td>Extension requested</td>
<td>Complete the nationwide re-survey of contamination by re-surveying the three outstanding provinces (Cabinda, Lunda Norte, and Lunda Sul), no later than 2018</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1 January 2018</td>
<td>Extension requested</td>
<td>Continue to accelerate clearance with a view to completion as soon as possible but no later than 2025</td>
</tr>
<tr>
<td>Iraq</td>
<td>1 February 2018</td>
<td>Extension requested</td>
<td>Incorporate in its reporting contamination and clearance of all locally produced anti-personnel mines</td>
</tr>
<tr>
<td>Palau</td>
<td>1 May 2018</td>
<td>Unclear whether on target</td>
<td>Survey all suspected mined areas, especially in Bloody Nose Ridge in Peleliu state, as soon as possible</td>
</tr>
<tr>
<td>Thailand</td>
<td>1 November 2018</td>
<td>Extension requested</td>
<td>Accelerate non-technical survey and clearance to achieve its extension request land release milestones</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>1 March 2019</td>
<td>Not on track</td>
<td>Complete and approve swiftly its national mine action strategy for 2018-25, and reform governance and management of mine action</td>
</tr>
<tr>
<td>Croatia</td>
<td>1 March 2019</td>
<td>Not on track</td>
<td>Enhance use of non-technical and technical survey to improve land release efficiency</td>
</tr>
<tr>
<td>State Party</td>
<td>Article 5 deadline</td>
<td>Status of progress</td>
<td>Priorities for action</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Serbia</td>
<td>1 March 2019</td>
<td>Not on track</td>
<td>Apply non-technical and technical survey to improve land release efficiency</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1 March 2019</td>
<td>Not on track</td>
<td>Present detailed plans for completing demining of the Falkland Islands/Malvinas as soon as possible</td>
</tr>
<tr>
<td>Sudan</td>
<td>1 April 2019</td>
<td>Not on track</td>
<td>Re-establish conditions that allow international demining organisations to conduct land release in Sudan</td>
</tr>
<tr>
<td>Cyprus</td>
<td>1 July 2019</td>
<td>Not on track</td>
<td>Cyprus and Turkey to facilitate clearance of all mined areas inside and outside the Buffer Zone</td>
</tr>
<tr>
<td>Argentina</td>
<td>1 January 2020</td>
<td>Not on track</td>
<td>Renew earlier offer to the United Kingdom to support demining of the Malvinas/Falkland Islands</td>
</tr>
<tr>
<td>Cambodia</td>
<td>1 January 2020</td>
<td>Not on track</td>
<td>Accelerate clearance of dense anti-personnel mined areas and only clear land with firm evidence of contamination</td>
</tr>
<tr>
<td>Chad</td>
<td>1 January 2020</td>
<td>Not on track</td>
<td>Complete national non-technical survey as soon as possible</td>
</tr>
<tr>
<td>Eritrea</td>
<td>1 February 2020</td>
<td>Not on track</td>
<td>Report on progress in demining as required by the APMBC and respect duty to clear mined areas as soon as possible</td>
</tr>
<tr>
<td>Chile</td>
<td>1 March 2020</td>
<td>On track</td>
<td>Continue to accelerate clearance in order to meet deadline</td>
</tr>
<tr>
<td>Yemen</td>
<td>1 March 2020</td>
<td>Not on track</td>
<td>Yemen should give access to international demining operators to increase technical expertise and capacity and accelerate clearance</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>1 April 2020</td>
<td>Not on track</td>
<td>Complete non-technical survey of all mined areas and draft strategic plan aiming for full clearance as soon as possible</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>1 June 2020</td>
<td>Not on track</td>
<td>Submit an updated workplan and respect duty to clear mined areas as soon as possible</td>
</tr>
<tr>
<td>Niger</td>
<td>31 December 2020</td>
<td>Unclear whether on track</td>
<td>Submit a detailed workplan and accelerate demining to complete clearance within no more than two years</td>
</tr>
<tr>
<td>DR Congo</td>
<td>1 January 2021</td>
<td>On track</td>
<td>Submit a detailed workplan and complete clearance as soon as possible, but no later than 2021</td>
</tr>
<tr>
<td>Mauritania</td>
<td>1 January 2021</td>
<td>On track</td>
<td>Complete clearance of remaining mined area in early 2018 as planned</td>
</tr>
<tr>
<td>Colombia</td>
<td>1 March 2021</td>
<td>Not on target</td>
<td>Take advantage of peace processes to conduct national baseline survey of contamination, strengthen management and coordination of mine action</td>
</tr>
<tr>
<td>Senegal</td>
<td>1 March 2021</td>
<td>Not on track</td>
<td>Complete non-technical survey and clear all mined areas with firm evidence of contamination as soon as possible</td>
</tr>
<tr>
<td>South Sudan</td>
<td>9 July 2021</td>
<td>Not on track</td>
<td>Develop resource mobilisation strategy, including national support, and initiate policy dialogue with development partners on long-term support for a national mine action programme</td>
</tr>
<tr>
<td>Turkey</td>
<td>1 March 2022</td>
<td>Not on track</td>
<td>Finalise the national strategic mine action plan for 2017–19 as soon as possible and move forward without further delay to clear non-border areas</td>
</tr>
<tr>
<td>Somalia</td>
<td>1 October 2022</td>
<td>Not on track</td>
<td>Accord greater priority and resources to mine survey and clearance</td>
</tr>
</tbody>
</table>
States parties appear to be in breach of their international legal obligation to clear mines “as soon as possible”, notably Eritrea, Ethiopia, and Senegal. Eritrea kicked out international demining organisations a decade ago and has failed to fill the gap left by their departure from the national mine action programme. States parties should consider initiating an Article 8 procedure to address Eritrea’s failure to respect its treaty obligations. Senegal has prevented clearance of known mined areas without justification and the failure to clear mines around military bases raises serious doubt as to Senegal’s compliance with the prohibition on use under the APMBC.

While states not party to the APMBC do not have specific clearance deadlines, their obligations under international human rights law to protect life mean that they are required to survey, mark, and clear anti-personnel mines as soon as possible. Among states not party, Sri Lanka, formerly one of the world’s most heavily mined countries, has unilaterally set a deadline of 2020 for completion of mine clearance. In addition, the Kosovo Mine Action Centre (KMAC) expects that clearance of anti-personnel mines in the province will be completed by 2021. Mine Action Review encourages all states not party and other territories to pledge to complete clearance as soon as possible but no later than 2025, as committed to in the APMBC’s Maputo +15 Declaration by states parties.
### MINE ACTION PROGRAMME PERFORMANCE

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

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

#### Table 6: Programme performance – criteria and factors

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

As in last year’s report, only one state, Algeria, attained a "very good" rating, but four programmes were rated "good": Chile, Mauritania, Sri Lanka, and Zimbabwe. This is three more than last year. The biggest drop was in the scoring for Ecuador’s national programme, a reflection of its failure to meet its end-2017 deadline and the decision to request a grossly excessive additional extension period. All of these states are party to the APMBC except for Sri Lanka.
<table>
<thead>
<tr>
<th>State/territory</th>
<th>Performance score</th>
<th>Performance rating</th>
<th>Performance trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>8.4</td>
<td>Very Good</td>
<td>▲</td>
</tr>
<tr>
<td>Chile</td>
<td>7.2</td>
<td>Good</td>
<td>▲</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>7.2</td>
<td>Good</td>
<td>▲</td>
</tr>
<tr>
<td>Mauritania</td>
<td>7.0</td>
<td>Good</td>
<td>▲</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>7.0</td>
<td>Good</td>
<td>▲</td>
</tr>
<tr>
<td>Croatia</td>
<td>6.9</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>6.7</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>6.4</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Cambodia</td>
<td>6.3</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Thailand</td>
<td>6.3</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Israel</td>
<td>6.2</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Jordan</td>
<td>6.1</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Mozambique</td>
<td>6.1</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Angola</td>
<td>6.0</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>South Sudan</td>
<td>6.0</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>5.9</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Colombia</td>
<td>5.8</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Cyprus</td>
<td>5.8</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Niger</td>
<td>5.8</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Kosovo</td>
<td>5.7</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Lebanon</td>
<td>5.7</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>5.6</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>DR Congo</td>
<td>5.6</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Nagorno-Karabakh</td>
<td>5.6</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Armenia</td>
<td>5.5</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Palestine</td>
<td>5.4</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Serbia</td>
<td>5.4</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Turkey</td>
<td>5.3</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Sudan</td>
<td>5.2</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>5.2</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Western Sahara</td>
<td>5.2</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Chad</td>
<td>5.2</td>
<td>Average</td>
<td>▼</td>
</tr>
<tr>
<td>Ecuador</td>
<td>4.9</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Iraq</td>
<td>4.8</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Georgia</td>
<td>4.7</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Russia</td>
<td>4.7</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Peru</td>
<td>4.6</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Somalia</td>
<td>4.5</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Ukraine</td>
<td>4.4</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Vietnam</td>
<td>4.1</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Yemen</td>
<td>4.0</td>
<td>Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Senegal</td>
<td>3.4</td>
<td>Very Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Eritrea</td>
<td>3.0</td>
<td>Very Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>2.4</td>
<td>Very Poor</td>
<td>▼</td>
</tr>
<tr>
<td>Myanmar</td>
<td>1.4</td>
<td>Very Poor</td>
<td>▼</td>
</tr>
</tbody>
</table>
Of the states with the worst programme performance ratings in 2016, a disappointing number are states parties to the APMBC. Ethiopia, a state party, has gone from being one of the best mine action programmes a decade ago to being one of the worst. The problems are all of their own making. The same is true for Eritrea, which has failed to even report on progress in demining, while Senegal has very little progress on which to report. Yemen’s ongoing conflict has clearly affected its demining programme, but at least it showed signs of improvement in 2016 amid the continuing conflicts raging across its territory. Myanmar, a state not party, was by some distance the lowest ranked programme, with the government’s continued refusal to allow mine clearance preventing a peace dividend from being realised, and new mine-laying amounting to a serious violation of international human rights law.

**REPORTING ON SURVEY AND CLEARANCE**

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

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

- To the extent possible, the location of all mined areas that contain, or are suspected to contain, anti-personnel mines. For states parties, the tables for survey and clearance set out the data the national mine action centre should require to report on a monthly basis, and which all states should be able to present.
- The status of programmes for the destruction of anti-personnel mines and accurate reports on the extent of contamination and when they were emplaced.
- The types and quantities of all anti-personnel mines destroyed after becoming a state party to the APMBC, including a breakdown of the quantity of each type of anti-personnel mine destroyed.

Failure to comply with this reporting obligation is a violation of the APMBC. As at September 2017, the following states parties had not submitted Article 7 reports for 2016, and in some cases previous calendar years too: Angola, Cameroon, DR Congo, Eritrea, Niger, Nigeria, and Somalia.

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

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

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

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

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

2 According to Article 2(1) of the APMBC, “Anti-personnel mine” means a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons. Mines designed to be detonated by the presence, proximity or contact of a vehicle as opposed to a person, that are equipped with anti-handling devices, are not considered anti-personnel mines as a result of being so equipped. According to Article 2(3) of the APMBC, “Anti-handling device” means a device intended to protect a mine and which is part of, linked to, attached to or placed under the mine and which activates when an attempt is made to tamper with or otherwise intentionally disturb the mine.

3 IMAS 01:10, Second Edition (as amended as at June 2013), §6.2.


6 For instance, in the case of Akhakov v. Russia, which concerned the failure to clear landmines, the European Court of Human Rights held that “having regard to the State’s failure to endeavour to locate and deactivate the mines, to mark and seal off the mined area so as to prevent anybody from freely entering it, and to provide the villagers with comprehensive warnings concerning the mines laid in the vicinity of their village, the Court finds that the State has failed to comply with its positive obligation under Article 2 of the Convention to protect [life].” European Court of Human Rights, Akhakov and Others v. Russia, Judgment (Final), 6 April 2009, §§95. See also *Pasa v. Turkey*, Judgment, 12 December 2006. At the time, Russia was not [and is still not] a party to the APMBC.

7 Art. 7(1)(g), APMBC.
STATES PARTIES
Despite a further drop in donor funding in 2016, the Mine Action Programme of Afghanistan (MAPA) reported a rise in mine clearance, by national operators in particular, as a result of increased efficiency and competitiveness. Results, though, still fell short of targets set to ensure completion within its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline and rising insecurity further narrowed the humanitarian space for mine action.
RECOMMENDATIONS FOR ACTION

- MAPA should revise its Article 5 extension milestones to reflect slower-than-anticipated rates of clearance since it produced the request.
- MAPA should set out a policy and plans for tackling locally produced landmines.
- After a decade of discussion, Afghanistan should act quickly to finalise and adopt a national mine action law.

CONTAMINATION

Afghanistan is one of the countries most affected by mines and ERW, mainly the result of the decade-long war of resistance that followed the Soviet invasion of 1979, the 1992–96 internal armed conflict, and the United States (US)-led coalition intervention in late 2001, which added considerable quantities of unexploded ordnance (UXO).

Between 2013 and the end of 2015, continuing survey led to new finds of legacy mined areas and raised the estimate of anti-personnel mine contamination to 251 km². That changed in 2016 when the Directorate of Mine Action Coordination (DMAC) reported a drop in anti-personnel mine contamination to 225 km² at the end of the year, representing about 38% of the total threat from munitions.1 North-east and central provinces account for more than half Afghanistan’s anti-personnel mine contamination, with Kabul, Logar, Maidan Wardak, Paktia, and Panjshir provinces among the most affected.2

Afghanistan also had 277 km² of anti-vehicle mine contamination at the end of 2016, particularly affecting southern and central provinces, and 89 km² affected by ERW. The estimates, however, do not include areas affected by locally produced landmines or former NATO/International Security Assistance Force (ISAF) firing ranges. DMAC reported in April 2017 that 58 ranges covering 125 km² remained to be surveyed and cleared.3

Table 1: Remaining contamination in 2013–16

<table>
<thead>
<tr>
<th>Type of contamination</th>
<th>Hazardous areas</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-personnel mines</td>
<td>2,981</td>
<td>2,825</td>
</tr>
<tr>
<td>Anti-vehicle mines</td>
<td>1,140</td>
<td>1,156</td>
</tr>
<tr>
<td>Locally produced mines*</td>
<td>28</td>
<td>19</td>
</tr>
<tr>
<td>ERW**</td>
<td>179</td>
<td>254</td>
</tr>
<tr>
<td>Totals</td>
<td>4,328</td>
<td>4,254</td>
</tr>
</tbody>
</table>

* Abandoned devices only  
** Includes 17 areas contaminated by cluster munition remnants (affecting 5.57 km² as at May 2017).

Table 2: Anti-personnel mine contamination by region (2016)

<table>
<thead>
<tr>
<th>Region</th>
<th>Mined areas</th>
<th>Area (km²)</th>
<th>Communities impacted</th>
</tr>
</thead>
<tbody>
<tr>
<td>North-east</td>
<td>759</td>
<td>67.95</td>
<td>260</td>
</tr>
<tr>
<td>Central</td>
<td>717</td>
<td>47.72</td>
<td>290</td>
</tr>
<tr>
<td>South</td>
<td>170</td>
<td>33.80</td>
<td>96</td>
</tr>
<tr>
<td>West</td>
<td>64</td>
<td>27.51</td>
<td>41</td>
</tr>
<tr>
<td>South-east</td>
<td>209</td>
<td>19.09</td>
<td>105</td>
</tr>
<tr>
<td>North</td>
<td>332</td>
<td>18.74</td>
<td>107</td>
</tr>
<tr>
<td>East</td>
<td>136</td>
<td>10.35</td>
<td>36</td>
</tr>
<tr>
<td>Totals</td>
<td>2,387</td>
<td>225.16</td>
<td>935</td>
</tr>
</tbody>
</table>
Locally produced mines

The "IED" contamination of almost 5.2km² reported by the United Nations Mine Action Service (UNMAS)/DMAC in 2015 (see Table 1) represented only "abandoned" devices and did not reflect the full extent of contamination by victim-activated devices that are prohibited as anti-personnel mines under the APMBC, adding to Afghanistan's Article 5 clearance obligation. A "preliminary survey" conducted in 18 provinces in 2016 at the request of the National Security Council identified 270 newly contaminated areas, mostly contaminated by IEDs and ERW, covering an area of around 420km², including about 220km² affected by pressure-plate IEDs (PPIEDs), which are landmines. The MAPA said it had not entered the data into the IMSMA database and the area required further non-technical survey.

Locally produced mines continued to pose the greatest explosive threat to civilians. The United Nations (UN) reported that 1,100 casualties resulted from locally produced mines. These killed 473 civilians and injured a further 627 in 2016. They caused a further 547 civilian casualties (252 killed and 295 injured) in the first half of 2017, 22% more than in the same period of 2016. The UN expressed particular concern that the number of child casualties increased by 70% in the first half of the year and that the number of women casualties doubled in the same period.

PROGRAMME MANAGEMENT

The MAPA is managed by DMAC, a department of the Afghanistan National Disaster Management Authority (ANDMA), reporting to the Office of the Second Vice-President. It received operational support in planning, priority-setting, and information management from the UN Mine Action Centre for Afghanistan (UNMACA), which changed its name to "UNMAS in support of DMAC" (UNMAS/DMAC) in November 2016.

The present structure is the outcome of a transition from international management of mine action to national ownership. From 2001, this was a project of UNMAS and under international management. In October 2016, UNMAS formally handed leadership of the programme over to DMAC. The change has been accompanied by increased attention to mine action by the Office of the President and is expected to raise the profile of mine action in national policy-making.

By the end of 2016, DMAC had 16 staff, but was preparing to expand to 35 in the course of 2017. The staff of UNMAS/DMAC increased in 2016 to 201, of whom six were international staff. By July 2017, all former UNMACA staff except department heads were due to transfer to contracts bringing them under DMAC management and reporting directly to DMAC. Department heads were due to continue as UNMAS advisers to DMAC until also coming under DMAC management by the end of 2018.

Legislation

A technical committee comprising concerned ministries and the former UNMACA drafted a mine action law to be included as an annex to a 2005 law on firearms and explosive materials. The draft was approved by the Office of the President and passed to the Ministry of Justice more than two years ago but as at February 2017 it remained stuck in the Ministry of Justice.
DMAC identifies tackling contamination by locally produced mines as a priority concern in view of the high level of civilian casualties. At the request of Afghanistan’s National Security Council it coordinated assessment of contamination conducted by Implementing Partners (IPs) in 18 provinces in 2016. A small number of IPs have hitherto conducted only limited clearance of devices that have been “abandoned”. Discussion continues on developing a strategy and operating framework that would enable wider clearance without jeopardising the perception by armed groups of IP neutrality and thereby compromising their safety and security.

The MAPA continued to set clearance targets based on what Afghanistan would need to fulfill its 2023 Article 5 clearance deadline rather than on available resources. The operational work plan for 1396 (2016–17) called for release of 133km², including 622 mined areas containing anti-personnel mines covering 51km², 198 areas with anti-vehicle mines covering 21km², and 92 battle area clearance (BAC) tasks covering 57km², not including firing-range clearance. Those operations would release 32 districts of mines/ERW if no additional hazards were located but required funding of $110 million, including $94.6 million for land release, $6.3 million for coordination, $5.7 million for risk education and $3.4 million for victim assistance.

Total funding received in Afghan Year 1395 (2016–17) amounted to $40.5 million, 15% less than the $47.6 million received the year before. Donors provided $30.93 million bilaterally in 1395 and $9.48 million through the VTF. Half the year’s funding came from just three donors: the United States provided $14.9 million, the United Kingdom $3.2 million and Canada $3.1 million.

UNMAS/DMAC attributed the upturn in increased operational efficiency, better application of land release methodologies by IPs, and greater competitiveness among operators bidding for projects. DMAC received $1.27 million and UNMAS/MACCA $4.3 million in 2016, compared with $7 million provided for the MACCA in 2015.

UNMAS/DMAC expected funding in 2017 to remain at about the same level as the previous year but planned to release a total of 133km² of contaminated land, including 55km² of mined area containing anti-personnel mines, 21km² of mined area containing anti-vehicle mines, and almost 57km² of battle area.

Operators

Landmine clearance is conducted largely by five long-established national and two international NGOs. The Afghan NGOs are: Afghan Technical Consultants (ATC), Demining Agency for Afghanistan (DAFA), Mine Clearance Planning Agency (MCPA), Mine Detection and Dog Centre (MDC), and the Organization for Mine Clearance and Afghan Rehabilitation (OMARI). AREA, a national non-governmental organisation (NGO) accredited in 2014, became operational at the end of 2016. The MAPA received no funding from the Afghan government.

By the end of 2016, three national IPs were operating a total of 38 community-based demining teams in areas where insecurity inhibited demining by their own teams, down from 49 a year earlier. AREA supported nine teams in Kabul and north-eastern Nangahar provinces, while DAFA (13 teams) and MDC (16 teams) deployed them in Helmand and Kandahar provinces.

The most active international NGOs are Danish Demining Group (DDG) and The HALO Trust. Since 2012, the Swiss Foundation for Mine Action (FSD) has had a small operation near the border with Tajikistan. Janus Demining Afghanistan (previously Sterling International) has been contracted to undertake clearance of firing ranges used by militaries serving with the NATO-led International Security Assistance Force.

UNMAS/DMAC had a total of 61 quality assurance (QA)/quality control QC staff: 7 in headquarters in Kabul, 16 staff working from seven regional offices and 38 conducting quality management for the firing ranges clearance project. In 2016, staff carried out 2,303 QA/QC checks on demining operations and 4,480 on firing ranges clearance.

Survey in 2016

Afghanistan started a nationwide “Mine and ERW Impact Free Community Survey” (MEIFCS) in May 2012, envisaging it would take two years to complete. Almost six years later, the MAPA reported the survey had completed 285 of 400 districts. Survey was under way in 10 more districts and the MAPA said it planned to survey 24 more districts in 1356 (2017–18) if it could find funding.

In 2016, The HALO Trust operated seven teams conducting survey in Herat and Kandahar provinces and MCPA deployed 12 teams in 14 provinces. FSD, meanwhile, operated two teams in Badakhshan province.

Non-technical survey resulted in cancellation and reduction of 4km² in 2016 but the MAPA reported that the continuing MEIFCS survey also added 87km² of previously unidentified contamination, of which anti-personnel mined areas accounted for 19.4km², mined areas with anti-vehicle mines for 19.8km² and battle area for the rest.
Table 3: Cancellation of SHAs and reduction of CHA by non-technical survey in 2016

<table>
<thead>
<tr>
<th>SHAs cancelled</th>
<th>Size of cancelled SHAs (m²)</th>
<th>CHA area reduced (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>2,641,821</td>
<td>1,410,213</td>
</tr>
</tbody>
</table>

Table 4: New suspected or confirmed mined and battle areas identified in 2016

<table>
<thead>
<tr>
<th>SHAs identified</th>
<th>Estimated total area (m²)</th>
<th>CHAs identified</th>
<th>Estimated total area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>16,129,422</td>
<td>434</td>
<td>70,968,848</td>
</tr>
</tbody>
</table>

Among the key factors prolonging the survey was the need to cover far more communities than planned. By March 2017, MEIFICS teams had surveyed 1,297 communities that were known to be affected and 21,454 where the presence of ERW was unknown, but it had also surveyed 26,650 villages that were not listed in the official gazetteer on which the survey was based but that were identified as the survey progressed. Two other key factors were insecurity and lower donor funding.34

Clearance in 2016

Clearance covered 69.25km² of mined area in 2016. Five Afghan IPs accounted for most of the increase in mined land released through clearance in 2016 despite a continued decline in funding. The five IPs cleared 31.4km² according to DMAC,35 up from less than 20km² in 2015 and amounting to nearly two-thirds of the 2016 total.36 DMAC attributed the improved productivity to better use of land release methodologies, better clearance techniques, and greater competition for donor contracts. Operators were also heavily dependent on short-term contracts and on US funding, leaving open the question of whether this performance would be sustained and raising concerns that if the funding stopped some IPs would have to close.36

DAFA, working mainly in the south west, nearly tripled the area cleared while OMAR more than quadrupled the amount of land it released and the number of mines destroyed, working with 14 demining teams totalling 378 deminers out of a total staff of nearly 600.37 MCPA, which had total staff of 448, reported deploying a similar number of deminers and 12 survey teams with 28 staff. It planned to bid for contracts in 2017 that would enable it to maintain capacity at this level.40

The HALO Trust remained much the biggest humanitarian operator with total staff of 2,854, including close to 1,600 deminers, 96 staff in mechanical units, and another 50 in multipurpose teams undertaking survey and spot explosive ordnance disposal (EOD), responding to community call-outs. Capacity expanded with the help of multi-year funding from the United Kingdom and the Netherlands. Area clearance was fractionally down, as teams focused less on clearing anti-vehicle mines than they had in 2015 and more on the slower task of clearing anti-personnel mines. They were also working in several areas affected by heavy metal contamination.41

The HALO Trust also participated with other IPs in the survey of contamination in 18 provinces from locally produced mines/IEDs at the request of the National Security Council. It also worked with DMAC on developing a strategy and operational framework that would enable humanitarian operators to engage in clearing locally produced mines in Afghanistan without compromising their neutrality, safety, and security.42

Of the two other international humanitarian operators active in 2016, FSD, working in northern Badakhshan province bordering Tajikistan, sharply increased both the area cleared and the number of mines destroyed in 2016. Lower levels of funding for DDG, however, resulted in it laying off 15 clearance teams and 150 personnel in the course of the year. Although it developed an EOD surge capacity that responded to 525 emergency call-outs, the mined area it cleared was sharply down on 2015.43
Table 5: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas released</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>“Abandoned” locally produced mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>AREA</td>
<td>8</td>
<td>64,535</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>ATC</td>
<td>158</td>
<td>7,516,879</td>
<td>1,585</td>
<td>39</td>
<td>0</td>
<td>18,454</td>
</tr>
<tr>
<td>DAFA</td>
<td>94</td>
<td>9,926,794</td>
<td>5,714</td>
<td>119</td>
<td>0</td>
<td>44,854</td>
</tr>
<tr>
<td>DDG</td>
<td>10</td>
<td>332,776</td>
<td>71</td>
<td>1</td>
<td>0</td>
<td>840</td>
</tr>
<tr>
<td>FSD</td>
<td>3</td>
<td>328,025</td>
<td>6,518</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>HALO</td>
<td>313</td>
<td>17,157,895</td>
<td>4,086</td>
<td>139</td>
<td>0</td>
<td>2,036</td>
</tr>
<tr>
<td>MCPA</td>
<td>46</td>
<td>2,616,129</td>
<td>142</td>
<td>58</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>MDC</td>
<td>65</td>
<td>7,884,273</td>
<td>527</td>
<td>68</td>
<td>10</td>
<td>29,180</td>
</tr>
<tr>
<td>OMAR</td>
<td>75</td>
<td>3,421,620</td>
<td>465</td>
<td>4</td>
<td>0</td>
<td>4,886</td>
</tr>
<tr>
<td>Totals</td>
<td>772</td>
<td>49,248,926</td>
<td>19,114</td>
<td>428</td>
<td>10</td>
<td>100,321</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  
AV = Anti-vehicle  
UXO = Unexploded ordnance

Deminer Safety

A total of 16 demining casualties were recorded by DMAC/UNMAS for 2016. This is a much higher toll than in 2015 when one deminer was killed and nine injured. It is not known whether increased competitiveness among IPs is indirectly contributing to demining accidents.

Insecurity inflicted a much higher number of casualties in 2016, with nine deminers killed and ten injured in attacks by armed groups. In the first six months of 2017, UNAMA said it recorded no conflict-related attacks against humanitarian deminers that resulted in death or injury but anti-government elements abducted four employees of an unspecified demining organisation for ransom. They were released two days later after the intervention of community elders.

ARTICLE 5 COMPLIANCE

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

Afghanistan submitted an extension request in 2012 providing for clearance not just of anti-personnel mines but all ERW by 2023. Four years into implementation of its request, Afghanistan’s prospects for meeting its deadline are fast disappearing because of a downturn in donor funding, resulting in reduced capacity of the MAPA and slower clearance; new discoveries of contamination; and the impact of continuing conflict.

At the end of 2016, estimated anti-personnel mine contamination was 225km², just 15km² less than at the start of the extension period (see Table 1). Moreover, this estimate did not take account of widespread use of victim-activated explosive devices by armed anti-government groups, which qualify as anti-personnel mines and add to Afghanistan’s clearance obligations under the Article 5. UNMAS/ DMAC believes the number of devices is far fewer than the number of mass-produced mines but acknowledges that amid Afghanistan’s continuing conflict and narrowing humanitarian space, comprehensive survey of locally produced mines is impossible, let alone clearance.

Table 6: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>49.25</td>
</tr>
<tr>
<td>2015</td>
<td>35.38</td>
</tr>
<tr>
<td>2014</td>
<td>62.87</td>
</tr>
<tr>
<td>2013</td>
<td>60.11</td>
</tr>
<tr>
<td>2012</td>
<td>77.15</td>
</tr>
<tr>
<td>Total</td>
<td>284.76</td>
</tr>
</tbody>
</table>
Data provided by DMAC, 10 May 2017. Afghanistan’s Article 7 transparency report for 2016 (Form F) still reported anti-personnel mine contamination as 251km².

A7 Report (for 2016), Form F; email from MACCA, 27 April 2016.


Data provided by DMAC, 10 May 2017.

Ibid.


Interview with Mohammad Shafiq Yosufi, Director, DMAC, in Geneva 9 February 2017.


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

For details of the history and structure of mine action in Afghanistan, see Afghanistan’s Article 5 deadline Extension Request, 29 March 2012, pp. 50–68.


Email from Abdul Qudos Ziaee, UNMAS/DMAC, 10 May 2017.


Article 5 deadline Extension Request, 29 March 2012, pp. 167–75.


Interview with Mohammad Shafiq Yosufi, DMAC, in Geneva 9 February 2017; email from Farid Homayoun, Country Director, HALO Trust, 23 May 2017.


Email from Abdul Qudos Ziaee, UNMAS/DMAC, 10 May 2017.

Ibid.

Ibid.

Email from MACCA, 10 May 2011.

Email from Abdul Qudos Ziaee, UNMAS/DMAC, 10 May 2017.

Ibid.

UNMAS said clearance costs per square metre dropped from US$0.68 to US$0.58. It also reported spending less on programme management and coordination. Email from Abdul Qudos Ziaee, UNMAS/DMAC, 10 May 2017.

Ibid.

Email from Abdul Qudos Ziaee, UNMAS/DMAC, 10 May 2017.

ATC, DAFA, MCPA, MDC, OMAR.

Email from Abdul Qudos Ziaee, UNMAS/DMAC, 10 May 2017.

DMAC reporting of results for the Afghan years 1394 (2015–16) and 1395 (2016–17) showed a more modest increase in area cleared by five national IPs, rising from 25.23km² in 1394 to 25.89km² in 1395, while funding for these operators dropped from $15.2 million in 1394 to $11.8 million in 1395. Email from Mohammad Shafiq Yosufi, DMAC, 26 September 2017.


Email from Zekria Payab, Deputy Director, OMAR, 29 March 2017.

Email from Haji Atiqullah, Director, MCPA, 14 April 2017.

Email from Farid Homayoun, HALO Trust, 23 May 2017.

Ibid.

Email from Megan Latimer, Programme and Operations Coordinator, Afghanistan, Ukraine and Colombia, DDG, 29 May 2017.

Email from Feda Mohammad Oriakhil, Project Officer, DMAC, 30 September 2017.

Email from Habib Khan Zazai, UNMAS, in support of DMAC, 7 May 2017.

Ibid.


**ARTICLE 5 DEADLINE: 1 APRIL 2017**
(CLEARANCE DECLARED COMPLETE)

**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Improving performance</td>
<td>9</td>
<td>6.9</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: VERY GOOD**

<table>
<thead>
<tr>
<th>Score</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.4</td>
<td>8.1</td>
</tr>
</tbody>
</table>

**PERFORMANCE COMMENTARY**

Algeria completed demining in late 2016, several months in advance of its extended Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline of 1 April 2017.
CONTAMINATION
Algeria was affected by anti-personnel mines as a result of World War II, the French colonial occupation, and the insurgency of the 1990s. During Algeria’s struggle for independence, mines were laid by the French along the Challe and Morice lines on the eastern and western borders of the country. Algeria estimated that more than 10 million mines were laid.1 Some 80% were blast mines while most of the remainder were fragmentation mines.2

In clearance between 1963 and 1988, some 500km² of mined area was cleared, with the destruction of more than 7.8 million anti-personnel mines. A second clearance phase began in November 2004, which resulted in the destruction of 850,000 mines. (A further 159,000 stockpiled mines were destroyed.)3 As at April 2016, clearance had reduced contamination to two contaminated provinces (wilaya) (Guelma and Nâama). By July 2016, clearance in Nâama was reportedly complete also.4 Clearance of known mined areas in Guelma was completed on 1 December 2016.5

Occasionally, “isolated” anti-personnel mines are also found outside known mined areas. In addition, the north of the country is said to be contaminated by an unknown number of locally produced mines and other explosive items laid by insurgent groups.6 In the first half of 2017, Algerian police reported seizing 121 landmines from groups linked to terrorism or arms smuggling.7

The total number of mine survivors in Algeria is unknown but there have been no new mine victims since 2010.8

PROGRAMME MANAGEMENT
The Interministerial Committee on the Implementation of the Anti-Personnel Mine Ban Convention, set up by presidential decree in 2003, is the governmental focal point for all mine action activities in Algeria.

Operator
All demining in Algeria has been carried out manually by the Algerian army.

LAND RELEASE
Clearance in 2016
As in previous years, Algeria has not reported clearly on clearance for the previous calendar year. Demining operations during 2016 destroyed 62,589 anti-personnel mines and 225 anti-vehicle mines.9 This included 599 colonial-era anti-personnel mines found outside known mined areas.10

In its formal declaration of compliance with APMBC Article 5, Algeria reported release of 28.1km² of land11 but has not clarified how much was clearance and how much was release by other means. Its Article 7 transparency report suggests an even higher figure of 29.65km². Mine Action Review has assumed physical clearance of 12km² for the year, consonant with results in 2015.

Outside the mined areas laid by France in the colonial era, clearance in 2016 addressed four further mined areas in Tindouf Province, close to the borders with Mauritania, Morocco, and Western Sahara. One at Meksem El Dahma (5,000m²) involved destruction of 102 anti-personnel mines and 37 anti-vehicle mines; a second at Oum El Achar (882m²) 20 anti-personnel mines and 2 anti-vehicle mines; and two areas in El Bétina, one of 64,000m² and the other of 4,800m², with the destruction of a further 6,566 anti-personnel mines and 186 anti-vehicle mines. Clearance of the latter three areas was completed on 16 December 2016.12

ARTICLE 5 COMPLIANCE
Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2011), Algeria 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 April 2017.

Algeria’s accelerated pace of demining in 2015 and 2016 led it to complete clearance before the end of December 2016, in advance of its extended deadline. Algeria systematically funded its mine action programme through its own resources. Algeria has indicated that the specialised army and police units remain ready to destroy any further mines that are reported or discovered.13

RECOMMENDATIONS FOR ACTION
- Algeria should clarify how much manual clearance took place in 2016 as opposed to release by other means.
- Algeria should ensure an adequate capacity exists to address any mines or other munitions that are encountered in the future.
ANGOLA

ARTICLE 5 DEADLINE: 1 JANUARY 2018
(EIGHT-YEAR EXTENSION REQUESTED)

MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Item</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: AVERAGE
6.0  5.4
PERFORMANCE COMMENTARY

In 2016, Angola made major strides towards completing a nationwide re-survey and succeeded in establishing, for the first time, a realistic estimate of the extent of its remaining mine contamination. According to operators, more than 90% of suspected hazardous areas (SHAs) recorded as a result of inflated estimates from a 2004–07 Landmine Impact Survey (LIS) were cancelled during the re-survey, demonstrating a vast improvement in the application of sound land release methodology. The re-survey formed part of efforts to develop a credible extension request to its Article 5 deadline of May 2017, with a view to completing clearance by 2025.

Significant efforts were made by operators and the national mine action centre, CNIDAH (Comissão Nacional Intersectorial de Desminagem e Assistência Humanitária), to improve the quality of the national mine action database and information management more broadly, issues that have plagued Angola’s mine action programme for more than a decade. In 2016–17, in preparation for the submission of the new Anti-Personnel Mine Ban Convention (APMBC) Article 5 extension request, considerable energy was spent in order to reconcile operator data and national database figures; substantial improvements were reported to have been achieved as a result.

Angola’s mine action programme has been facing severe funding shortfalls, which worsened in the course of 2016. While survey output continued to increase during the year as efforts to complete the re-survey accelerated, clearance and technical survey outputs decreased sharply from those recorded in 2015, with operators facing persistent reductions in funding and capacity. This squeeze on funding is increasingly threatening the success of mine action in Angola. Unless sizeable and sustained increases in support are secured, the future of the national programme is highly uncertain, and the country’s 2025 proposed deadline to complete mine clearance will not be met.

RECOMMENDATIONS FOR ACTION

■ Angola should complete the nationwide re-survey of contamination by re-surveying the three remaining provinces, Cabinda, Lunda Norte, and Lunda Sul, no later than 2018.
■ Angola should revise the workplan set out in its Article 5 deadline extension using the updated information in the national mine action database, including clear annual targets for areas to be cleared or otherwise released and a corresponding budget. As new information is obtained with the completion of the re-survey, further revisions to the plan should be made accordingly.
■ Angola should continue efforts to work more 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. Dedicated and sustained assistance for information management capacity to these ends should be provided to CNIDAH.
■ Data should be recorded and reported consistently according to International Mine Action Standards (IMAS) terminology. Angola should update states parties regularly on progress, including through submitting annual Article 7 transparency reports in a timely manner.
■ Angola should increase its national funding to mine action so as to accelerate the pace of clearance and demonstrate national commitment to respect its Article 5 clearance obligations.
■ National demining assets and capacity should be put to full use to clear confirmed mined areas on the basis of humanitarian needs and priorities.
■ Angola should clarify and empower the management structure of the national mine action programme, including the roles and responsibilities and funding of the two mine action entities. IMAS recommends that a single national authority be created to provide effective and efficient management of the national programme.
■ Angola should increase its international advocacy to attract re-entry of donors to reverse the decline in international funding for mine action. A clear national resource mobilisation plan should be developed and implemented.
CONTAMINATION

The total size of Angola’s remaining mine contamination is believed to be just over 118km². In its latest Article 5 deadline extension request submitted in May 2017, Angola reported a total of 1,461 contaminated areas remaining to be addressed, including 1,074 confirmed hazardous areas (CHAs) covering a total of almost 104km² and 387 SHAs covering an estimated 141km².1 But the results of the nearly completed nationwide re-survey, which have resulted in the cancellation on average of 90% of SHA, suggest that the 141km² of suspected contamination will decrease to approximately 14km² of confirmed contamination.2

The new estimate of contamination represents a milestone for Angola’s mine action programme, which was previously unable to generate an accurate assessment of the extent of contamination. It is also a considerable decrease from the last reported estimate of almost 129km² of CHA and 356km² of SHA dating back to mid-2014.3

All 18 provinces still contain mined areas. As at May 2017, when Angola submitted its Article 5 deadline extension request, it reported that re-survey had been completed in 12 provinces (Benguela, Bié, Cunene, Huambo, Huila, Kuando Kubango, Kwanza Norte, Kwanza Sul, Malanje, Namibe, Uige, and Zaire) and was ongoing in three (Bengo, Luanda, and Moxico), leaving a further three provinces [Cabinda, Lunda Norte, and Lunda Sul] to be addressed.4

While Angola’s latest Article 5 extension request sets the deadline for completion of the re-survey by 2017, as at September 2017, it was unlikely that it would be completed by the end of the year. However, with the provision of even limited resources, operators believed that re-survey could be finalised by 2018.5 Positively, Mines Advisory Group (MAG) reported that it began non-technical survey operations in Lunda Sul in June 2017 and Lunda Norte in July.6

In the period from the submission of its previous extension request of March 2012 through to April 2017, Angola reported a total of 303 areas over 23.8km² that were previously been carried out as a result.14 A number of new hazardous areas where survey had not been completed were identified as a result.14 It reported that released land in its areas of operations was rapidly being put to use by local communities for agriculture and the construction of housing and communal institutions such as clinics, schools, churches, and police stations.15

There is also a significant problem with explosive remnants of war (ERW), especially UXO. In 2016, The HALO Trust reported a rising trend of ERW incidents involving children and noted that CNIDAH had requested that more risk education activities be targeted at children.16 Much of the land released by mine action is used for agriculture, which is of critical importance for acutely poor communities reliant on subsistence farming. But the lack of safe land also has implications for larger-scale agricultural production as Angola seeks to diversify its sources of national income. CNIDAH confirmed in 2017 that the government was developing a new strategy of economic diversification, including expansion of agriculture, livestock, tourism, and mining, and the presence of mines was a serious impediment to many of these.11

Historically, humanitarian demining efforts in Angola have focused on urban and peri-urban areas due to security concerns in the countryside during the years of conflict, and in response to the needs of growing town-based populations afterwards. The HALO Trust reported in 2017 that many of the cities and towns in Angola had witnessed significant urban expansion, following reconstruction enabled by mine clearance. At the same time, rural populations have been largely left without support to deal with mine contamination, which for hundreds of communities means living beside minefields, with the daily threat of mines, despite the end of the conflict 15 years ago.12

In 2017, MAG reported additional pressure on land use in Mexico province with natural population growth and an increase in reverse migration, wherein people are returning to rural areas from coastal areas and the provincial capital due to the high costs of urban living. The intent of many is to engage in subsistence farming to improve familial food security.13 Norwegian People’s Aid (NPA) reported that two children were killed and two injured in a mine incident in Malanje in August 2016, and a number of new hazardous areas where survey had not previously been carried out were identified as a result.14 It reported that released land in its areas of operations was rapidly being put to use by local communities for agriculture and the construction of housing and communal institutions such as clinics, schools, churches, and police stations.15

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...
**PROGRAMME MANAGEMENT**

Angola’s national mine action programme is managed by two mine action structures. CNIDAH serves as the national mine action centre, reporting to the Council of Ministers. It also accredits non-governmental organisations (NGOs) and commercial demining companies. Under the vice-governor of each province, CNIDAH’s 18 provincial operations offices determine annual objectives.

The other mine action body, the Executive Commission for Demining (Comissão Executiva de Desminagem, CED), was established in 2005 to manage Angola’s national development plan and is chaired by the Minister of Social Assistance and Reintegration. It supports mine clearance in areas where development projects are a priority and is the coordination body for activities conducted by the national public operators (the Armed Forces, the Military Office of the President, the National Demining Institute (Instituto Nacional de Desminagem, INAD), and the Police Border Guard). INAD, which was established in 2002 in order to separate coordination and operational responsibilities, is responsible for conducting demining and verification, and providing training, under the auspices of the Ministry of Social Assistance and Reintegration.

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

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

Angola’s mine action programme has had more than a decade of capacity building assistance, including from the United Nations Development Programme (UNDP), international mine action NGOs, and the Geneva International Centre for Humanitarian Demining (GICHD). Notably, UNDP sought to build CNIDAH’s capacity in 2002–11, but admitted that its support was not very successful, especially in database management. No formal, independent evaluation of the programme as a whole has ever been conducted.

**Strategic Planning**

In May 2017, Angola submitted a request to extend its Article 5 deadline for a further period of eight years, until 2025. Operators commended CNIDAH’s inclusive and participatory approach to the elaboration of the request. As discussed below, the extension request does not contain a detailed workplan or annual clearance targets, but it suggests that clearance could gradually phase out, with clearance of less-contaminated provinces completed first.

Previously, following a request by the Twelfth Meeting of States Parties, Angola elaborated a workplan for 2014–17 based on the preliminary results of its national survey, which projected that 327 confirmed mined areas covering about 35.5km² would be cleared by the end of 2017.

**Information Management**

Angola’s mine action programme has been plagued with difficulties in information management for more than a decade, impeding efforts to achieve a comprehensive, accurate understanding of contamination. As a consequence, from 2007 to its last reported figures in 2014, Angola has made widely different and conflicting claims of the extent of its mine problem. Two issues are at the crux of Angola’s inability to construct a reliable mine action database: on the one hand, CNIDAH’s database does not match NGOs’ own records, while on the other, CED operators fail to report to CNIDAH in the IMSMA format. Operators have persistently raised concerns about inaccurate data, inconsistency and unreliability of information, internal issues within CNIDAH, and lengthy delays in updating data.

In February 2016, IMSMA New Generation (NG) was installed with the help of the GICHD. Subsequently, all operators reported investing significant time and resources working with and supporting CNIDAH to update the database and reconcile inconsistencies between the database and operator records. According to MAG, initially the introduction of IMSMA NG exacerbated delays in updating the database as parties struggled to learn the new system, but later the database began to be managed effectively by CNIDAH with regular updating. The HALO Trust questioned the timing of the switch to IMSMA NG, which occurred during the middle of the accelerated country-wide re-survey efforts in preparation for the Article 5 extension request. NPA reported in 2017 that there were positive trends and changes with the launch of new version and assistance from GICHD to resolve discrepancies. Notably, NPA reported that it expected cancellation of a total of more than 10km² of SHA and CHA in its areas of operations from the database purely through clean-up.

In addition, The HALO Trust reported it had provided CNIDAH with a simple means to produce Geographic Information System (GIS)-based minefield maps for all remaining SHAAs and CHAs, on a country-wide or province–by-province basis, in PDF formats, a functionality that the new version of IMSMA does not offer. Its results from the re-surveys of Cunene and Namibe were electronically transferred and updated in
the IMSMA NG database in February 2017 in collaboration with CNIDAH and the GICHD, along with web-based maps with satellite imagery provided through a HALO Trust partnership with GIS mapping company ESRI.\textsuperscript{30}

Unfortunately, despite the significant efforts invested in improving the accuracy database and progress in reconciling data, these advances were not reflected in the Article 5 extension request submitted by CNIDAH in May 2017. The request contains inconsistencies between key figures in the narrative text and in the supporting annexes, as well as calculation errors. Lengthy tables of data presented in Word format, rather than Excel, make it extremely difficult to identify and correct discrepancies in data.\textsuperscript{31} It is possible that data was distorted during the process of developing the extension request, likely at the point of extraction from IMSMA.

In its extension request, CNIDAH reported that efforts were underway to harmonise its database with CED data, but stated that further work on use and management of data was needed with respect to INAD, which is the guardian of the IMSMA database for the CED, the Demining Brigades of the Security Unit of the President of the Republic, the Angolan Armed Forces, and the Angola Border Guard Police.\textsuperscript{32}

### Quality Management

CNIDAH is responsible for undertaking external quality assurance (QA) and quality control (QC) of mine action activities, including QC of all completed tasks prior to handover of land to beneficiaries.\textsuperscript{33}

In 2016, The HALO Trust indicated that QA at provincial level was generally weak, due to lack of funding and support. It stated that in its areas of operations worksite visits were minimal, although handover of task sites cleared by HALO Trust had happened informally to allow beneficiaries to make timely use of their land.\textsuperscript{34} NPA reported that CNIDAH conducted QC on several of its tasks during the year, while MAG stated that the CNIDAH team visited its operations regularly.\textsuperscript{35}

### Operators

Three international NGOs conducted humanitarian demining in Angola in 2016: The HALO Trust, MAG, and NPA.\textsuperscript{36} Operators included local NGOs The Association of Mine Professionals [APACOMINAS], Demining and Humanitarian Assistance Organisation (ODAH), Union for the Rights to Education, Health and Safety for the Unemployed (UDESSD), and Associação Terra Mãe (ATM).

According to The HALO Trust, in 2008–16, the total number of operational personnel of international and national operators has fallen by 89%.\textsuperscript{37} In 2016, the loss of funding from the European Union (EU) Development Fund for demining impacted all international operators with demining effectively coming to a halt in five provinces (Bié, Benguela, Cunene, Kwanza Sul, and Kwanza Nortel).\textsuperscript{38}

HALO Trust’s operations have focused on clearing mined areas in four provinces: Benguela, Bié, Huambo, and Kuando Kubango. In 2016, however, its demining activities were largely confined to the central province of Huambo and around the heavily mined town of Cuito Cuanavale in Kuando Kubango province, due to reduced funding and capacity.\textsuperscript{39}

In 2016, NPA continued to work in rural, underdeveloped areas of Malanje and Zaire provinces. After the completion of its EU-funded project in Zaire in May 2016, NPA's operations continued in Malanje only. A landmine incident affecting four children in the vicinity of Malanje town led to five previously unsuspected hazardous areas being identified and ultimately the discovery that areas of three municipalities had never been surveyed, or only to a limited extent due to poor access. This delayed NPA’s plans to move operations to Uige province.\textsuperscript{40}

In 2016, MAG continued its systematic re-survey of Moxico province, which it completed in June 2017.\textsuperscript{41} HALO Trust’s capacity in 2016 included an average of 315 staff, a reduction of 85 compared to 2015. It deployed an average of 16 manual demining teams; two combined survey, explosive ordnance disposal (EOD), risk education, and marking teams; and a new mechanical demining team to operate a DIGGER D-250 tilling machine acquired during the year. The loss of EU funding caused a significant drop in capacity in January 2016, with nine manual teams having to be made redundant. Demining operations were stopped in Bié province and partially suspended in Kuando Kubango. Funding was secured from the United States and Switzerland, which enabled 10 manual demining teams and the mechanical team to be deployed in Huambo province, and a further six manual demining teams in Kuando Kubango.\textsuperscript{42}

NPA employed an average of 58 deminers in 2016, fluctuating based on project funding between a high of 78 in March–April and a low of 42 in September–October. The organisation also deployed a combined team equipped for non-technical survey, risk education, and EOD spot tasks. It maintained a mechanical capacity of two MineWolf machines and four Casspirs and a team of five operators. NPA also continued its partnership with international demining NGO APOPO during the year, which employed eight mine detection rat handlers and two mechanical operators, and four deminers from October 2016 to operate a brush-cutter machine.\textsuperscript{43}

In 2016, MAG deployed a total of four manual demining teams, an EOD team, a non-technical survey team, a community liaison team, and a mechanical clearance and support team. However, due to lack of funding, at the end of the year its capacity was reduced by two manual demining teams. It was given a MineWolf 240 by a former international operator, but the machine was only operational for two months before the rainy season curtailed its deployment. MAG reported, though, that based on two months of results, vast improvements in output were expected with its future deployment.\textsuperscript{44}

Collectively, the four CED operators – the Armed Forces, the Military Office of the President, INAD, and the Police Border Guard – are working in all 18 provinces. They are tasked by the government to clear or verify areas prioritised by national infrastructure development plans.\textsuperscript{45} A number of commercial companies\textsuperscript{46} operate in Angola and are accredited by and report to CNIDAH, but are mostly employed by state or private companies to verify areas to be used for investment, whether or not they are known to contain SHAs.\textsuperscript{47}
LAND RELEASE

Prior to Angola’s submission of its latest Article 5 extension request in May 2017, the various problems with the national database, including the different reporting formats between CNIDAH and CED, have made it difficult to describe in detail and with any degree of accuracy the extent of land released in Angola over the years. Additionally, data from the CED and commercial companies has not been made available. Angola has also failed to submit any updated annual Article 7 transparency reports since 2014, a violation of the Convention.

In 2016, according to operator records, there was an 11km² increase in the amount of land cancelled by non-technical survey compared with 2015. This resulted from accelerated efforts to complete re-survey in preparation for the submission of the extension request. However, there were sharp decreases in the amount of land released through clearance and technical survey during the year, from 7.2km² in 2015 to 2.4km² in 2016, as funding and capacity for clearance continued to decrease.48

Survey in 2016

International operators reported cancelling just over 136km² of SHA through non-technical survey in 2016, and reducing a further 1.2km² through technical survey, while confirming as contaminated 155 mined areas with a total size of nearly 7.8km² (see Table 1).49 This is compared to 2015 when nearly 125km² of SHA was cancelled through non-technical survey, 3.1km² reduced through technical survey, and 274 areas with a total size of nearly 18km² confirmed as mined.50

Table 1: Mined area survey in 201651

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs cancelled</th>
<th>Area cancelled (m²)</th>
<th>Areas confirmed</th>
<th>Area confirmed (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HALO (Bié)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>52,856</td>
</tr>
<tr>
<td>HALO (Cunene)</td>
<td>123</td>
<td>109,603,523</td>
<td>35</td>
<td>2,690,287</td>
<td>0</td>
</tr>
<tr>
<td>HALO (Huambo)</td>
<td>1</td>
<td>647,534</td>
<td>5</td>
<td>246,708</td>
<td>199,853</td>
</tr>
<tr>
<td>HALO (Kuando Kubango)</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>262,860</td>
<td>187,221</td>
</tr>
<tr>
<td>HALO (Namibe)</td>
<td>8</td>
<td>3,244,895</td>
<td>3</td>
<td>253,790</td>
<td>0</td>
</tr>
<tr>
<td>MAG (Moxico)</td>
<td>73</td>
<td>22,769,701</td>
<td>102</td>
<td>3,964,777</td>
<td>201,980</td>
</tr>
<tr>
<td>NPA (Malanje)</td>
<td>4</td>
<td>72,365</td>
<td>6</td>
<td>378,550</td>
<td>435,657</td>
</tr>
<tr>
<td>NPA (Zaire)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>121,145</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>209</strong></td>
<td><strong>136,338,018</strong></td>
<td><strong>155</strong></td>
<td><strong>7,796,972</strong></td>
<td><strong>1,198,712</strong></td>
</tr>
</tbody>
</table>

Following the completion of a full re-survey of Huila and Kwanza Sul provinces in 2015, The HALO Trust was requested by CNIDAH to re-survey Cunene and Namibe provinces in 2016. According to HALO Trust, both provinces had previously been surveyed by Santa Barbera, a German international organisation, during the 2004–07 LIS, and a high number of SHAs were recorded. Despite demining in both provinces in 2007–15, the national database did not accurately reflect remaining contamination.52

Upon conclusion of re-survey of Cunene province, HALO Trust was able to cancel 97% of all previously recorded hazardous areas, reducing the number of areas recorded in the database from 143 SHAs and 25 CHAs to just 35 CHAs with a total size of just under 2.7km². A significant amount of cancellation was due to areas of ERW contamination erroneously recorded as mined areas during the LIS. These were identified and destroyed by HALO Trust. In Namibe province, HALO Trust cancelled 92% of all previously recorded hazardous areas, leaving a total of three CHAs covering 0.25km² to be cleared. HALO Trust reported that these three areas were legacy minefields near a government prison facility at Bantiaba, which the provincial government now wished to have cleared.53

In 2016, MAG cancelled 22.8km² by non-technical survey and reduced a further 0.2km² through technical survey, while confirming as mined nearly 4km².54 In 2016, NPA cancelled 0.07km² through non-technical survey and reduced close to an additional 0.6km² through technical survey.55

In 2016, NPA also reported that database clean-up in August 2016 resulted in cancellation of almost 8km² of hazardous area in the provinces of Malanje, Uige, Kwanza Norte, and Zaire. It reported that a further 3.25km² was cancelled as a result of database clean-up in 2017.56

MAG’s re-survey of Moxico province identified a total of 244 tasks with a total size of more than 13.5km² remaining. This marked the end of a three-year process to re-survey the province in which a total of 221 tasks were cancelled and 108km² cancelled or reduced.57

According to CNIDAH, between 2012 and April 2014, 192km² was either cancelled by non-technical survey, or released by technical survey, or removed from the national database by eliminating data discrepancies between CNIDAH and the operators.58
Clearance in 2016

As set out in Table 2, international NGO operators reported clearing a total of almost 1.2km² of mined area in 2016, destroying in the process 1,255 anti-personnel mines, 1,071 anti-vehicle mines, and 86 ERW. This is less than a third of clearance output in 2015, when operators cleared a total of 4.1km² of mined area.

Table 2: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Province</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO/AXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>HALO</td>
<td>Bié</td>
<td>3</td>
<td>33,227</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>HALO</td>
<td>Huambo</td>
<td>16</td>
<td>307,590</td>
<td>23</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>HALO</td>
<td>Huila</td>
<td>1</td>
<td>4,567</td>
<td>7</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>HALO</td>
<td>Kuando Kubango</td>
<td>12</td>
<td>459,175</td>
<td>982</td>
<td>964</td>
<td>3</td>
</tr>
<tr>
<td>MAG</td>
<td>Moxico</td>
<td>2</td>
<td>156,185</td>
<td>88</td>
<td>98</td>
<td>16</td>
</tr>
<tr>
<td>NPA</td>
<td>Malanje</td>
<td>10</td>
<td>231,566</td>
<td>155</td>
<td>0</td>
<td>45</td>
</tr>
<tr>
<td>NPA</td>
<td>Zaire</td>
<td>1</td>
<td>6,598</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>45</td>
<td>1,198,908</td>
<td>1,255</td>
<td>1,071</td>
<td>86</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  AV = Anti-vehicle  AXO - Abandoned ordnance

In addition, NPA reported destroying 11 anti-personnel mines, 1 anti-vehicle mine, and 88 items of ERW in spot tasks in 2016. MAG destroyed a further 54 anti-personnel mines, 10 anti-vehicle mines, and 584 items of UXO in EOD spot tasks. HALO Trust reported completing 200 EOD spot tasks, during which 30 anti-personnel mines, 7 anti-vehicle mines, and 1,572 items of ERW were destroyed.

All three operators suffered sharp decreases in clearance output in 2016. NPA and HALO Trust cleared only half of the area they achieved in 2015, while MAG’s clearance fell to just over one quarter of its 2015 figure. NPA reported that the decrease in output in 2016 was due to a 20% decrease in the number of deminers and because it was not possible to use machines on most tasks as anti-vehicle mines were expected to be present. The HALO Trust reported that the drop in its clearance output was largely due to the loss of EU funded demining capacity in Bie and Kuando Kubango, which resulted in the loss of experienced demining staff. Likewise, MAG stated a reduction in the number of teams deployed due to a lack of funding was responsible for its decreased output during the year.

In March 2016, HALO Trust launched a “Mine Impact Free Huambo” initiative, with the aim of completing clearance of Huambo province by 2018. With support from a consortium of partners including the United States, Switzerland, and Japan, along with the Canton of Bern and DIGGER Foundation, HALO Trust aimed to deploy 10 demining teams and a DIGGER D-250 tilling machine to complete clearance of Huambo within three years.

Deminer Safety

The HALO Trust reported that on 12 April 2016 one of its deminers initiated a Type 72 anti-personnel blast mine while excavating in a minefield in Huambo province. He sustained only minor injuries thanks to personal protective equipment and was able to return to work a month later.
ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2012), 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 1 January 2018. Angola will not meet this deadline and has submitted a request for a further eight-year extension to its Article 5 deadline, through to the end of 2025.

While the request contains a realistic estimate of remaining contamination, it does not contain a workplan or projections and targets of areas to be addressed per year, or a corresponding detailed budget. It also fails to reflect the updated and improved data from the national database and contains inconsistencies between key figures in the narrative text and in the supporting annexes, as well as calculation errors and lengthy, inscrutable tables of data in Word format.71

Angola’s previous extension request submitted in March 2012 was presented as an “interim period” during which efforts would be undertaken to better estimate the extent of the contamination and sort out database issues through a national survey and a mapping project to geographically represent the extent of contamination.72 The 2012 request indicated the size of the country, the different mine-laying techniques used, the fact that the locations and number of mines were not recorded, and lack of resources as the main reasons for Angola’s inability to comply with its initial deadline. Another significant impeding factor noted was Angola’s information management problems.73 The 2017 extension request also identifies a number of areas which could hamper progress and the achievement of the 2025 clearance deadline, including a lack of financial resources, weak institutional and operational capacity, withdrawal or decrease in capacity of NGOs, and unforeseen outbreaks and/or disasters.74

Under the 2017 extension request, nationwide re-survey is to be completed before the end of 2017 and clearance by the end of 2025. However, as at September 2017, it was more likely that the national re-survey could be completed before the end of 2018. MAG aimed to complete re-survey of Lunda Norte and Lunda Sul by the end of 2018.75

CNIDAH has estimated that the cost of completing clearance by 2025 will be US$275 million.76 According to the 2017 extension request, two roundtables will be held in 2017–18 with potential donors from the banking, industrial, steel and other sectors, with the aim of mobilising public, private, national, and foreign resources. A strategy for a thematic approach to funding will also be developed. The request states that mobilisation of national funding will require persuasion of “competent bodies of the Angolan State, through existing legal planning mechanisms for this purpose”, adding that CNIDAH is primarily responsible for the implementation of the strategy, which it said is already in progress.77

The Government of Angola has provided significant funding for demining, but almost exclusively in support of major infrastructure projects, and it has faced severe budget cuts following the crash in oil prices. Clearance of rural areas has typically not been funded by the government, and assistance from international demining organisations has been vital to clear poor and rural areas.78 Despite not funding mine action by international operators directly in 2016, the government continued to make available in-kind support, such as free use of land for office compounds, and institutional incentives such as tax exemptions on the import of goods.79 At the same time, operators raised concerns that complicated, expensive, and lengthy visa processes and lengthy and costly bureaucratic procedures for customs clearance could hamper the provision of international assistance.80 Under Article 6(8) of the APMBC, states parties receiving international assistance are required to cooperate “with a view to ensuring the full and prompt implementation of agreed assistance programs”.

The impact of Angola’s critical decline in international support for mine action can hardly be overstated. Once one of the largest recipients of international mine action funding, demining operators and officials have noted a substantial decrease in financial support, and most worryingly disengagement by a number of traditional donors, notably the EU.81 In 2007–17, collectively the resources of the three largest operators, HALO Trust, MAG, and NPA declined by 89%. In 2017, annual funding was only 19% of the projected amount needed ($275 million) to complete mine clearance by the end of 2025.82

Operators have repeatedly raised serious concerns over an apparent lack of political interest or will from states parties or international donors to support humanitarian demining operations in Angola, perhaps over perceptions about Angola’s status as a middle-income country.83 However, the relatively brief boom in commodity prices and subsequent national economic crisis brought on by the fall of oil prices, which has resulted in a decrease in government revenue by more than half, severe budget cuts, and double-digit inflation, is jeopardising the sustainability and existence of demining in the country.84

HALO Trust reported that, overall, its funding was continuing to contract in 2017, though successes included the return of former donors Japan and Switzerland, and commitments from a small number of new donors, in addition to private donations. Increased funding provided by the United States was critical to sustaining demining activities and maintaining key assets and staff members in 2016 after EU funding ceased, it said.85

In 2017, HALO Trust received funding to complete re-survey of Bengo and Luanda provinces.86 In Huambo province, as at mid-2017, as part of its “Mine Impact Free Huambo” initiative, HALO Trust had cleared more than half of the remaining mined areas, and was seeking funding for a final year of clearance in 2018, in order to declare Huambo mine impact-free.87 While it had funding for operations in Huambo and Kuando Kubango in 2017, significantly greater resources are needed to increase capacity in Benguela and Bié, where little demining is being carried out.88
On 8 March 2017, International Women’s Day, HALO Trust launched a project for “100 women in demining in Angola”, seeking to re-start demining in Benguela province, which stopped in 2014 due to lack of funding, despite 80 minefields remaining. In June 2017, training of the first two teams of female deminers began, with funding provided by the Swiss foundation, World Without Mines.89

MAG was actively seeking additional funding though a decrease in resources in 2017 was possible, which could have implications for its team sizes, it said.90 In particular, MAG was in the process of confirming funding to complete the re-survey of Lunda Norte and Lunda Sul provinces, where it had estimated, at the outset of particular, MAG was in the process of confirming funding and from May onwards, a total capacity of 36 demining ending in March 2017, funding for 12 deminers was lost, 2017. At the same time, with a Japanese-funded project deminers as a result of new funding from Norway, with In the first half of 2017, NPA’s capacity increased by 20 areas where the extent of the threat was unknown. 91

In March 2017, NPA completed re-survey of Malanje province and estimated that it could complete clearance of all known contamination in the province within the first six months of 2018.73

News that clearance of two provinces, Huambo and Malanje, could be completed by 2018 is highly encouraging. Completion of these provinces will be major steps forward for Angola’s mine action programme and a demonstration that meaningful progress is achievable to reach Angola’s completion target of 2025.

### Table 3: Five-year summary of clearance

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>1.2</td>
</tr>
<tr>
<td>2015</td>
<td>4.1</td>
</tr>
<tr>
<td>2014</td>
<td>2.2</td>
</tr>
<tr>
<td>2013</td>
<td>3.8</td>
</tr>
<tr>
<td>2012</td>
<td>4.4</td>
</tr>
<tr>
<td>Total</td>
<td>15.7</td>
</tr>
</tbody>
</table>

---

1 Second Article 5 Extension Request, received 11 May 2017, p. 5.
3 Figures as at June 2014, Article 7 Report (for 2013), Form C.
4 Second Article 5 Extension Request, received 11 May 2017, pp. 5 and 10.
5 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
6 Email from Jeanette Dijkstra, Country Director, MAG, 29 September 2017.
7 Second Article 5 Extension Request, received 11 May 2017, pp. 5 and 11.
8 Email from Vanja Sikirica, Country Director, Norwegian People’s Aid (NPA), 11 May 2016, and questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
9 Emails from Gerhard Zank, HALO Trust, 17 May 2016; and Vanja Sikirica, NPA, 11 May 2017.
10 Email from Vanja Sikirica, NPA, 11 May 2017.
11 Second Article 5 Extension Request, received 11 May 2017, p. 19.
12 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
13 Email from Bill Marsden, MAG, 2 May 2017.
14 Emails from Vanja Sikirica, NPA, 11 May 2017; and Joaquim da Costa, Acting Country Director, NPA, 28 September 2017.
15 Email from Vanja Sikirica, NPA, 11 May 2017.
16 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email, 17 May 2016.
17 Email from Joaquim da Costa, NPA, 28 September 2017.
19 Interview with Joaquim Merca, CNIDAH, in Geneva, 10 April 2014.
20 Interview with Susete Ferreira, UNDP, in Luanda, 14 June 2011.
21 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.
22 Second Article 5 Extension Request, received 11 May 2017, p. 19.
24 Email from Vanja Sikirica, NPA, 11 May 2016; and interview with Joaquim Merca, CNIDAH, in Geneva, 10 April 2014.
25 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017 and 11 May 2016; Bill Marsden, MAG, 2 May 2017 and 17 October 2016; and Gerhard Zank, HALO Trust, 17 May 2016.
26 Email from Bill Marsden, MAG, 2 May 2017.
27 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
28 Email from Vanja Sikirica, NPA, 11 May 2017.
29 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
30 Ibid.
31 Ibid.
32 Second Article 5 Extension Request, received 11 May 2017, p. 12.
33 Email from Vanja Sikirica, NPA, 11 May 2016.
34 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
35 Email from Vanja Sikirica, NPA, 11 May 2017. and MAG
36 Menschen gegen Minen (MgM) ended operations in November 2015 Upon completion of its last task in Kuando Kubango which formed part of a European Union-funded project. In July 2017, MgM reported that it was seeking funding to continue work in the National Parks in Kuando Kubango province, which are to be included into the KAZA Trans-Frontier Conservation area. MgM was the only operator demining in the parks; it was on shutdown during 2016 while funding was sought to continue operations and redeploy equipment. Email from Kenneth O’Connell, Technical Director, MgM, 4 July 2017.
37 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email, 1 October 2017.
38 Ibid., and emails from Gerhard Zank, 17 May and 17 October 2016. The EU has been a major donor in Angola. In 2013, its office in Angola announced it would provide another €20 million ($25 million) for mine action in 2013–17. After delays that have slowed demining operations, €18.9 million ($25 million) was finally provided through the 10th European Development Fund. However, during the tendering process for the 11th extension of the European Development Fund grant in 2015, a process run by the Angolan Ministry of Planning, the ministry decided that funding demining was not a priority, despite pleas from CNIDAH. Support for demining from the 10th European Development Fund ended in 2016.
39 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
40 Email from Vanja Sikirica, NPA, 11 May 2017.
41 Emails from Bill Marsden, MAG, 2 May 2017; and Jeanette Dijkstra, MAG, 29 September 2017.
42 Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.
43 Email from Vanja Sikirica, NPA, 11 May 2017.
Email from Bill Marsden, MAG, 2 May 2017.


Email from Joaquim Merca, CNIDAH, 12 May 2014.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017 and 11 May 2016; Bill Marsden, MAG, 2 May 2017 and 17 October 2016; Gerhard Zank, HALO Trust, 17 May 2016; and Kenneth O’Connell, MgM, 5 May 2016.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017; and Bill Marsden, MAG, 2 May 2017.

Emails from Vanja Sikirica, NPA, 11 May 2016; Bill Marsden, MAG, 2 and 17 October 2016; Gerhard Zank, HALO Trust, 17 May 2016; and Kenneth O’Connell, MgM, 5 May 2016.

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.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.

Email from Joaquim da Costa, NPA, 28 September 2017. Second Article 5 Extension Request, received 11 May 2017, p. 25.

Email from Jeanette Dijkstra, MAG, 29 September 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017.


Statement of Angola, Intersessional meetings (Standing Committee on Mine Action), Geneva, 23 May 2012.

Article 5 deadline Extension Request Analysis, 30 October 2012.

Second Article 5 Extension Request, received 11 May 2017, p. 22.

Email from Jeanette Dijkstra, MAG, 29 September 2017.

Second Article 5 Extension Request, received 11 May 2017, p. 25.

Ibid., p. 21.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017; and Bill Marsden, MAG, 2 May 2017; and Vanja Sikirica, NPA, 28 September 2017.

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.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and emails from Vanja Sikirica, NPA, 11 May 2017; and Bill Marsden, MAG, 2 May 2017; and Vanja Sikirica, NPA, 28 September 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

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Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.

Questionnaire response by Gerhard Zank, HALO Trust, 22 May 2017; and email from Vanja Sikirica, NPA, 11 May 2017.
ARTICLE 5 DEADLINE: 1 JANUARY 2020
(NOT ON TRACK TO MEET DEADLINE)

RECOMMENDATION FOR ACTION

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

CONTAMINATION

Argentina reports that it is mine-affected by virtue of its claim to sovereignty over the Malvinas/Falkland Islands. 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. It reiterated this declaration at the Fifteenth Meeting of States Parties. The islands were mined, mostly by Argentinian forces, during its armed conflict with the UK in 1982. Argentina has reported that no other territory under its jurisdiction or control is mine-affected.

PROGRAMME MANAGEMENT

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

LAND RELEASE

Argentina has argued that it is unable to meet its Article 5 obligations because it has not had access to the Malvinas due to the “illegal occupation” by the UK. It did, however, make an offer more than a decade ago to support demining of the islands. In May 2016, Argentina reiterated its claim of sovereignty over the islands and declared that if the UK entered into negotiations over sovereignty that an agreement on demining could be reached between the two countries.

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, and in accordance with the 10-year extension granted in 2009 by the Second Review Conference, Argentina is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 January 2020.

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

1 Article 7 Report, Form A, 8 April 2010.
5 Statement of Argentina, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 17 May 2016.
<table>
<thead>
<tr>
<th>MINE ACTION PROGRAMME PERFORMANCE</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>PERFORMANCE SCORE: AVERAGE</td>
<td>5.9</td>
<td>5.9</td>
</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

While clearance output dropped slightly in 2016 compared to the previous year, the amount of land reduced by technical survey rose, and the amount cancelled by non-technical survey increased significantly. However, the annual cancellation output reported for 2016, was in part inflated due to the Bosnia and Herzegovina Mine Action Centre (BHMAC) delaying the reporting of data for the European Union (EU) land release pilot project until completion of the project rather than as the work progressed. Notwithstanding this, the results do still reveal use of a more efficient evidence-based land release methodology, which has been piloted over the last few years, and reflected in the three new national standards adopted in 2016 on non-technical survey, technical survey (including targeted investigation and systematic technical survey), and land release.

Compared to previous years, Bosnia and Herzegovina (BiH) improved its annual reporting on survey and clearance in 2016, and reported more accurately on land release data disaggregated by output (cancellation, reduction, and clearance) and activity (non-technical survey, technical survey, and clearance). However, reports of confirmed hazardous area (CHA) were inconsistent between different forums.

RECOMMENDATIONS FOR ACTION

- BiH should ensure completion and approval of its National Mine Action Strategy for 2018–25 and a completion plan for mine survey and clearance based on the latest available information, and taking into account implementation of the new land release methodology being rolled out. Periodic revisions should be factored into the strategy. BHMAC and the national authorities should also ensure the timely preparation and submission by the end of March 2018 of BiH’s Anti-Personnel Mine Ban Convention (APMBC) Article 5 extension request.
- 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.
- BHMAC should report more accurately and consistently on the extent of anti-personnel mine contamination, including using the classification of suspected hazardous area (SHA) and CHA in a manner consistent with the International Mine Action Standards (IMAS). It should also ensure that all land released through survey and clearance is entered and reflected in its database in a timely manner.
- BHMAC should operationalise throughout its mine action programme new evidence-based methods of land release, including the use of technical survey with targeted investigation, to more accurately identify and delineate areas of confirmed contamination, and cancel or reduce areas where evidence of mines is lacking.
- BHMAC should ensure the completion of the appropriate standing operating procedure (SOP) on land release and the full implementation of the National Mine Action Standard (NMAS) on land release.
- BHMAC should ensure that operators update their SOPs to reflect new methodologies for land release, including, where appropriate, for technical survey with targeted investigation.
- BHMAC should ensure that operators report consistently on outputs using the new land release methodologies.
- The BiH Armed Forces, the Federal Administration of Civil Protection, and the Civil Protection Administration of Republika Srpska should be provided with the necessary demining equipment, in a timely manner, to facilitate the full and efficient deployment of their respective demining capacities.

CONTAMINATION

BiH is heavily contaminated with mines and explosive remnants of war (ERW), including cluster munition remnants (CMR), primarily as a result of the 1992–95 conflict related to the break-up of the Socialist Federal Republic of Yugoslavia. Most mined areas are in the zone of separation between BiH’s two main political entities – the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS). Twenty years after the end of the conflicts, BiH is still the most heavily mined country in Europe.

BHMAC has reported different figures for its estimate of mine contamination as at the end of 2016. In its latest APMBC Article 7 transparency report, BiH states that a total of 1,091km² of area was suspected to contain mines, across 8,636 locations, of which it estimated that 315.75km² of area was more likely to contain mines, across 4,286 “locations”.

34
BiH’s statement on Article 5 implementation at the June 2017 APMBC intersessional meetings only references the 1,091km² of suspected mined area (representing 2.2% of the total area of BiH), does not reference the area within this total, which is estimated to contain mines. The 23.46km² of CHA reported to Mine Action Review in Table 1 represents the surveyed tasks within the overall 1,091km², which are ready for clearance.

Either way, this represents a decrease in overall mined area, compared to the 1,149km² of SHA and 300km² of CHA and as at the end of 2015, as reported by BiH in its Article 7 report the previous year, or the 1,149.9km² of SHA and 23.04km² of CHA reported to Mine Action Review for 2015.

Table 1: Anti-personnel mine contamination by canton (as at end-2016)

<table>
<thead>
<tr>
<th>Canton</th>
<th>SHA Area (km²)</th>
<th>CHA Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsko-Sanki</td>
<td>587</td>
<td>106.33</td>
</tr>
<tr>
<td>Posavski</td>
<td>192</td>
<td>19.41</td>
</tr>
<tr>
<td>Tuzlanski</td>
<td>674</td>
<td>81.28</td>
</tr>
<tr>
<td>Zanicko-Dobojski</td>
<td>750</td>
<td>125.36</td>
</tr>
<tr>
<td>Bosansko-Podrinjski</td>
<td>281</td>
<td>50.69</td>
</tr>
<tr>
<td>Srednje-Bosanski</td>
<td>856</td>
<td>129.77</td>
</tr>
<tr>
<td>Hercegovacko-Neret</td>
<td>1,187</td>
<td>155.78</td>
</tr>
<tr>
<td>Zapadno-Hercegovacki</td>
<td>6</td>
<td>0.31</td>
</tr>
<tr>
<td>Sarajevo</td>
<td>290</td>
<td>74.25</td>
</tr>
<tr>
<td>Canton 10</td>
<td>584</td>
<td>88.83</td>
</tr>
<tr>
<td><strong>Subtotal BiH Federation</strong></td>
<td><strong>5,407</strong></td>
<td><strong>832.01</strong></td>
</tr>
<tr>
<td>Republika Srpska</td>
<td>3,093</td>
<td>242.99</td>
</tr>
<tr>
<td>Brčko district</td>
<td>138</td>
<td>16.23</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>8,638</strong></td>
<td><strong>1,091.23</strong></td>
</tr>
</tbody>
</table>

* The data reported on CHA is included within the overall SHA, and is not in addition to the SHA.

BiH has suggested that 73,483 mines and items of unexploded ordnance (UXO) remain to be cleared.

The number of “minefield” records was reported to total 19,283, of which 13,672 were in the Federation of BiH, 4,858 in Republika Srpska, and 753 in Brčko District. Collection of minefield records is ongoing, with BHMAC estimating that it has collected around 70% of the total. It is unclear to what extent the 19,283 minefield records include areas already released through survey and clearance operations, but which incorrectly remain in the database as mined areas.

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.” Similarly, a 2015 UNDP evaluation reported that BHMAC is aware that not all of the SHA is actually mined, but “without more efficient non-technical survey and technical survey procedures the exact extent of the problem cannot be quantified.”

As at May 2017, plans were being discussed between BHMAC, clearance operators, and the EU, regarding a potential country re-assessment [re-survey] to establish a more accurate baseline of mine-contamination and improve the efficiency of demining operations. Data from this would also be used to feed into periodic revisions of BHMAC’s completion plan (see the Strategic Planning section, below). As at September 2017, a project proposal for the country re-assessment had been submitted to the EU for consideration.

According to BiH, mined areas are located in 129 municipalities/cities, with 1,389 communities/populated areas contaminated. Mine and ERW contamination directly impacts the safety of approximately 545,000 people, or 15% of the population of BiH, based on the last census in 2013. Of the total SHA, 62% is forested, 26% agricultural land, and 12% infrastructure. Much of the remaining mine contamination in BiH is comprised of individually placed mines or groups of mines, which do not follow a set pattern, and which were emplaced across a wide area, posing a challenge to the identification of the location of contamination. Furthermore, physical changes to mined areas, such as in vegetation, and a lack of witnesses to the laying of the mines, pose additional challenges. Mine contamination is said also to obstruct the return of refugees and the displaced; impede rehabilitation and development of utility infrastructure; and prevent free movement between communities, especially on the administrative line between the entities.

BiH was severely affected by the Balkan flood disaster in May 2014, which reminded the international and local community of the task of mine clearance that still remains in BiH, and emphasised the need to push for a non-stagnated mine action sector. The European Union (EU)’s 2014 Flood Recovery Needs Assessment for BiH found that while minimal mine mitigation was needed...
The fertile agricultural belt in the Posavina region, along with the Doboj region, has the most heavily contaminated areas. According to BHMAC, however, most mine incidents now occur in forested areas. In 2016, four mine-related incidents were recorded, resulting in four fatalities and three injuries, all of whom were adult males. This is an increase compared to 2015, when only one mine-related incident was recorded, resulting in a fatality.

**PROGRAMME MANAGEMENT**

The Demining Commission, under the BiH Ministry of Civil Affairs, supervises the state-wide BHMAC and represents BiH in its relations with the international community on mine-related issues. The Demining Commission is composed of representatives from three ministries (Civil Affairs, Security, and Defence) elected from the three constituent “peoples” of BiH and representing BiH’s three majority ethnic groups (Bosniaks, Croats, and Serbs).

Three new Demining Commission members were given a two-year mandate on 23 July 2015, which expired in July 2017. A new Demining Commission was expected to be appointed in the near future, and in the interim, the current representatives will serve as an “acting” Demining Commission. Whereas the Minister for Civil Affairs remains ultimately responsible for mine action, the Demining Commission represents the strategic body responsible for setting mine action policy, and it proposes the appointment of BHMAC senior staff, for approval by the Council of Ministers. 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. Furthermore, according to the 2016 audit office report, “The Commission has not developed a methodology on how to monitor the work of the BHMAC”.

BHMAC, established by a 2002 Decree of the Council of Ministers, is responsible for regulating mine action and implementing BiH’s demining plan, including accreditation of all mine action organisations. BHMAC operates from its headquarters in Sarajevo, two main offices in Sarajevo and Banja Luka, and eight regional offices (Banja Luka, Bihac, Brčko, Mostar, Pale, Sarajevo, Travnik, and Tuzla).

A November 2016 national audit office report on the efficiency of the demining system in BiH concluded that: “The institutions of BiH have not undertaken all activities required to ensure efficiency of the demining system. A conclusion can be drawn that BiH is not committed to dealing seriously with the demining problem, which jeopardises the implementation of the BiH strategic goals and the fulfilment of international commitments assumed. The demining process has neither been analysed nor improved systematically in the past 15 years”. This mirrors some of the strong criticism of BHMAC’s governance and management prior to 2015, (see “Clearing the Mines 2015” report on BiH). However, reforms are now being implemented, under the leadership of a new acting director of BHMAC, who was appointed on 22 September 2015 by the Council of Ministers.

The Demining Commission has drafted an Action Plan to address the recommendations of the 2016 audit office report, and as at September 2017 the status of the Action Plan was unclear.

In its 2015 revision of the National Mine Action Strategy for 2009–19, BHMAC stated that one of its goals was to “organize regular meetings for Board of Donors in order to present the results and to ensure and increase trust and support of donors”. After a 10-year hiatus, Board of Donor meetings resumed in September 2015, and a second meeting took place in March 2016. As the Board of Donors is one of the few platforms where international actors meet formally under law, international donors in BiH welcomed the resumption of the meetings, which provide a forum for improved coordination and communication with the national authorities.

As at September 2017, however, no further Board of Donor meetings had taken place since the March 2016 meeting. This is an issue that the national authorities, and fellow co-chair of the board UNDP, should address if the Board is to serve as a meaningful forum in which to enhance coordination and better engage donors.

In May 2016, moves were made to reinstate expert working groups (EWGs), which used to meet until 2009, helping to address issues such as quality control (QC). According to BHMAC, the EWGs, which were re-established in October 2016, will meet as often as needed. One EWG meeting was held in 2016. The BiH Armed Forces think the EWG would benefit from regular, quarterly meetings. As at June 2017, UNDP reported that it was planning to organise EWGs in coordination with BHMAC.
Strategic Planning

BiH is currently working on a new National Mine Action Strategy for 2018–25, with support from the Geneva International Centre for Humanitarian Demining (GICHD), which addresses all contamination, including anti-personnel mines. The BiH Mine Action Strategy for 2009–19, adopted by the Council of Ministers in 2008, sets the target of the country becoming free of mines by 2019. BHMAC conducted the first of three planned revisions of the strategy in 2012–13 (the other two were due in 2015 and 2017, respectively). The 2012 revision envisaged that over the next two or three years all contaminated areas that meet the relevant clearance standards would be declared mine-free by the end of the year. The revised strategy was not formally adopted by the Council of Ministers, highlighting the lack of political attention to mine action in BiH.

In April 2015, while revision of the second strategy was ongoing, BHMAC stated that it could provisionally report that, after six years, only half of the strategy’s scope had been implemented, primarily due to lack of funding for humanitarian demining. The funding shortfall resulted in part from a failure to secure funds for demining from additional government sources. Local NGO representatives expressed concern in March 2015 that civil society involvement in the strategy revision had, so far, been limited. A representative of the EU said they were sceptical that the 2015 revision would be meaningful, but noted pressure from the international community to improve on previous strategic planning processes.

The second revision of the BiH Mine Action Strategy 2009–19 was completed in 2015, in consultation with the Demining Commission and UNDP. Among the strategic and operational goals in the revised strategy, was to eliminate one third of the total suspected mined area in BiH through non-technical and technical survey, by the end of 2019. The operational plan in the 2015 revision also envisaged that over the next two or three years all organisations would transition to conform to the new land release methodology. The revision was endorsed by the Demining Commission in BiH in March 2016, but was not adopted by the Council of Ministers.

The third revision of the strategy was due to be concluded by the end of 2017, and in 2016, BHMAC in consultation with the GICHD, started the revision process. However, instead of revising the existing Mine Action Strategy 2009–19 (revision II, with proposed amendments), BiH, with support from the GICHD, is producing a new national mine action strategy for the period through to projected completion of mine and CMR clearance (2018–25). As part of this process, an initial workshop was held in November 2016, followed by a second workshop on "Bosnia and Herzegovina National Mine Action Strategy Working Group Sessions", organised by BHMAC and the GICHD, with the participation of relevant government ministries, clearance operators, and other stakeholders, took place in Sarajevo in February 2017.

The new strategy, which has been prepared with support from the GICHD, was due for completion by the end of 2017, and will contain a general plan and timeframe for the completion of mine clearance, as well as for CMR. The new strategy will also include a section on management of residual contamination and national capacities, after clearance of all contaminated areas is completed. The new strategy, will be presented to the government as a suggested format and timeframe for completion of mine and CMR clearance in BiH, to be managed and implemented by the national authorities. In June 2017, BiH reported that it was in the process of defining the final steps of the new strategy, and on 13 September 2017, a meeting was held with between BHMAC, the Demining Commission, the GICHD, and UNDP, during which the draft strategy was presented and comments provided. The draft strategy was then shared with the BiH Armed Forces, the entity Civil Protections, UNDP, and the EU for further comment.

In addition, the Demining Commission and BHMAC will produce an action plan and financial plan for the strategy (2018–25).

In order to improve efficiency and effectiveness, BHMAC began to implement more efficient land release methodology in 2014, with the realisation of the "IPA 2011 Land Release" project, funded by the EU. Land release operations under the EU pilot project finished in 2016, and the project officially ended in March 2017. It is hoped that the new land release concept, which prioritises survey across multiple land release pilot projects and beyond, will greatly speed up release of suspected mined area.

As at May 2017, plans were being discussed for a potential country-wide re-assessment (re-survey), to establish a more accurate baseline of mine-contamination. The proposed non-technical survey would include desk studies, analysis of war maps, and other materials, and would focus on finding evidence of mines, including analysing evidence of cases in which mines have been removed by locals in the intervening years since the end of the conflict. It is envisaged that the re-survey would take approximately two years and data obtained during the process will help inform periodic revisions to BHMAC’s completion plan. The proposed re-assessment will also include components of impact assessment, as the initial survey results date back many years and there is the need to re-determine the current impact of mine contamination. As at August 2017, BHMAC, NPA, and the BiH Armed Forces’ Demining Battalion, were looking to work together for the re-survey process, and as at September 2017, a project proposal had been sent to the EU.
Results of mine action in BiH show that the applied land release model was efficient in the period 2005–09, and prior to 2009, BHMAC cancelled significant amounts of land annually through non-technical survey. There remains significant potential for further reduction in the size of the SHA. However, this will require strong implementation oversight by BHMAC and dedicated efforts and improved survey techniques to obtain additional information on mine contamination. It will also require supplementing and combining non-technical survey with the use of technical interventions to confirm or deny the presence of mine contamination in SHAs. BHMAC’s plan is to achieve this through enhanced technical survey methodology, including where possible, the use of technical survey with “targeted investigation” (also referred to as targeted technical survey), alongside the more traditional systematic technical survey approach, to more accurately determine the location of the confirmed mine contamination.

The application of targeted investigation was part of the original EU Land Release pilot project, and the concept was subsequently trialled and adopted more widely in BiH. Technical survey with targeted investigation was piloted by Norwegian People’s Aid (NPA) in 2015, and has subsequently been expanded and implemented by other operators and state bodies, including the BiH Armed Forces and civil protection entities. The process consists of first applying elements of non-technical survey, including desk studies and collection of evidence of contamination. Field-based targeted investigations are then conducted, and the outputs analysed to assess any CHA identified. As part of this process, BHMAC and NPA identified new sources of information for inclusion, including from former soldiers and commanders, and members of the local population who provided valuable data on mine contamination. Several methodologies can then be applied as part of the technical survey to locate the target contamination, including the use of manual clearance lane(s) towards a specific target, the use of detection dogs to search for a specific target, or the use of drones to help identify a specific target. Selection of techniques for each target is guided by several factors, including analysis of the characteristics of indirect evidence examined and environmental conditions (including the type of terrain and density of vegetation). In March 2017, NPA and BHMAC jointly organised a three-day workshop on the results of application of technical survey with targeted investigation in BiH in 2016. The workshop included a technical component during which the BiH Armed Forces, the Federal Administration of Civil Protection, the Civil Protection Administration of Republika Srpska, Pro Vita, NPA, and BHMAC, collectively discussed experiences gained through implementation of the technique, quality management in land release operations, and prioritisation. The results of the workshop were then presented to donors and other mine action stakeholders from the region.

There is broad agreement that technical survey with targeted investigation could significantly improve the efficiency of land release in BiH. It is hoped that targeted investigation could more accurately define CHA, and reduce the area treated through clearance to between 1% and 3% of the original SHA.

In May 2017, BHMAC asked NPA to develop a planning tool for land release. The tool is based on indicators of productivity, resources, and successful land release. It supports implementation of the national mine action strategy and monitoring of BiH’s mid-term land release action plans. On 22 August 2017, the tool was presented during a meeting of the BiH Land Release Board, together with representatives from the UNDP and EU delegations in BiH. The National Land Release Board is comprised of BHMAC, the BiH Armed Forces, the civil protection entities of the Federation of BiH and of the Republika Srpska, and NPA serves as an advisor to the board. As at September 2017, the plans and timeline for assessing and/or adopting the planning tool had not been announced.

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

Legislation

Since 2008, efforts have been made to adopt new mine action legislation in BiH with a view to creating a stable platform for mine action funding by the government and local authorities. A new draft demining law, which was first submitted to parliament in 2010, had still to be approved as at September 2017. It has not received approval from the Council of Ministers, after which it must be sent for parliamentary approval. The last attempt to amend the law took place in the second half of 2015 and the draft Bill failed to attract the support of the Council of Ministers, which concluded that instead of adopting a new law, the existing law on demining should be amended. BiH demining authorities are following the recommendation to amend the existing law, but as such is restricted to the number of changes it can include, as amendments are not permitted to exceed 40% of an original Act or else a new law is needed. In August 2016, the 68th session of the Council of Ministers of BiH issued a “Decision of the establishment of working group for the design of changes on the Demining law in BiH.” The working group, which consisted of representatives from the Ministry of Civil Affairs, the Demining Commission, BHMAC, the Armed Forces, and the entity Civil Protections, created a first draft of the amended demining law, which as at September 2017 was still under consideration. In December 2016, the Ministry of Civil Affairs of BiH opened a short 16-day public consultation process on Draft of Law on Amendments to the Law on Demining in BiH in accordance with the rules for consultations in drafting legal regulations in institutions of BiH. As at June 2017, the public consultation had been completed, and the draft law sent, via the Ministry of Civil Affairs, to the Council of Ministers for adoption.
UNDP has highlighted the need for the existing draft to be amended to ensure a strategic management body exists for mine action; that BiH national standards on land release are referenced; and that no technical issues impede land release.107

A BHMAC official acknowledged that the lack of a new legal framework has contributed to BiH’s repeated failure to meet its funding targets under its own mine action strategy.108 Nevertheless, the UNDP 2015 evaluation stated that though a more robust legal framework for mine action in BiH would be welcome, the current demining law is adequate to enable mine action activities to be implemented effectively.109

Standards

In December 2012, having recognised the need for more efficient land release in BiH, the EU, with pre-accession funding, started a pilot “Land Release” project with BHMAC.110 As part of this project, and by order of the Demining Commission, BHMAC developed three new draft chapters of its mine action standards in 2013. After discussion within the demining community in BiH, the draft standards were adopted by the Demining Commission in 2014, when operational activities commenced on the pilot projects.111

Subsequent lessons learned from conducting non-technical survey, technical survey (including targeted investigation), and mine clearance during the pilot projects, resulted in BHMAC amending the three standards in 2015, in accordance with IMAS.112 The revised national standard chapters were drafted in cooperation with EU technical assistance through the Land Release pilot project, UNDP, and the GICHD.113 After public debate and feedback from demining organisations and other mine action stakeholders, the three new chapters of the national mine action standards (NMAS) were adopted by the Demining Commission on 27 January 2016.114 The Demining Commission adopted temporary guidelines for QA/QC for land release tasks in July 2017.115

In addition, BHMAC has begun amendments and annexes for all chapters of the NMAS, as well as for SOPs for humanitarian demining.116 NPA piloted SOPs for technical survey with targeted investigation as the “missing link” in BiH’s land release process and proposed to BHMAC to consider the finalisation and adoption of these SOPs.117 In 2016, in collaboration with the GICHD and UNDP, BHMAC held a workshop on “standards and SOP revisions”.118 In order to further optimise efficiency and effectiveness, and ensure that the standards and SOPs allow for the optimal release of land through survey, including by technical survey, BHMAC created four expert working groups in 2016, to work on amendments and additional to all the chapters of the national mine action standards and SOPs.119 The working groups expected to complete their work by the end of September 2017, after which recommendations were to be sent to the demining commission for adoption.120

Quality Management

BHMAC’s two main offices in Banja Luka and Sarajevo coordinate the activities of regional offices in planning, survey, and quality control/QA. QA inspectors are based in the regional offices.121

The 2015 UNDP evaluation found that BHMAC’s QA of demining activities functions well, but recommended that BHMAC develop effective quality management mechanisms for the whole organisation to make processes more efficient and transparent.122 However, the 2016 national audit office report found that the quality control of demining carried out by BHMAC is not efficient and that a systematic improvement of the quality control (QC) process has never been done. In addition, the report states that: “Despite several levels of control in the demining system, accidents and irregularities occur in the areas the BiH Mine Action Centre declared safe”.123

In the report, “accidents” refer to blasts during demining activities and in areas that have been cleared and released; and “incidents” refer to mines and items of UXO detected in cleared areas after the completion of works and after the QC certificates had been issued by BHMAC. According to the audit office report, 23 irregularities and 32 accidents occurred between 2005 and 2016. Of the 32 accidents, 29 occurred during demining while the remainder involved civilians after demining had been completed.124 The Director of BHMAC, however, confirmed in May 2017 that no irregularities or accidents on cleared/released land have occurred in the last two years.125

Five decisions requiring repetitions of technical survey operations were issued during clearance and technical survey operations in 2016, in addition to six withdrawals of authorisation, and one resolution on prohibition of further work.126

It is important that appropriate QA and QC procedures are in place for all elements of land release methodology, including QC for survey.

Operators

At the end of 2016, 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, nine commercial companies (eight national and one international), and twelve non-governmental organisations (NGOs) [ten national and two international].127 Overall demining capacity totalled 1,200 persons in accredited organisations, comprising 900 deminers and 300 others (including team leaders, site leader, operational officers, quality assurance (QA) officers, and dog trainers).128
During 2016, 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 thirteen other clearance organisations, comprising nine NGOs (DEMIRA, Dok-ing deminiranje N.H.O., Eko Dem, Centre of Mine Detection Dogs (MDDC), NPA, Pazi Mine, Pro Vita, Stop Mines, and Association UEM) and four commercial organisations (Detektor, N&N Ivsa, Point, and UEM). BHMAC did not expect any major changes to demining capacity in 2017.

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

The BiH Armed Forces survey and clearance operations are fully engaged from March to November, and with reduced activity, predominantly in southern BiH, from December to February. In 2017, the BiH Armed Forces planned to undertake 56 demining projects: 34 in the Federation BiH, 18 in Republika Srpska, and 4 in District Brčko. Of the 56 planned projects, 6 were related to landmine clearance, 36 to technical survey, 4 to targeted technical survey, and the remaining 10 to CMR clearance. The BiH Armed Forces deploys machinery and explosive detection dogs during its survey and clearance operations. They do, however, require ongoing support from external partners, such as NPA (with international funding from governments of Germany, Norway, the Netherlands, and Switzerland, in addition to the Digger Foundation), to secure personal protective equipment, batteries for detectors, and fuel for demining machinery, since the Army’s own complex procurement system often cannot deliver such items in sufficient time.

Since 2010, NPA has increasingly focused on building the capacity of the 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. The Demining Battalion also receives support from Austria, France, Italy, and the United States, as well as EUFOR, which alone provides 90% of support. NPA further conducts mine clearance in the Srebrenica region in support of the activities of the International Commission for Missing Persons. As mentioned above, since 2010, NPA has increasingly focused on building the capacity of the Demining Battalion. NPA expected to maintain the same level of funding in 2017.

Mines Advisory Group (MAG) received operational accreditation in April 2017, and began technical survey and clearance operations in May 2017, with funding from the governments of Austria and the United States. 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 left much capacity 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. 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.
LAND RELEASE

In 2016, BiH released 1.34km² by clearance and 10.39km² by technical survey. A further 46.94km² was cancelled.153 While clearance output dropped slightly compared to the 1.64km² cleared in 2015, the amount of land reduced by technical survey and cancelled by non-technical survey in 2016 rose significantly, compared to the 8.39km² reduced and 16.17km² cancelled in 2015.154 However, as mentioned below, the 2016 survey output was inflated as the area reported as released by survey and clearance, including as cancelled by non-technical survey, includes the results of the EU pilot project over three and a half years, and not just in 2016.155

Survey in 2016

In 2016, 10.39km² was reduced by technical survey across 183 tasks and 46.94km² was cancelled by non-technical survey (see Table 2 below).156 The figure of 46.94km² reported as cancelled by non-technical survey, however, included the results of the full three and a half-year EU pilot project, rather than the annual cancellation output for 2016.157 This was likely due to a delay in sign off of the results of the EU pilot project, and subsequent delay in entry into the database, due to QC considerations.

In addition, 75 SHAs totalling 1.3km² were confirmed as mined.158

Technological survey was conducted by the BiH Armed Forces, the Federal Administration of Civil Protection, the Civil Protection Administration of Republika Srpska, and thirteen other clearance organisations (see the Operators section, above).159

Only BHMAC, with the assistance of an NPA non-technical survey team seconded to it, cancelled SHA and confirmed area as mined in 2016.160

Table 2: Survey of mined area in 2016161

<table>
<thead>
<tr>
<th>Canton</th>
<th>Area cancelled (m²)</th>
<th>Area reduced (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsko-sanki</td>
<td>4,914,108</td>
<td>740,803</td>
</tr>
<tr>
<td>Posavski</td>
<td>389,460</td>
<td>527,159</td>
</tr>
<tr>
<td>Tuzlanski</td>
<td>4,004,922</td>
<td>1,401,296</td>
</tr>
<tr>
<td>Zeničko-dobojski</td>
<td>439,791</td>
<td>1,344,235</td>
</tr>
<tr>
<td>Bosansko-podrinjski</td>
<td>90,110</td>
<td>112,325</td>
</tr>
<tr>
<td>Srednje-bosanski</td>
<td>14,491,633</td>
<td>1,515,606</td>
</tr>
<tr>
<td>Hercegovačko-neret</td>
<td>7,759,750</td>
<td>416,783</td>
</tr>
<tr>
<td>Zapadno-hercegovački</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sarajevo</td>
<td>2,151,640</td>
<td>834,725</td>
</tr>
<tr>
<td>Canton 10</td>
<td>3,068,847</td>
<td>45,838</td>
</tr>
<tr>
<td><strong>Total Federation BiH</strong></td>
<td><strong>37,310,261</strong></td>
<td><strong>6,938,770</strong></td>
</tr>
<tr>
<td><strong>Total Republika Srpska</strong></td>
<td><strong>7,952,808</strong></td>
<td><strong>2,863,266</strong></td>
</tr>
<tr>
<td><strong>Total District Brčko</strong></td>
<td><strong>1,680,751</strong></td>
<td><strong>588,965</strong></td>
</tr>
<tr>
<td><strong>Sum totals</strong></td>
<td><strong>46,943,820</strong></td>
<td><strong>10,391,001</strong></td>
</tr>
</tbody>
</table>
Clearance in 2016

In 2016, mine clearance operations in BiH were conducted by the Armed Forces, the Civil Protection of FBiH, and the Civil Protection of Republika Srpska, and thirteen other clearance organisations (see the Operators section above). More than 60% of the organisations engaged in small tasks, clearing a total of less than 100,000m² each during the year.

Overall, a total of almost 1.34km² was cleared in 2016, across 84 tasks, during which 1,313 anti-personnel mines, 63 anti-vehicle mines, and 1,192 items of ERW were destroyed (see Table 3). This is less than the 1.64km² cleared in 2015, and well below the 2009–19 mine action strategy target of 9.27km².

Table 3: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Canton</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>ERW destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsko-sanki</td>
<td>75,089</td>
<td>69</td>
<td>6</td>
<td>57</td>
</tr>
<tr>
<td>Posavski</td>
<td>43,381</td>
<td>14</td>
<td>10</td>
<td>118</td>
</tr>
<tr>
<td>Tuzlanski</td>
<td>133,782</td>
<td>146</td>
<td>1</td>
<td>112</td>
</tr>
<tr>
<td>Zeničko-dobojski</td>
<td>85,974</td>
<td>332</td>
<td>11</td>
<td>167</td>
</tr>
<tr>
<td>Bosansko-podrinjski</td>
<td>27,565</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Srednjë-bosanski</td>
<td>302,761</td>
<td>151</td>
<td>13</td>
<td>72</td>
</tr>
<tr>
<td>Hercegovačko-neret</td>
<td>103,467</td>
<td>65</td>
<td>9</td>
<td>33</td>
</tr>
<tr>
<td>Zapadno-hercegovački</td>
<td>85,974</td>
<td>332</td>
<td>11</td>
<td>167</td>
</tr>
<tr>
<td>Sarajevo</td>
<td>133,635</td>
<td>200</td>
<td>0</td>
<td>224</td>
</tr>
<tr>
<td>Canton 10</td>
<td>15,315</td>
<td>36</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Total Federation BiH</td>
<td>920,969</td>
<td>1,016</td>
<td>54</td>
<td>799</td>
</tr>
<tr>
<td>Total Republic Srpska</td>
<td>403,926</td>
<td>283</td>
<td>8</td>
<td>366</td>
</tr>
<tr>
<td>Total District Brčko</td>
<td>10,284</td>
<td>14</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1,335,179</strong></td>
<td><strong>1,313</strong></td>
<td><strong>63</strong></td>
<td><strong>1,192</strong></td>
</tr>
</tbody>
</table>

AP = Anti-personnel      AV = Anti-vehicle

Clearance operations in BiH include mechanical preparation of land, manual clearance, and the use of MDSs and SDDs depending on the geographical conditions. In addition, NPA also deploys SDDs and observation and recording of the dogs using drones. BHMAC reported that land release activities under the pilot project had been fully conducted on a total of six SHAs in BiH in 2016, with an estimated total area of 25.5km². BHMAC conducted non-technical survey, while accredited organisations conducted technical survey and mine clearance. Technical survey reduced 2km², clearance released 0.4km² (and destroyed 215 mines and 84 pieces of ERW), and 22.3km² was released through non-technical survey. After the verification process, 24.7km² was released to the final users. As per the data provided by BHMAC, less than 10% of the SHA was treated by technical methods.

As previously mentioned, one of the key developments that NPA reported in its clearance operations in 2015 and 2016 was the implementation of a pilot project of targeted technical survey over suspected mined areas, in coordination with BHMAC. The project, which was conducted in the municipality of Travnik, in the Middle Bosnia Canton, included development of SOPs, and application and testing of new techniques, processes, and procedures for targeted technical survey. It was hoped that this would increase efficiency of land release, and ensure improved assessment of mined areas, with limited need for full clearance. The results of the pilot project in Travnik municipality have been very positive, and NPA planned to expand the use of technical survey with targeted investigation in the municipality of Ravno. For SHAs with incorrect minefield records, traditional systematic technical survey typically required 20%–30% of the resources needed for full clearance, whereas targeted technical survey only required 1%–3%, based on the results of NPA’s relatively limited pilot project.

Deminer safety

In 2016, there were two demining accidents, both involving an anti-personnel PROM-1 mines. The first was in March 2016, during NPA clearance operations in the municipality of Usora, during which a team leader was killed by a PROM-1 mine. The second, also in March, was during technical survey operations of the non-government organization Eko-Dem in the municipality of Osmaci, during which one deminer was killed, and two people injured, also by a PROM-1 mine.
ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the ten-year extension request granted by states parties in 2008), BiH is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2019. BiH is not on track to meet this deadline, and is planning to prepare and submit an Article 5 extension request in 2018. BiH has reported that its Article 5 extension request will coincide with its anticipated national mine action strategy for 2018–25, and will be in accordance with the Maputo Declaration +15, adopted in 2014. The new strategy will also highlight the importance of full implementation of the land release concept.

Table 4: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>1.34</td>
</tr>
<tr>
<td>2015</td>
<td>1.64</td>
</tr>
<tr>
<td>2014</td>
<td>1.85</td>
</tr>
<tr>
<td>2013</td>
<td>1.89</td>
</tr>
<tr>
<td>2012</td>
<td>1.30</td>
</tr>
<tr>
<td>Total</td>
<td>8.02</td>
</tr>
</tbody>
</table>

In 2016, as in all years since it was granted the ten-year extension to its initial Article 5 deadline, BiH fell far short of its land release targets. In May 2016, BHMAC claimed that analysis of the Mine Action Strategy 2009–19, shows that BiH is currently 3.5 years behind in fulfilling its Article 5 obligations, due to lack of funding. BHMAC reported that more detailed information about completion of clearance would be available at the end of 2017, after it had conducted the third revision of the mine action strategy, which is now intended to be produced as a new Mine Action Strategy for 2018–25. BHMAC did, however, report that analysis shows that the fulfilment of BiH’s 2019 Article 5 deadline is currently four years behind schedule “due to funding” issues. However, while securing sufficient funding and capacity undoubtedly impacts progress, swifter progress towards completion could be achieved through stronger management of survey and clearance operations to ensure improved land release.

It is hoped that continued and increased operationalisation of more efficient evidence-based land release methodology will significantly increase land release output in BiH. This essentially focuses on greater use of non-technical survey and technical survey (including use of targeted investigation), as trialled in various land release pilot projects, to more accurately determine the location and extent of actual contamination, and cancel areas not contaminated. In March 2016, UNDP reported that the results of the pilot project to date show that continued application of this land release approach will greatly accelerate reduction and cancellation of SHA in BiH, and reduce costs. As at May 2017, BHMAC reported that new evidence-focused land release methodology was improving the mine action process and that it planned to greatly expand the application of technical survey with targeted investigation and of systematic technical survey in BiH. According to BiH, “Results gained so far through the realisation of these projects in the period 2014–16 allow for optimism that the application of this concept in the next period will greatly speed up the process of releasing the suspect hazardous areas, which will become more cost effective and cheaper.”

If approved and implemented, the plan for a country-wide re-assessment (re-survey) of SHA through high-quality non-technical survey, combined with technical interventions, will help greatly reduce the size of the currently over-inflated SHA in BiH, and ensure clearance assets are directed to areas where there is confirmed mine contamination. However, while the ratio of technical investigation to non-technical investigation methods provides an indication of the efficiency of land release operations in BiH, over time this ratio will naturally reduce, as land wrongly suspected of being mine-contaminated is cancelled/released through survey. The potential for technical survey with targeted investigation will also diminish with time, as additional information acquired through survey, including from informants, is obtained and applied.

As at June 2017, BiH reported that “activities of Land Release” (believed to refer to the new land release methodology) were being conducted at nine SHAs in BiH, with a total area of 35km², and expected to complete process verification and release approximately 30km² to final users by the end of the year. BiH reported that its operational plan for 2017–18 was to cancel 165km², reduce 76.56km², and clear 13.64km².
BHMAC is funded by the common institutions of BiH and other institutions at state level. Operations of the BiH Armed Forces are supported by the budget of the common institutions of BiH, while the FBiH finances the operations of Federal Administration of Civil Protection, and the Government of the Republic of Srpska funds the Civil Protection Administration of Republika Srpska. According to BHMAC, small-scale investments in equipment and training could significantly increase the capabilities of both the Federal Administration of Civil Protection and the Armed Forces.

Funding in 2017 was expected to remain at the same level as 2016. In 2016, just under BAM34 million (approx. US$19.3 million) was allocated to mine action operations in BiH. Of this, 56% (BAM19 million) came from national sources while almost 44% (BAM15 million) was from international donors. However, funding for the implementation of the Mine Action Strategy 2009–2019 is significantly less than originally planned, which in 2016 was only 53% of the BAM63.6 million (approx. US$36.5 million) originally forecast. The Ministry of Civil Affairs, the Demining Commission, and BHMAC have highlighted the limited funds for demining and have requested funds from the national budget. Domestic institutions and organisations and the private sector also fund mine action, including providing support to technical survey and clearance operations.

Analysis shows that BiH has committed a larger proportion of its national budget to mine action than many other mine-affected countries. Nevertheless, analysis by both NPA and UNDP shows that in the first five years of the 2009–19 strategy, while international donors maintained their planned funding commitments, anticipated BiH government funding level were not met, especially with regards to planned “additional government” sources and consequently, by 2013, progress was way off target. According to BiH, financial issues and lack of funds are the reason for the delay in fulfilling its Article 5 obligations. In the period 2006–17, only 50% of planned funds were available. The local and donor sources ensured the funds as planned, but unfortunately BiH did not provide additional funding due to its economic situation.

The slow pace of clearance has resulted in lack of confidence in the mine action programme from donors but also from people living in mine-affected communities, who felt disillusioned that the mines have not been cleared. The new National Mine Action Strategy for 2018–25 due to be presented to the BiH national authorities by the end of 2017, will provide details on how and when BiH intends to achieve Article 5 completion. To implement the strategy, however, will require strong oversight and commitment from BHMAC, and the Demining Commission and their superiors in the government. Finite funding and available operational capacity must be used as effectively as possible, and evidence-based land release methodology applied to ensure land is released back to communities as efficiently as possible.


3 Email from Goran Zdrale, Senior Officer for Analysis and Reporting, BHMAC, 17 May 2017; and Article 7 Report (for 2016), Form C.

4 Article 7 Report (for 2016), Form C; and email from Tarik Serak, Head of Operations, BHMAC, 13 November 2017. However, BiH’s Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 2016), Form A, reports suspected mined area of 1.18km² across 8,796 "micro locations".

5 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.

6 Email from Tarik Serak, BHMAC, 13 November 2017.

7 Article 7 Report (for 2015), Form C.


9 Article 7 Report (for 2016), Form C. This compares to an estimated 82,000 mines and UXO reported as at the end of 2015 (Article 7 Report (for 2015), Form C). BHIC’s CCW Protocol V Article 10 Report (for 2016), Form A, estimates approximately 79,000 mines and UXO.

10 Article 7 Report (for 2016), Form C.


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

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

14 Email from Suad Baljak, Mine Action Officer, UNDP, 15 September 2017.

15 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.

16 Email from Goran Zdrale, BHMAC, 17 May 2017.


19 Email from Darvin Licsica, NPA, 5 May 2016.

20 Email from Lillian Palmbach, UNDP, 29 May 2015.


22 Ibid., pp. 118.

23 Ibid., pp. 241–43.


25 Interview with Tarik Serak, BHMAC, Sarajevo, 20 March 2015.

26 Article 7 Report (for 2016), Form C.

27 CCW Protocol V Article 10 Report (for 2015), Form C.

28 Article 7 Report (for 2016), Form C.


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


33 Email from David Rowe, Advisor, GICHD, 14 September 2017.


35 The principle of organising BiH state-level bodies along ethnic lines came under scrutiny following the 2009 judgment of the European Court of Human Rights in the Sejdić and Finci case that the rights of two Bosnians of Roma and Jewish descent had been violated by being denied the opportunity to run for high-level elected office because they were not of the major ethnic groups. European Court of Human Rights, Sejdić and Finci Judgment, 22 December 2009; UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 22; and email from Suad Baljak, UNDP, 15 June 2017.


37 Email from Suad Baljak, UNDP, 15 September 2017.


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


45 Interview with Saša Obradovic, Director, BHMAC, Sarajevo, 10 May 2017; and email from David Rowe, Advisor, GICHD, 14 September 2017.


48 Interview with Tarik Serak, BHMAC, Sarajevo, 10 May 2017; and emails from Fotini Antonopoulou, EU, 19 June 2017; and Suad Baljak, UNDP, 15 June 2017; and UNDP BiH, "Mine Action Board of Donors Meeting", 31 March 2016, at: http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/presscenter/articles/2016/03/31/sastanak-odbora-donatora-za-protuminske-akcije.html.

49 Interviews with Haris Lokvancic, Advisor on Political Affairs, Programme Officer – Human Security/Justice, Swiss Embassy, Sarajevo, 9 May 2017; Fotini Antonopoulou, EU, Sarajevo, 10 May 2017, and Li.-Col. Martin Herrmann, Defence Attaché to Bosnia and Herzegovina and Kosovo, German Embassy, Sarajevo, 10 May 2017.

50 Emails from David Rowe, GICHD, 14 September 2017; and Josephine Dresner, Programme Manager, MAG, 24 September 2017.


52 Interview with Tarik Serak, BHMAC, 10 May 2017, Sarajevo.

53 Email from Goran Zdrale, BHMAC, 17 May 2017.

54 Interview with Blažen Kovač, Ministry of Defence, and Chair of the Demining Commission, Sarajevo, 10 May 2017.

55 Email from Suad Baljak, UNDP, 15 June 2017.

56 CCW Protocol V Article 10 Report (for 2015), Form B.


58 Ibid.

59 Ibid., pp. 2–3.

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

61 Email from Tarik Serak, BHMAC, 23 April 2015.

Interview with Dominika Skubida, EU, Sarajevo, 19 March 2015.

Statement of BiH, 14th Meeting of States Parties, Geneva, 18 December 2015; and email from Tarik Serak, BHMAC, 26 May 2016.

Email from Tarik Serak, BHMAC, 26 May 2016.


Ibid., p. 6; and Statement of BiH, 14th Meeting of States Parties, Geneva, 1 December 2015.


Email from Goran Zdrale, BHMAC, 17 May 2017; and interview with Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.

Interviews with Åsa Massleberg, GICHD, Geneva, 9 March 2017; and Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.

Statement of BiH, Intersestional meetings, Geneva, 8 June 2017.

Email from Suad Baljak, UNDP, 15 September 2017.

Statement of BiH, Intersestional meetings, Geneva, 8 June 2017.

Email from Suad Baljak, UNDP, 15 September 2017.


Email from Suad Baljak, UNDP, 15 September 2017.

Interview with Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.

Interviews with Haris Lokvancic, Swiss Embassy, Sarajevo, 9 May 2017; and Fotini Antonopoulou, EU, Sarajevo, 8 May 2017.

Interview with Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.

Interviews with Darvin Lisica, NPA, Sarajevo, 8 May 2017; Fotini Antonopoulou, EU, Sarajevo, 8 May 2017; and Saša Obradovic and Tarik Serak, BHMAC, Sarajevo, 10 May 2017.

Interviews with Darvin Lisica, NPA, Sarajevo, 8 May 2017; and Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.

Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017; and Darvin Lisica, “Application of targeted technical survey in Bosnia and Herzegovina: development of advanced techniques for data collection and assessment, standard operating procedures and building of national capacities”.

Emails from Darvin Lisica, NPA, 31 August 2017; and Tarik Serak, BHMAC, 24 October 2017.

124 Ibid., pp. 27–28.
125 Interview with Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.
128 Ibid., p. 21, and CCW Protocol V Article 10 Report (for 2016), Form A.
130 Email from Goran Zdrale, BHMAC, 17 May 2017.
131 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 29.
132 Ibid.; and interviews with Darvin Lisica, NPA, Sarajevo, 8 May 2017; Haris Lokvancic, Swiss Embassy, Sarajevo, 9 May 2017; and Tarik Serak, BHMAC, Sarajevo, 10 May 2017.
133 Interview with Lt.-Col. Dzevd Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.
134 Ibid.
135 Ibid.; and email from Goran Sehić, Deputy Programme Manager, NPA BiH, 18 October 2017.
136 Email from Amelia Balic, NPA Bosnia, 15 April 2015.
137 Emails from Darvin Lisica, NPA, 5 May 2016; and Goran Sehić, NPA, 10 July 2017.
138 Email from Fotini Antonopoulou, EU, 18 September 2017.
139 Interview with Lt.-Col. Dzevd Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.
140 Interview with Muamer Hrustanovic and Ahmet Dulovic, Federal Civil Protection of BiH, Sarajevo, 10 May 2017; and interview with Tarik Serak, BHMAC, Sarajevo, 10 May 2017.
142 Email from Suad Baljak, UNDP, 15 September 2017.
144 Email from Goran Sehić, NPA, 10 July 2017; and interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
145 Email from Goran Sehić, NPA, 10 July 2017.
146 Ibid.
147 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
148 Email from Amelia Balic, NPA Bosnia, 15 April 2015.
149 Email from Goran Sehić, NPA, 10 July 2017.
150 Interview with Josephine Dresner, MAG, Sarajevo, 9 May 2017.
151 UNDP, Draft Mine Action Governance and Management Assessment for BiH, p. 35.
152 Email from Fotini Antonopoulou, EU, 18 September 2017.
153 Email from Goran Zdrale, BHMAC, 17 May 2017.
154 Email from Tarik Serak, BHMAC, 26 May 2016.
155 Ibid., 24 October 2017.
156 Article 7 Report (for 2016), Form C; and email from Goran Zdrale, BHMAC, 17 May 2017.
157 Email from Tarik Serak, BHMAC, 24 October 2017.
158 Email from Goran Zdrale, BHMAC, 17 May 2017.
159 Ibid.
160 Ibid.; and email from Goran Sehić, NPA, 10 July 2017.
161 Article 7 Report (for 2016), Form C; and email from Goran Zdrale, BHMAC, 17 May 2017.
163 Email from Goran Zdrale, BHMAC, 17 May 2017.
164 Article 7 Report (for 2016), Form C; and email from Goran Zdrale, BHMAC, 17 May 2017.
165 Email from Tarik Serak, BHMAC, 26 May 2016.
166 Article 7 Report (for 2016), Form C; BHMAC, “Report on Mine Action in BiH for 2016”, February 2017, p. 11; and email from Goran Zdrale, BHMAC, 17 May 2017. There was a discrepancy between clearance data provided by BHMAS for NPA, and that provided by NPA for its 2016 operations. NPA reported that it had cleared 19 mined areas, totalling 0.13km², with the destruction of 503 AP mines, 8 AV mines, and 161 items of UXO. Email from Goran Sehić, NPA, 10 July 2017.
167 Email from Goran Zdrale, BHMAC, 17 May 2017.
168 Ibid.
170 Email from Darvin Lisica, NPA, 5 May 2016.
171 Email from Goran Sehić, NPA, 10 July 2017.
172 Email from Darvin Lisica, NPA, 5 May 2016.
174 Interview with Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.
175 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
176 Ibid.
179 Email from Tarik Serak, BHMAC, 26 May 2016.
181 Email from Goran Zdrale, BHMAC, 17 May 2017.
183 Email from Goran Zdrale, BHMAC, 17 May 2017.
184 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
185 Ibid.
186 Article 7 Report (for 2016), Form C.
187 Email from Goran Zdrale, BHMAC, 17 May 2017.
188 Ibid.
189 Email from Suad Baljak, UNDP, 15 September 2017.
190 Statement of BiH, First CCM Review Conference, Dubrovnik, 9 September 2015; and interview with Tarik, BHMAC, Sarajevo, 10 May 2017.
191 Email from Goran Zdrale, BHMAC, 17 May 2017.
193 Ibid.
194 BHMAC, “Five years since the entry into force of the Convention on Cluster Munitions”, 3 August 2015.
196 Interview with Lt.-Col. Dzevd Zenunovic, Ministry of Defense, Chair of the Demining Commission, Sarajevo, 10 May 2017.
197 Email from Goran Zdrale, BHMAC, 17 May 2017.
200 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
201 Ibid., p. 14.
**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
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<tbody>
<tr>
<td>Problem understood</td>
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<td>8</td>
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<tr>
<td>Target date for completion of mine clearance</td>
<td>6</td>
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</tr>
<tr>
<td>Targeted clearance</td>
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<td>Efficient clearance</td>
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<td>National funding of programme</td>
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</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>8</td>
<td>8</td>
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<td>National mine action standards</td>
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</tr>
<tr>
<td>Reporting on progress</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

- For 2016: 6.3
- For 2015: 6.6

**PERFORMANCE COMMENTARY**

The pace of land release slowed sharply in 2016 as cancellation of reclaimed land peaked and operators adjusted to greater financial constraints. These placed a question mark against the prospects for achieving the goal of completion of clearance by 2025 being discussed in the context of a new national mine action strategy.
RECOMMENDATIONS

- Cambodia should expedite adoption and publication of its new national mine action strategy detailing evidence-based plans for completing its Article 5 obligations.
- The Cambodian Mine Action and Victim Assistance Authority (CMAA) should adjust criteria for prioritising clearance in order to accelerate release of areas of dense anti-personnel mine contamination (category A1).
- Cambodia should ensure clearance is only conducted on land where there is firm evidence of contamination.
- The CMAA should take action to strengthen information management.
- The CMAA should present an annual report detailing progress towards strategic targets.
- Cambodia should accelerate cooperation with Thailand to facilitate clearance of mined areas along both sides of their common border.

CONTAMINATION

Cambodia is affected by mines and explosive remnants of war (ERW) left by 30 years of conflict that ended in the 1990s. Its anti-personnel mine problem is concentrated in, but not limited to, 21 north-western districts along the border with Thailand that account for the great majority of mine casualties. The K5 mine belt, which was installed along the border with Thailand in the mid-1980s in an effort to block insurgent infiltration, ranks among the densest contamination in the world.1

After 25 years of mine action in Cambodia, estimates of the extent of mine contamination continue to fluctuate. A baseline survey (BLS) of Cambodia’s 139 most mine-affected districts completed in 2013 estimated total mine and ERW contamination at 1,915km². The BLS identified hazardous areas affected to some degree by mines, covering a total of more than 1,111km², of which 1,043km² were affected by anti-personnel mines.2

This included some 73km² of dense contamination but most areas, covering 892km², contained “scattered or nuisance” anti-personnel and anti-vehicle mines.2

At the end of 2016, the CMAA estimate of dense anti-personnel mine contamination had risen to more than 100km² and the estimate of total mine contamination was 4% higher at 897km², reflecting mainly increased estimates of scattered/nuisance mines and anti-vehicle mines [see Table 1].3 The reason for the higher level of contamination has not been explained but the CMAA acknowledges that mined areas continue to be found outside the polygons identified in the BLS.4 As an example, Mines Advisory Group (MAG) reported it found 16 minefields in Rattanakiri province in 2016 which had not been caught in previous survey.5

Table 1: Mine contamination based on BLS results for 139 districts and additional survey 6

<table>
<thead>
<tr>
<th>Contamination classification</th>
<th>Area (m²) May 2013</th>
<th>Area (m²) End-2014</th>
<th>Area (m²) End-2015</th>
<th>Area (m²) End-2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Dense AP mines</td>
<td>63,894,629</td>
<td>99,750,628</td>
<td>99,490,452</td>
<td>100,778,056</td>
</tr>
<tr>
<td>A2 Mixed AP and AV mines</td>
<td>78,601,787</td>
<td>N/R</td>
<td>40,064,014</td>
<td>36,361,353</td>
</tr>
<tr>
<td>A2.1 Mixed dense AP/AV mines</td>
<td>9,154,925</td>
<td>N/R</td>
<td>6,561,919</td>
<td>7,090,672</td>
</tr>
<tr>
<td>A2.2 Mixed scattered AP/AV mines</td>
<td>216,840,425</td>
<td>N/R</td>
<td>173,915,747</td>
<td>168,694,189</td>
</tr>
<tr>
<td>A2 Total</td>
<td>304,597,137</td>
<td>255,370,490</td>
<td>220,541,680</td>
<td>212,146,214</td>
</tr>
<tr>
<td>A3 AV mines</td>
<td>68,187,332</td>
<td>N/R</td>
<td>31,510,235</td>
<td>47,082,941</td>
</tr>
<tr>
<td>A4 Scattered or nuisance mines</td>
<td>674,882,897</td>
<td>627,720,309</td>
<td>508,247,851</td>
<td>537,184,712</td>
</tr>
<tr>
<td>Totals</td>
<td>1,111,561,995</td>
<td>982,841,427</td>
<td>859,790,218</td>
<td>897,191,923</td>
</tr>
</tbody>
</table>

AP = Anti-personnel
AV = Anti-vehicle
N/R = Not reported
A draft national mine action strategy for 2017–25 said that as at March 2017 Cambodia had 946 km² of mine contamination, including 103 km² of A1 category dense anti-personnel mine contamination, 220 km² of A2 category (mixed anti-personnel and anti-vehicle mines), and 544 km² of A4 category (scattered mines). After a spike in the number of mine and ERW casualties in 2014, the total number of people killed or injured continued to decline in 2015 and 2016 (see Table 2). The number of anti-personnel mine casualties more than doubled in 2016 but remained at about the same level as in 2012–14. After increased attention to clearing anti-vehicle mines in the past two years the number of casualties from these devices as well as from other ERW has steadily declined since 2014 and the total number of people killed or injured in 2016 was less than half the 205 casualties in 2011.

Table 2: Casualties by device in 2012–16

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Killed</td>
<td>Injured</td>
<td>Killed</td>
<td>Injured</td>
<td>Killed</td>
</tr>
<tr>
<td>AP mine</td>
<td>3</td>
<td>23</td>
<td>2</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>AV mine</td>
<td>4</td>
<td>12</td>
<td>3</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>ERW</td>
<td>18</td>
<td>23</td>
<td>11</td>
<td>68</td>
<td>11</td>
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<tr>
<td>Totals</td>
<td>25</td>
<td>58</td>
<td>16</td>
<td>92</td>
<td>21</td>
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</table>

PROGRAMME MANAGEMENT

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

The CMAA’s President is Prime Minister Hun Sen who in 2016 changed the senior officials responsible for managing the sector. Prak Sokhonn, CMAA vice-president and chairman of a Joint Government-Development Partners’ Mine Action Technical Working Group maintaining relations with donors was appointed foreign minister in April 2016. Two senior government officials, Serei Kosal and Ly Thuch, were named as CMAA’s first and second vice-presidents respectively. In May 2016, Ly Thuch, who also serves as a government minister, was appointed CMAA Secretary General, replacing Prum Sophakmonkol, who moved to the Ministry of Foreign Affairs.

The CMAA identifies priority communes for clearance on the basis of casualty data and provincial-level Mine Action Planning Units (MAPUs) are responsible for preparing annual clearance task lists, working in consultation with local authorities to identify community priorities and with operators, taking account of donor funding and objectives. Task lists are reviewed and approved by Provincial Mine Action Committees (PMACs) and the CMAA. Reviews of the system in 2015 identified weaknesses, notably in reconciling local-level priorities with wider strategic goals, and CMAA management acknowledged a need to review the criteria for prioritising clearance in discussions on a new mine action strategy. UNDP has supported the CMAA through a “Clearing for Results” (CFR) programme since 2006, awarding contracts funded by international donors through a process of competitive bidding. The first two phases from 2006 to the end of 2015 resulted in release of 167 km² at a cost of $37 million. Prospects for the third phase were overshadowed by waning donor support.

By May 2016, donors had committed to provide $11 million for four years, of which $7 million was pledged by Australia. For 2016, CMAA issued three contracts worth a total of $1.65 million. This included two contracts worth $1.1 million awarded to CMAC to clear 7.6 km² in Battambang and Bantheay Mearneh provinces and one contract worth $0.43 million awarded to the National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC) to clear 2.2 km² in Pailin.

Strategic Planning

The CMAA’s management reshuffle came as it prepared to draw up a new strategic plan that operators hoped would help to invigorate donor support. The CMAA convened technical discussions on the plan in 2016 and had intended to complete it that year but progress was held back by the CMAA’s management reshuffle and wider political developments in the build-up to national elections. A draft National Mine Action Strategy 2017–2025 was still under discussion between CMAA, operators, and other stakeholders as at September 2017 but one proposal under consideration was to present it at the Anti-Personnel Mine Ban Convention (APMBC) Sixteenth Meeting of States Parties in December 2017.
The draft plan vision called for a Cambodia that “is mine free and the threat from explosive remnants of war is minimized and human and socio-economic development takes place safely.” It further identified the mission of mine action as “to release all known landmine and prioritized cluster munition contaminated areas and to minimize the residual risks caused by explosive remnants of war in Cambodia; and to advocate for the rights and services for landmine and ERW survivors and indirect victims.”

The draft plan set eight goals and twenty-seven objectives. The goals were:

- Release all known mined areas by 2025.
- Release prioritised cluster munition-contaminated areas by 2025.
- Address the threats from ERW.
- Minimise mine/ERW (including cluster munition remnants) casualties and improve survivors’ livelihoods.
- Contribute to economic growth and poverty reduction.
- Promote regional and international disarmament and cooperation in mine action.
- Establish a sustainable national capacity to address residual mine/ERW contamination after 2025.
- Ensure mine action activities are supported by enhanced quality management systems, effective information management and are gender- and environment-protective sensitive.

The draft said total known mine contamination amounted to 946km². It said Cambodia had released an average of 94km² a year for the last three years and at this rate would need 10 years to complete release of all known mine contaminated areas. To meet the goals of the Maputo Declaration and achieve completion by 2025 Cambodia would need to increase productivity by 22% to release 115km² a year. It said clearance assets should only deploy in areas where there is clear evidence of mines and future clearance tasks should be prioritised on the basis of effective re-survey (non-technical survey) that identified areas with clear evidence of the presence of mines. It said planning and prioritisation should respond to needs of communities on its border and that donor funding should be directed to priority areas where communities are impacted by high-risk mine types which are likely to function.

The initial draft plan also acknowledged that “a significant number” of mined areas cleared in 2016 either did not contain any mines or only contained mine types that experience showed had degraded and no longer functioned. The observation echoed a finding by the Geneva International Centre for Humanitarian Demining (GICHD) in a 2016 report, citing official data that almost half the land released by full clearance or reduced by technical survey in 2015 contained no mines (26%) or very few (one to three) devices (23%). It also found that dense anti-personnel mine contamination accounted for 7% of land released by full clearance in 2015 and 3.5% of land cleared in 2010–15. Land contaminated by nuisance or scattered mines accounted for almost half the area released in 2010–15.

The draft strategy said planning and prioritisation should take device types into consideration and that clearance tasks should be prioritised on the basis of effective re-survey (non-technical survey) that identified areas with clear evidence of the presence of mines. It said planning and prioritisation should respond to needs of communities on its border and that donor funding should be directed to priority areas where communities are impacted by high-risk mine types which are likely to function.

A Concept Paper on resource mobilisation released by the CMAA in early 2016 said Cambodia would need almost $340 million to deal with contamination totalling 1,638km², of which some 930km² was mined area and 707km² was battle area. It said Cambodia would be able to release 1,545km² (94% of the total) by 2025 through technical survey and clearance but warned that mine action targets were “seriously threatened” by lack of funding. The CMAA believed Cambodia would need around $400 million to tackle 1,970km² of mine and ERW contamination by 2025.
Information Management

The CMAA manages a database that upgraded to operating Information Management System for Mine Action (IMSMA) New Generation in 2014 that receives regular operational progress reports from operators but in 2017 information management remained a major challenge.

A GICHD information management assessment in 2015 concluded that “the overall level of data analysis and information usage within CMAA is good. Reports, charts, maps, extracts from IMSMA are being produced.” It also said “the full potential of IMSMA as an operational tool and its data for planning, prioritization, and tasking could significantly be enhanced in the future.” It also observed that the flow of data from CMAC remained a major challenge.

The GICHD reported in 2016 that the Database Unit staff “possesses the skills and knowledge to realize solutions to the increasing analysis and reporting requirement of the CMAA management” and demonstrated a strong commitment to improving the quality of data.29 In 2017, however, the CMAA still struggled to produce consistent, disaggregated data detailing the progress of survey and clearance.

Land Release

The CMAA reported release of a total of 68.7km² of mined area through survey and clearance in 2016 but inconsistencies in the CMAA’s data as well as between CMAA data and results reported by operators meant this was an approximate figure.33 Even with this caveat, it was clear that the pace of land release had slowed sharply from 2015, when Cambodia appeared to have released a total of approximately 147km².34

The slowdown had been expected as operators completed the survey of areas reclaimed by local communities which had started in 2015 and produced a spike in the amount of land cancelled by non-technical survey. The result underscored that land release in future would increasingly require technical survey and/or full clearance, further slowing progress towards completion, particularly as operators are tasked onto more A1 densely contaminated areas.35

Table 3: Land release in 2014–16 (km²)36

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cancelled by NTS</th>
<th>Area reduced by TS</th>
<th>Area cleared</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>22.21</td>
<td>23.77</td>
<td>50.24</td>
<td>96.22</td>
</tr>
<tr>
<td>2015</td>
<td>70.38</td>
<td>30.11</td>
<td>46.47</td>
<td>146.96</td>
</tr>
<tr>
<td>2016</td>
<td>28.93</td>
<td>14.48</td>
<td>25.33</td>
<td>68.73</td>
</tr>
</tbody>
</table>

NTS = Non-technical survey  
TS = Technical survey

Operators

Mine clearance is undertaken mainly by the national operator, CMAC, and two international mine action non-governmental organisations (NGOs), The HALO Trust and Mines Advisory Group (MAG). A national NGO, Cambodian Self-help Demining (CSHD), has been active since 2011. The CMAA identified three commercial companies as accredited to operate in 2017, including BACTEC, D&Y, and MUCC.30 The CMAA said in April 2016 that NPMEC had thirteen demining and four explosive ordnance disposal (EOD) teams accredited with the CMAA in 2016, an increase of two EOD teams compared to the start of 2015. In 2017, it reported only 10 NPMEC units accredited with the CMAA.31

The CMAA is responsible for quality management and in 2016 deployed eight QA/QC teams. It expected to maintain the same capacity in 2017.32
Survey in 2016

The CMAA reported release of 43.41km$^2$ through cancellation by non-technical survey and reduction through technical survey in 2016 (see Table 4) but its figures differed significantly from those reported by operators. MAG said that it cancelled 1.68km$^2$ through non-technical survey in 2016 and reduced 0.8km$^2$ as part of its technical survey. 37

Table 4: Land released by survey in 2016 (m$^2$)38

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area cancelled by NTS</th>
<th>Area reduced by TS</th>
<th>Total release by survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMAC</td>
<td>17,010</td>
<td>12,438,399</td>
<td>12,455,409</td>
</tr>
<tr>
<td>CSHD</td>
<td>0</td>
<td>43,254</td>
<td>43,254</td>
</tr>
<tr>
<td>MAG</td>
<td>1,265,770</td>
<td>1,302,961</td>
<td>2,568,731</td>
</tr>
<tr>
<td>NPMEC</td>
<td>0</td>
<td>451,161</td>
<td>451,161</td>
</tr>
<tr>
<td>HALO</td>
<td>27,644,284</td>
<td>244,192</td>
<td>27,888,476</td>
</tr>
<tr>
<td>Totals</td>
<td>28,927,064</td>
<td>14,479,967</td>
<td>43,407,031</td>
</tr>
</tbody>
</table>

Clearance in 2016

The amount of land released through clearance appears to have fallen sharply in 2016, though data inconsistencies make it difficult to determine results precisely. The CMAA reported clearance of 26.7km$^2$ in 2016, little more than half the estimated 46.5km$^2$ cleared in 2015 but may have understated results by some operators. Operators destroyed a total of 7,349 mines, 17% less than the previous year. CMAA data, however, showed clearance of less than 1km$^2$ of a total estimate of 108km$^2$ of densely contaminated land (A1 and A2.1) in 2016 and 15.4km$^2$ of a total of 682km$^2$ scattered/nuisance mine contamination (A2.2 and A4). 39 Data is indicative only in view of discrepancies in the figures presented in Tables 5 and 6. The total area cleared (C3) in Table 5 is less than the total area cleared in Table 6.

Table 5: Land release in 2016 by land classification and methodology (m$^2$)40

<table>
<thead>
<tr>
<th>Area cancelled by NTS</th>
<th>Area reduced by TS</th>
<th>Area cleared</th>
<th>Totals</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>ERW destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>202,428</td>
<td>59,992</td>
<td>699,774</td>
<td>962,194</td>
<td>1,698</td>
<td>0</td>
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<tr>
<td>A2</td>
<td>301,648</td>
<td>324,412</td>
<td>1,319,324</td>
<td>1,945,384</td>
<td>130</td>
<td>8</td>
</tr>
<tr>
<td>A2.1</td>
<td>70,020</td>
<td>62,785</td>
<td>240,287</td>
<td>373,092</td>
<td>560</td>
<td>6</td>
</tr>
<tr>
<td>A2.2</td>
<td>6,932,983</td>
<td>6,528,992</td>
<td>9,055,794</td>
<td>22,517,769</td>
<td>2,774</td>
<td>45</td>
</tr>
<tr>
<td>A3</td>
<td>189,996</td>
<td>22,530</td>
<td>6,654,607</td>
<td>6,867,133</td>
<td>93</td>
<td>56</td>
</tr>
<tr>
<td>A4</td>
<td>17,792,584</td>
<td>6,121,746</td>
<td>6,279,342</td>
<td>30,193,672</td>
<td>2,166</td>
<td>38</td>
</tr>
<tr>
<td>B2</td>
<td>3,437,406</td>
<td>1,359,510</td>
<td>1,078,636</td>
<td>5,875,552</td>
<td>157</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>28,927,065</td>
<td>14,479,967</td>
<td>25,327,764</td>
<td>68,734,796</td>
<td>7,578</td>
<td>153</td>
</tr>
</tbody>
</table>

The sharpest fall in operating results came from CMAC, Cambodia’s biggest demining organisation, which the CMAA said cleared 13.74km$^2$ in 2016,41 down from about 22.86km$^2$ in 2015. CMAC said it cleared 17.5km$^2$ in 2016,42 a discrepancy which may be attributable to delays in the submission and data entry of CMAC operating results. CMAC said it cleared 0.12km$^2$ of A1/dense anti-personnel mine contamination and 6.6km$^2$ of A4/scattered anti-personnel mine contamination but its director said in 2017 it would clear more A1 tasks in line with shifting national priorities.43

The downturn followed two years of severe financial constraints which led to downsizing of the number of personnel. CMAC had 1,245 staff at the end of 2016, compared with 1,700 the previous year. Germany ended financial support for CMAC’s Demining Unit 6 in Siem Reap in 2016 and the organisation faced a reduction in the value of contracts awarded by the UNDP-managed Clearing for Results programme. CMAC said it received some $8.7 million in 2016, including $5.9 million from international donors and just under $3 million from unspecified “internal” sources.44
CMAC saw improved prospects for donor support in 2017. Japan agreed to provide $12 million worth of equipment, including 88 vehicles, 788 deep-search detectors, 90 brush cutters, and 450 sets of personal protective equipment. It also agreed to provide $18 million in funding over three years from 2017 to 2019. CMAC planned to use the funding to focus on clearance in four heavily mined districts of Battambang province with a view to making them impact-free. It also expected to receive around $3 million worth of work from the government in 2017, including clearance or verification for road development, power lines and irrigation systems.45

Table 6: Mine clearance in 201646

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>Submunitions destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMAC</td>
<td>230</td>
<td>13,739,804</td>
<td>3,038</td>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td>CSHD</td>
<td>23</td>
<td>434,075</td>
<td>139</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>HALO</td>
<td>232</td>
<td>11,268,298</td>
<td>3,248</td>
<td>97</td>
<td>0</td>
</tr>
<tr>
<td>MAG*</td>
<td>9</td>
<td>151,908</td>
<td>314</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NPMEC</td>
<td>18</td>
<td>1,061,376</td>
<td>610</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>512</td>
<td>26,655,461</td>
<td>7,349</td>
<td>148</td>
<td>3</td>
</tr>
</tbody>
</table>

* MAG reported clearance of 1,971,204m² and destroying 830 anti-personnel mines.

The HALO Trust continued to operate with 1,100 personnel in five western and northern provinces in 2016 but recorded a slight downturn in productivity. It released 11.27km² through clearance in 2016, about half of it involving areas contaminated by anti-vehicle mines. This represented a drop of 8% from the previous year, though it destroyed 17% more anti-personnel mines in the course of clearance according to CMAA data. HALO Trust continued to work on clearing parts of the KS mine belt and expanded its presence in Prey Vihear province but faced restrictions on access to some areas close to disputed parts of Cambodia’s border with Thailand. In 2017, The HALO Trust deployed teams for the first time to Koh Kong province, an area starting to attract large numbers of settlers but left out of survey and clearance. HALO Trust also reviewed possible use of mine detection dogs in technical survey of mined areas and planned to conduct a trial of rats provided by APOPO in 2017, starting with four rats and rising to eight, to explore their possible use in technical survey.47

MAG had eight mine action teams and a total of 128 deminers operating in 2016 in Battambang and Pailin of a total of 228 staff that included BAC, EOD, community liaison, and mechanical clearance teams. MAG reported clearance of 1.97km², and said its record of results differed from the CMAA’s because the CMAA combined clearance and area-reduction results under technical survey and experienced delays in uploading results to its database. MAG received some $2.9 million in donor funding in 2016 and expected support to continue at that level in 2017, enabling it to maintain the same operational capacity. In 2017, it also expected to target a higher proportion of densely contaminated minefields.48

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the 10-year extension granted by states parties in 2009), Cambodia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 January 2020. It is not on track to meet this deadline.

Cambodia’s draft mine action strategy for 2017–25 sets a target of completing clearance of known mine contaminated areas by 2025 but makes clear this is dependent on a attracting donor support of around $400 million, averaging more than $40 million a year, a much higher level than achieved in recent years.

Table 7: Release of mined areas in 2012–16 (km²)49

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared</th>
<th>Area released by survey</th>
<th>Total area released</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>25.33</td>
<td>43.41</td>
<td>68.73</td>
</tr>
<tr>
<td>2015</td>
<td>46.47</td>
<td>100.49</td>
<td>146.96</td>
</tr>
<tr>
<td>2014</td>
<td>54.38</td>
<td>42.08</td>
<td>96.46</td>
</tr>
<tr>
<td>2013</td>
<td>45.59</td>
<td>21.46</td>
<td>67.05</td>
</tr>
<tr>
<td>2012</td>
<td>45.96</td>
<td>6.62</td>
<td>52.58</td>
</tr>
<tr>
<td>Totals</td>
<td>217.73</td>
<td>214.06</td>
<td>431.78</td>
</tr>
</tbody>
</table>
I implementing agency and led to the creation of the CMAA.

of mine action in 2000 that separated the roles of regulator and in the mid-1990s. It surrendered this function in a restructuring “centre”. Set up in 1992, CMAC was assigned the role of coordinator exercise the wider responsibilities associated with the term C

pp. 16−17.

C

CMAA, 14 March 2015.

for 2014, received by email from Nguon Monoketya, CMVIS Officer, pp. 4 and 47.

2016; and Enrico Gaveglia, Acting Country Director, UNDP, Phnom


Information provided by Tong Try, Senior Project Officer, Clearing for Results/UNDP, 11 May 2016.

Email from Edwin Faigmane, Chief Technical Adviser, UNDP, 21 September 2016.


Ibid., p. 17.
In 2016–17, there continued to be a number of reports of casualties and incidents from “landmines”, including victim-activated IEDs, reported by the United Nations Mine Action Service (UNMAS), there were 43 reported explosive incidents in the Far North region of Cameroon, causing 411 casualties: 171 killed and 240 injured. Body-borne IEDs have targeted primarily civilians while roadside IEDs are targeted mainly at military vehicles. The two most affected departments are Mayo-Sava and Logone-et-Chari, though after four incidents involving locally produced mines causing 14 casualties in Logone-et-Chari, no incidents on roads were reported after February 2016.

CONTAMINATION

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RECOMMENDATIONS FOR ACTION

■ Cameroon should urgently clear any anti-personnel mines or other victim-activated explosive devices on its territory and take immediate steps to minimise harm to civilians, including through the provision of risk education.

■ Cameroon should inform states parties to the Anti-Personnel Mine Ban Convention (APMBC) of the discovery of any anti-personnel mine contamination, including victim-activated improvised explosive devices (IEDs), and report on the location of all suspected or confirmed mined areas under its jurisdiction or control and on the status of programmes for their destruction.

■ As soon as security conditions permit, non-technical survey should commence in the Extrême-Nord (Far North) region, which has been reportedly most affected by conflict in 2016–17.

■ As necessary, Cameroon should seek, encourage, and facilitate assistance and expertise from humanitarian demining organisations.
According to military sources, the roadside IEDs deployed in 2016 were largely unsophisticated victim-activated pressure-plate devices, mainly using fertilizer-based explosive charges or other locally produced explosives. There are no legacy minefields in Cameroon, and incidents relating to explosive remnants of war (ERW) are reported infrequently.

While the extent of contamination from locally produced mines and IEDs is not known, a report by a Cameroonian analyst in 2016 claimed that mines had been used extensively around roads, houses, and vehicles, and that “damage caused by these homemade mines is becoming ever more frequent”. Cameroonian military officials reported in 2015 that “huge” numbers of landmines had been planted by Boko Haram along Cameroon’s Nigerian border, posing a threat to civilians, livestock, and soldiers, and reported recurrent use of locally produced mines and explosive charges along the road between Kerawa and Kolofata, targeting army vehicles.

In 2016–17, there continued to be numerous reports of casualties from mines and IEDs, both civilian and military. In June 2017, two Cameroonian soldiers were killed and five others were injured when their truck hit a mine on the Homaka road, near to the Nigerian border. In May 2017, six civilians were reportedly injured outside the village of Homaka when one stepped on a landmine while looking for straw to use for roofing. In February 2017, four soldiers were killed and several others injured in the Mayo-Tsanaga department, Far North region, after their vehicle detonated a mine. In June 2016, three other Cameroonian soldiers were said to have been seriously wounded when their vehicle detonated a mine planted by Boko Haram along the Kolofata-Gancé road, again in the Far North region. In March 2016, it was reported that 34 people, including at least 11 soldiers, had been killed and another 40 injured in seven landmine explosions over the previous five days in the same region.

**LAND RELEASE**

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

In June 2017, the United States (US) was reported to have donated significant quantities of demining equipment to Cameroon, including metal detectors. In March 2016, it was reported that US military advisors and officers were training Cameroonian soldiers on detection and destruction techniques for mines and other explosive devices. Previously, in 2015, Cameroon was reported to have received demining/EOD training and equipment from the United States and Russia and armoured mine-detection vehicles were provided by the US Army Africa Command.

In April 2017, UNMAS confirmed that the military and gendarmerie had benefitted from substantial and ongoing specialised capacity support from international actors, including France and the United States, but noted a shortage of equipment, and called for further IED awareness and EOD training.

**ARTICLE 5 COMPLIANCE**

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

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

CAMEROON


2. Jean-Guy Lavoie, Chief of Operations, UNMAS, "Mission Report: UNMAS explosive hazard mitigation response in Cameroon, 9 January – 13 April 2017", 30 April 2017, p. 1. In January–April 2017, UNMAS carried out an "explosive hazard threat mitigation response" in Cameroon, where it delivered risk education to humanitarian personnel, compiled and analysed available data on the threat, and assessed the needs for medium and long-term explosive threat mitigation measures to support the delivery of humanitarian assistance and relevant defence and security forces.


4. Ibid., p. 11.

5. Ibid., p. 1.


ARTICLE 5 DEADLINE: 1 JANUARY 20
(NOT ON TRACK TO MEET DEADLINE)

MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Timely clearance</td>
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<td>2</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>National mine action standards</td>
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<td>6</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: AVERAGE

5.2

5.1
PERFORMANCE COMMENTARY

Chad’s mine action programme showed signs of continuing improvement in 2016 over the previous year with more than double the amount of clearance by Mines Advisory Group (MAG), despite difficult operating conditions. Together with Handicap International (HI), MAG also substantially increased the amount of mined area confirmed by survey compared to 2015. However, large portions of the northern regions of Chad remain heavily contaminated by mines and explosive remnants of war (ERW), where survey has yet to be completed, and Chad is not on track to meet its extended Article 5 deadline. Facing the loss of the only international donor and the cessation of mine action operations in Chad in December 2016, the securing of European Union (EU) funding for a new four-year demining project starting in 2017 was a critical, positive development.

RECOMMENDATIONS FOR ACTION

- Chad should complete its nationwide survey to enable it to provide a comprehensive estimate of its mine contamination.
- Chad should revise its existing national mine action strategy with updated information, clarify the amount of contamination remaining, and submit a new workplan with clear annual targets for 2017–20 under its current extension request.
- Chad needs to urgently elaborate a resource mobilisation strategy to secure and diversify funding and attract international technical and operational support.
- Chad should take the necessary measures to strengthen the effectiveness of its national mine action centre. It should strive to ensure that available national demining personnel and resources are fully mobilised and deployed for survey and clearance on areas which contain anti-personnel mines, and allocated on the basis of humanitarian priorities.

CONTAMINATION

In December 2015, Chad reported it had identified a total of 123 mined areas albeit from survey of only part of the country. It expected more contaminated areas to be identified in four regions: Borkou, Ennedi, Moyen Chari, and Tibesti. In May 2014, Chad had 113 areas confirmed to contain mines with a total size of 103.5km². It did not include a revised estimate for contamination in its latest Article 7 transparency report, for 2016.

Chad also has a significant problem with explosive remnants of war (ERW); in 2014, it identified 221 ERW-contaminated areas covering 2.5km². Chad’s mine action plan for 2014–19 indicated that, based on a national technical survey conducted in 2010–12 and information available as at May 2014, it faced a total of 787 hazardous areas covering 1,236km². This comprised 123 mined areas across seven regions (covering 104km²) and 664 ERW-contaminated areas across nine regions (covering 1,132km²). Chad reported that it had already addressed ten mined areas and 443 ERW-contaminated areas.

In December 2015, Chad stated that demining by MAG and the National Demining Centre (Centre National de Déminage, CND) had released a further four areas of anti-personnel mine contamination with a total size of 0.32km² in the Tibesti region to the north, and in Sarh, Kyabé, Moyen-Chari region in the south. It also reported that while “it was not possible to provide precise figures”, non-technical survey activities by MAG and HI in Tibesti and in the south had identified 14 previously unrecorded mined areas, bringing the total number of mined areas remaining once again to 123.

As at May 2014, five of Chad’s twenty-two regions contained confirmed mined areas, as set out in Table 1. Borkou, Ennedi, and Tibesti are located in northern Chad at the border with Libya; Sila is located at the border with Sudan; and Moyen-Chari is in southern Chad at the border with the Central African Republic.

Table 1: Anti-personnel mine contamination by province (as at May 2014)

<table>
<thead>
<tr>
<th>Province</th>
<th>CHAs</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borkou</td>
<td>28</td>
<td>20.78</td>
</tr>
<tr>
<td>Ennedi</td>
<td>7</td>
<td>16.45</td>
</tr>
<tr>
<td>Moyen-Chari</td>
<td>1</td>
<td>0.06</td>
</tr>
<tr>
<td>Sila</td>
<td>1</td>
<td>0.1*</td>
</tr>
<tr>
<td>Tibesti</td>
<td>76</td>
<td>66.26</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>113</td>
<td>103.55</td>
</tr>
</tbody>
</table>

CHAs = Confirmed hazardous areas

*100m²

Mines and ERW are said to obstruct safe access to housing, roads, pastures, water points, and mining areas, especially in northern Chad. Contamination is an ongoing threat to local populations and its negative impact on the socio-economic development of Borkou, Ennedi, and Tibesti, which are among its poorest regions, is particularly severe. Made roads obstruct key transport routes, and diversions opened through potentially contaminated areas present risks to local populations seeking to access basic state services, such as medical coverage and higher education and training facilities.
provided mainly in regional capitals. To the south, east, and western regions, the impact of mines is thought to be relatively low, with the primary threat coming from ERW, including both unexploded ordnance (UXO) and abandoned explosive ordnance. In 2016, Chad reported that 27 people were injured by mines or UXO in Borkou and Ouaddai regions.

In August 2016, four Chadian soldiers were reported to have been killed when the vehicle they were traveling in hit a mine allegedly laid by Boko Haram in Kaiga Kindji, near to the Chad-Niger border in the Lake Chad region. This followed Chad’s increased participation in joint military offensives against Boko Haram as part of a Multi-National Joint Task Force launched in 2015. In 2015 and 2016, numerous incidents involving both civilian and military casualties from “landmines”, including locally produced mines planted by Boko Haram, were reported as part of the insurgency, which spread from north-east Nigeria to involve neighbouring areas of Cameroon, Chad, and Niger. Most reports appeared to describe use of locally produced mines made by Boko Haram, which functioned as either anti-personnel mines or anti-vehicle mines.

**PROGRAMME MANAGEMENT**

The national mine action programme is managed by a national mine action authority, the National High Commission for Demining (Haut Commissariat National de Déminage, HCND), and a mine action centre, the CND.

In December 2016, funding for a two-year EU-funded mine action project (Projet d’appui au secteur du déminage au Tchad, PADEMIN) came to an end. Under this project, MAG conducted survey and clearance of mines and ERW, focusing on Borkou, Ennedi, and Tibesti. In 2016, it employed a total of 35 national deminers, and deployed a four-strong mechanical demining support team for its technical survey operations. HI provided capacity-building support to the CND, in particular for information and quality management, and carried out non-technical survey in three southern regions of the country thought to be contaminated by mines and ERW.

But as the two-year EU funding was coming to an end, the EU agreed to support a new four-year mine action project in Chad, and MAG and HI were set to resume mine action activities during 2017. A third international operator, the Swiss Foundation for Demining (La Fondation Suisse pour le Démitage, FSD), was preparing to provide technical support to the CND.

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

**Strategic Planning**

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

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

**Standards**

HI began a review of Chad’s national mine action standards for land release and quality management at the start of 2016. In September 2017, HI reported that 11 revised national mine action standards had been updated and released, following approval by the CND.

**Quality Management**

MAG and HI reported that a number of external quality assurance and quality control (QA/QC) visits were carried out by the CND in 2016. Two QA/QC activities were conducted by CND staff on HI’s risk education teams in the Lake Chad area, and two visits were made by the CND to mine action operations in the north, including one independent mission by CND staff to Tibesti to QC MAG’s operations prior to land release, and another to Borkou for QC of clearance operations, with support from HI.

While HI continued providing technical support on quality management to the CND throughout 2016, it remained concerned that considerable further efforts were still required to establish a fully functional quality management system with adequate capacity within the CND.
**Information Management**

HI reported that while progress on information management capacity had been made in 2015, no further development was achieved during 2016, and, as at September 2017, the CND still lacked internet access, making it difficult for the Information Management System for Mine Action (IMSMA) team to carry out their daily work. HI also highlighted that, despite some improvements, further efforts were needed to consolidate data checking, correction, and validation.21

**Operators**

In addition to national CND teams, as described above, in 2016 HI and MAG were the international demining operators in Chad.

**LAND RELEASE**

In 2016, a total of nearly 0.58km² of mined area was released by clearance and technical survey, following the 0.26km² of clearance in 2015. The amount of mine contamination confirmed by survey increased significantly to close to 16.24km² in 2016, up from 1.2km² in 2015.22

**Survey in 2016**

MAG reported confirming six areas with a total of just over 14.63km² of mine contamination in Tibesti region in 2016.23 HI reported confirming seven suspected hazardous areas (SHAs) with a size of just over 1.61km² in Borkou region, including three small areas in Faya department and two areas in Kouba department with a combined size of 1,609,500m².24 Additionally, MAG reported that in 2015–16, technical survey was conducted on 74 areas with an estimated size of 14,800m².25

In December 2016, HI carried out an evaluation of the needs for survey and clearance in Borkou and the west of Ennedi region to prepare for the start of the new four-year EU-funded demining project. It reported identifying more than 40km² of area as mined, 2.7km² as contaminated with ERW, and a total of 147 open suspected or confirmed hazardous areas, following a desk assessment of existing data, including from a 2001 Landmine Impact Survey, the IMSMA database, and operators’ records, along with a number of field visits and meetings with local stakeholders.24

Previously, in 2015, a total of more than 1.2km² of SHA was confirmed by MAG and HI as contaminated with anti-personnel mines in the Tibesti, Moyen-Chari, and Chari Baguirmi regions.27

**Clearance in 2016**

MAG reported releasing a total of 575,120m² of mined area in Tibesti region in 2016, with the destruction of 96 anti-personnel mines and 21 anti-vehicle mines. It stated that this figure included some area reduced by technical survey, but was unable to provide the precise amount. As stated above, MAG reported that in 2015–16, technical survey was conducted on 74 areas with an estimated size of 14,800m², but it was unable to specify the amount of technical survey carried out in 2016.28 This was an increase on land released from 2015, when MAG reported clearing 263,009m² in Tibesti region.

In total, when MAG concluded operations in 2016 under the EU PADEMIN project, which began in February 2015, it reported releasing 98 areas with a size of nearly 1.4km², along with more than 100,000m² of traffic routes.29

**ARTICLE 5 COMPLIANCE**

Under Article 5 of the APMBC (and in accordance with the six-year extension granted by states parties in 2013), Chad is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 January 2020. Chad is highly unlikely to meet this deadline.

Chad’s Article 5 deadline has already been extended three times. Its latest extension request, granted in 2013, noted as circumstances impeding compliance with its Article 5 obligations: lack of financial support; the size of the country and poor road network; information management problems; mismanagement at CND; and lack of transparency in resources management, as well as security issues.

In 2014, Chad submitted its mine action plan for the extension period, which provides a more precise idea of its remaining contamination covering 103.5km² and indicates a provisional and general timetable. However, the full extent of the challenge remains unknown, as further survey needs to be conducted. This, combined with the lack of a concrete plan to complete survey and intermittent clearance in previous years, makes it very difficult to believe that Chad is capable of meeting its 2020 deadline.

In 2013, Chad was requested by states parties to report on the result of a mid-term evaluation of its national mine action strategy by the end of 2015, and to revise the strategy on the basis of updated information, if required. It was also requested to report on an annual basis on the clarity of remaining contamination, efforts to diversify funding, efforts to improve information management, and on weather conditions which affect Chad’s ability to meet its Article 5 obligations. As of mid-2017, it had yet to do so.30
In early 2017, both HI and MAG reiterated that Chad will not meet its 2020 deadline unless funding for mine action and capacity significantly increases. Challenges also include the distance of contamination in northern Chad and the difficult conditions, including the desert climate, high temperatures, sand, and wind, as significant challenges for logistics and human resources, alongside a lack of capacity and internal organisation of the national mine action authorities. Chad’s mine action plan for 2014–19 foresees expenditure of US$61 million ($40 million for operations and technical assistance, $4.5 million for equipment, and $16.6 million for the CND’s running costs). Chad has planned to contribute almost one-third of total funding ($16.6 million). In 2014, Chad reported contributing $2.76 million to the CND; no funding was, though, allocated to land release operations. In 2017, MAG and HI reported that the government had not provided any funding for operational mine action in recent years. According to its national plan, Chad’s budget for mine action activities in 2017 is just over $10.3 million.

Facing the loss of the only international donor and the cessation of mine action operations in Chad with the end of the PADEMIN project in December 2016, the securing of EU funding for a new four-year demining project starting in 2017 was critical. Under the new project, MAG was set to begin operations in Tibesti and Lac regions and HI would carry out survey and mine clearance in Borkou and the west of Ennedi region. MAG expected to increase its non-technical survey and risk education capacity, and deploy a community liaison team for seven months.

FSD was set to provide technical support to the CND to train new demining teams and increase the technical and managerial capacity of senior CND staff.

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1 Statement of Chad, 14th Meeting of States Parties, Geneva, 2 December 2015. This was also reported in Chad’s Article 7 Report (for 2015), Form C.
3 Ibid.
4 Statement of Chad, 14th Meeting of States Parties, Geneva, 2 December 2015. Translation from the original. This was also reported in Chad’s Article 7 Report (for 2015), Form C.
6 Ibid; and response to questionnaire by Romain Coupéz, MAG, 3 May 2017; and response to questionnaire by Benjamin Westercamp and Seydou N’Gaye, HI, 22 March 2017.
7 Response to questionnaire by Romain Coupéz, MAG, 3 May 2017.
8 Email from Julien Kempteneers, HI, 2 May 2016.
9 Article 7 Report (for 2016), Form J.
12 Response to questionnaire by Romain Coupéz, MAG, 3 May 2017.
13 Email from Julien Kempteneers, HI, 2 May 2016; and HI, “Landmine Clearance Efforts Begin in Chad”, undated; at: http://www.handicap-international.us/landmine_clearance_efforts_begin_in_chad.
14 Response to questionnaire by Romain Coupéz, MAG, 3 May 2017; and response to questionnaire by Benjamin Westercamp and Seydou N’Gaye, HI, 22 March 2017.
15 Presentation of Chad at African Union/ICRC Weapons Contamination Workshop, Addis Ababa, 3–5 March 2013; and Third Article 5 deadline Extension Request, 2 May 2013, p. 12.
18 Email from Julien Kempteneers, HI, 5 September 2017.
19 Ibid.; and email from Romain Coupéz, MAG, 19 September 2017.
20 Response to questionnaire by Benjamin Westercamp and Seydou N’Gaye, HI, 22 March 2017.
21 Email from Julien Kempteneers, HI, 5 September 2017.
22 Responses to questionnaire by Romain Coupéz, MAG, 3 May 2017; and email, 21 September 2017; response to questionnaire by Benjamin Westercamp and Seydou N’Gaye, HI, 22 March 2017; and emails from Julien Kempteneers, HI, 5 September 2017 and 2 May 2016; and Llewelyn Jones, MAG, 7 May 2016.
23 Response to questionnaire by Romain Coupéz, MAG, 3 May 2017.
24 Email from Julien Kempteneers, HI, 9 September 2017.
25 Response to questionnaire by Romain Coupéz, MAG, 3 May 2017; and email, 19 September 2017.
26 Emails from Julien Kempteneers, HI, 5 and 26 September 2017.
27 Emails from Julien Kempteneers, HI, 2 May 2016; and Llewelyn Jones, MAG, 7 May 2016.
28 Response to questionnaire by Romain Coupéz, MAG, 3 May 2017; and email, 19 September 2017. MAG reported carrying out an additional 16,843m² of battle area clearance and 57,469m² of road clearance, for a total of 649,432m² of land released in 2016. In its Article 7 report for 2016, Chad reported demining in Zouar and Zouarké, in Tibesti region, by MAG, with clearance of just under 650,000m² and the destruction of 94 anti-personnel mines, 21 anti-vehicle mines, and 2,847 items of UXO. Article 7 Report (for 2016), Form J.
29 Response to questionnaire by Romain Coupéz, MAG, 3 May 2017; and email, 19 September 2017.
30 “Preliminary observations of the Committee on Article 5 Implementation (Chile, Costa Rica, Switzerland and Zambia)”, Intersessional meetings, Geneva, 8–9 June 2017.
31 Responses to questionnaire by Romain Coupéz, MAG, 3 May 2017; and Benjamin Westercamp and Seydou N’Gaye, HI, 22 March 2017.
32 Email from Julien Kempteneers, HI, 2 May 2016.
34 Responses to questionnaire by Romain Coupéz, MAG, 3 May 2017; and Benjamin Westercamp and Seydou N’Gaye, HI, 22 March 2017.
36 Responses to questionnaire by Romain Coupéz, MAG, 3 May 2017; and Benjamin Westercamp and Seydou N’Gaye, HI, 22 March 2017.
37 Response to questionnaire by Benjamin Westercamp and Seydou N’Gaye, HI, 22 March 2017.
CHILE

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

MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Improving performance</td>
<td>8</td>
<td>6</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: GOOD 7.2 6.9

PERFORMANCE COMMENTARY

Chile significantly increased clearance output in 2016, seemingly putting behind it the allegations of major fraud that had beset the mine action programme in late 2015.1
RECOMMENDATION FOR ACTION

At the Sixteenth Meeting of States Parties in December 2017, Chile should reconfirm that it will meet its extended Article 5 deadline of March 2020.

CONTAMINATION

As at the end of 2016, Chile had more than 5.65km\(^2\) of confirmed and suspected mined area across five regions (see Table 1), believed to contain more than 20,000 landmines. Most confirmed contamination is in Arica and Parinacota. 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 vast majority of the mines were laid in the northern region, with some minefields located as high as 5,000m above sea level.

Table 1: Mined area by province (as at end-2016)

<table>
<thead>
<tr>
<th>Province</th>
<th>CHAs</th>
<th>Area (m(^2))</th>
<th>SHAs</th>
<th>Area (m(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arica and Parinacota</td>
<td>10</td>
<td>1,632,210</td>
<td>1</td>
<td>145,297</td>
</tr>
<tr>
<td>Antofagasta</td>
<td>11</td>
<td>309,805</td>
<td>3</td>
<td>2,985,481</td>
</tr>
<tr>
<td>Magallanes and Antártica Chilena</td>
<td>13</td>
<td>507,480</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tarapacá</td>
<td>6</td>
<td>56,817</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Valparaíso</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>14,000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>40</td>
<td><strong>2,506,312</strong></td>
<td>5</td>
<td><strong>3,144,778</strong></td>
</tr>
</tbody>
</table>

CHAs = Confirmed hazardous areas  
SHAs = Suspected hazardous areas

The impact of residual contamination is reported to be minimal, though a new mine victim was recorded along the border with Peru in May 2016.

PROGRAMME MANAGEMENT

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

Standards

Chile developed a joint demining manual for its armed forces in 2014, which includes procedures for destruction of unexploded ordnance (UXO).

Operators

Demining is conducted by the Army Corps of Engineers and the Navy Peace and Demining Division. Mechanical resources are being used to support manual demining.
**LAND RELEASE**

Chile cleared more than 3.5 km² of mined area in 2016 (see Table 2), almost doubling output in 2015 of 1.9 km². It has not reported directly on the number of mines cleared in 2016 but by extrapolation from successive Article 7 transparency reports Mine Action Review estimates that more than 15,000 anti-personnel mines and more than 7,800 anti-vehicle mines were destroyed during the year.

Clearance in 2016 was conducted over 38 areas in three of the five contaminated regions: Antofagasta, Arica and Parinacota, and Magallanes y Antártica Chilena.

### Table 2: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Region</th>
<th>Areas subject to clearance</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antofagasta</td>
<td>14</td>
<td>341,122</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td>Arica and Parinacota</td>
<td>11</td>
<td>3,139,874</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td>Magallanes and Antártica Chilena</td>
<td>13</td>
<td>42,650</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>38</strong></td>
<td><strong>3,523,646</strong></td>
<td><strong>N/R</strong></td>
<td><strong>N/R</strong></td>
</tr>
</tbody>
</table>

AP = Anti-personnel  
AV = Anti-vehicle  
N/R = Not recorded

**ARTICLE 5 COMPLIANCE**

Under Article 5 of the APMBC (and in accordance with the eight-year extension granted by states parties in 2011), Chile is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2020.

Chile should now meet its extended deadline. In July 2016, the Minister of Defence announced that Chile had completed 72% of its mine clearance and that it was on course to complete clearance in 2020. In its statement to the Fifteenth Meeting of States Parties, Chile reiterated its commitment to fulfil its Article 5 obligations, but without indicating whether this would be possible by 2020.

### Table 3: Clearance in 2012–16 (km²)

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared</th>
<th>Extension request forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>3.52</td>
<td>1.68</td>
</tr>
<tr>
<td>2015</td>
<td>1.89</td>
<td>0.93</td>
</tr>
<tr>
<td>2014</td>
<td>2.14</td>
<td>4.22</td>
</tr>
<tr>
<td>2013</td>
<td>0.71</td>
<td>1.41</td>
</tr>
<tr>
<td>2012</td>
<td>1.34</td>
<td>1.58</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>9.60</strong></td>
<td><strong>9.82</strong></td>
</tr>
</tbody>
</table>

Chile hosted the Fifteenth Meeting of States Parties in Santiago in November–December 2016.

---

2. Article 7 Reports (for 2015 and 2016), Form C.
3. Article 7 Report (for 2009), Form I.
4. Article 7 Report (for 2015), Form C.
6. “Chile investiga un fraude de medio millón de dólares en el seno de la Comisión de Desminado” [“Chile investigates half a million dollar fraud at the Demining Commission”], Infodefensa.com, 28 December 2015.
10. Ibid.
11. N. García, “Chile fecha el desminado total de fronteras en 2020” [“Chile will complete the demining of its borders in 2020”], Infodefensa.com, 15 July 2016.
**COLOMBIA**

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

**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
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</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>5</td>
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<tr>
<td>Targeted clearance</td>
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<td>6</td>
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<td>Efficient clearance</td>
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<td>National funding of programme</td>
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<td>Land release system in place</td>
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</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.8</td>
<td>6.4</td>
</tr>
</tbody>
</table>
Colombia’s agreement with the Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia, FARC) gave momentum to its demining efforts in 2016 and the Colombian Congress’s ratification of the peace deal in November 2016 was expected to further spur mine action across the country, particularly in areas primarily occupied by FARC that were previously off limits to clearance organisations. However, bureaucratic obstacles and poor coordination and tasking are impeding efficient mine survey and clearance and putting in jeopardy the peace dividend for mine action.

**RECOMMENDATIONS FOR ACTION**

- Colombia should take advantage of the peace process with the FARC to conduct a baseline survey of contamination and to accelerate significantly clearance of remaining mined areas in accordance with its obligations under the Anti-Personnel Mine Ban Convention (APMBC).
- As part of this process, Colombia should promote, in consultation with its demining partners, appropriate land release methodologies, including through use of mine detection dogs (MDDs) and mechanical demining assets.
- Colombia’s mine action programme authorities urgently need to improve data management and planning procedures.
- Colombia needs to streamline procedures for accreditation, tasking, and Quality Assurance (QA) and apply them consistently to all operators.

**CONTAMINATION**

Colombia’s mine problem is the result of decades of conflict with non-state armed groups. The precise extent of contamination remains highly uncertain, though at least 30 of Colombia’s 32 departments are suspected to have a mine threat. As at mid-2017, Colombia still lacked a meaningful understanding of contamination, although its new strategic plan for 2016–21, which is based on a national estimate of 51km² of mined area, aims to elaborate a national baseline.

Colombia continues to report on “events” included in its database, which include unconfirmed media reports, such as of victims and minelaying. Its Article 7 transparency report for 2016 reported that 647 suspected mined areas were recorded between 1990 and the end of 2016, a reduction from the 671 recorded as at the end of 2015. Of these, 100 were in Antioquia, believed to be the most affected department. Colombia systematically attributed 5,000m² to each “confirmed hazardous area.”

On 7 March 2015, negotiators for the Government of Colombia and the FARC announced that agreement had been reached by the two parties on demining. According to a joint statement, the government and the FARC would select a number of pilot zones with the highest level of threat from anti-personnel mines, improvised explosive devices (IEDs), UXO, or other explosive remnants of war (ERW). Following signature in August 2015 of an agreement with the European Union for support to the Pilot Project on Humanitarian Demining, Norwegian People’s Aid (NPA) was overseeing non-technical survey of suspected hazardous areas (SHAs) and technical survey and clearance of confirmed hazardous areas (CHAs).

According to The HALO Trust, mines “continue to have a huge effect on the civilian population, causing physical harm, preventing farming and affecting livelihoods.” Through the rapid response intervention plan implemented in 2016, 119 high-impact municipalities have been prioritised for intervention with a further 474 medium- and low-impact municipalities earmarked for intervention before 2021. The organisation believes that mine action is integral to efforts to rebuild the lives of the six million internally displaced people and 8 million registered victims of conflict in Colombia. This is because land restitution claims are unable to be processed if land is deemed to be dangerous. By declaring municipalities free from mine threat, HALO Trust observes that it is providing the “fundamental first step” towards facilitating the safe return of the displaced.

Colombia reported 84 new mine victims in 2016, a sharp reduction on the total of 217 reported for 2015.
PROGRAMME MANAGEMENT

Since 2002, the national mine action programme has been overseen by the National Interministerial Commission on Anti-Personnel Mine Action (Comisión Intersectorial Nacional para la Acción contra Minas Antipersonal, CINAMAP). CINAMAP serves as the national mine action authority. Two other institutions – the Victims Unit and the Land Restitution Unit – were established subsequently.

In September 2014, Decree 1649 created DAICMA to replace the earlier mine action body, the Presidential Programme for Comprehensive Mine Action (PAICMA). DAICMA effectively serves as the national mine action centre.

DAICMA’s ability to coordinate came under added scrutiny in 2016 and 2017 as it has been looking in operators to tasks before the extent of the challenge is known and without a clear appreciation of operators’ future capacities. This has resulted in teams sometimes laying idle, significantly reducing efficiency. Under Article 6(8) of the APMBC, states parties receiving international assistance are obliged to cooperate with a view to ensuring the full and prompt implementation of agreed assistance programmes. In August 2017, DAICMA became DAICMA – Descontamina Colombia.

Strategic Planning

Colombia’s APMBC Article 5 deadline extension request projected, improbably, that all mined areas would be released by 2020. Colombia’s 2011–13 operational plan was to address 6,000 dangerous and mined areas in 14 of 660 municipalities where the presence of mines is suspected covering an estimated 15km². Colombia did not attain those targets.

Colombia was due to submit an operational plan for 2014–20 at the Thirteenth Meeting of States Parties in December 2013, but did not do so. Colombia did present a demining “action plan” for 2014–16 at the Third APMBC Review Conference in Maputo in July 2014. The plan foresaw a first phase of mine action in 91 municipalities and steadily increasing national army demining capacity to 54 units, as well as the number of non-technical survey teams to 15 by 2016.

Colombia developed a five-year strategic plan for 2016–21. Among the primary aims set out in the plan are consolidation of the mine action sector and the elaboration of a detailed baseline of contamination. The operational plan has assigned responsibility for 63 highly impacted and prioritised municipalities to a range of civilian and military humanitarian demining operators.

Standards

New national mine action standards have been elaborated, including on MDDs and machines. The HALO Trust and other mine action operators in Colombia are working closely with the national authorities to raise standards for all elements of demining operations, including manual clearance and the introduction of mechanical demining.

Information Management

Poor information management has been a feature of Colombia’s mine action programme since its inception. While lack of access has undoubtedly played a role in this, efforts to verify and consolidate meaningful mine action data have proved inadequate. Government decree 1649 of 2014 assigned to DAICMA responsibility for maintaining the IMSMA database and to “compile, systematise, centralise, and update relevant information” to serve as a basis for programme planning. This remains a central challenge for the programme. NPA has been supporting DAICMA on information management with a full-time expert seconded to the Directorate.

Operators

The Armed Forces former Humanitarian Demining Battalion (BIDES), now Humanitarian Demining Brigade (Brigada de Desminado Humanitario [BROH], has been conducting humanitarian demining since 2005, when it began clearance of 35 military bases. It completed the clearance in 2010.

In 2013, The HALO Trust became the first non-governmental organisation (NGO) to conduct demining in Colombia when it began clearance operations at the El Morro minefield, Nariño municipality, in Antioquia department. In 2015–16, HALO Trust Colombia was conducting survey, mine clearance, risk education, and some victim assistance. Its main office was in Bogotá and operations were taking place in eight municipalities across three departments: Antioquia, Meta, and Tolima. Based on the peace agreement, DAICMA assigned HALO Trust 14 rapid-response municipalities for immediate post-conflict intervention. As at March 2017, HALO Trust was also conducting operations in Cauca and Valle del Cauca and had in addition been authorised to begin operations in the departments of Nariño and Putumayo bringing the total number of municipalities assigned to the organization to 27.

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

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In 2017, NPA was supporting the Demining Brigade with its MDD and dog handler training, including by sourcing funds for a project to support their puppy and breeding project. It also hoped to finalise an agreement with the FARC on including staff from Humanicemos, the FARC demining organisation being established, into NPA training and teams for deployment to Briceño municipality. The Organization of American States (OAS) serves as the monitoring body for humanitarian demining in Colombia; procedures in place for the approval of tasks, plans, and standing operating procedures (SOPs) have been questioned. NPA, for instance, 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.

**LAND RELEASE**

Colombia cleared less than 0.3km² of mined area in 2016, a decrease on clearance output in 2015 of 0.35km². Operations in 2016 included destruction of 210 anti-personnel mines.

**Survey in 2016**

In 2016, The HALO Trust conducted survey in the departments of Antioquia (in the municipalities of Abejorral, Argelia, El Carmen de Viboral, Nariño, San Rafael, and Sonson); Meta (Mesetas, San Juan de Arama, and Vistahermosa municipalities); and Tolima (Ataco, Chapparal, Planadas, and Rioblanco). Survey identified 289,219m² of hazardous area across a total of 53 CHAs and SHAs.

In 2016, NPA coordinated the completion of demining by BIDES in two communities. One was El Orejón in the municipality of Briceño in Antioquia where 4,022m² of area was surveyed, while the second was in Santa Helena in the municipality of Mesetas, in the department of Meta, where 19,624m² was surveyed. NPA also initiated independent non-technical survey in 2016, at Vista Hermosa in the municipality of Mesetas; this subsequently led to identification of CHAs that were due to be cleared in the course of 2017.

**Clearance in 2016**

Colombia reported clearance of 287,661m² in 2016 across six departments: Antioquia, Bolivar, Caldas, Meta, Santander, and Tolima. DAICMA had expected to initiate clearance operations in 20 new municipalities over the course of 2016.

Since 2010, UNMAS has been advising DAICMA (and its predecessor). UNMAS’s aims for 2016 were threefold: to increase the capacity of the authorities to manage, coordinate, and regulate the mine action sector; to develop the sector to support peace and development initiatives (particularly ensuring that civilian and humanitarian demining organizations are operating under an adequate quality management framework"); and to support the peace process. UNMAS was hoping for significant progress in non-technical survey during 2017, in order to facilitate the planning of efficient and effective clearance operations. In order to minimise the cost of demining Colombia, UNMAS argues, the efficiency of operations must improve. This could usefully include the use of MDDs.

<table>
<thead>
<tr>
<th>Province</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antioquia</td>
<td>161,641</td>
<td>121</td>
<td>4</td>
</tr>
<tr>
<td>Bolivar</td>
<td>16,671</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>Caldas</td>
<td>35,349</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Meta</td>
<td>20,874</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>Santander</td>
<td>53,059</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>Tolima</td>
<td>67</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>287,661</strong></td>
<td><strong>210</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

AP = Anti-personnel

In 2016, HALO Trust conducted clearance in the departments of Antioquia (in the municipalities of El Carmen de Viboral, Nariño, San Rafael, and Sonson); Meta (San Juan de Arama municipality); and Tolima (Ataco municipality), reporting clearance of 115,628m² with the destruction of 90 anti-personnel mines and 2 items of UXO. On 15 October 2016, the municipality of Nariño was handed over to the local population by Colombian President Juan Manuel Santos and The HALO Trust. Nariño is free of the threat of anti-personnel mines, the first time a civilian organisation has freed a municipality from explosive contamination.

On 21 and 22 December 2016, NPA, together with DAICMA, BIDES, the FARC, and the Colombian Ministry of Foreign Affairs, handed over cleared areas in El Orejón in the municipality of Briceño, in the north-east of the country, after clearance of 19,849m² that included the destruction of 46 anti-personnel mines.

**Deminer Safety**

In June 2017, NPA staff had to leave Santa Helena, Mesetas municipality in Meta department, due to direct threats from a dissident FARC faction.
Progress in 2017

In March 2017, HALO Trust was close to initiating non-technical survey in two further departments: Cauca and Valle del Cauca.42 Government restrictions on the use of explosives by NGOs had been limiting the capability to tackle Colombia’s UXO threat but HALO Trust was planning to introduce thermite burning devices, manufactured in New Zealand, to enable safe destruction of ERW without the use of explosives.43 By the end of the year, HALO Trust hoped to have doubled the size of its personnel.44

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBCh an accordance with the ten-year extension granted by states parties in 2010, Colombia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2021.

It is not on target to meet the deadline, although the national Mine Action Strategic Plan 2016–2021 still envisions that Colombia will fulfil its mine survey and clearance obligations by 2021.

The progress agreement has the potential to be a great success for Colombia. The HALO Trust has, though, seen a reduction in funding to “legacy” projects in departments such as Antioquia that predate the peace deal even though many communities in those regions are still greatly impacted by mine contamination. The HALO Trust is making a concerted effort to ensure that these legacy projects receive the funding they need to make sure the job is completed.45

As at September 2017, the Government of Colombia was in negotiations with the now largest active guerrilla group, the National Liberation Army [ELN],46 with mine action a point of discussion, which is a positive signal for the future importance of mine action in Colombia.47

2 Article 7 Report (for 2015), Form D.
3 Article 7 Reports (for 2015 and 2016), Form D.
4 Article 7 Report (for 2015), Form D.
6 Email from Chris Ince, Programme Manager, HALO Trust Colombia, 28 May 2016.
9 Email from Oliver Ford, Programme Support Officer, HALO Trust Colombia, 14 September 2017.
10 Email from Chris Ince, HALO Trust Colombia, 28 May 2016.
11 Article 7 Reports (for 2015 and 2016), Form D.
13 Article 7 Report (for 2014), Form A.
15 Revised Article 5 deadline Extension Request, 13 August 2010, p. 66.
19 Article 7 Report (for 2015), Form D.
20 Email from Vanessa Finson, Programme Manager, Humanitarian Disarmament – Colombia, NPA, 14 March 2017.
21 Email from Oliver Ford, HALO Trust Colombia, 14 September 2017.
22 Article 7 Report (for 2014), Form C.
23 Email from Vanessa Finson, NPA, 14 March 2017.
26 Email from Harriet Houlsby, Programme Coordinator, HALO Trust Colombia, 17 March 2017.
27 Email from Fredrik Holmegaard, Project Manager, Humanitarian Disarmament – Colombia, NPA, 13 June 2016.
28 Email from Vanessa Finson, NPA, 14 March 2017.
29 Email from Vanessa Finson, NPA, 12 September 2017.
32 Email from Harriet Houlsby, HALO Trust, 17 March 2017.
33 Ibid.
34 Email from Vanessa Finson, NPA, 14 March 2017.
35 Article 7 Report (for 2014), Form C.
36 Article 7 Report (for 2015), Form D.
37 Article 7 Report (for 2016), Form D.
38 Email from Harriet Houlsby, HALO Trust, 17 March 2017.
41 Email from Vanessa Finson, NPA, 12 September 2017.
42 Email from Harriet Houlsby, HALO Trust, 17 March 2017.
43 Ibid.
44 Ibid.
45 Ibid.
47 Email from Vanessa Finson, NPA, 12 September 2017.
CROATIA

**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

6.9 | 7.0
PERFORMANCE COMMENTARY

Croatia’s mine action programme performance in 2016 was mixed. Annual clearance output, while still high at more than 38km², was slightly lower than in 2015, and the amount of land cancelled by non-technical survey was significantly lower. In a positive development, the Croatian Mine Action Centre (CROMAC) reported land reduced by technical survey for the first time; this was made possible under the 2015 Law on Mine Action. Despite this positive aspect, there are concerns that overall the new law may impede effective and efficient operations. There were numerous demining accidents in 2016 but under the new law, CROMAC is no longer directly responsible for investigating them.

RECOMMENDATIONS FOR ACTION

■ Croatia should ensure it fully uses both non-technical and technical survey to efficiently confirm mine contamination and to discredit suspected areas that are not contaminated. CROMAC should ensure there is sufficient survey capacity to meet its technical and non-technical survey land release targets.
■ Croatia should revisit the 2015 Law on Mine Action to rectify some of the unintended challenges it poses to the implementation of mine action operations.
■ Croatia should evaluate the revised procedures in place to investigate demining accidents since the adoption of the 2015 demining law, including potentially re-establishing and strengthening CROMAC’s role in accident investigation, as the national body with the requisite technical expertise.

CONTAMINATION

Croatia is affected by mines and, to a much lesser extent, explosive remnants of war (ERW), including cluster munition remnants (CMR), a legacy of four years of armed conflict associated with the break-up of the former Yugoslavia in the early 1990s. At the end of 2016, total confirmed mined area (excluding military sites) was 281.5km² across 64 sites, while mines were suspected to cover a further 161.7km², across 52 suspected hazardous areas (SHAs) [see Table 1]. This represents a decrease compared to the 294km² across 66 confirmed hazardous areas (CHAs), and 189km² across 55 SHAs, as at the end of the previous year. Nine counties out of a total of twenty-one are still mine-affected, with records indicating that a total of 35,776 anti-personnel mines and 6,115 anti-vehicle mines remain to be cleared.

The 443.2km² of combined suspected and confirmed contamination is slightly lower than the figure of 446.6km² reported in Croatia’s Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report for 2016 and its Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 and Amended Protocol II Article 13 reports, which include 3.3km² of contamination which is unexploded ordnance (UXO) only, and not mine contamination.

In addition, a further 32km² of mined area exists under military control, said to contain 25,299 anti-personnel mines and 1,040 anti-vehicle mines. The military facilities include three barracks, three training sites, and four storage sites, with 30km² of the overall military mined area contained in the training sites.

Table 1: Mined area by county (as at end-2016)*

<table>
<thead>
<tr>
<th>County</th>
<th>CHAs</th>
<th>Area (km²)</th>
<th>SHAs</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brod-Posavina</td>
<td>1</td>
<td>1.98</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Karlovac</td>
<td>9</td>
<td>16.58</td>
<td>8</td>
<td>32.93</td>
</tr>
<tr>
<td>Lika-Senj</td>
<td>9</td>
<td>99.4</td>
<td>8</td>
<td>38.35</td>
</tr>
<tr>
<td>Osijek-Baranja</td>
<td>12</td>
<td>38.39</td>
<td>10</td>
<td>21.69</td>
</tr>
<tr>
<td>Požega-Sлавonia</td>
<td>2</td>
<td>24.4</td>
<td>2</td>
<td>5.52</td>
</tr>
<tr>
<td>Split-Dalmatia</td>
<td>4</td>
<td>18.5</td>
<td>2</td>
<td>3.37</td>
</tr>
<tr>
<td>Sisak-Moslavina</td>
<td>10</td>
<td>45.08</td>
<td>9</td>
<td>33.31</td>
</tr>
<tr>
<td>Šibenik-Knin</td>
<td>7</td>
<td>19.24</td>
<td>5</td>
<td>7.60</td>
</tr>
<tr>
<td>Zadar</td>
<td>10</td>
<td>17.92</td>
<td>8</td>
<td>18.94</td>
</tr>
<tr>
<td>Totals</td>
<td>64</td>
<td>281.5</td>
<td>52</td>
<td>161.7</td>
</tr>
</tbody>
</table>

* A further 31.92km² of mined area exists under military control.
Croatia was impacted by the flood disaster that hit several states across south-eastern Europe in May 2014, though in Croatia only 2.2km² of SHA in three municipalities in Vukovar-Srijem county was affected. According to CROMAC, there was no change in contamination because the river bank was breached downstream of the SHAs.8 After the floods, though, CROMAC made demining the flooded areas a priority. Clearance of the most critical SHA, between the river bank and railway line in Gunja municipality, started as soon as the waters receded, an “in-kind donation” of services by Croatian demining companies.9 The remaining SHA in two areas along the flood-affected border with Serbia, located in Vrbanja and Nijemci municipalities, was subsequently released as planned in 2015, and the county of Vukovar-Srijem (including the municipalities of Vrbanja and Nijemci, within the county) was cleared of all mines.10

In July 2017, media incorrectly reported that 34 landmine explosions had been triggered in southern Croatia, in an area thought to be mine-free, following the spread of a forest fire from neighbouring Montenegro.11 However, this information was wrong, and the reported explosions were in fact caused by a local resident firing a gas-fuelled sound cannon to deter wild boars.12

Mine contamination in Croatia predominantly has a socio-economic impact on local communities, and prevents safe use of land for livestock and forestry-related activities. As at the end of 2016, 92.6% of suspected contamination was reportedly on forested land, much of which is protected as national park or Natura 2000 area; 7.1% was on agricultural land; and 0.3% was on other areas [e.g. water, marshland, coast].13 CROMAC planned to complete demining of agricultural land in 2018. 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.14

The last civilian victim of a mine incident in Croatia was in 2013, and the last mine incident involving a child was 2004.15

**PROGRAMME MANAGEMENT**

CROMAC was established on 19 February 1998 as the umbrella organisation for mine action coordination.16 The CROMAC Council, the oversight and strategic planning body for mine action, is supposed to meet on a monthly basis17 but since the expiry of the mandate of government-appointed members in August 2016, the council has not met.18 As at May 2017, the CROMAC Council had been reformed, but was awaiting a new government decree in order to be formally established and commence its work.19

Delay in government approval of the CROMAC Council primarily poses administrative challenges, rather than hindering mine action operations on the ground. Until the Decree is passed, the CROMAC Council is not able to send documents to the government for approval, such as the annual workplan, and it also impacts negatively on recruitment within CROMAC.20 This explains why the head of CROMAC was still “Acting” Director as at writing.

In April 2012, the government created the Office for Mine Action (OMA), reporting to the Prime Minister’s office, to function as a focal point for mine action, strengthen coordination among stakeholders and funding agencies, and raise public awareness about mine hazards.21 The OMA does not sit above CROMAC; rather, it is the government institution dealing with the political aspects of mine action whereas CROMAC deals with operations.22 The OMA includes a Unit for European Union (EU) Funds, tasked with promoting access to a range of EU funds to support the mine action sector.23 The establishment of the OMA has elevated the status of mine action within the country as it can politically pressure the government and international actors in ways that CROMAC, as a technical body, cannot.24

**Strategic Planning**

Croatia’s 2008 Article 5 deadline extension request set out annual demining targets and strategic goals, including elimination of all mine threat to housing and areas planned for the return of displaced people by 2010; to infrastructure by 2011; to agricultural land by 2013; and to forest areas by 2018.25 While clearance of the mine threat to housing and infrastructure is now complete, Croatia missed its target on agricultural land, which is being prioritised for clearance and released annually, but which remained contaminated as at the end of 2016.

CROMAC also has a National Mine Action Strategy 2009–2019, which was approved by the Croatian Parliament in September 2009, and includes the goal of all mine clearance by 2019.26 Mine clearance priorities are divided into three main groups: safety, socio-economic, and ecological. The aim is to improve safety and promote economic development, focusing on the release of the highest priority areas with priorities set in collaboration with local authorities. CROMAC has completed release of most of the highest priority areas.27
Legislation and standards

A new Mine Action Law was adopted by the Croatian Parliament on 21 October 2015, incorporating developments from the latest International Mine Action Standards (IMAS), and specifically those relating to the use of technical survey to confirm the presence of contamination or discredit it in an SHA.28 The 2015 law introduces a new procedure for “supplementary general survey” (i.e. non-technical survey) and enables “exclusion” (i.e. reduction) of SHAs through technical survey, which was not possible under the previous law.29 Under the new law, CROMAC can use technical survey to release land, and to better define and confirm minefields for which it has no record.30 The 2015 Law on Mine Action has eliminated the need for standing operating procedures (SOPs), as all aspects of mine action are now clearly defined in the new law.31 National Mine Action Standards are also encompassed within it.32

The 2015 Law, the elaboration of which was initiated by the OMA with the text drafted by the Ministry of Interior, marks an improvement in certain respects on earlier operational procedure (for instance, by permitting land release through technical survey), but also poses challenges to the efficient and effective running of Croatia’s mine action programme. Operators were extensively consulted during the drafting of the former mine action law, but this did not occur during the elaboration of the 2015 Law. While CROMAC provided expert input and feedback on the draft, many of its substantive recommendations were not incorporated.33

There is widespread agreement among mine action experts and professionals with significant experience in the field (e.g. CROMAC staff and deminers), that the new law is not practical to implement in the field, and impedes efficient and effective mine action operations.34 Certain articles of the 2015 Law lack clarity and are hard to interpret, or do not make good sense operationally.35 One such example concerns quality assurance (QA). Under the new law, authorised CROMAC staff no longer have the authority to control personnel and technical equipment prior to and during demining operations, and instead only undertake quality control (QC) of executed demining operations.36 Furthermore, the 2015 Law has limited CROMAC’s supervision of the commercial operators, including with regard to decisions relating to the rates of demining, the level of pressure faced by companies, and quality assurance.37 The new law reportedly works in a more prescriptive way, with significant sanction for failure to comply, but lacking preventive measures to combine safety and promote better quality of work.38

Another consequence of the new law is that CROMAC no longer has responsibility for investigating demining accidents. This responsibility now lies with the State Attorney, under the oversight of the Ministry of Interior, rather than with the body with the requisite technical expertise. CROMAC only receives accident report summaries from the Ministry.39 Five mine-related accidents occurred in 2016, resulting in three fatalities and four people injured (see the Deminer Safety section below, for details).40

The former Law on Mine Action prescribed that after three years deminers needed to retrain, but this requirement was eliminated under the new 2015 Law, as was the requirement for deminers to undergo retraining in order to keep their licence if mistakes such as missed mines were made.41 The OMA have suggested that the by-law regarding safety be revised to require deminers to undergo refresher training at least once a year.42 A CROMAC representative emphasised that it is equally important for the leaders/managers responsible for the demining projects to be properly trained and regulated.43

With sufficient political will, the challenges posed by the 2015 Law could be addressed and its provisions strengthened.44 CROMAC would prefer that this is achieved through amendments to the law itself, rather than through the creation of supplementary by-laws and regulations, which is currently the case.

Article 143 of the Law on Mine Action required that by-laws be adopted to cover a number of issues, including demining methodology. Accordingly, a working group under the Ministry of Interior developed two supplementary regulations. The first by-law, “Regulations on demining, quality control, non-technical and technical surveys and marking of suspected hazardous areas”, entered into force in May 2016, and included, among other aspects, distinct technical survey procedures for mines and CMR, respectively. The second by-law, “Regulations on personal supervisory booklet and ID card of mine action employees and record forms”, entered into force in June 2016.45

In March 2017, the amendments to the “By-law on the Method of Conducting Demining Operations, Quality Control, General and Technical Survey and Marking of Suspected Hazardous Area”, were published in the Official Gazette, after which they entered into force.46 Amendments adopted through this by-law elaborate in more detail the provisions in the 2015 Law on Mine Action relating to the implementation of demining activities. Adoption of the amended by-law is said to require that demining activities be systematically monitored “in order to eliminate or correct possible deficiencies or improprieness that slow down or hamper the demining process”.47 Unfortunately however, the by-law reportedly does not help to rectify the negative impacts of the 2015 demining law on efficient and effective implementation of clearance operations. Instead, CROMAC believes it further weakens the final QC criteria for demined areas.48

Under the 2015 Law, the Ministry of Interior assesses authorised legal entities to conduct demining; this was formerly CROMAC’s responsibility.49 With regard to accreditation, the Ministry of Interior now provides three separate permits: approval for manual mine detection, approval for mechanical mine detection, and approval for operations by mine and UXO detection dogs. This replaces the former unified accreditation license.50
Quality Management

In 2016, during QC of cleared areas during ongoing demining operations, CROMAC QC supervisors and auxiliary staff found that in 28 cases, across 10 working sites, mine clearance operations did not meet the prescribed quality requirement and ordered repetition of demining on an area of 45,005m². During final QC, the QC committee established that in four cases demining activities had not been performed in accordance with regulations and companies were ordered to repeat operations on an area of 15,783m². The QC committee is appointed by the director of CROMAC and consists of two authorised CROMAC employees and one representative of the Humanitarian Demining Inspectorate under the Ministry of Interior.

Under the former demining law, authorised CROMAC staff had the authority to monitor personnel and technical equipment prior to and during demining operations. However, with the adoption of the 2015 Law on Mine Action, CROMAC now only undertakes QC of executed demining operations. Supervision during and after survey and clearance has been replaced by ongoing QC and final QC. Required "ongoing QC" for clearance operators has increased to 5%, in order to increase safety and quality. In addition, CROMAC QC officers review a minimum of 5% of control samples at least every three days, and final quality management of 1% is conducted by a commission with two representatives from CROMAC and one from the Ministry of Interior. The shift in focus away from QA practices prior to and during demining operations to QC practices post-clearance is a concern for CROMAC (see section on Legislation and standards). The QC requirements of the 2015 Law are said to pose a significant capacity challenge for both operators and CROMAC, and rather than strengthen quality management as intended, they threaten to negatively impact it.

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. CROMAC believes this model of privatised clearance is faster, cheaper, and more efficient. Much foreign donor funding is tendered this way. CROMAC manages tendering for the Croatian Government and EU money in accordance with the Law on Public Procurement. The trust fund, "Croatia without Mines", raises money from private sources.

At the beginning of 2016, 46 commercial companies, with a total capacity of 653 deminers, 55 machines, and 42 mine detection dogs (MDDs), were accredited to conduct CMR and mine clearance. By the end of the year, this had decreased to 41 accredited commercial companies with a total of 600 deminers, 51 demining machines, and 60 MDDs. Overall capacity remained roughly the same, but use of MDDs significantly increased in 2016. Most assets were deployed for mine clearance, with 23 companies undertaking mine clearance operations in 2016. As at May 2017, CROMAC did not expect any major changes to demining capacity in 2017, although overall capacity might increase towards 2018 given that several large projects were planned for mid-2017. The exception to the commercial tendering system is the state-owned enterprise MUNGOS, which is directly assigned a sufficient number of tasks by CROMAC to keep it solvent while it slowly phases down clearance operations. MUNGOS is one of the oldest demining organisations in Croatia and, as at May 2017, employed 50 deminers, 11 auxiliary staff, and 6 managers. MUNGOS is currently undergoing restructuring which has helped improve its efficiency, and as at May 2017, two-thirds of MUNGOS’s capacity was dedicated to technical survey. A large proportion (two-thirds) of MUNGOS deminers are, however, ready to retire and receive their pension, and the rest will be transferred to CROMAC to perform technical survey. The director of MUNGOS believed technical survey is an extremely good means by which to reduce the size of SHA, and also feels that demining could benefit from greater exchange of expertise and information between countries in the region. NGOs are barred from competing for commercial tenders as CROMAC views their subsidy by other funds as unfair. As barriers to entry into the mine clearance market are relatively low there is considerable fragmentation. Of the 23 companies demining in 2016, 12 cleared less than one square kilometre and only one company, Istraživač, was responsible for more than 20% of the total area cleared (see Table 2). The United Nations Development Programme (UNDP) 2014 needs assessment observed that in the years preceding the assessment the number of demining companies in Croatia had grown but capacity overall had decreased. 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. This rise is in part due to deminers becoming dissatisfied and starting up new firms, and the 2015 Law requires a minimum of only five deminers per company. The current number of demining companies is disproportionate to the number of deminers, and according to a representative from CROMAC, it would be more realistic to have half the number of companies, but to ensure each one is properly managed.

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. Some companies have sought to diversify with operations outside Croatia, but given the relatively higher wages of Croatian deminers, lack of international experience, and lack of brand recognition, they have found it difficult to compete for tenders. An NGO representative claimed that the quality of demining suffers when the price of demining is low. 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. 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.
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.81 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.79

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.80 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.81 Very large project tenders are also more complicated to draft and demand more time and resources to administer and monitor.82

The new Acting Director of CROMAC has subsequently tended towards much smaller project sizes (0.5km²–1km², excluding the EU polygons already procured), which encompass single, specific types of land, e.g. forested areas or agricultural land.83 These are also easier to administer, monitor, and analyse.84 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.85 However, CROMAC plans operations on a yearly basis, in accordance with the annual and three-year demining plans, which are set by the Government. CROMAC is unable to award multi-year contracts because it has to budget year-by-year, and in accordance with its own by-laws it is not possible to contract and reserve funds for the next year until the budget is set.86 Tenders are awarded to the lowest priced bidder, but if bids are unusually low, CROMAC requests additional information on wages and other costs and tenders are rejected if the costs do not add up.87

UNDP also noted that the current contracting of defined polygons is suitable for mine clearance but would not be conducive for effective technical survey, and called for a new procedure to be drafted once the law is changed.88 The Humanitarian Demining Association reported that it would be preferable if, where possible, technical survey was already undertaken on project tasks prior to tendering them, so that commercial companies have as much information as possible to accurately plan for the tender.89

With the adoption of the new law, which enables use of technical survey, CROMAC plans to target demining on confirmed mined areas and to conduct technical survey on the remaining SHA.90 However, as at May 2017, there was insufficient capacity to conduct technical survey to the extent CROMAC would like, and it may in fact be several years until the required capacity is fully developed.91 CROMAC is looking at options to increase capacity, including the use of MDDs, which are now easier to deploy under the 2015 Law, and which are being used by several commercial companies to expedite release of land.92

LAND RELEASE

In 2016, 38.75km² of mined area was released by clearance (38.3km² by operators working under the direction of CROMAC and a further 0.45km² by the Ministry of Defence) and a further 1.39km² was reduced by technical survey.73

In addition, non-technical survey cancelled 1.77km², and confirmed nearly 1.9km² as mined in eight SHAs during 2016.84

Survey in 2016

CROMAC non-technical and technical survey released 3.2km² in 201685 (1.39km² through technical survey and 1.77km² through non-technical survey).86 In addition, 1.88km² of mined area was confirmed.87

Clearance in 2016

Operators working under the direction of CROMAC cleared more than 38km² from 106 mined areas in 2016, with the destruction of 1,342 anti-personnel mines, 505 anti-vehicle mines, and 1,974 items of UXO.88 Of this, some 0.41km² of clearance in 2016 resulted in no mines being found; an improvement on the equivalent of 0.83km² in 2015.
<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>Region/county</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfa</td>
<td>4</td>
<td>198,381</td>
<td>Karlovac/Osječk-baranjska/Šibenik-Knin</td>
<td>8</td>
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<td>4</td>
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<td>4</td>
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<td>5</td>
<td>3</td>
<td>26</td>
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<tr>
<td>Cor</td>
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<td>76</td>
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<tr>
<td>Credo</td>
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<td>29</td>
<td>1</td>
<td>191</td>
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<tr>
<td>Dok-Ing</td>
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<tr>
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<td>6</td>
<td>1,317,560</td>
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<td>368</td>
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<td>Istraživač</td>
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<td>8,610,645</td>
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<td>439</td>
<td>350</td>
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<td>16</td>
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<tr>
<td>Piper</td>
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<td>25,651</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
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<td>Rumital</td>
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<td>5,299,356</td>
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<td>110</td>
<td>1</td>
<td>110</td>
</tr>
<tr>
<td>Titan</td>
<td>5</td>
<td>2,579,091</td>
<td>Brod-Posavina/Lika-Senj/Osijek-Baranja/Sisak-Moslavina/Zadar</td>
<td>109</td>
<td>97</td>
<td>30</td>
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<tr>
<td>Zeleni Kvadrat</td>
<td>10</td>
<td>2,859,591</td>
<td>Brod-Posavina/Karlovc/Lika-Senj/Požega-Slavonia/Šibenik-Knin/Zadar</td>
<td>75</td>
<td>11</td>
<td>214</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>106</strong></td>
<td><strong>38,263,980</strong></td>
<td><strong>1,342</strong></td>
<td><strong>505</strong></td>
<td><strong>1,974</strong></td>
<td></td>
</tr>
</tbody>
</table>

AP = Anti-personnel  AV = Anti-vehicle
The combined total released by non-technical and technical survey in 2016 was 3.2 km², which is only 13% compared to the plan for 2016. Less technical survey was conducted in 2016 than intended, as funding was used to finish clearance, but the new funding will reportedly focus on increased technical survey.

In July 2016, Croatia signed a contract to demine its border with Hungary, as part of the cross-border cooperation project. The total area to be covered by the project was 1.46 km², and 1.45 km² was demined in 2016, destroying 137 anti-personnel mines, 103 anti-vehicle mines, and 66 items of UXO during clearance. Of the total project, 3.40 km² remained to be cleared as at the end of 2016, as it was submerged under water. Demining of the remaining mined area was subsequently completed in the first half of 2017.

A further 1.75 km² of suspected mine contamination remains on Croatia’s border with Hungary, 1 km from the border. As at August 2017, CROMAC had begun planning for how to release this remaining mined area over the next two years.

Deminer Safety

There were five mine accidents in 2016, which resulted in three fatalities (all deminers) and four injured (three deminers and one auxiliary worker), all of whom were men aged between 36 and 60. This represents an increase compared to the two anti-personnel mine accidents in 2015, which killed one and injured two.

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the ten-year extension request granted by states parties in 2008), Croatia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2019. Croatia is not on track to meet the deadline.

In May 2016, though, CROMAC had reported that if all planned EU-financed projects are carried out, and dependent on available funding, Croatia still expected to meet its March 2019 deadline. In November, Croatia acknowledged that mine clearance activities in 2016 had not achieved the levels forecasted, but that the Croatian government and all mine action stakeholders in Croatia were still determined to solve the mine problem and systematise mine action activities so that the main goal and objective of completion by 2019 was still attainable.

CROMAC has reported that achieving Article 5 completion depends solely on financing the necessary resources, as the demining capacities and experience are more than suitable. It highlighted, however, that meeting the 2019 Article 5 deadline “will be very challenging”, based on the overall pace of progress.

In January 2016, during demining operations in Šibenik-Knin county, a mine accident involving a PROM-1 mine occurred in which one auxiliary worker sustained light injuries. In April 2016, a mine accident on a search and demining project in Lika-Senj county resulted in the death of one deminer from a PROM-1, with two others sustaining light injuries. In June 2016, a deminer suffered light injuries during a PMA-3 mine accident in Lika-Senj county. In October 2016, a mine accident involving a PROM-1 in Brod-Posavina county resulted in the death of a deminer; and in December, a deminer was killed by a PROM-1 mine in Zadar county.

Five of the seven mine accidents recorded in 2015 and 2016 involved PROM-1 bounding anti-personnel mines, which are especially dangerous due to their high sensitivity, instability, and lethality. CROMAC reported that the PROM-1 is particularly difficult to render safe because its fuze becomes unstable after being exposed to weather conditions for several years. On the other hand, PROM-1 mines are very easy to detect due to their high metal content, which could indicate that demining accidents are more likely to the result of procedures not being followed correctly.

As mentioned previously, under the 2015 Law on Mine Action, responsibility for investigating demining accidents now lies with the State Attorney, under the oversight of the Ministry of Interior, rather than with CROMAC, the body with the requisite technical expertise. In light of the concerning number of demining accidents in 2016, and the need to fully determine the reason for the accidents, Croatia should consider re-evaluating its current procedure for accident investigation with a view to increasing CROMAC’s involvement.

Table 3: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>38.8*</td>
</tr>
<tr>
<td>2015</td>
<td>40.6</td>
</tr>
<tr>
<td>2014</td>
<td>37.7</td>
</tr>
<tr>
<td>2013</td>
<td>32.3</td>
</tr>
<tr>
<td>2012</td>
<td>30.5</td>
</tr>
<tr>
<td>Total</td>
<td>179.9</td>
</tr>
</tbody>
</table>

*Includes 0.45 km² cleared by the Ministry of Defence
In 2016, Croatia contributed around €4.9 million (approximately US$5.3 million) in national funding towards the cost of CROMAC, and around €21 million (approximately US$23 million) to cover survey and clearance of mined areas. CROMAC expected to receive continued funds in 2017, including from the EU, which was anticipated to account for up to 63% of total funding.

Overall, €39.4 million for mine action was realised in 2016. For the second year in a row, funding from external sources surpassed funds from the state budget, which until 2015 accounted for more than 60% of the total funds spent for mine clearance operations in 1998–2014. In 2016, EU funds accounted for the largest share of the mine action, representing approximately 65% of the total funds spent and contracted; with share from the Croatian state budget accounting for approximately 34%, and donations 1%.

As a result of its accession to the EU, Croatia is no longer on the Organization for Economic Cooperation and Development’s Development Assistance Committee (OECD DAC) list and so can no longer be a recipient of official development assistance (ODA), which UNDP has identified as an impediment to Croatia’s removal of the mine threat. CROMAC received more funding in 2016, particularly from the EU, but expected that funding from other international donors would reduce now that Croatia is an EU member.

UNDP’s Mine Action Recovery Needs Assessment for Flooded Areas in Eastern Croatia stated that the ability to release land through technical survey would enhance the capacity to more quickly recover from disasters and speed up land release. However, it raised concerns that CROMAC did not have sufficient survey capacity to enable the release of land through technical survey once the demining law is changed and advised CROMAC should boost this capacity to fully implement land-release methodology. As at October 2016, CROMAC reported it had increased its capacity for technical survey through internal reallocation and that it was using MUNGOs for technical survey. However, as at May 2017, CROMAC revealed that technical survey capacity was still not sufficient to meet requirements, and may not reach full required capacity until after 2018.

CROMAC’s priority for survey and clearance operations in 2017 was to reduce the overall size of SHAs, and to complete release of agricultural areas and areas in the “Kopački Rit” Nature Park. According to its 2017 Annual Plan of Mine Action, it planned to release a total of 75 km\(^2\) in 2017: 54 km\(^2\) through clearance and 21 km\(^2\) through technical survey, non-technical survey, and “supplementary non-technical survey activities” (during which control samples are taken to determine the absence of mines and UXO). Croatia, however, reported that in the first four months of 2017, only 4.98 km\(^2\) had been released through survey and clearance, which represents only 6.6% of the Annual Mine Action Plan forecast for 2017, suggesting that it was falling behind its 2017 targets.

In order to ensure greater progress towards meeting Croatia’s Article 5 obligation, CROMAC will need to increase its capacity and implementation of survey operations, including the use of non-technical and technical survey to more accurately determine the size and location of contamination, and to, respectively, cancel and reduce areas in which no evidence of contamination is found.
interview with Miljenko Vahtari, CROMAC, 13 May 2016; and CCW Article 7 Report (for 2016), Form A.

33 Interviews with Hrvoje Debač, OMA, 17 May 2017, Zagreb; Ante Brkljačić, Acting Director, CROMAC, Geneva, 9 June 2017; and Neven Karas, CROMAC, and Tomislav Ban, Assistant Director and Head of Sector for Operational Planning and Programming, CROMAC, Sisak, 18 May 2017.

34 Interviews with Neven Karas and Tomislav Ban, CROMAC, Sisak, 18 May 2017; and a representative of the Croatian Employers’ Association (CEA), Humanitarian Demining Association, Zagreb, 17 May 2017.


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

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

38 Ibid.


40 Email from Nataša Mateković, CROMAC, 2 May 2017; Article 7 Report (for 2016), Form C; CCW Protocol V Article 10 Report (for 2016), Form A; CCW Amended Protocol II Article 13 Report (for 2016), Form B; and Statement of Croatia, Intersessional meetings, 8 June 2017.

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

42 Interview with Hrvoje Debač, OMA, Zagreb, 17 May 2017.

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

44 Interviews with Neven Karas, and Tomislav Ban, CROMAC, Sisak, 18 May 2017; and Ante Brkljačić, CROMAC, Geneva, 9 June 2017.

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

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

47 Ibid.

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

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

50 Ibid.

51 Email from Nataša Mateković, CROMAC, 2 May 2017; and CCW Protocol V Article 10 Report (for 2016), Form A.

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

53 Ibid.

54 Emails from Miljenko Vahtarić, CROMAC, 13 May 2016; and Nataša Mateković, CROMAC, 2 May and 20 June 2017.


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

57 Ibid.

58 Emails from Nataša Mateković, CROMAC, 22 March and 2 May 2017; Article 7 Report (for 2016), Form C; CCW Protocol V Article 10 Report (for 2016), Form A; and CCW Amended Protocol II Article 13 Report (for 2016), Form B.

59 Emails from Nataša Mateković, CROMAC, 22 March and 2 May 2017.

60 Email from Nataša Mateković, CROMAC, 2 May 2017.

61 Ibid. interviews with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014; and Amira Savranović, then Director, MUNGOS, Sisak, 14 April 2014.

62 Interview with Damir Magdić, Director, MUNGOS, Sisak, 18 May 2017.

63 Email from Miljenko Vahtarić, CROMAC, 21 October 2017; and interview with Nataša Mateković, CROMAC, Sisak, 18 May 2017.

64 Interview with Damir Magdić, MUNGOS, 18 May 2017.

65 Ibid.

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

67 Email from Nataša Mateković, CROMAC, 2 May 2017.


70 Interviews with Hrvoje Debač, OMA, 17 May 2017, Zagreb; and Tomislav Ban, CROMAC, Sisak, 18 May 2017.

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

72 Interview with Zeljko Romic, Piper Demining, Zagreb, 17 March 2015.

73 Ibid.

74 Email from Marija Breber, Social Worker, Mine Aid, 25 March 2015.

75 Interview with Zeljko Romic, Piper Demining, Zagreb, 17 March 2015.

76 Interview with a representative of the CEA, Humanitarian Demining Association, Zagreb, 17 May 2017.

77 Ibid.

78 Interview with Miljenko Vahtarić, CROMAC, in Zagreb, 16 March 2015.

79 Ibid.

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


82 Interview with Kristina Dorosulić, Head of Public Procurement, CROMAC, Sisak, 18 May 2017.


84 Interview with Kristina Dorosulić, CROMAC, Sisak, 18 May 2017.


86 Interview with Hrvoje Debač, OMA, 17 May 2017, Zagreb.

87 Interview with Kristina Dorosulić, CROMAC, Sisak, 18 May 2017.


90 Email from Miljenko Vahtarić, CROMAC, 21 October 2016.

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

92 Ibid.

93 Email from Nataša Mateković, CROMAC, 2 May 2017; and statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016.

94 Ibid.

95 Email from Nataša Mateković, CROMAC, 2 May 2017; and Article 7 Report (for 2016), Form C.


97 Email from Nataša Mateković, CROMAC, 2 May 2017; and Article 7 Report (for 2016), Form C; and statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016.

98 Email from Nataša Mateković, CROMAC, 2 May 2017; and Article 7 Report (for 2016), Form C.

99 Article 7 Report (for 2016), Form C; and CCW Protocol V Article 10 Report (for 2016), Form A.

100 Email from Miljenko Vahtarić, CROMAC, 13 May 2016.

101 Email from Nataša Mateković, CROMAC, 2 May 2017.

102 Email from Nataša Mateković, CROMAC, 22 March and 2 May 2017; and Article 7 Report (for 2016), Form C.

103 Statements of Croatia, 15th Meeting of States Parties, Santiago, 29 November 2016; and Intersessional meetings, 8 June 2017.

104 Interview with Nataša Mateković, CROMAC, 10 February 2017, Geneva.

105 Email from Nataša Mateković, CROMAC, 2 May 2017.

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

107 Email from Nataša Mateković, CROMAC, 2 May 2017.

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


111 Article 7 Report (for 2016), Form C; and Statements of Croatia, Clearance Session, APMBC 14th Meeting of States Parties, Geneva, 1 December 2015; and Intersessional meetings, 8 June 2017.


115 Email from Miljenko Vahtrić, CROMAC, 13 May 2016.


117 Email from Nataša Mateković, CROMAC, 2 May 2017.


119 Email from Miljenko Vahtrić, CROMAC, 22 March 2017.

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

121 Email from Nataša Mateković, CROMAC, 2 May 2017.


123 Article 7 Report (for 2016), Form C; CCW Amended Protocol II Article 13 Report (for 2016), Form B; and Statement of Croatia, Clearance Session, 15th Meeting of States Parties, Santiago, 29 November 2016; and CCM Article 7 Report (for 2016), Form A.


125 Email from Miljenko Vahtrić, CROMAC, 13 May 2016.


127 Ibid., pp. 42–43.

128 Email from Miljenko Vahtrić, CROMAC, 21 October 2016.

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

130 Email from Nataša Mateković, CROMAC, 2 May 2017.


132 Ibid.
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<td>Land release system in place</td>
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<tr>
<td>National mine action standards</td>
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<td>Reporting on progress</td>
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<td>Improving performance</td>
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<tr>
<td><strong>PERFORMANCE SCORE: AVERAGE</strong></td>
<td>5.8</td>
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</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

No anti-personnel mines are believed to remain in minefields on territory under the control of the Republic of Cyprus (Cyprus). Incremental progress was made in 2016 towards releasing mined areas in the Buffer Zone and in Turkish-controlled territory in northern Cyprus.

Within the Buffer Zone, limited progress has been made due to the lack of permitted access to the remaining minefield locations which border the area supervised by the United Nations (UN). These remaining locations are reportedly seen as having operational or strategic significance by the sides.1 Technical survey was conducted in an area of the Buffer Zone in order to enable the safe movement of United Nations Peacekeeping Force in Cyprus (UNFICYP) personnel, and resulted in reduction of a small part of a hazardous area.

RECOMMENDATION FOR ACTION

- Cyprus and Turkey should heed the UN Security Council's renewed call for access to all remaining mined areas inside and outside the Buffer Zone.4

CONTAMINATION

Cyprus is contaminated by anti-personnel and anti-vehicle mines. The island has been divided geographically and politically by what was once a heavily mined, 180km-long Buffer Zone since 1974, following Turkish Forces operations in the north of the island. Minefields were laid by both the Greek Cypriot National Guard and the Turkish Armed Forces. The exact extent of remaining mine contamination across the island is not known, and permission for UNFICYP to access areas outside the Buffer Zone remains limited.5

UNFICYP data indicates that at the end of 2016, 67 suspected hazardous areas (SHA) across Cyprus might be contaminated with mines and/or explosive remnants of war (ERW).6 The type of contamination, however, was not disaggregated and UNFICYP did not report how many of the 67 SHA are believed to contain anti-personnel mines. Of the total number of SHAs, 32 are located south of the Buffer Zone in territory controlled by the Republic of Cyprus but are not believed to contain anti-personnel mines; 4 are in the Buffer Zone, and 31 are north of the Buffer Zone in Turkish-controlled territory.6 Survey of these areas is required to gain a more precise estimate of the scale of contamination, though UNFICYP has estimated that more than 7,000 anti-personnel and anti-vehicle mines currently remain across the island of Cyprus.5

Territory controlled by the Republic of Cyprus

Cyprus has reported that no anti-personnel mines remain in the minefields laid by the National Guard that are on territory under its effective control.10

Previously, a total of 20 mined areas containing 4,653 anti-personnel mines existed in areas under the effective control of Cyprus outside the Buffer Zone, which had been emplaced by the National Guard.11 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.12

Buffer Zone

Previously, 81 mined areas had been located within the Buffer Zone (13 of which contained mines laid by the National Guard) containing a total of 27,714 mines and extending over almost 11km².13 In November 2013, Cyprus reported that no minefields under its control remained in the Buffer Zone, after its clearance of two mined areas in Dali in 2012 and a further mined area at Potamia by July 2013, in accordance with its National Plan.14

According to Cyprus, the sole remaining minefield in the Buffer Zone is located in Turkish-controlled area, close to the village of Deryneia15 (also spelt Derynia or Dherynia).

In July 2015, however, a report of the UN Secretary-General on the UN operation in Cyprus noted that “no progress was registered on the issue of access to the four known remaining minefields in the Buffer Zone, of which three are under the control of the National Guard and one is under the control of the Turkish forces, despite requests by UNFICYP”.14 This was restated in subsequent reports of the Secretary-General, most recently in July 2017, in which it was reported that, “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”.17
This raised concerns that mine contamination remains in the Republic of Cyprus-controlled areas of the Buffer Zone. In May 2016, in response to a request for clarification, a government diplomat in Geneva clarified that the Government of the Republic of Cyprus considers the three minefields to be under its control and not within the Buffer Zone. In addition, the official stated that the three minefields in question do not contain anti-personnel mines.18

The UN Security Council calls on “both sides to continue to engage, as a matter of urgency and while respecting UNFICYP’s mandate, in consultations with UNFICYP on the demarcation of the buffer zone, and on the United Nations 1989 aide-memoire, with a view to reaching early agreement on outstanding issues.”19 According to UNFICYP, such demarcation would, in particular, help to resolve any ambiguity or lack of agreement between the sides and the UN about the precise location of the Buffer Zone.20

Turkish-controlled territory in northern Cyprus

The extent of mine contamination in areas controlled by Turkish Forces is not known. However, Cyprus has claimed in its latest Article 7 transparency report (for 2016) 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.21 According to the UN, some military mine clearance appears to have been conducted over most locations that are still recorded as minefields.22

During a meeting on 15 May 2015, the President of the Republic of Cyprus, Nicos Anastasiades, provided the northern Cyprus leader, President Mustafa Akinci, with coordinates of the 28 known minefields laid by the National Guard prior to Turkey’s military action in 1974.23 These minefields, located north of Nicosia towards the Pentadaktylos mountain range, in what is today Turkish-occupied area, included 1,006 anti-personnel mines.24

On 4 June 2015, the northern Cyprus president asked for assistance to address the 28 minefields on Turkish-controlled territory in the north. In response, and with a view to facilitating future demining, UNFICYP and UNMAS worked to refine the data and map the minefields, which are suspected to contain both anti-vehicle and anti-personnel mines.25

Survey of the minefields was conducted and completed in the summer of 2015 by UNMAS, supported by Turkish Engineering Forces, in conjunction with UNFICYP.26 The survey resulted in three of the twenty-eight areas being found to have a higher risk of mine contamination and to require technical survey, as well as an additional two suspected locations identified by the local community. UNFICYP support for clearance of these areas occurred under an agreement known as “3+2” support.27

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.28 In May 2017, Turkish Cypriot security forces reaffirmed their intention to clear the minefield.29

PROGRAMME MANAGEMENT

UN-supported mine action operations in Cyprus are coordinated by UNMAS, on behalf of UNFICYP.30 In July 2016, UNMAS became an integral component of UNFICYP, providing its expertise in mine action planning and coordination, quality assurance oversight, and data management for mine action information, as well as demining capacity.31

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.32

Legislation and Standards

All UN-supported mine action operations in Cyprus are conducted in accordance with International Mine Action Standards (IMAS).33

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.34

Quality Management

UNMAS is responsible for conducting quality assurance and quality control of all UN-supported mine action operations in Cyprus.35

Operators

In 2016, UN demining activities in Cyprus were conducted by UNMAS’s implementing partner, MAG.36 MAG’s capacity included a multi-task team and a mechanical support team (mini-MineWolf).37

Previously, in 2015, clearance was conducted by a military demining team from the UN Interim Force in Lebanon (UNIFIL) Troop Contributing Country (TCC), provided by the Cambodian Construction & Engineering Company (CAMBCOY), as part of UNFICYP’s inter-mission cooperation with UNIFIL.38 In 2016, however, the UNIFIL CAMBCOY did not deploy to Cyprus and UNFICYP did not use a TCC for demining.39
LAND RELEASE

In the Buffer Zone, 20,000m² was reduced through technical survey in 2016.⁴⁰

In Turkish-controlled territory in northern Cyprus, 6,772m² was released through clearance in 2016, and a further 26,757m² reduced through technical survey.⁴¹

Survey and clearance in the Buffer Zone in 2016

In September 2016, UNMAS, through its implementing partner MAG, reduced 20,000m² through technical survey near Deryneia in the Buffer Zone, to facilitate safe mobility for UNFICYP personnel.⁴２ No land was released through clearance in the Buffer Zone in 2016.⁴³

This is a reduction compared to 2015, when 16,691m² of mined area was confirmed and cleared in the Buffer Zone, and a further 45,000m² reduced by technical survey.⁴⁴

Survey and clearance in Turkish-controlled territory in northern Cyprus in 2016

In 2016, UNMAS, through its implementing partner MAG, undertook survey and clearance of two minefields in Yedidalga/Karavostasi and a third near Agios Haralampos/Agirdagi Kilisesi, northern Cyprus. These three minefields were identified during UNMAS surveys in 2015 (supported by Turkish Engineering Forces, in conjunction with UNFICYP), following the provision of information by the President of the Republic of Cyprus to the leader of northern Cyprus, regarding 28 former National Guard minefields that were laid in 1974. Clearance of these minefields is significant as they are part of a package of confidence-building measures agreed in May 2015 in support of the peace process.⁴⁵

During the 2016 survey and clearance operations, MAG confirmed 6,900m² as mined, across the three SHAs. A total of 6,772m² of mined areas was cleared through manual demining, during which seven anti-vehicle mines, but no anti-personnel mines, were destroyed. A further 26,757m² was reduced through technical survey.⁴⁶

Progress in 2017

In July 2017, a report of the UN Secretary General stated that “UNFICYP had completed demining operations on the last 2 of the 28 legacy minefields, the locations of which were provided to the Turkish Cypriot leader by the Greek Cypriot leader as part of a package of confidence-building measures announced in May 2015.”⁴⁷

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with a second three-year extension granted by states parties in December 2015), Cyprus is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 July 2019.

Cyprus has reported clearing all anti-personnel mines in mined areas that it accepted were under its control within ten years of becoming a state party, namely by 1 July 2013. A three-year extension to its Article 5 deadline until 1 July 2016 was requested and approved in 2012, due to anti-personnel mines remaining in territory occupied by the Turkish forces, which it was unable to clear.⁴⁸

On 27 March 2015, Cyprus submitted a second Article 5 deadline extension request, seeking a further three-year extension, until 1 July 2019. The reason cited for the second extension request was the same as the first, namely that Cyprus does not have effective control over remaining contaminated areas.⁴⁹ 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.”⁵⁰

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.⁵¹

At the intersessional meetings in June 2015, Cyprus stated that “negotiations for a settlement of the Cyprus question have recently resumed and there are good reasons for being hopeful that this will in fact be the last extension request that Cyprus needs to submit.”⁵²

The July 2016 report by the Secretary-General also noted that both the Greek Cypriot leader and the Turkish Cypriot leader have “continued to engage in settlement talks with dedication and perseverance”, and “underlined their commitment to intensify their efforts in the coming months with the aim of reaching a comprehensive settlement agreement within 2016”.⁵³

The UN Security Council, most recently in January 2017, has called on both sides to facilitate clearance of all remaining mined areas on the island.⁵⁴ 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”.⁵⁵ 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”.⁵⁶
A January 2017 report of the UN Secretary General, observed that: “While the progress made towards the safety of Cypriots via the clearance of five minefields in the north is welcome, much more remains to be done. The lack of action on the clearance of the minefield adjacent to the ceasefire line near Mammari, for example, continues to pose unnecessary risks. Minefields on the island have little military utility, but pose a serious threat to life.”57 As at July 2017, however, negotiations were still ongoing.58

According to a July 2017 report of the UN Secretary-General on the UN operation in Cyprus, “The Force [UNFICYP] engaged with the sides to identify priorities for the survey and clearance of minefields across the island in 2017 and 2018 and stands ready to support them, initially through a non-technical survey of the relevant areas. The Force has sought prompt agreement from the sides on initiating the survey, given the importance of demining as a safety measure and in achieving the ultimate goal of a mine-free Cyprus.”59

1 Email from Julie Myers, Programme Officer, UNMAS (based on information provided by Maj. Rich Pearce, Mine Action Officer, UNFICYP), 26 September 2017.

2 Emails from Julie Myers, UNMAS (based on information provided by Joseph Huber, Chief of Operations, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July and 26 September 2017.

3 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 26 September 2017.

4 UN Security Council Resolution 2338 [2017], §11.

5 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 26 September 2017.


7 APMBCC Article 7 Report [for 2016], Form C.


9 Ibid. Previously, in an April 2016 Factsheet, it was estimated that mines affected 2km² of land, with four minefields remaining in the Buffer Zone and thirty-five minefields across the rest of the island. UNFICYP, “Factsheet: towards a Mine-free Cyprus”, April 2016, at: https://unficyp.unmissions.org/sites/default/files/mine-factsheet_-_final_update_april_2016.pdf.

10 Article 7 Report [for 2016], Form C.

11 “Analysis of the request submitted by Cyprus for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention”, 4 October 2012.

12 APMBCC Committee on Article 5 Implementation, “Observations on implementation of Article 5 by Cyprus”, 23 June 2015; and Article 7 Report [for 2013], Form G.

13 “Analysis of the request submitted by Cyprus for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention”, 4 October 2012.


15 APMBCC Article 7 Reports (for 2012, 2013, 2014, 2015, and 2017), Form C.


18 Interview with Demetris Samuel, Deputy Permanent Representative, Cyprus Permanent Mission to the UN in Geneva, Geneva, 19 May 2016.


20 Email from Julie Myers, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Rich Pearce, UNFICYP), 24 July 2017.

21 Article 7 Report [for 2016], Form C.

22 Email from Julie Myers, Programme Officer, UNMAS (based on information provided by Joseph Huber, UNMAS, and Maj. Mike Holgate, Mine Action Officer, UNFICYP), 6 October 2016.


24 Article 7 Report [for 2014], Form C.


26 Email from Julie Myers, UNMAS (based on information provided by Timothy Roberts, Chief of Operations, UNMAS Lebanon), 4 October 2015; and report of the Secretary-General on the United Nations operation in Cyprus, UN doc. S/2015/517, 2 July 2015, p. 3.
The Democratic Republic of Congo (DRC)’s mine action programme’s land release output declined slightly in 2016, though it is still on track to meet its Anti-Personnel Mine Ban Convention (APMBC) Article 5 clearance deadline by 2021. According to the United Nations Mine Action Service (UNMAS), as at September 2017, the DRC appeared likely to complete clearance by 2019. This is a further year behind the 2016 deadline set out in its 2012–16 national mine action strategy.¹

## MINE ACTION PROGRAMME PERFORMANCE

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**PERFORMANCE SCORE: AVERAGE**

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<td></td>
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RECOMMENDATIONS FOR ACTION

- DRC should finalise a detailed workplan to fulfil its Article 5 obligations as soon as possible.
- DRC should develop a national mine action strategy with realistic timelines and clear objectives.
- As soon as it is safe to do so, the DRC should conduct survey in Aru and Dungu territories.
- Further efforts are needed to ensure that the Congolese Mine Action Centre (Centre Congolais de Lutte Antimines, CCLAM) can provide effective information and quality management.
- In particular, DRC should significantly improve the quality of the national mine action database to ensure that it is accurate, up to date, and under effective national management.
- Greater efforts should be made to ensure reporting and recording of mine action data according to International Mine Action Standards (IMAS) land-release terminology.
- A focus should be placed on building sufficient national capacity to address residual contamination following the exit of international operators.

CONTAMINATION

The DRC is affected by anti-personnel and anti-vehicle mines and explosive remnants of war (ERW), a result of decades of conflict involving neighbouring states, militias, and rebel groups since gaining its independence in 1960. According to UNMAS, at the end of 2016, a total of 54 confirmed hazardous areas (CHAs) and suspected hazardous areas (SHAs) with a total size of 851,228m² remained. At the end of 2015, a total of 71 CHAs and SHAs remained covering an estimated 1.3km²; the total comprised 13 confirmed mined areas covering less than 0.2km², and 58 SHAs covering just over 1.1km².

At the end of 2016, six of the DRC’s former eleven provinces still contained confirmed or suspected mine contamination, as set out in Table 1. The figures for contamination provided by UNMAS in Table 1 are not entirely consistent with data given previously to Mine Action Review, but were said to be accurate.

Table 1: Anti-personnel mine contamination by province (as at end-2016)

<table>
<thead>
<tr>
<th>Province (now or previous names)</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equateur (now South-Ubangi, North-Ubangi, Equateur)</td>
<td>3</td>
<td>38,527</td>
<td>21</td>
<td>434,204</td>
</tr>
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<td>Orientale (now Tshopo, Ituri, Bas-Uele)</td>
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<td>22,384</td>
<td>16</td>
<td>301,083</td>
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<td>Maniema</td>
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<td>3,993</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>North-Kivu</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>8,442</td>
</tr>
<tr>
<td>Katanga (now Tanganyika)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>42,000</td>
</tr>
<tr>
<td>Kasai-Occidental</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>595</td>
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<td><strong>Totals</strong></td>
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<td><strong>64,904</strong></td>
<td><strong>47</strong></td>
<td><strong>786,324</strong></td>
</tr>
</tbody>
</table>

In April 2014, DRC reported that 130 SHAs affected by mines remained in eight provinces (then Equateur, Kasai Occidental, Kasai Oriental, Maniema, North Kivu, Katanga, Province Orientale, and South Kivu) covering an estimated 1.8km², on the basis of the results of a nine-month-long National Landmine Contamination Survey (NLCS) launched in March 2013. The Aru and Dungu territories in former Orientale Province, however, were not surveyed due to insecurity.

As at December 2015, the DRC reported that 45 of the 130 SHAs had been cleared during the year, covering some 0.9km², putting three of the DRC’s then eight remaining contaminated provinces in a position to be declared cleared of mines, once quality management had been completed. Clearance of former South Kivu province was completed following a CCLAM survey in early October 2015 that cancelled the last remaining SHA. UNMAS cautioned, however, that four SHAs were newly identified in 2016 and further hazards might be identified in the future, particularly in Aru or Dungu.

As at September 2017, survey of Aru or Dungu had still not been possible due to security concerns, though according to UNMAS, survey could be completed by humanitarian demining organisations within a four-month period, once funding and access are secured.

In May 2017, the last known area containing cluster munition remnants contamination in the DRC with a size of 3,900m² was cleared.
In 2017, UNMAS reported that anti-personnel mine contamination remaining in DRC was limited and that only small numbers of anti-personnel mines were found on an annual basis by operators. Areas suspected to contain anti-personnel mines often proved to contain unexploded ordnance (UXO), abandoned ordnance (AXO), or small arms ammunition. Norwegian People’s Aid (NPA) confirmed it found primarily only UXO in the SHAs it addressed in 2016, and stated that frequently many SHAs contained no anti-personnel mines at all. Handicap International (HI) reported that of the three zones where it was operational in 2016, only one was found to contain anti-personnel mines. Mines Advisory Group (MAG) did not report encountering any anti-personnel mines in its operations in 2016, and found only one anti-vehicle mine during the year.

Throughout 2016, ongoing conflict continued to add ERW, and munitions remained a constant and significant risk to civilians, as well as placing wide-ranging restrictions on socio-economic development and recovery. In 2002–17, UNMAS reported that a total of 2,563 victims of mines and ERW had been registered in the DRC.

Released land is used for agriculture and settlement development, in addition to opening up access to markets, water, and firewood. NPA reported that, in April 2017, of all the land it had released and returned to local communities in 2016, 8% was found to be used for construction and 92% for other activities, such as agriculture and livestock grazing. Most areas were put back into productive use immediately after being handed over, it said. HI reported that land released to local inhabitants in Tshopo province in November was being cultivated four months later, having been blocked for years prior.

**PROGRAMME MANAGEMENT**

CCLAM was established in 2012 with support from the UN Mine Action Coordination Centre (UNMACC) and UNMAS. 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.

Previously, UNMACC 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 DRC (MONUSCO) peacekeeping mission. UN Security Council Resolution 1925 mandated UNMACC to strengthen national mine action capacities and support reconstruction through road and infrastructure clearance.

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

Throughout 2016, ongoing conflict continued to add ERW, and munitions remained a constant and significant risk to civilians, as well as placing wide-ranging restrictions on socio-economic development and recovery. In 2002–17, UNMAS reported that a total of 2,563 victims of mines and ERW had been registered in the DRC.

Released land is used for agriculture and settlement development, in addition to opening up access to markets, water, and firewood. Norwegian People’s Aid (NPA) confirmed it found primarily only UXO in the SHAs it addressed in 2016, and stated that frequently many SHAs contained no anti-personnel mines at all. Handicap International (HI) reported that of the three zones where it was operational in 2016, only one was found to contain anti-personnel mines. Mines Advisory Group (MAG) did not report encountering any anti-personnel mines in its operations in 2016, and found only one anti-vehicle mine during the year.

**Strategic Planning**

The DRC’s national mine action strategic plan for 2012–16 set the goal of clearing all areas contaminated with anti-personnel mines or submunitions by the end of 2016.

In June 2017, following the expiration of the DRC’s 2012–16 national strategy, which was developed with the support of the Geneva International Centre for Humanitarian Demining (GICHD), the GICHD reported that, together with UNMAS, it would work closely with CCLAM to develop the DRC’s next national mine action strategy. According to the GICHD, the first strategy development workshop was organised in Kinshasa in September 2017, bringing all relevant national and international stakeholders together to analyse the context, agree on the mine action programme’s overall vision and mission, and define strategic goals and objectives. Fulfilment of DRC’s Anti-Personnel Mine Ban Convention (APMBC) Article 5 obligations will be a main focus of the next national strategy, it said.

In granting DRC’s second Article 5 deadline extension request, states parties to the APMBC called on the DRC to present a detailed workplan by 30 April 2015 on the implementation of its remaining clearance obligations throughout its extension period. It did not, however, do so, and as at September 2017 had still to submit a workplan.
Standards
In September 2017, UNMAS reported that the DRC’s outdated National Technical Standards and Guidelines (NTSGs) had been revised and national mine action standards had been developed, which, following review by the CCLAM, were expected to be published by the end of the year.33

Quality Management
MAG, HI, and NPA reported that internal quality assurance (QA)/quality control (QC) systems were in place in 2016, and that UNMAS controlled external QA/QC, prior to handing over responsibility for quality management to the CCLAM.34 According to UNMAS, only limited QA was carried out by CCLAM in 2016 due to lack of funding for travel or the deployment of personnel. UNMAS said it undertook regular QA of UN-contracted operators, but reported that the size of the country and lack of adequate and affordable transport and infrastructure often precluded timely quality management. No sampling was undertaken in 2016.35

Information Management
The CCLAM assumed responsibility from UNMAS for information management in January 2016. Subsequently, despite many years of capacity-building support from UNMAS, and from NPA in 2016, serious concerns persisted over the quality of the database and CCLAM’s capacity and resources to provide adequate management of it. Gaps in data, inadequate maintenance, a lack of capacity to extract and share information, and the absence of coordination meetings with operators, were all evident during the year. NPA, which hosted information management training courses together with the GICHD for CCLAM in 2016, reported that while the Centre 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.36 CCLAM did not provide information in response to Mine Action Review’s requests for data in 2017.

Operators
Five international operators carried out mine survey and clearance operations in the DRC in 2016: DanChurchAid (DCA), HI, MAG, commercial company Mechem, and NPA, along with a national demining organisation, AFRILAM.38

In 2016, UNMAS contracted two multi-task teams (MTTs) for clearance operations in Kasai Central, Kasai Oriental, Lomami, and Maniema provinces. The teams primarily carried out explosive ordnance disposal (EOD) tasks, destruction of AXO, and battle area clearance (BAC). UNMAS also contracted three MTTs directly in support of MONUSCO operations in the provinces of Haut-Uele, Ituri, North Kivu, South Kivu, and Tanganyika; the teams mainly provided explosive hazard management support for the mission’s activities.39

In 2016, MAG employed 24 demining personnel for survey and clearance activities.40 NPA began operating with one MTT, one mine clearance team (MCT), and four technical survey teams, for a total personnel of 52. In April, the teams were reconfigured into non-technical and technical survey teams, but with the focus on technical survey. As at November 2016, increased resources allowed two MTTs to be deployed to assist the Armed Forces of the DRC (FARDC).41

HI commenced a two-year project in partnership with AFRILAM in 2016 with funding from the German Ministry of Foreign Affairs. AFRILAM deployed three teams of 14 deminers, while HI provided staff for quality management oversight and information management assistance.42 Under contract from UNMAS, from mid-2015 to mid-2016, MECHEM deployed five MCTs in the east of the country, until funding for its contract ceased in March 2016.43

LAND RELEASE
UNMAS has reported to Mine Action Review that a total of less than 0.4km² of mined area was released in 2016, of which 0.36km² was by clearance and technical survey, and a further 0.04km² cancelled by non-technical survey.44 This is a decrease from the total mined area in DRC released in 2015 of just over 0.74km² of mined area, including 0.43km² by clearance and technical survey, and a further 0.31km² by non-technical survey.45

In September 2017, UNMAS reported it was working on a data reconciliation project together with the GICHD to try and ensure that the database is up-to-date and accurate in order to facilitate compliance with the DRC’s Article 5 obligations by the end of 2019. It expected to maintain closer links with the CCLAM information management section in the future in order to monitor that data is recorded accurately.27

Survey in 2016
In 2016, operators cancelled a total of nearly 37,700m² by non-technical survey and additionally reduced nearly 127,300m² of anti-personnel mined area through technical survey, while confirming just over 120,000m² as mined.46 This compares to results in 2015 when 0.31km² of mined area was cancelled by non-technical survey, 0.12km² of mined area was reduced, and 0.17km² was confirmed as mined.47
Table 2: Mine survey in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs cancelled</th>
<th>Area cancelled (m²)</th>
<th>SHAs confirmed as mined</th>
<th>Area confirmed (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECHEM</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NPA</td>
<td>3</td>
<td>37,682</td>
<td>0</td>
<td>0</td>
<td>120,127</td>
</tr>
<tr>
<td>DCA</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td>HI</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>120,419</td>
<td>7,171</td>
</tr>
<tr>
<td>Totals</td>
<td>3</td>
<td>37,682</td>
<td>4</td>
<td>120,419</td>
<td>127,298</td>
</tr>
</tbody>
</table>

N/R = Not reported

Clearance in 2016

A total of just over 230,300 m² was released by clearance in 2016, with the destruction of 28 anti-personnel mines and 101 items of UXO. This is a decrease from the total mined area cleared in 2015 of just over 314,000 m². In addition, in 2016, NPA stated that two fuzeless anti-personnel mines and one anti-vehicle mine were found and destroyed in spot tasks. MAG reported destroying one anti-vehicle mine in a spot task and HI reported destroying one anti-personnel mine and eight items of UXO outside its demining tasks.

Table 3: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECHEM</td>
<td>3</td>
<td>45,835</td>
<td>22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>NPA</td>
<td>17</td>
<td>180,645</td>
<td>0</td>
<td>0</td>
<td>101</td>
</tr>
<tr>
<td>DCA</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td>HI</td>
<td>1</td>
<td>3,847</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>21</td>
<td>230,327</td>
<td>28</td>
<td>0</td>
<td>101</td>
</tr>
</tbody>
</table>

AP = Anti-personnel
AV = Anti-vehicle
TS = Technical survey

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the six-year extension request granted by states parties in June 2014), the DRC is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 January 2021. It is on track to meet this deadline. As at mid-2017, according to UNMAS, the DRC should complete clearance by 2019. This is in advance of its deadline but yet another year behind the end-2016 deadline set out in its national mine action strategy.

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”. 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. Initially intending to submit a request for an extension of its initial November 2012 deadline by four years, DRC instead requested a 26-month interim extension primarily to carry out the national survey to provide it with the information needed to submit another definitive extension request in 2014.

In April 2014, DRC submitted a second request to extend its Article 5 deadline starting in January 2015. The extension indicated that at least 30% of the total mined area could be released through technical survey, indicating that some 1.3 km² would need to be cleared. The extension request estimated that on average 0.21 km² would be cleared each year.
The extension request included annual projections of progress to be made during the extension period, though without providing a detailed workplan with a monthly breakdown of activities for each operator in each area in order to achieve these.\textsuperscript{63} 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 will be spent on survey and clearance in Aru and Dungu.\textsuperscript{41} It announced that the Government of the DRC had committed to contribute FC579,831,000 (about $600,000) a year to mine action activities, starting in January 2015.\textsuperscript{62} Operators reported, however, that in 2016 no funding was provided by the government for mine action operations, and only very limited support was given to the CCLAM.\textsuperscript{63} According to UNMAS, in 2017 the Government of the DRC did not have a budget allocation for mine action operations.\textsuperscript{44}

Over five years in 2012–16, demining organisations cleared a total of nearly 1.2km\(^2\) of mined area (see Table 4).

Table 4: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (\text{[m}^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>211,293</td>
</tr>
<tr>
<td>2015</td>
<td>314,562</td>
</tr>
<tr>
<td>2014</td>
<td>225,484</td>
</tr>
<tr>
<td>2013</td>
<td>110,961</td>
</tr>
<tr>
<td>2012</td>
<td>354,189</td>
</tr>
<tr>
<td>Total</td>
<td>1,216,489</td>
</tr>
</tbody>
</table>

As at September 2017, the DRC had not submitted a detailed workplan on the implementation of its extension request targets nor any annual Article 7 transparency reports since 2014. This is a violation of its treaty obligations.

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.\textsuperscript{65} In June 2015, the DRC reported to states parties that after six months of implementation of its second extension request, it had concerns over declining international funding and the consequences for its ability to achieve its extension targets.\textsuperscript{66}

Operators MAG, HI, and NPA were initially optimistic that DRC would meet its national goal of completing clearance by the end of 2016, but became increasingly less so as the year went on, though they remained confident that the DRC would be able to meet its 2021 Article 5 deadline on time, if not earlier. They attributed the DRC’s inability to finish by the end of 2016 to a lack of access and the remote, difficult terrain of remaining areas, and additional concerns over sustained funding, upcoming elections, and deteriorating security in certain areas.\textsuperscript{67}

In 2017, MAG and NPA raised concern over declining funding for mine action in the DRC.\textsuperscript{68} UNMAS expected mine action capacity to decrease over the course of the year due to difficulties in obtaining funding, donor concerns over the current political impasse in the country, and higher-impact humanitarian crises such as cholera and yellow fever outbreaks, flooding, and increasing displacement of populations.\textsuperscript{69}

1. Email from Steven Harrop, Chief of Operations, UNMAS, 4 September 2017.
2. An escalation of conflict between rebel group M23 and Armed Forces of DRC (FARDC) with support of the UN Stabilization Mission in DRC (MONUSCO), from August to November 2013, prior to the disbanding of M23, also resulted in new contamination of large areas of land, including roads and access routes, with UXO. UNMAS, ‘2015 Portfolio of Mine Action Projects, Democratic Republic of the Congo’, at: http://www.mineaction.org/sites/default/files/print/country_portfolio4904-1070-78801.pdf.
3. Email from Steven Harrop, UNMAS, 20 September 2017. The CCLAM, however, reported in December 2016, that a total of 65 confirmed and SHAs comprising 36% of all known mine contamination remained to be addressed, primarily in the north and east of the country. Statement by Sudi Alimasi Kimpbutu, Coordinator, CCLAM, 15th Meeting of States Parties, Santiago, 3 December 2016.
4. Email from Colin Williams, Chief of Operations, UNMAS DRC, 1 September 2016.
5. Email from Steven Harrop, UNMAS, 4 September 2017. On 9 January 2015, the National Assembly of the DRC passed a law which enacted the proposed redistricting under the 2006 Constitution of the DRC’s 11 provinces into 25 provinces, plus Kinshasa.
6. Email from Steven Harrop, UNMAS, 4 September 2017.
8. Ibid.
10. Email from Colin Williams, UNMAS, 16 October 2015.
11. Emails from Steven Harrop, UNMAS, 4 September; and Colin Williams, UNMAS, 17 October 2016 and 16 October 2015; and response to questionnaire, 19 May 2016.
12. Email from Pehr Lodhammar, UNMAS, 5 April 2017.
13. Emails from Jean-Denis Larsen, Country Director, Norwegian People’s Aid (NPA), 19 May 2017; Matthieu Kayisika Ntumba, Operations Manager, NPA, 18 and 20 June 2017; Colin Williams, UNMAS, 12 June 2017; and Pehr Lodhammar, Programme Manager, UNMAS, 14 April 2017.
14. Email from Pehr Lodhammar, UNMAS, 5 April 2017.
15. Email from Jean-Denis Larsen, NPA, 18 April 2017.
16. Response to questionnaire by Seydou N’Gaye, Senior Technical Advisor, and Maryam Walton, Mine Action Coordinator, HI, received by email via Julien Kempeneers, Deputy Desk Officer, Mine Action Department, HI, 23 March 2017.
17. Response to questionnaire by Gerard Kerrien, Country Director, received by email via Llewelyn Jones, Director of Programmes, MAG, 8 May 2017.
19. Response to questionnaire from Michelle Healy, UNMACC, Kinshasa, 29 April 2013. In addition, MONUSCO uses released land for their field bases and airport terminals.
20. Email from Jean-Denis Larsen, NPA, 18 April 2017.
22. Response to questionnaire by Michelle Healy, UNMACC, 29 April 2013.
27. UNMAS, ‘DRC, Support to UN Country Team and the Government’.


Email from Steven Harrop, UNMAS, 4 September 2016.

Responses to questionnaire by Gerard Kerrien, MAG, 8 May 2017; and Seydou N’Gaye and Maryam Walton, HI, 23 March 2017; and email from Jean-Denis Larsen, NPA, 19 May 2017.

Email from Pehr Lodhammar, UNMAS, 5 April 2017.

Email from Jean-Denis Larsen, NPA, 18 April 2017.

Email from Steven Harrop, UNMAS, 20 September 2017.

Email from Julien Kempeneers, HI, 14 April 2016.

Email from Pehr Lodhammar, UNMAS, 5 April 2017.

Response to questionnaire by Gerard Kerrien, MAG, 8 May 2017.

Email from Jean-Denis Larsen, NPA, 18 April 2017.

Response to questionnaire by Gerard Kerrien, MAG, 8 May 2017.

Response to questionnaire by Seydou N’Gaye and Maryam Walton, HI, 23 March 2017.

Email from Steven Harrop, UNMAS, 20 September 2017.

Responses to questionnaire by Gerard Kerrien, MAG, 8 May 2017; and Seydou N’Gaye and Maryam Walton, HI, 23 March 2017; and emails from Jean-Denis Larsen, NPA, 18 April and 20 September 2017; Maryam Walton, HI, 22 September 2017; and Steven Harrop, UNMAS, 4 and 20 September 2017. HI reported that clearance of the two areas was not completed in 2016 and remained ongoing as at March 2017. UNMAS reported discrepancies between the figures reported here by operators and the information contained in the national database. According to the information held in the national database, a total of 201,746m² was cleared in 2016; however UNMAS stated that operators’ records were not always sent to UNMAS. DCA declined to provide data to Mine Action Review in 2016.

Email from Steven Harrop, UNMAS, 4 September 2017.

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.

Article 5 deadline Extension Request, 31 March 2011, pp. 3 and 49.

Ibid; and Statements of DRC, Intersessional meetings (Standing Committee on Mine Action), Geneva, 21 June 2011 and 27 May 2013.

Second Article 5 deadline Extension Request, 7 April 2014, p. 48.

Ibid., p. 49.

Ibid., p. 81.

Ibid., p. 12.

Article 5 deadline Extension Request, 7 April 2014, p. 52.

Responses to questionnaire by Gerard Kerrien, MAG, 8 May 2017; and Seydou N’Gaye and Maryam Walton, HI, 23 March 2017; and emails from Jean-Denis Larsen, NPA, 18 April 2017; and Steven Harrop, UNMAS, 4 and 20 September 2017.

Email from Pehr Lodhammar, UNMAS, 5 April 2017.

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.

Statement of DRC, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 25 June 2015.

Emails from Llewelyn Jones, MAG, 7 May 2016; Julien Kempeneers, HI, 14 April 2016; and Pehr Lodhammar, NPA, 12 April 2016.

Response to questionnaire by Gerard Kerrien, MAG, 8 May 2017; and email from Jean-Denis Larsen, NPA, 18 April 2017.

Email from Pehr Lodhammar, UNMAS, 5 April 2017.
ECUADOR

ARTICLE 5 DEADLINE: 31 DECEMBER 2017
(FIVE-YEAR EXTENSION REQUESTED)

Ecuador failed to meet its Article 5 deadline for clearance of 1 October 2017 and sought, and was granted, an additional three-month extension at the Fifteenth Meeting of States Parties. Since then it has determined that it needs a five-year extension, bringing into question its compliance with its duty under Article 5 of the Anti-Personnel Mine Ban Convention (APMBC) to clear anti-personnel mines as soon as possible. It cleared only 1,400m² of area in 2016.

MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Improving performance</td>
<td>2</td>
<td>6</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: POOR

4.9 5.9
CONTAMINATION

Ecuador’s contamination results from its 1995 border conflict with Peru. The most heavily mined section of the border is the Condor mountain range (Cordillera del Condor) which was at the centre of the dispute. As at the end of 2016, 132,976m² of contaminated area was reported to remain in 59 areas across five mined zones.1 Contamination was believed to include a total of 4,125 anti-personnel mines.2

Two of twenty-four provinces in Ecuador are still affected by mined areas, as set out in Table 1. The provinces are located in the south of the country along the border with Peru.

PROGRAMME MANAGEMENT

The national mine action programme is managed by the National Centre for Humanitarian Demining (CENDESMI), an interministerial body chaired by the Ministry of Foreign Affairs.

Until October 2013, the Organization of American States (OAS) provided technical oversight and quality assurance (QA) of clearance.4

Standards

Under the Binational Cooperation Programme (Programa Binacional de Cooperación) established in 2000, in April 2013 Ecuador and Peru adopted a Binational Manual for Humanitarian Demining (Manual Binacional de Desminado Humanitario) to unify the demining procedures of both states in accordance with the International Mine Action Standards (IMAS).

Operators

Demining operations are conducted by the Army’s General Demining Command (CGD). The CGD has in the past been deploying 16 manual demining teams and 2 mechanical demining teams (using an MV-4 remotely controlled flail), as well as 1 mine detection dog (MDD) team.3 In 2017, Ecuador was planning to deploy only 12 demining teams.5

In December 2013, the joint Ecuador-Peru Binational Humanitarian Demining Unit of 30 deminers conducted its first exercise in Morona Santiago. In October 2015, the Unit began operations in a mined area estimated to extend over 43,500m² within the Tiwinza square kilometre (an area at the centre of the conflict between the two nations).3

LAND RELEASE

Ecuador released less than 5,000m² of mined area in 2016 across two provinces (see Table 3), compared with output in 2015 of 66,000m². Operations in 2016 included the destruction of 565 anti-personnel mines and 2 items of UXO. One mined area was released in the province of Zamora Chinchipe (by cancellation). On 22 November 2016, demining operations began in the Tiwinza square kilometre through the Binational Humanitarian Demining Unit, which had released an area of 1,410m² by the end of the year, leaving 35,490m² to release in that zone.

Survey in 2016

A total of 3,267m² of suspected hazardous area (SHA) was cancelled in 2016, as set out in Table 2, releasing a single mined area in Zamora Chinchipe province. In addition, non-technical survey identified 26 previously unrecorded mined areas covering a total of 7,521m².6 These have not been reported separately from the four mined areas but the area is included in the total contaminated area.

Table 1: Mine contamination by province (as at end-2016)3

<table>
<thead>
<tr>
<th>Province</th>
<th>Contaminated zones</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morona Santiago (Tiwinza)</td>
<td>1</td>
<td>35,490</td>
</tr>
<tr>
<td>Zamora Chinchipe</td>
<td>4</td>
<td>97,486</td>
</tr>
<tr>
<td>Totals</td>
<td>5</td>
<td>132,976</td>
</tr>
</tbody>
</table>

In its 2008 Article 5 deadline extension request, Ecuador listed farming, mining production, and tourism as the main productive activities affected by mine contamination.
Clearance in 2016

No mined areas were released in 2016 but clearance covered a meagre 1,410\text{m}^2, with the destruction of 565 anti-personnel mines and 2 ERW (see Table 3).

<table>
<thead>
<tr>
<th>Region</th>
<th>Areas cleared</th>
<th>Area cleared (\text{m}^2)</th>
<th>Anti-personnel mines destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morona Santiago</td>
<td>0</td>
<td>1,410</td>
<td>565</td>
</tr>
<tr>
<td>Totals</td>
<td>0</td>
<td>1,410</td>
<td>565</td>
</tr>
</tbody>
</table>

**ARTICLE 5 COMPLIANCE**

Under Article 5 of the APMBC (and in accordance with the three-month extension granted by states parties in 2016), Ecuador is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2017. On 31 March 2017, Ecuador formally submitted a request for a five-year extension until 31 December 2022.\(^{11}\)

In granting Ecuador’s 2008 extension request, the Ninth Meeting of States Parties had noted that based on planned increases in funding and demining capacity, Ecuador “may find itself in a situation wherein it could proceed with implementation faster than that suggested by the amount of time requested.”\(^{12}\) This proved not to be the case. In its presentation to the Article 5 Committee in May 2016, Ecuador, one of the co-chairs of the committee, announced that of the remaining 0.13\text{km}^2 of contamination, 0.08\text{km}^2 would be cleared in 2016 and the remaining 0.05\text{km}^2 in 2017 prior to October.\(^{13}\) This did not occur.

In granting the extension request, the Fifteenth Meeting of States Parties noted that Ecuador and the Convention as a whole would benefit from a full extension request process taking place, and agreed to grant Ecuador a three-month extension until 31 December 2017. “In addition, the Meeting requested that Ecuador submit a detailed request, in accordance with the established process, by 31 March 2017, in order for Ecuador and the States Parties to benefit from a cooperative exchange on the request.”\(^{15}\)

In its Article 7 transparency report for 2016, however, Ecuador suddenly and without explanation determined that it would need a further five years to fulfil its Article 5 obligations. It planned to release contamination according to the following workplan detailed in Table 5 below.

In granting the extension request, the Fifteenth Meeting of States Parties noted that Ecuador and the Convention as a whole would benefit from a full extension request process taking place, and agreed to grant Ecuador a three-month extension until 31 December 2017. “In addition, the Meeting requested that Ecuador submit a detailed request, in accordance with the established process, by 31 March 2017, in order for Ecuador and the States Parties to benefit from a cooperative exchange on the request.”\(^{15}\)

In its Article 7 transparency report for 2016, however, Ecuador suddenly and without explanation determined that it would need a further five years to fulfil its Article 5 obligations. It planned to release contamination according to the following workplan detailed in Table 5 below.

Table 5: Planned Mine Clearance in 2017–22

<table>
<thead>
<tr>
<th>Year</th>
<th>Mined areas</th>
<th>Mined area (\text{m}^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2</td>
<td>32,480</td>
</tr>
<tr>
<td>2018</td>
<td>2</td>
<td>26,159</td>
</tr>
<tr>
<td>2019</td>
<td>9</td>
<td>12,555</td>
</tr>
<tr>
<td>2020</td>
<td>10</td>
<td>8,431</td>
</tr>
<tr>
<td>2021</td>
<td>10</td>
<td>10,340</td>
</tr>
<tr>
<td>2022</td>
<td>26</td>
<td>7,521</td>
</tr>
<tr>
<td>Totals</td>
<td>59</td>
<td>97,486</td>
</tr>
</tbody>
</table>

Ecuador’s request for a new five-year extension does not appear to represent an act of good faith. Its compliance with the duty under Article 5 of the APMBC to complete clearance “as soon as possible” is in serious doubt.
1. Article 7 Report (for 2016), Form F2.
2. Ibid., Form C.
3. Article 7 Report (for 2016), Form C.
4. Email from Carl Case, General Coordinator, Comprehensive Action against Antipersonnel Mines and Assistance for Control of Arms and Munitions, OAS, Washington, 19 March 2014.
7. Ibid.
8. Article 7 Report (for 2016), Form C.
9. Ibid., Form F2.
10. Ibid.
11. Ecuadorian Ministry of Foreign Affairs, “Request for renewal of extension of the deadline to complete the destruction of antipersonnel mines in mined areas in accordance with Article 5, paragraphs 3 and 6 of the Convention on the Prohibition of the Use, Stockpiling, Production, and Transfer of Antipersonnel Mines and on their Destruction” March 2017.
14. Letter from Efrain Baus Palacios, Director of Neighbourhood Relations and Sovereignty for the Ministry of Foreign Affairs and Human Mobility and President of the National Humanitarian Demining Center of Ecuador, to Amb. Patricia O’Brien, 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.
15. Decisions on the request submitted by Ecuador for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, 1 December 2016, §d.
**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Improving performance</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: VERY POOR**

3.0

3.4
PERFORMANCE COMMENTARY

Eritrea’s mine action programme has performed very poorly in most areas, with further stagnation and even deterioration during 2016. There is no indication that any progress in mine action has occurred since the end of 2013. It is failing to comply with its obligation under Article 5 of the Anti-Personnel Mine Ban Convention (APMBC) to complete clearance as soon as possible. Eritrea failed to submit an updated Article 5 workplan as required by states parties upon granting its second extension and did not respond to repeated requests for updated information from Mine Action Review in 2017. It last submitted an Article 7 transparency report in 2014.

RECOMMENDATIONS FOR ACTION

■ Far greater priority needs to be afforded to demining in Eritrea. The authorities should ensure that demining units are not reoriented to other tasks but focus on survey and clearance operations for humanitarian purposes.
■ Eritrea should urgently submit an up-to-date list of all known or suspected areas with anti-personnel mines and a detailed timeline of activities planned under its Article 5 extension request, including annual projections of areas to be addressed and a corresponding budget.
■ Eritrea should urgently submit its outstanding annual Article 7 transparency reports, the latest of which was due by 30 April 2017, as well as respond to requests from the international mine action community for updated information in a transparent and timely manner.
■ Eritrea should reconsider its policy of excluding international technical assistance from the country, which would support more efficient land release and re-open international funding paths.
■ Eritrea should develop and make public a resource mobilisation strategy on the basis of a clear understanding of remaining contamination.

CON bear

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”. The EDA did not respond to repeated requests from Mine Action Review for further information in 2016 or in 2017.

The last estimate of mine contamination in Eritrea dates back to the end of 2013, when Eritrea reported that 434 mined areas remained over an estimated 33.4km². This was a two-thirds reduction on the earlier estimate of 99km² of June 2011, and significantly lower than the 129km² identified by the 2004 landmine impact survey.

Table 1: Suspected hazardous areas (SHAs) by region (as at end-2013)

<table>
<thead>
<tr>
<th>Zoba (region)</th>
<th>SHAs</th>
<th>Estimated area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semienawi Keih Bahri</td>
<td>166</td>
<td>9,462,537</td>
</tr>
<tr>
<td>Anseba</td>
<td>144</td>
<td>10,230,940</td>
</tr>
<tr>
<td>Gash Barka</td>
<td>63</td>
<td>6,252,951</td>
</tr>
<tr>
<td>Debub</td>
<td>29</td>
<td>3,894,036</td>
</tr>
<tr>
<td>Maakel</td>
<td>24</td>
<td>2,423,325</td>
</tr>
<tr>
<td>Debubawi Keih Bahri</td>
<td>8</td>
<td>1,169,029</td>
</tr>
<tr>
<td>Totals</td>
<td>434</td>
<td>33,432,818</td>
</tr>
</tbody>
</table>

Anti-personnel mines and ERW are reported to negatively affect socio-economic conditions in Eritrea, blocking access to agricultural and pastoral land vital to farmers and animal herders, and preventing the implementation of construction and development projects, including of roads, schools, and clinics.
PROGRAMME MANAGEMENT

The Eritrea mine action programme is entirely nationally managed. The EDA, established in July 2002, is responsible for policy development, regulation of mine action, and the conduct of mine clearance operations. The EDA reports directly to the Office of the President.

Operators

Demining is primarily conducted by the engineering units of the Eritrean defence forces under the supervision of the EDA, which also carries out quality assurance (QA) and quality control (QC) in accordance with Eritrea’s National Mine Action Standards. According to its second Article 5 deadline extension request, submitted in 2014, Eritrea planned to deploy “at least” five demining teams during its second extension period, the same number as then deployed, but might increase the number if adequate financial and logistical support were found. Following expulsion of international non-governmental organisations (NGOs) in 2005, Eritrea does not allow any international demining operators to conduct survey or clearance in Eritrea.

LAND RELEASE

Under its 2014 extension request, Eritrea projected that up to 15.4km² 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.

Eritrea has not provided any updates to states parties to the APMB, nor responded to Mine Action Review requests for information on any mine action activities (including survey) undertaken since 2014. Previously, in 2013, Eritrea reported release of 157 SHAs totalling 33.5km², leaving 385 mined areas of close to 24.3km² to be surveyed.

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB (and in accordance with the three-year extension granted by states parties in 2011 and a further five-year extension granted in 2014), Eritrea is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 February 2020. It is not on track to meet this deadline and is failing to comply with its Article 5 obligations.

In January 2014, Eritrea submitted a second Article 5 deadline extension request seeking a further five years to continue clearance and complete re-survey of SHAs, but not to fulfil its clearance obligations under the treaty. It is not clear how this is consistent with the terms of Article 5 of the APMB. 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”.

Re-survey during the second extension period is planned to involve both technical and non-technical survey of all remaining mined areas across six regions. Re-survey is planned to run concurrently with clearance in priority areas in the Anseba, Maakel, and Semienawi Keih Bahri regions.
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”.\footnote{Email from Habtom Seghid, Deputy General Manager, EDA, 6 May 2015.} It was further stated that Eritrea “won’t complete clearance in the next five years”, and will likely require a third extension.\footnote{Ibid.} Eritrea has not provided states parties with any information since, nor did it submit an updated Article 5 extension request workplan as requested. It did not attend any meetings of the APMBC in 2016 or the first half of 2017.

### Table 2: Mine clearance in 2012–16\footnote{Emails from Habtom Seghid, EDA, 2 March 2010, 21 and 22 July 2011; Article 7 Reports (for 2011 and 2012), Form J; and Second Article 5 deadline Extension Request, 23 January 2014, p. 8.}

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
<th>AP mines destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td>2015</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td>2014</td>
<td>N/R</td>
<td>N/R</td>
</tr>
<tr>
<td>2013</td>
<td>2.3</td>
<td>N/R</td>
</tr>
<tr>
<td>2012</td>
<td>1.2</td>
<td>11</td>
</tr>
<tr>
<td>Totals</td>
<td>3.5</td>
<td>11</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  
N/R = Not reported
**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td></td>
<td><strong>1</strong></td>
</tr>
<tr>
<td>Targeted clearance</td>
<td></td>
<td><strong>1</strong></td>
</tr>
<tr>
<td>Efficient clearance</td>
<td></td>
<td><strong>1</strong></td>
</tr>
<tr>
<td>National funding of programme</td>
<td></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td>Timely clearance</td>
<td></td>
<td><strong>0</strong></td>
</tr>
<tr>
<td>Land release system in place</td>
<td></td>
<td><strong>5</strong></td>
</tr>
<tr>
<td>National mine action standards</td>
<td></td>
<td><strong>6</strong></td>
</tr>
<tr>
<td>Reporting on progress</td>
<td></td>
<td><strong>2</strong></td>
</tr>
<tr>
<td>Improving performance</td>
<td></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: VERY POOR**

|          | **2.4** | **2.5** |

ARTICLE 5 DEADLINE: 1 JUNE 2020
(NOT ON TRACK TO MEET DEADLINE)
PERFORMANCE COMMENTARY

Ethiopia is failing to comply with its obligations under the Anti-Personnel Mine Ban Convention (APMBC). Its mine action programme showed few signs of progress in 2016. From being one of the best mine action programmes a decade ago it is now one of the worst, with little meaningful progress since September 2011. It failed to submit an updated workplan due 30 April 2017 as part of its latest Article 5 extension. However, the re-establishment in 2015 of a governmental entity responsible for the national mine action programme, even if not under independent civilian management, was a step forward.

RECOMMENDATIONS FOR ACTION

- Ethiopia should ensure the newly created national mine action authority has sufficient resources to establish an effective mine action programme.
- Ethiopia should submit an updated workplan for the remainder of its Article 5 extension period through to June 2020, detailing all areas confirmed or suspected to contain anti-personnel mines, annual targets of areas to be addressed, methods of land release and operators, and a detailed budget.
- Ethiopia should fully report on progress in implementing its 2015–17 workplan.
- Ethiopia should report and record mine action data according to International Mine Action Standards (IMAS) land-release terminology.
- Ethiopia should develop a resource mobilisation plan and clarify how financial resources will be used to meet its extension request targets.

CONTAMINATION

In June 2017, Ethiopia reported that nearly 7.2km² of confirmed mined area remained, along with more than 1,180km² of suspected hazardous areas (SHAs), of which it expected about only about 3% would contain mines.1

Since 2015, Ethiopia’s reporting on the number and size of areas suspected or confirmed to be mined has been inconsistent between its 2015 Article 5 extension request, its response to subsequent requests for clarification, statements at APMBC meetings, and its latest APMBC Article 7 transparency report on contamination as at 30 April 2017. It would appear, however, that as at June 2017, 45 confirmed hazardous areas (CHAs) remained covering a total area of just under 7.2km² along with 269 SHAs with a size of nearly 1,186km².

According to its latest Article 7 report, submitted in 2017, and information in its extension request, CHAs and SHAs remained 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.

Table 1: CHAs and SHAs by region (as at April 2017)2

<table>
<thead>
<tr>
<th>Region</th>
<th>SHAs</th>
<th>Area (km²)</th>
<th>CHAs</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afar</td>
<td>14</td>
<td>3.70</td>
<td>6</td>
<td>1.76</td>
</tr>
<tr>
<td>Benishangul</td>
<td>2*</td>
<td>0.05</td>
<td>2*</td>
<td>0.05</td>
</tr>
<tr>
<td>Gambela</td>
<td>20</td>
<td>0.80</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Oromia</td>
<td>13</td>
<td>1.05</td>
<td>8</td>
<td>0.10</td>
</tr>
<tr>
<td>Somali</td>
<td>262</td>
<td>1,186.90</td>
<td>27</td>
<td>3.81</td>
</tr>
<tr>
<td>Tigray</td>
<td>3</td>
<td>0.70</td>
<td>2</td>
<td>1.46</td>
</tr>
<tr>
<td>Totals</td>
<td>314</td>
<td>1,193.2</td>
<td>45</td>
<td>7.18</td>
</tr>
</tbody>
</table>

* The two SHAs and CHAs may be double counting the same areas.

It is not possible to definitively reconcile Ethiopia’s statements in 2017 on its progress in implementing its Article 5 obligations with that of information provided in its 2015 extension request and other previously reported information. In addition, Ethiopia did not report on progress to meet the projected milestones contained in its extension request for 2015–17. 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.3
Ethiopia has also noted that estimates of contamination do not include the area along the Ethiopia-Eritrea confrontation line where no survey has been carried out and the border has not been demarcated. The area was previously under the control of the United Nations Mission in Ethiopia and Eritrea (UNMEE). When asked what efforts it had made to address this contamination, Ethiopia replied that it had carried out clearance behind its own defensive lines, but it was not possible to enter or clear the area between the two countries’ defensive lines due to security concerns, and clearance would have to wait until the demarcation has been completed.

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 Landmine Impact Survey (LIS) identified mine and explosive remnants of war (ERW) contamination in 10 of Ethiopia’s 11 regions, with 1,916 SHAs across more than 2,000km² impacting more than 1,492 communities.5 When asked what efforts it had made to address this contamination, Ethiopia replied that it had carried out clearance behind its own defensive lines, but it was not possible to enter or clear the area between the two countries’ defensive lines due to security concerns, and clearance would have to wait until the demarcation has been completed.4

The Afar, Somali, and Tigray regions accounted for more than four-fifths of impacted communities.6 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.14 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).15 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 APMBC responsibilities to the Ministry of Defence in 2012.11 Ethiopia subsequently requested, and was granted, a five-year extension to its Article 5 clearance deadline of 1 June 2015 until June 2020.

The last known estimate of mine and ERW victims in Ethiopia stems from the 2001–04 LIS, which claimed 16,616 mine and ERW casualties, of whom 9,341 were killed and 7,275 were injured. Ethiopia reported that two-thirds of the victims were engaged in herding and farming at the time of the incidents.12 Mines and ERW are reported to continue to cause socio-economic harm, including through: denying access to agricultural and pasture land, which contributes to food insecurity and serious economic hardship for certain communities; blocking access to water for communities and particularly for nomadic pastoralists; and blocking secondary and tertiary roads important to local communities.13

**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.14 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).15 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 APMBC 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.16

In response to the decision to close EMAO and transfer demining responsibility to the army’s Combat Engineers Division, NPA ended its direct funding support17 and had completed the transfer of its remaining 49 mine detection dogs (MDDs) to EMAO by the end of April 2012.18 Some MDD handlers and support staff were transferred to the federal police.19 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 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.20 This office was to include a number of sub-departments, including for operations, risk education, information management, quality assurance, and training. Ethiopia claimed that a demining company, technical survey and explosive ordnance disposal (EOD) teams, and a mechanical demining team had been formed.21

In December 2016, Ethiopia informed states parties to the APMBC that the mine action training centre had been fully transferred to the “Office in charge of Mine Action”. It reported, though, that resource constraints were impeding the construction of the Demining Training Centre started by the former EMAO, and noted that demining equipment was nearing the end of its operational life.22
Standards
Under its extension plan targets, Ethiopia stated in 2015 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 updated using the current IMAS. These had been previously updated with support from NPA.23

Quality Management
Ethiopia reported that operations had been “employing overall quality management including quality assurance and quality control efforts to ensure that operations are in accordance with NMAS and IMAS”.24

Information Management
Ethiopia also reported that, prior to 2015, EMAO had installed and customised a new version of the Information Management System for Mine Action (IMSMA) database and had been working on capacity development to upgrade data processing. However, it stated that database challenges remained and until issues with the IMSMA system were resolved, the National Defence Force would “continue using alternative data processing packages together with IMSMA for planning, reporting, and analysis”. In its extension request, Ethiopia requested technical advisory and training support to make the IMSMA database fully functional.25 In June 2017, Ethiopia reiterated its appeal for assistance for resources and skills training for personnel to operate the IMSMA database and for strategic planning projects.26

Operators
Under its extension request, Ethiopia stated that from 1 December 2015 to the end of May 2020, it would deploy four demining companies and four survey and rapid-response teams.27 In April 2017, Ethiopia reported that using its own resources, 412 personnel attended a basic demining course. In addition, 23 deminers completed a month-long EOD Level 2 training course conducted by the International Committee of the Red Cross (ICRC) in March 2017, and a further 20 participated in an improvised explosive device (IED) training run by the United States.28 It did not report, however, that any demining had begun.

LAND RELEASE
Ethiopia did not report any survey or systematic clearance for 2016 or the first half of 2017. In its extension request, Ethiopia pledged that four demining teams and four technical survey and rapid-response teams would start clearance and survey in November 2015, and a further four technical survey and rapid-response teams would be deployed the following month, once training and refreshment courses had been held.29 As at June 2017, Ethiopia had not, however, reported that any survey or clearance teams had been deployed. It reported, though, that in 2016 on the basis of reports from the local population, 30 items of ordnance had been destroyed by the mine action office: 10 anti-vehicle mines and 20 items of UXO.30

Previously, in April 2014, Ethiopia had informed states parties to the APMBC that in January–November 2013 its rapid-response teams had visited more than ten ERW-impacted communities in “Amhar, Oromiya, south and Somalia regional states” clearing more than 100,000m² and destroying ten anti-personnel mines and 176,000 items of UXO.31 No details were given as to the exact location of the spot tasks. Historically, in 2002–12, Ethiopia stated that almost 60km² of mined areas were cleared while nearly 1,200km² of SHAs were released by technical survey, with the destruction of 9,260 anti-personnel mines, 1,466 anti-vehicle mines, and 197,985 items of UXO.32

ARTICLE 5 COMPLIANCE
Under Article 5 of the APMBC (and in accordance with a five-year extension granted by states parties in 2015) Ethiopia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 June 2020. It is not on track to meet this deadline.

Ethiopia’s original Article 5 deadline expired on 1 June 2015. In March 2015, Ethiopia submitted a request for an extension of five years until 1 June 2020 to complete survey and clearance of all remaining mined areas.33 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 serious violation of the convention until the approval of the late request by the Fourteenth Meeting of States Parties on 4 December 2015.34 In the request, Ethiopia provided the following intended yearly milestones and targets:

- In 2015–17, non-technical survey and technical survey would be carried out on all remaining 314 SHAs covering a total area of more than 1,193km². Of this, 22 SHAs with an area of almost 30km² would be addressed in 2015; 149 SHAs covering 516km² in 2016;35 and a further 143 SHAs with a size of almost 648km² in 2017.36
- It further projected that a total of 0.45km² would be cleared in 2015; 4.88km² in 2016; and 4.8km² in 2017: a total of 10.135km².
- In 2018–20, clearance would continue in the surveyed areas, mainly in the Somali region.37 Ethiopia promised that an updated workplan would be submitted to states parties by April 2017.38
As at June 2017, Ethiopia had not reported release of any area set out in the extension request.39

In December 2016, Ethiopia stated that the Ministry of Defence’s Combat Engineers Division planned to undertake “advanced technical survey” in six regions – Afar, Benishangul, Gambela, Oromia, Somali, and Tigray – and that from January 2017 to June 2020, four demining operators and four rapid-response teams would survey and clear contaminated areas.40 It pledged to provide a workplan with a list of all areas known or suspected to contain anti-personnel mines along with annual projections to address the remaining areas.41

It failed, however, to submit a workplan by the required date of 30 April 2017. In June 2017, at the APMBC’s intersessional meetings, Ethiopia informed states parties that the workplan had been developed and was waiting approval by authorities, after which it would disseminate the plan to all stakeholders for input.42

In April 2017, for the first time since 2012, Ethiopia submitted an updated Article 7 report. However, the quality of Ethiopia’s reporting on its mine action activities in recent years has been poor. Its March 2015 extension request is riddled with inconsistent figures and mathematical errors, and the Article 7 report does not contain precise information on the location and size of contaminated areas.

Ethiopia has listed the following reasons for its inability to comply with its initial 2015 Article 5 deadline: insecurity in and around some mined areas; the lack of basic social services and infrastructure necessary for operations in rural areas; continuous redeployment of demining teams in scattered mined areas; lack of funding; the identification of additional hazardous areas; climate (such as a three-month rainy season); and a lack of precise information on the number and location of mined areas.43 Previously, in 2010, Ethiopia said it would clear all mines by 2013 (two years ahead of its deadline) if sufficient funding were available.44 In March 2013, however, following the closure of EMAO and transfer of responsibility for mine action to the Ministry of Defence, Ethiopia reported it was unlikely to meet its Article 5 deadline due to secondment of demining units to Sudan, and gaps in training, equipment, and funding.45

With no functioning mine action programme as at the end of 2016 and little progress reported in clearance since September 2011 (see Table 2), Ethiopia is unlikely to meet its future extension request plan. The inconsistencies and errors throughout its extension request do not provide sufficient clarity on or confidence in the true extent of mine contamination remaining or a realistic estimate of when clearance could be completed.46

Table 2: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>N/R</td>
</tr>
<tr>
<td>2015</td>
<td>N/R</td>
</tr>
<tr>
<td>2014</td>
<td>N/R</td>
</tr>
<tr>
<td>2013</td>
<td>0.10</td>
</tr>
<tr>
<td>2012</td>
<td>N/R</td>
</tr>
<tr>
<td>Total</td>
<td>0.10</td>
</tr>
</tbody>
</table>

N/R = Not reported

In its 2015 extension request, Ethiopia claimed it would cost a total of more than US$37 million to complete clearance by May 2020, a seemingly inexplicable increase from the $10 million that EMAO reported was required to clear all remaining areas by 2012.48 The request stated that Ethiopia would cover most of the mine action programme’s administrative costs, including quality assurance, information management, and training to respond to residual contamination, but did not report the amount of its national contribution.49

Ethiopia has called on a number of occasions for technical and financial support from international NGOs to meet its mine clearance obligations.50 In June 2015, Ethiopia requested other states parties to provide mine detection and clearance equipment to assist in clearing mines and IEDs.51 In June 2017, it requested assistance and training in information management and planning, stating it faced a shortage of resources and skilled manpower.52

1 Statement of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 8 June 2017; and Article 7 Report (for 2016), Form C. In its March 2015 Article 5 deadline extension request, Ethiopia stated that, based on past operational experience, after technical survey as little as 0.5% of the estimated area of SHAAs would contain mines, which would amount to a total of less than 5.6km². At the same time, it also reported higher estimates that 2% or 3% of the total size of the SHAAs could be expected to be confirmed. Article 5 deadline Extension Request, 31 March 2015, pp. 7 and 42.

2 In its Article 7 report for 2016, Ethiopia reported that these areas contained contamination of the following types: PMN, POMZ, PMD 6, M14, M16, and M35 (PRBM 35) mines, along with anti-vehicle mines and unexploded ordnance (UXO). The areas listed as CHAs are labelled both “suspended minefields” and as “areas that contain mines” in its September 2015 Article 5 Committee response for additional information. Ethiopia has also reported figures of 26 CHAs remaining in Somali region and three CHAs in Tigray region. See Article 7 Report (for 2016), Form C; Article 5 deadline Extension Request, 31 March 2015, pp. 26 and 42; statement of Ethiopia, Intersessional meetings (Standing Committee on Article 5 Implementation), Geneva, 9 April 2014; “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.

3 “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.

4 Ibid.

5 Norwegian People’s Aid (INPAI), ”Landmine Impact Survey Report, Federal Democratic Republic of Ethiopia”, May 2004.


7 Interviews with Gebriel Lager, Deputy Director, EMAO, in Ljubljana, 14 April 2008, and in Geneva, 4 June 2008.
11 Statements of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, p. 6.
12 Article 5 deadline Extension Request, 31 March 2015, p. 4.
13 Ibid.
16 Statements of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, April 2014, and 2015.
17 Email from Aubrey Sutherland-Pillai, Programme Manager, NPA, 2015.
18 Email from Kjell Ivar Breili, Programme Manager, NPA, Ethiopia, 2015.
19 Email from Aubrey Sutherland-Pillai, NPA, 2015.
20 Statements of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, April 2014, and 2015.
21 "Response to Committee on Article 5 Implementation request for additional information on its Article 5 deadline Extension Request", 2015.
23 Article 5 deadline Extension Request, 31 March 2015, p. 11.
24 Ibid., p. 8.
25 Ibid., p. 37.
26 Statements of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, June 2017.
27 Article 5 deadline Extension Request, 31 March 2015, p. 44.
28 Article 7 Report (for 2014), Form G. At the intersessional meetings in June 2017, Ethiopia also reported that 109,000m² of contamination “which was not identified before” had been cleared. This appears to refer to the just over 100,000m² it reported had been cleared in 2013. See statements of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, June 2017.
29 Article 5 deadline Extension Request, 31 March 2015, pp. 11 and 44.
30 Statement of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, June 2017, and Form G. At the intersessional meetings in June 2017, Ethiopia also reported that 109,000m² of contamination “which was not identified before” had been cleared. This appears to refer to the just over 100,000m² it reported had been cleared in 2013. See statements of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, June 2017.
31 Article 5 deadline Extension Request, 31 March 2015, pp. 24.
32 "Response to Committee on Article 5 Implementation request for additional information on its Article 5 deadline Extension Request", submitted 26 September 2015, and Analysis of Ethiopia’s Article 5 deadline Extension Request, 19 November 2015, p. 2. Of the total 1,916 SHAs recorded, 259 were released by “general survey”, 1,207 were “confirmed mine free” through technical survey, and an additional 136 areas confirmed to contain mines. Ethiopia also included a table of munitions destroyed which reported the destruction of 3,445 anti-personnel mines, 1,132 anti-tank mines, 1,733 anti-vehicle mines, and 141,112 items of UXO. It had previously reported slightly different figures of destroying 9,278 anti-personnel mines and 1,264 anti-vehicle mines. See Simon, “Transitioning Mine Action Programmes to National Ownership: Ethiopia,” GICHD, pp. 16–17.
33 Article 5 deadline Extension Request, 31 March 2015, p. 10.
34 The requests is dated 31 March 2015 but according to the Implementation Support Unit it was not received until 16 June 2015. See http://www.apminebanconvention.org/states-parties-to-the-convention/ethiopia/
35 Article 5 deadline Extension Request, 31 March 2015, p. 46. In the extension request Ethiopia appears to give different figures for the number and amount of SHAs to be addressed per year: in a separate table also on p. 46, it also reports that 12 SHAs covering 28.3km² would be surveyed in 2015. On p. 45, however, it reverses figures for clearance and survey and erroneously reports that over the course of 2015, 452,890m² would be addressed by non-technical and technical survey, while a total of 28.1km² would be cleared. It also reports a different figure of 160 SHAs with a size of more than 517.3km² to be surveyed in 2015. In the table in the request, Ethiopia reported that of the 1,916 SHAs identified by the LIS, 259 areas were later released through “general survey” and 1,207 areas released through technical survey. Article 5 deadline Extension Request, 31 March 2015, p. 7.
36 Article 5 deadline Extension Request, 31 March 2015, pp. 45–66. However, these figures add up to 1,193,826,634m², which is greater than any of the four slightly different figures reported in the extension request as the total size of the remaining SHAs. Likewise, the alternate figures listed in the preceding footnote total 1,193,681,680m², which is also greater than any figure reported for the size of the remaining SHAs. To add to the confusion, in its statement to the intersessional meetings in June 2015, Ethiopia reported that only 22 SHAs covering 447km² would be addressed in 2015–17. Statement of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015.
37 Statement of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, and Article 5 deadline Extension Request, 31 March 2015, p. 47.
38 Statement of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015, and Article 5 deadline Extension Request, 31 March 2015, p. 45.
39 "Preliminary Observations of the Committee on Article 5 Implementation (Chile, Costa Rica, Switzerland, and Zambia)," Intersessional meetings, Geneva, 2015.
40 Statement of Ethiopia, 15th Meeting of States Parties, Santiago, Chile, 29 November 2015.
41 Ibid.
42 Statement of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015.
43 Article 5 deadline Extension Request, 31 March 2015, pp. 40–41.
46 According to figures presented in the request, as at March 2015, 5.9km² of land was confirmed as mined and a further 35.8km² was expected to be confirmed to contain mines following survey, though Ethiopia’s extension request outlines the clearance of 10.1km² by 2020.
49 Article 5 deadline Extension Request, 31 March 2015, p. 48. Ethiopia also reported that the government had contributed a total of US$8 million to demining in 2001–14. Ethiopia submitted 26 September 2015; and Analysis of Ethiopia’s Article 5 deadline Extension Request, 31 March 2015, p. 33.
50 Ibid., pp. 48–49.
51 Statement of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015.
52 Statement of Ethiopia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 2015.
IRAQ

ARTICLE 5 DEADLINE: 1 FEBRUARY 2018
(TEN-YEAR EXTENSION REQUESTED)

<table>
<thead>
<tr>
<th>MINE ACTION PROGRAMME PERFORMANCE</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Improving performance</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: POOR**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.8</td>
<td>4.1</td>
</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

Islamic State fighters left huge areas contaminated with mines and other munitions, adding to Iraq’s obligations under the Anti-Personnel Mine Ban Convention (APMBC) but the extent of which has yet to be assessed. Little clearance of legacy minefields occurred in central and southern Iraq as the priority shifted to clearing improvised explosive devices (IEDs) and locally produced mines, the overwhelming majority of which were anti-personnel mines. The mine action response has been hampered by insecurity, lack of capacity, and funding constraints. Crippling bureaucracy in Baghdad along with corruption have compounded the problems, holding up expansion of demining capacity and assets although changes of management in the country’s NGO Directorate at least held out the hope of more streamlined registration of mine action organisations.

RECOMMENDATIONS FOR ACTION

- Iraq should commit formally in its Article 5 extension request to clearing all locally produced anti-personnel mines and, wherever available, provide data on, or at least estimates of, the extent of contamination.
- Iraq should strengthen the mandate, management, personnel, and resources of its Department of Mine Action (DMA).
- The DMA should develop multi-year work plans for all mine action outside the oil sector detailing priorities and responsibilities for survey and clearance.
- Federal authorities should undertake a high-level resource mobilisation campaign.
- Iraq should ensure that clear procedures are established to facilitate smooth and fast registration and accreditation of commercial and humanitarian mine action organisations as well as the importation of equipment.
- The DMA should strengthen its information management processes in line with international standards.
- The Government of Iraq should centralise within the DMA reporting on all demining operations to enable a comprehensive national overview of mine action progress.
- In reporting in connection with the APMBC, Iraq should not report anti-personnel mines as IEDs.
- Iraq should authorise selected international operators to conduct demolitions of cleared mines and other munitions, wherever it is appropriate to do so.

CONTAMINATION

Iraq is probably the world’s most mine-contaminated country. The 1980–88 war with Iran, the 1991 Gulf War, and the 2003 invasion by the United States (US)-led coalition account for most known contamination, including barrier minefields along its borders with Iran and Saudi Arabia. Occupation of large areas by Islamic State after 2014 added extensive contamination with improvised munitions. These are mostly locally produced mines (victim-activated pressure-plate devices that are prohibited under the APMBC).

Iraq’s request for an extension to its APMBC Article 5 deadline prepared by the DMA and the Iraq Kurdistan Mine Action Authority (IKMMA) and submitted in March 2017 estimated the remaining threat as 3,554 confirmed hazards covering 1,195km². Three southern governorates account for almost two-thirds of Iraq’s total mine contamination. Iraq’s Kurdistan Region accounted for a fifth.

Data provided separately by the DMA and IKMMA to the Mine Action Review (see Tables 1–4), reported total explosive contamination at the end of 2016 as covering almost 1,359km². This did not include areas contaminated by locally produced mines in areas recaptured from Islamic State, which have not been subjected to systematic or large-scale survey.

Federal (central and southern) Iraq

Areas affected by anti-personnel mines or a mixture of anti-personnel and anti-vehicle mines total 1,271 km², a level almost unchanged from the previous year. Basrah, Missan, and Muthanna governorates have large barrier minefields along the borders with Iran and Saudi Arabia. Reportedly, Basrah also has three confirmed hazardous areas (CHAs) covering 26.6km² in its oilfields.

Despite the presence of such large mined areas, the DMA claims that most mined areas are scattered and random, increasing the challenge of locating them. It cites this as a factor that impeded Iraq’s ability to comply with its original Article 5 deadline. It also said many mined areas had not been identified.
Table 1: Mine contamination in Central and Southern Iraq by device (as at end-2016)\(^5\)

<table>
<thead>
<tr>
<th>Contamination</th>
<th>CHAs</th>
<th>Area (km(^2))</th>
<th>SHAs</th>
<th>Area (km(^2))</th>
<th>Total area (km(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP mines</td>
<td>117</td>
<td>55.90</td>
<td>14</td>
<td>13.63</td>
<td>69.53</td>
</tr>
<tr>
<td>AV mines</td>
<td>7</td>
<td>0.17</td>
<td>0</td>
<td>0</td>
<td>0.17</td>
</tr>
<tr>
<td>Locally produced mines</td>
<td>2</td>
<td>0.13</td>
<td>2</td>
<td>6.53</td>
<td>6.67</td>
</tr>
<tr>
<td>Mixed AP/AV mines</td>
<td>162</td>
<td>1,198.45</td>
<td>18</td>
<td>3.04</td>
<td>1,201.49</td>
</tr>
</tbody>
</table>

**Totals**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>288</td>
<td>1,254.65</td>
<td>34</td>
<td>23.20</td>
<td>1,277.86</td>
</tr>
</tbody>
</table>

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

Table 2: Mine contamination in Central and Southern Iraq by governorate (as at end-2016)\(^6\)

<table>
<thead>
<tr>
<th>Governorate</th>
<th>CHAs</th>
<th>Area (km(^2))</th>
<th>SHAs</th>
<th>Area (km(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basrah</td>
<td>8</td>
<td>29.16</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Diyala</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>13.63</td>
</tr>
<tr>
<td>Missan</td>
<td>98</td>
<td>6.62</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Muthanna</td>
<td>1</td>
<td>10.48</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wassit</td>
<td>10</td>
<td>9.64</td>
<td>0</td>
<td>0</td>
</tr>
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</table>

**Totals**

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>117</td>
<td>55.90</td>
<td>14</td>
<td>13.63</td>
</tr>
</tbody>
</table>

The DMA said emergency non-technical survey in 2016 had identified 13.93km\(^2\) of IED contamination in areas recaptured from Islamic State, of which Anbar governorate (including Fallujah and Ramadi) accounted for 10.52km\(^2\), Babylon for 2.39km\(^2\), and Salah ad-Din for 1.02km\(^2\).\(^7\)

Kurdistan Region of Iraq (KRI)

Anti-personnel mine contamination levels in Kurdish governorates, although a fraction of central and south Iraq’s, would rank the KRI on its own among the world’s top five most contaminated regions and it continues to sustain mine casualties. IKMMA reported 7 people killed and 20 injured by mines and explosive remnants of war (ERW) in 2016.\(^8\) Estimates of KRI contamination at the end of 2016 were marginally higher than a year earlier as a result of continuing survey and cleaning up data. More than half the KRI’s mined area is located in Slemani governorate.\(^9\) IKMMA says a number of areas on the borders with Turkey and Iran totalling about 25km\(^2\) have not yet been accessible for survey due to security.\(^10\)

Table 3: Contamination in the KRI by device (as at end-2016)\(^11\)

<table>
<thead>
<tr>
<th>Contamination</th>
<th>CHAs</th>
<th>Area (km(^2))</th>
<th>SHAs</th>
<th>Area (km(^2))</th>
<th>Total area (km(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP mines</td>
<td>2,600</td>
<td>153.66</td>
<td>464</td>
<td>70.65</td>
<td>224.31</td>
</tr>
<tr>
<td>AV mines</td>
<td>11</td>
<td>0.27</td>
<td>3</td>
<td>0.02</td>
<td>0.29</td>
</tr>
<tr>
<td>Mixed</td>
<td>100</td>
<td>5.68</td>
<td>24</td>
<td>10.39</td>
<td>16.07</td>
</tr>
</tbody>
</table>

**Totals**

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<table>
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<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,711</td>
<td>159.61</td>
<td>491</td>
<td>81.06</td>
<td>240.67</td>
</tr>
</tbody>
</table>

Table 4: Anti-personnel mine contamination in the KRI by governorate (as at end-2016)\(^12\)

<table>
<thead>
<tr>
<th>Province</th>
<th>CHAs</th>
<th>Area (km(^2))</th>
<th>SHAs</th>
<th>Area (km(^2))</th>
<th>Total area (km(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dohuk</td>
<td>411</td>
<td>20.86</td>
<td>0</td>
<td>0</td>
<td>20.86</td>
</tr>
<tr>
<td>Erbil</td>
<td>341</td>
<td>49.54</td>
<td>0</td>
<td>0</td>
<td>49.54</td>
</tr>
<tr>
<td>Garmiyan</td>
<td>117</td>
<td>5.73</td>
<td>154</td>
<td>18.76</td>
<td>24.49</td>
</tr>
<tr>
<td>Slemani</td>
<td>1,731</td>
<td>77.53</td>
<td>310</td>
<td>51.90</td>
<td>129.43</td>
</tr>
</tbody>
</table>

**Totals**

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<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2,600</td>
<td>153.66</td>
<td>464</td>
<td>70.66</td>
<td>224.32</td>
</tr>
</tbody>
</table>
Locally produced mines

In Iraq's fast changing security environment operators have not had sufficient time or resources to conduct widespread systematic survey in areas recaptured from Islamic State but report that the scale of contamination is unprecedented in humanitarian mine action. Even after the recapture in July 2017 of Iraq's second city, Mosul, large expanses of territory and some major towns remained to be liberated and would likely add large additional hazardous areas requiring clearance.

Operators have encountered a wide variety of locally produced devices left by Islamic State but report that the vast majority are victim activated and meet the APMBC treaty of an anti-personnel mine. These mostly consist of devices activated by a pressure plate or “crush necklace” wires sufficiently sensitive to be detonated by the weight of a child and connected to an explosive charge of ammonium nitrate and aluminium powder or paste. The size of the charge ranges from 3kg to 100kg, which is capable of destroying a vehicle. Mines Advisory Group (MAG), working in the KRI and the adjacent Grey Zone reported that 98% of items it cleared were locally produced mines and the other 2% were abandoned radio-controlled or command-wire devices or booby-traps. It has also encountered devices loaded with chemical agents. Janus Global Operations, working in central Iraq, reported 95% of the devices it encountered were locally produced pressure-plate mines and that very few contained military explosives.

Islamic State used mines in conventional lanes in open country and around the perimeter of villages and access to key buildings. As an example of the scale of the contamination, MAG identified three mine “panels” in the vicinity of Bashiqar stretching over distances of 12km, 18km, and 24km, with multiple rows of devices spaced at intervals of between one and several metres in straight lines or zigzag patterns. Islamic State also mined approaches to buildings and public infrastructure and extensively booby-trapped private houses and property, posing a lethal threat to civilians returning to their homes. Operators and international aid agencies reported heavy civilian casualties from explosive devices but lacked detailed information. They believe that many fatalities may have gone unrecorded.

PROGRAMME MANAGEMENT

Mine action in Iraq is managed along regional lines. The DMA, set up by the Ministry of Health and Environment in Baghdad in 2008, coordinates and manages the sector in central and southern Iraq. IKMMA, created in 2004, manages mine action in four northern governorates under the Kurdish Regional Government.

The DMA and IKMMA agreed in September 2015 to share operations in a so-called Grey Zone, an area of about 69,000km² controlled or contested by Islamic State forces after 2014 and overlapping their respective operating areas. The line separating DMA and IKMMA areas of responsibility in the Grey Zone is determined by which forces have liberated areas from Islamic State and taken control of the territory. A Joint Operations Centre in Erbil managed by iMMAP coordinates operations in the zone.

The United Nations Mine Action Service (UNMAS) established a presence in Iraq in mid-2015 to assess the extent of the threat of explosive weapons, including IEDs and locally produced mines, in areas retaken from Islamic State, and to help the DMA develop and coordinate an emergency response, facilitating the return of displaced people. Under this programme, UNMAS is training selected security services and mine action personnel in how to organise an explosive ordnance disposal (EOD) response, along with survey and clearance in retaken areas, and assisting governmental authorities to develop standards and procedures for IED clearance.

By mid-2016, UNMAS had offices in Erbil with 12 national staff, and in Baghdad with 4 national staff, and expected to add additional capacity by the end of the year. UNMAS requested more than US$100 million to fund the programme in 2016, and as at September had secured only one quarter of that amount.

Federal Iraq

The DMA implements policy set by a Higher Council for Mine Action created by, and reporting to, the prime minister, in which the ministries of defence, interior, and oil are major actors. The HCMA is supported by a Technical Committee, functioning as its secretariat. The Ministry of Oil contracts and manages commercial operators conducting clearance supporting the oil sector.

The DMA has previously reported that it oversees four regional mine action centres (RMACs) but its Article 5 extension request referred to three:

- North: covering the governorates of Anbar, Diyala, Kirkuk, and Salah ad-Din
- Middle Euphrates (MEU): Babylon, Baghdad, Karbala, Najaf, Qadisiyah, and Wasit
- South: Basrah, Missan, Muthanna, and Thi-Qar.

RMAC-South, which accounts for 71% of confirmed anti-personnel mine contamination (see Table 2) as well as 95% of Iraq’s cluster munition remnants contamination, was active tasking and coordinating operations by humanitarian demining agencies but in 2016 focused on cluster munition remnants not mines. The extent to which other RMACs were active in 2016 was unclear.

KRI

IKMMA functions as a regulator and operator. It reports directly to the office of the Prime Minister in the KRI and coordinates four directorates in Duhuk, Erbil, Garman, and Sulimaniya (Slemani). Despite financial constraints which have halved salaries for all staff, it also operates 27 12-strong manual demining teams, 7 mechanical teams, 5 survey teams, 3 EOD teams, and 35 quality assurance (QA) teams responsible for accreditation and monitoring the work of all operators.
IKMAA’s priorities for areas affected by legacy minefields include clearing agricultural land and infrastructure, tackling CHAs close to populated areas and areas reporting most mine incidents and casualties. Operators identified areas affected by locally produced mines for clearance in consultation with district-level authorities, IKMAA and, for the Grey Zone, a joint operations room run by iMMAP liaising with the DMA. Areas to which communities were returning were the main priority. IKMAA issued task orders for specific sites. IKMAA teams conducted QA.

**Strategic Planning**

Iraq’s Article 5 deadline extension request sets out separate two-year and 10-year work plans for the DMA and for IKMAA which detail projected expenditure but provide no information on operations or priorities. It says the two-year workplans are based on existing capacity but describes the 10-year plans as “aspirational” and dependant on attracting international donor funding.

The DMA envisaged expenditure of $30 million in 2018−19 and $238 million over the 10-year period to the end of 2027. IKMAA proposed expenditure of almost $25 million in 2018−19 and $247 million over the same 10-year period. The projected expenditure targets clearance of legacy minefields only and not the cost of operations tackling locally produced mines, cluster munition remnants, or other ERW.

The extension request addresses only legacy minefields, not the post-2014 locally produced mines left by Islamic State which is the most immediate priority and which is using most of the funding provided by international donors. The request identifies a range of other factors that have slowed the progress of mine action:

- Insecurity due to the conflict with Islamic State
- Extensive additional contamination as a result of conflict
- Lack of funding
- Lack of information because the Ministry of Defence lost all minefield maps after the change of regime in 2003
- Lack of technical expertise and capacity.

**Operators**

In central and southern Iraq, operators need to be accredited by the DMA but first have to register with the NGO Directorate, an opaque process that can take years and has obstructed efforts to rapidly scale up capacity for an emergency response to the contamination left by Islamic State. Operators working in the KRI require accreditation with IKMAA. Most mine clearance capacity is located in the KRI, but without DMA accreditation operators based there are not permitted to operate beyond the Grey Zone in Federal (Central and Southern) Iraq.

**Table 5: International mine action NGOs active (as at end-2016)**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Personnel in Centre/South (DMA)</th>
<th>Personnel in the North (IKMAA) &amp; Grey Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDG</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>FSD</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>HI</td>
<td>0</td>
<td>36</td>
</tr>
<tr>
<td>MAG</td>
<td>0</td>
<td>588</td>
</tr>
<tr>
<td>NPA</td>
<td>78</td>
<td>19</td>
</tr>
<tr>
<td>Totals</td>
<td>118</td>
<td>721</td>
</tr>
</tbody>
</table>

**Central and Southern Iraq**

National organisations undertaking mine clearance included the army engineers tasked by the Ministry of Defence Directorate, and Civil Defence, which has a team in every governorate tasked by the Ministry of Interior and the DMA.

Two international humanitarian demining NGOs, Danish Demining Group (DDG) and Norwegian People’s Aid (NPA), were active in central and southern Iraq in 2016 but up to mid-2017 neither had conducted any mine survey or clearance. DDG closed its operation in Basrah in December 2014 but resumed operations at the end of 2015 and in 2016 worked with two BAC and two QA/quality control (QC) teams as well as four community liaison teams. NPA has operated out of Basrah since 2014, and in 2016 had three survey and five EOD/BAC teams focused on clearance of cluster munition remnants.
Two commercial companies, Janus Global Operations and Optima, started working on locally produced mines and IED clearance in 2016. As they had not received accreditation to conduct clearance they partnered and provided operational management to an accredited local organisation, al-Fahad Company for Demining, working in insecure areas with their own security details. Janus worked with financing from the United States Department of State’s Office of Weapons Removal and Abatement (WRA) in Ramadi in 2016 and increased the number of teams in 2017 when it also worked in Mosul. Optima worked with three BAC teams under a one-year, $12 million UNOPS contract managed by UNMAS, UNMAS has not provided any data to Mine Action Review on the details of clearance achieved under this contract. BACTEC was contracted by South Oil Company to undertake clearance in southern Iraq starting in October 2015 and continuing until October 2016. Other demining companies active in the oil sector included Arabian Gulf and Al-Khibra Alfanya Company. The DMA also reported activities conducted by Iraq Mine Clearance Organization (IMCO), which had shut down operations in 2014 after the United States withdrew funding, but resumed limited activities with DMA funding in 2016.

IKMMA operated with 27 12-person mine action teams, 37 QA teams, 7 mechanical demining teams, five survey teams, and three EOD teams as well as 10 risk education teams. IKMMA’s clearance teams focused on legacy minefields, tackling improvised devices or locally produced mines only in response to emergency requests from authorities and when international operators were not available. As a result of financial pressures, IKMMA terminated contracts with KRI commercial companies in 2014.

LAND RELEASE

Available data does not allow reporting on all the mined area that was released by survey and clearance in Iraq in 2016. IKMMA and international operators sustained clearance in the KRI at about the same level in 2016 as the year before. Mine survey and clearance in central and southern Iraq increased significantly, a reflection of major mine clearance by BACTEC and, in relation to locally produced mines, by MAG.

Survey in 2016

Central and Southern Iraq

The DMA reported a mixture of non-technical and technical survey covering nearly 14km² in areas liberated from Islamic State, three-quarters of it in Anbar governorate, including the towns of Ramadi and Fallujah which were occupied by Islamic State from 2014 until they were liberated in 2016. It also included survey of lesser areas of Babylon and Salah al-Din. The DMA reported this led to cancellation of 0.6km² through non-technical survey and reduction of 2.13km² by technical survey. MAG, active in Iraq for nearly 25 years, is the biggest international demining actor in the country. It almost doubled its capacity in 2016 to finish the year with a total of 470 staff. MAG worked with 185 staff in the KRI, including nine mine action teams employing 108 deminers, as well as two mine detection dog (MDD) teams. In central and southern Iraq, MAG had 20 multi-task teams with 160 personnel, and five mechanical demining teams, as well as managing 25 community liaison teams, 12 of which were affiliated to national partner organisations. In 2016 it opened a Training, Monitoring and Evaluation Unit, training staff in high-risk search for areas affected by locally produced mines and in community liaison. MAG expected to add 12 more multi-task teams in the second half of 2017.

NPA has worked in southern Iraq since 2014 and received accreditation to work in the KRI at the end of 2016 and accreditation to conduct clearance of locally produced mines from 1 January 2017. It operated two EOD teams with eight personnel each, focused on clearing locally produced mines. As additional funding became available in 2017, NPA planned to open an operating base with training facilities closer to the location of field operations. DDG received accreditation to conduct risk education in November 2015 and for ERW clearance in early 2016. By the end of the year, alongside 28 risk education staff, it employed 14 deminers clearing ERW, excluding locally produced devices.

Two more recent additions included the Swiss Foundation for Mine Action (FSD), which established a presence in the KRI in October 2015, received accreditation in December, and was operational from March 2016. Handicap International became active in 2016 receiving accreditation for clearance of all ERW except locally produced devices in November and for disposal of locally produced devices in April 2017.

KRI

IKMMA reported that its teams cancelled 16.9km² through non-technical survey in 2016. Other operators did not conduct survey of legacy minefields which have already been subjected to what IKMMA refers to as “preliminary technical survey”.

Operators conducted assessments of sites for people displaced by conflict and started “high-risk survey” of locally produced mines in areas recaptured from Islamic State in both the KRI and the Grey Zone. The approach to survey by MAG combined non-technical survey, drawing on hazardous area reports from Kurdish Peshmerga security forces, local authorities, and community liaison teams, and limited technical survey to define mine lines and polygons. FSD similarly reports assessing tasks using information available from the Peshmerga, local authorities, and any other available local source, and conducting technical survey to define and mark hazard perimeters.
Clearance in 2016

In 2016 across Iraq, Mine Action Review has calculated that total mine clearance amounted to 16.4km²: 7.86km² of legacy contamination in central and southern Iraq; 2.7km² of legacy contamination in the KRI; and 5.8km² of locally produced mines laid by Islamic State forces. Vast areas of reported clearance without the destruction of significant numbers of landmines are not considered as mine clearance and are not included in Mine Action Review’s national or global totals.

Central and Southern Iraq

Reported mine clearance in central and southern Iraq in 2016 totalled 18.86km² according to official data, down from 23.18km² reported by the DMA as cleared in 2015. The 2016 data, however, attributed clearance of 4.2km² to NPA and DDG, which did not conduct any mine clearance in 2016. The only substantial clearance of minefields in central and southern Iraq appears to have been conducted by BACTEC working under contract to South Oil and clearing mined areas north-east of Basrah along the border with Iran required for oilfield development. The DMA reported clearing 7.37km² and destroying close to 7,000 mines. It also reported that Civil Defence teams “released” 6.35km² but cleared only a total of 10 mines. Mine Action Review does not record this as mine clearance. Only the reported clearance for BACTEC and Al-Khebra Al-Faniya are included in the national and global totals, amounting to 7,864,443m².

Table 6: Reported clearance of (legacy) mined areas in central and southern Iraq in 2016

<table>
<thead>
<tr>
<th>Operators</th>
<th>Areas released</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Farhad</td>
<td>15</td>
<td>247,381</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>BACTEC</td>
<td>43</td>
<td>7,370,245</td>
<td>6,305</td>
<td>652</td>
</tr>
<tr>
<td>Civil Defence</td>
<td>101</td>
<td>6,348,154</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Defence Ministry</td>
<td>1</td>
<td>15,364</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Al-Khebra Al-Faniya</td>
<td>6</td>
<td>494,198</td>
<td>1,281</td>
<td>81</td>
</tr>
<tr>
<td>EOD Directorate</td>
<td>2</td>
<td>185,467</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>168</td>
<td>14,660,809</td>
<td>7,589</td>
<td>740</td>
</tr>
</tbody>
</table>

In central and southern Iraq, military and federal police conducted clearance of locally produced mines and IEDs in the course of operations liberating areas from Islamic State. Systematic, large-scale clearance was undertaken only by two international commercial operators: Janus, funded by the US Department of State; and Optima, working for UNMAS under contracts issued by UNOPS. The operators had not received DMA accreditation to conduct clearance in 2016 and so operated in partnership with local company Al-Farhad.

KRI

Despite competing demands arising from the humanitarian fall-out from Iraq’s campaigns to drive out Islamic State and severe financial constraints, IKMAA was able to report clearance of 2.7km² of legacy mined areas in 2016, more than the level IKMAA reported in the previous year.
Table 7: Clearance of (legacy) mined areas in the KRI in 2016

<table>
<thead>
<tr>
<th>Operators</th>
<th>Areas released</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFIJV</td>
<td>0</td>
<td>1,280</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DDG</td>
<td>0</td>
<td>1,237</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IKMAA</td>
<td>34</td>
<td>1,341,027</td>
<td>2,686</td>
<td>27</td>
<td>992</td>
</tr>
<tr>
<td>Janus</td>
<td>0</td>
<td>5,377</td>
<td>13</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>MAG</td>
<td>39</td>
<td>1,353,518</td>
<td>310</td>
<td>0</td>
<td>2,197</td>
</tr>
<tr>
<td>Shanica</td>
<td>0</td>
<td>1,680</td>
<td>66</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>73</td>
<td>2,704,119</td>
<td>3,075</td>
<td>27</td>
<td>3,196</td>
</tr>
</tbody>
</table>

UXO = Unexploded ordnance

The focus of international operators in the KRI in 2016 and 2017, however, was the clearance of locally produced mines from liberated areas. Peshmerga units conducted military breaching as they advanced against Islamic State positions and provided field intelligence on hazardous areas to international operators but did not conduct systematic clearance.

MAG had started clearing locally produced mines in 2015 on an emergency basis and in 2016 shifted to standard operations with a toolbox of manual and mechanical assets, expanding the number of teams, opening a sub-base in the Sinjar area and working in three new areas in Ninawa governorate and one in Diyala governorate. Teams later moved to Hamdaniya district east of Mosul and in November to Bashina district north-east of Mosul, where they continued operating in 2017.

In 2016, MAG cleared a total of 5.26km² of land contaminated by locally produced mines, destroying 5,268, mostly in Ninawa governorate’s Tal Afar and Sinjar areas. Productivity increased significantly with the deployment of mechanical assets for both technical survey and clearance and MAG planned to accredit MDD teams in the second half of 2017 for use on tasks such as route clearance.

FSD, the other humanitarian organisation principally involved in clearing locally produced mines in 2016, worked mainly in Kirkuk governorate before moving a team late in the year to Erbil governorate. FSD expected to expand the number of teams from six to eight in 2017. NPA started working with two teams in the Hamdaniyah area of Nineveh province in 2017 and later added two more clearance and two non-technical survey teams. Janus started working with one team in the KRI in January 2017 focusing on key infrastructure. This included a pipeline supplying water to east Mosul city.

Table 8: Clearance of locally produced mines in the KRI in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area cleared (m²)</th>
<th>Mines destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSD</td>
<td>545,941</td>
<td>1,181</td>
</tr>
<tr>
<td>MAG</td>
<td>5,261,517</td>
<td>5,268</td>
</tr>
<tr>
<td>Totals</td>
<td>5,807,458</td>
<td>6,449</td>
</tr>
</tbody>
</table>

Deminer Safety

Iraqi security forces and Kurdish Peshmerga forces are believed to have sustained casualties in the course of clearing locally produced mines and IEDs but details are not known. Other operators, commercial and humanitarian, have also suffered fatalities in tackling such devices, prompting calls for more systematic exchange of information detailing accidents to try to mitigate risks. An international staff member of FSD was killed trying to defuse a single-switch, pressure-plate device in Daquq district. Investigations did not determine exactly how the device was initiated. A Janus international operator was killed in August 2016 by a device that had been assessed and photographed, the cause of initiation also unknown. A MAG national staff member was killed in April 2017 after the search head of his detector hit a pressure plate linked to a 23kg charge.
ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, 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 2018.

The scale of Iraq’s contamination had ensured it would need to extend its Article 5 deadline, and in March 2017 the DMA and IKMAA jointly submitted a request for a 10-year extension, but covering legacy mined areas only. The request was prepared at a point when Iraq’s military offensive to drive out Islamic State dominated the national agenda, including mine action, adding huge areas of contamination and slowing the progress of mine clearance.

The extension request provided some clarity on the scope of Iraq’s legacy mine problem but no estimate of the extent of contamination of locally produced mines and little guidance on Iraq’s plans for tackling both threats in the coming decade. Iraq identified numerous challenges (see Strategic Planning section above) and emphasised the future pace of mine clearance would depend on the extent of international donor support.\(^\text{72}\)

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1. Article 5 Extension Request, March 2017, pp. 78 and 85. The three governorates, all under the supervision of RMAC South, are Basrah, Missan, and Muthanna.
2. Email from Ahmed Al Jasim, Manager, Information Department, DMA, 6 April 2017; and email from Khabat Omer Ahmed, Planning Manager, IKMAA, 8 April 2017.
3. Article 5 deadline Extension Request, March 2017, p. 93.
4. Ibid., p. 67.
5. Data received from Ahmed Al Jasim, DMA, 6 April 2017. Data presented in the Article 5 deadline Extension Request puts total contamination at 1,195.57km\(^2\).
6. Email from Ahmed Al Jasim, DMA, 6 April 2017, including only areas contaminated exclusively with anti-personnel mines.
7. Email from Ahmed Al Jasim, DMA, 6 April 2017.
8. Email from Khabat Omer Ahmed, IKMAA, 17 August 2017.
11. Email from Khabat Omer Ahmed, IKMAA, 8 April 2017.
12. Ibid.
14. Email from Steven Warner, Middle East Programme Support Coordinator, MAG, 28 April 2017; and interview with Nina Seecharan, Country Director; Mick Beeby; and Kathy Keary, Grants and Liaison Officer, MAG, Erbil, 23 July 2017.
18. Email from Isam Ghareeb, iMMAP, 1 August 2016; interview with Obaid Ahmad, General Director of Technical Affairs, IKMAA, Erbil, 22 July 2017.
19. Email from Lauren Cobham, Programme Officer, UNMAS Iraq, 7 September 2016; and interview with Robert Thompson, Chief of Operations, UNMAS Iraq, Erbil, 23 July 2017.
24. Email from Khabat Omer Ahmed, IKMAA, 8 April 2017; and interview, Erbil, 27 July 2017.
25. Email from Khabat Omer Ahmed, IKMAA, 20 May 2016.
27. Ibid., pp. 96–98.
28. Ibid., pp. 10–12 and 88.
30. Compiled by Mine Action Review from data provided by the international humanitarian operators cited.
32. Email from Ahmed Al Jasim, DMA, 6 April 2017.
33. Email from Southern Craib, Country Director, DDG, 27 March 2017; and interview, Erbil, 24 July 2017.
37. Emails from Ahmed Al Jasim, DMA, 6 April and 6 September 2017.
Interview with Ahmad Obaid, IKMAA, Erbil, 22 July 2017; and email from Khatab Omer Ahmad, IKMAA, 8 April 2017.

Email from Steven Warner, Middle East Programme Support Coordinator, MAG, 26 April 2017; and interview with Nina Seecharan, Kathy Keary, and Mick Beeby, MAG, Erbil, 23 July 2017.

Emails from Mats Hektor, NPA, 1 April 2017, and Craig McNally, NPA, 27 March 2017.

Email from Southern Craib, DDG, 27 March 2017; and interview, Erbil, 24 July 2017.

Email from Alex van Roy, Programme Manager, FSD, 22 May 2017; and interview, Erbil, 24 July 2017.


Email from Ahmed Al Jasim, DMA, 6 April 2017.

Ibid.

Email from Khatab Omer Ahmad, IKMAA, 8 April 2017.

Ibid.

MAG reported conducting assessment and survey of 16 sites in 2016. Email from Steven Warner, MAG, 28 April 2017.


Interview with Alex van Roy, FSD, Erbil, 24 July 2017.

Email from Ahmed Al Jasim, DMA, 6 April 2017.

Emails from Mats Hektor, NPA, 17 and 24 April 2017; and from Southern Craib, DDG, 27 March 2017.

Telephone interview with Tim Dickinson, Commercial Director, BACTEC, 9 August 2017. BACTEC reported it cleared 7.1km² in operations conducted between October 2015 and October 2016.

Email from Ahmed Al Jasim, DMA, 6 April 2017.

Ibid.

DMA data showed that NPA cleared 2,757,376m² and DDG 1,442,516m² in 2016 without destroying any mines. Both operators said they did not conduct any mine clearance in central and southern Iraq in 2016.

Email from Khatab Omer Ahmad, IKMAA, 8 April 2017. Official mine clearance data in 2015 appeared to underreport clearance by MAG, which said it cleared 1.62km² that year, three times the amount reported by IKMAA.

Interview with Ahmad Obaid, IKMAA, Erbil, 22 July 2017; and email from Khatab Omer Ahmad, IKMAA, 8 April 2017.

Email from Steven Warner, MAG, 28 April 2017. MAG reported clearing 1.63km² in 2016 and 1.62km² in 2015. It additionally conducted BAC on 16 sites prepared for people displaced by conflict releasing 1.8km² and destroying 1,017 UXO items.

Email from Southern Craib, DDG, 27 March 2017; and interview, Erbil, 24 July 2017.

Email from Khatab Omer Ahmad, IKMAA, 8 April 2017.

Excluding DDG, which as a matter of policy did not accept tasks involving clearance of improvised devices.


Email from Steven Warner, MAG, 28 April 2017.


Email from Alex van Roy, FSD, 22 May 2017; and interview, Erbil, 24 July 2017.


Email from Alex van Roy, FSD, 11 August 2016; and interview in Geneva, 10 February 2017.

Email from Alex van Roy, FSD, 22 May 2017; and Steven Warner, MAG, 28 April 2017.

Email from Alex van Roy, FSD, 22 May 2017; and interview, Erbil, 24 July 2017.

Interview with Jordan Wilhelm, Director, CWD Programs, Janus Global Operations, in Geneva, 9 February 2017.


Article 5 deadline Extension Request (Revised), August 2017, pp. 12 and 99–100.
### MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**  
For 2016: 6.1  
For 2015: 5.9
PERFORMANCE COMMENTARY

Jordan doubled the area of land verified and released in 2016, thanks to a doubling of its operational capacity from two teams to four in October 2015 and throughout 2016. However, this capacity is still not sufficient for Jordan to meet its own pledge to verify, sample, and release remaining areas in the Jordan Valley by the end of 2017. Furthermore, Jordan has yet to acknowledge that it will remain in violation of Anti-Personnel Mine Ban Convention (APMBC) Article 5 until such time as it seeks and is granted by states parties a new clearance deadline.

RECOMMENDATIONS FOR ACTION

- Jordan should, without further delay, request a new extension to its Article 5 deadline for the period through to completion of all demining to humanitarian standards.
- Jordan should commit more national resources to its land release programme and increase the number of teams deployed for verification and demining to six, as foreseen in its current strategic mine action plan.
- Jordan should revise its strategic plan to reflect the fact that it is not on target to complete verification and release of remaining mined areas in the Jordan Valley by the end of 2017.

CONTAMINATION

Jordan is contaminated by mines and explosive remnants of war (ERW). Contamination is primarily the result of the 1948 partition of Palestine, the 1967 Arab-Israeli conflict, the 1970 civil war, and the 1975 confrontation with Syria. Military training ranges and cross-border smuggling have added to the ERW problem.

Jordan declared that it had fulfilled its Article 5 clearance obligations on 24 April 2012, having determined that no areas under its jurisdiction or control remained in which anti-personnel mines were known or suspected.

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.” This pertains first to the need for verification in the Jordan Valley, as earlier clearance by the Jordanian Armed Forces’ Royal Engineering Corps (REC) did not comply with national and international standards and was not subject to quality control; and second to verification that is needed along Jordan’s northern border, due to a considerable discrepancy (estimated to be more than 10,000 mines) between the recorded number of emplaced mines and the number actually cleared. The difference is said to be due to the migration of mines outside identified areas due to flooding and terrain fluctuations, detonations, and unrecorded clearance operations by the army or by smugglers.

As at the end of 2016, the total area in need of verification for missing mines was just over 5.68km², across a total of 92 areas. This comprised 2.8km² across 74 areas in the Jordan valley and 2.8km² across 18 areas in the northern borders.

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. As at May 2013, the estimated area requiring verification had fallen to 4.4km², before rising to 4.6km² in June 2014, and to 4.85km² as at the end of 2014. In its 2015–20 National Plan, Jordan reported that 5.4km² remained to be sampled, verified, and released according to national standards. As at end-2015, 4.2km² across 95 areas remained in need of verification in the Jordan Valley. Most recently, Jordan reported that, as at the end of 2016, 2.8km² across 74 areas still needed verification in the Jordan Valley.

The Jordan Valley is highly fertile, and many affected areas still awaiting verification could be used for agriculture once they are released. Completion of verification and clearance would also help to reduce the threat to local communities, contribute to the government’s poverty reduction strategy, and help demilitarise border areas, supporting peacebuilding efforts.

With respect to the northern borders, 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 NPA had been delayed for security reasons. 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. By May 2013, the estimated area needing verification had been reduced to around 5km², but operations by NPA were halted in February 2013 because of the security situation. In its 2015–20 National Plan, Jordan reported that 3.7km² remained to be verified and inspected by quality control (QC) teams.

Most recently, Jordan reported that, as at the end of 2016, just over 2.8km² across 18 areas along the northern borders still needed verification; this is the same area reported for the end of 2015. Verification operations in the north remained suspended as at April 2017, due to the ongoing Syrian crisis.
PROGRAMME MANAGEMENT

Jordan established the National Committee for Demining and Rehabilitation (NCDR) under a Royal Decree, which the government subsequently incorporated into law. 22 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

Strategic Planning

The NCDR’s 2010–15 National Plan, published in June 2010, aimed to complete clearance of all known mines, including 65,000 mines from the northern border, by May 2012, and to clear all ERW by December 2012. 27 Jordan had planned to complete verification and clearance in the Jordan Valley by the end of 2015, but later said the date of completion would depend on available resources. 28 The NCDR’s current 2015–20 National Plan aims to verify, sample, and release the remaining 5.4km² in the Jordan Valley within 36 months (by the end of 2017), by deploying six manual clearance teams and one mechanical demining team at a projected cost of US$2 million. 29 In April 2017, the NCDR reported that it was not on target to complete verification of the Jordan Valley by the end of 2017, and that it would update its workplan in 2018. 30 Resuming verification and release of the remaining 3.7km² along the northern border with Syria will depend on the security situation but, according to the plan, would require one year’s work with three manual teams and one mechanical team, at an expected cost of $1 million. 31 The plan also aims to eliminate all ERW contamination by 2017. 32 The NCDR prioritises areas in need of development for verification. 33 In addition, Jordan’s national plan reports that the NCDR will transition from a national institution focusing largely on its own mine clearance, to one that will concentrate on assisting other conflict-affected countries to overcome the challenges of mine action and ERW removal. 34

LAND RELEASE

In 2016, Jordan released just under 1.36km² of land. Manual operations verified and released 21 areas in the Jordan Valley, destroying 100 anti-personnel mines, 3 anti-vehicle mines, and 49 items of unexploded ordnance (UXO). 35 The land released in 2016 was double the 0.65km² released in 2015, progress that was attributed to the significant increase in operational capacity in 2016. 36

ARTICLE 5 COMPLIANCE

Given Jordan’s recognition that mined areas remain, and the continued discovery and clearance of mines in areas it has verified, it is clear that Jordan still has outstanding Article 5 survey and clearance obligations. As Jordan does not currently have an extension period granted by states parties, it is in violation of the APMBC.

Jordan declared completion of its Article 5 obligations on 24 April 2012, just ahead of its 1 May 2012 Convention deadline, in accordance with the three-year extension request granted by states parties in 2008. It submitted its formal declaration of completion to the Twelfth Meeting of States Parties in December 2012. 39 On announcing completion, however, Prince Mired acknowledged that “a residual risk could remain in areas where landmines have been emplaced”, 40 and noted that verification efforts had resulted in the discovery of additional mined areas. 41 The verification efforts, which are ongoing in the Jordan Valley, and which are currently suspended along the northern border due to insecurity, continue to result in the discovery and clearance of mined areas. 42

In August 2016, Jordan informed Mine Action Review that its Article 5 issue would be discussed during the next APMBC Meeting of States Parties 43, 44 which was held in Santiago, Chile, from 28 November to 2 December 2016. This did not occur, however, and most recently in April 2017, Jordan reported that it was not planning to submit an Article 5 extension request. 45

According to its 2015–20 National Plan, Jordan would need three years to finish the verification process, aiming for completion by December 2017. 44 However, the head of the NCDR has reported that Jordan is not on target to meet this completion date, given that the National Plan assumed a capacity of six national teams from 1 January 2015, which is less than current capacity. 45 The doubling of operational capacity in October 2015, from two teams to four, was a welcome development, and resulted in a doubling of the area of land verified and released in 2016, compared to 2015. 46 However, it is still short of the six teams specified in Jordan’s 2015–2020 National Mine Action Plan. 47 Furthermore, resumption and completion of verification along the northern borders is also contingent on an improvement in the security situation, and as at April 2017 verification activities remained suspended. 48 The NCDR plans to issue an updated workplan in 2018. 49

In 2016, the Jordanian government provided US$311,000 towards to the cost of the NCDR, and US$70,000 for verification of areas. 50
Declaration by Jordan of completion of implementation of Article 5, 12th Meeting of States Parties, 3–7 December 2012 (hereafter, Jordan 2012 Article 5 Declaration of Completion).

Jordan 2012 Article 5 Declaration of Completion.

Email from Mikael Bold, 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.

Jordan 2012 Article 5 Declaration of Completion.

Email from Mikael Bold, Programme Manager, NPA, 12 February 2012.

Article 7 Report (for 2016), p. 4; and email from Mohammad Breikat, National Director, NCDR, 10 April 2017.


Email from Mohammad Breikat, NCDR, 22 March 2015.


Email from Mohammad Breikat, NCDR, 4 September 2016.

Article 7 Report (for 2016), p. 4; and email from Mohammad Breikat, NCDR, 10 April 2017.


Jordan 2012 Article 5 Declaration of Completion.

Email from Jamal Odibat, Operations Reporting Officer, NCDR, 8 May 2014.


Email from Mohammad Breikat, NCDR, 22 March 2015.


Email from Mohammad Breikat, NCDR, 10 April 2017.


Ibid.

E-mail from Muna Alalul, NCDR, 31 July 2011.


Article 7 Report (for 2016), p. 4; and email from Mohammad Breikat, NCDR, 10 April 2017.

Ibid.

“Jordan becomes the first Middle Eastern country free of all known landmines”, Press release, 24 April 2012.

Jordan 2012 Article 5 Declaration of Completion.

Article 7 Report (for 2015); and CCW Amended Protocol II, Form B (for 2015).

Email from Mohammad Breikat, NCDR, 25 August 2016.


Email from Mohammad Breikat, NCDR, 10 April 2017.

Ibid.


Email from Mohammad Breikat, NCDR, 10 April 2017.

Ibid.

Ibid.

Ibid.
**MAURITANIA**

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

**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
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<tr>
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<td>National funding of programme</td>
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<tr>
<td>Timely clearance</td>
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<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>8</td>
<td>8</td>
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<td>National mine action standards</td>
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<td>Reporting on progress</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: GOOD**

| Score | 7.0 | 6.5 |
PERFORMANCE COMMENTARY

After completing clearance of known anti-personnel mine contamination in 2015, Mauritania requested a second Anti-Personnel Mine Ban Convention (APMBC) Article 5 extension period until 2021 to confirm whether suspected contamination along its undelimited northern border with Western Sahara was within its territory. Following technical survey, in February 2017, Mauritania confirmed that a 1km² area containing anti-personnel mines remained within its territory.

By September 2017, funding had been secured for clearance, which was expected to be completed by December 2017, with the area due to be released in early 2018. Mauritania informed Mine Action Review that survey of areas along the border had not revealed any further evidence of the presence of mines and no further dialogue with stakeholders on border clarification needed to be undertaken.¹

RECOMMENDATIONS FOR ACTION

■ Mauritania should clear the 1km² confirmed hazardous area (CHA) by the end of 2017, the deadline which it has set for itself to complete clearance.

■ Mauritania should report in detail to states parties on efforts undertaken to eliminate the suspicion of any mine contamination remaining on its territory through survey and dialogue with stakeholders about the border demarcation.

■ When clearance of the last remaining mined area is completed, Mauritania should take all necessary measures to establish that it has no mined areas remaining and declare completion of its Article 5 obligations well in advance of its 2021 extension request deadline.

■ Mauritania should ensure that sufficient capacity is maintained to address any residual contamination that may be discovered in the future.

CONTAMINATION

At the end of 2016, Mauritania had identified one suspected hazardous area (SHA) with an estimated size of 1km², in Ain Bintilli district, Tiris Zemmour region, in the far north of Mauritania. In early 2017, it confirmed that the area contained anti-personnel and anti-vehicle mines.²

At the end of 2015, Mauritania had reported it had released all known anti-personnel mine contamination, totalling 40 mined areas covering 67km², including 18 areas with a size of 64.8km² identified prior to 2010 and a further 22 areas covering 2.3km² identified in 2012–13.³ However, other contaminated areas were thought to exist close to Western Sahara, which depending on the demarcation of the border, could be inside Mauritanian territory and thus within its jurisdiction.⁴ In its request for a second extension to its Article 5 clearance deadline, Mauritania stated that it “suspects that the security system along the border with Western Sahara, which comprises fortifications and minefields, crosses Mauritanian territory, especially since there is no natural border between the two”.⁵

Mauritania’s mine contamination is a legacy of the conflict over Western Sahara in 1975–78. A 2006 Landmine Impact Survey (LIS) had found a total of 65 SHAs covering 76km² and affecting 60 communities. This represented a significant overestimate of the actual mine threat. In 2010, Morocco provided detailed maps of minefields laid during the Western Sahara conflict. The minefields had been partially cleared using military procedures prior to the entry into force of the APMBC.⁶

PROGRAMME MANAGEMENT

The National Humanitarian Demining Programme for Development (Programme National de Déminage Humanitaire pour le Développement, PNDHD) coordinates mine action operations in Mauritania.⁷ Since 2007, the programme has been the responsibility of the Ministry of Interior and Decentralization, with oversight from an interministerial steering committee.⁸ The PNDHD has its headquarters in the capital, Nouakchott, and a regional mine action centre (RAMC) in Nouadhibou.

Strategic Planning

In March 2017, Mauritania reported that a new national mine action strategic plan for 2016–20 had been developed with primary aims and targets, including verification of Mauritania’s borders and clearance of any newly identified contamination by 2020; continuing risk education and victim assistance; and maintenance of national mine clearance capacities.⁹
Information Management

The national mine action database is held at the PNDHD. In March 2017, Mauritania reported that the GICHD was updating the database and installing the latest version of the Information Management System for Mine Action (IMSMA) software.\(^{10}\)

Quality Management

Mauritania also stated that the PNDHD’s quality assurance (QA) and quality control (QC) capacity was maintained in 2016, but no activities were carried out.\(^{11}\)

LAND RELEASE

Mauritania reported that nationally funded technical surveys and administrative checks carried out in late 2016 and early 2017 resulted in the identification and confirmation of a mined area covering an estimated 1,000,000m\(^2\) and containing both anti-personnel and anti-vehicle mines in Sebkhat Fogra, Ain Bintilli district.\(^{13}\) It stated that the investigations undertaken had confirmed that the area was located within Mauritanian territory and that the area had been clearly marked with warning signs in Arabic and French.\(^{14}\)

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension request granted by states parties in 2015), Mauritania 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.\(^{16}\) It is on track to complete clearance in advance of this deadline.

In September 2017, the PNDHD informed Mine Action Review that funding had been secured from the United Nations Development Programme (UNDP) for clearance of the remaining area and that it expected to deploy teams following a two-week refresher training course. Clearance was anticipated to be completed within three months, by December 2017, and the area to be released in early 2018, after QC has been carried out. It stated that no further suspicion of mined areas remained on Mauritania’s territory and no further survey or efforts to clarify the border demarcation were required.\(^{17}\)

Previously, in June 2017, Mauritania projected that with external funding of US$75,000 it could complete clearance of the newly confirmed 1km\(^2\) area by the end of the year and declare itself in compliance with Article 5 of the convention at the forthcoming meeting of states parties in December 2017. It appealed for donor support to reach this goal.\(^{18}\)

The PNDHD reported that the Government of Mauritania provided US$385,000 in 2016-17 to cover the cost of the national mine action programme, a reduction on the $650,000 provided in 2015.\(^{19}\) It did not report significant changes to its national mine action capacity, which included the management staff of the PNDHD, its QA/QC team, and eight teams of deminers from the Engineer Corps, consisting of nearly 60 persons in total.\(^{20}\)

Operators

In accordance with a 2006 decree, all clearance activities were conducted by the Army Engineer Corps operating under the PNDHD. In 2011, Norwegian People’s Aid (NPA) signed a memorandum of understanding with Mauritania to provide support for mine and battle area clearance (BAC) in the country. NPA subsequently worked in Mauritania both as an operator and in a capacity-building role as a technical advisor for PNDHD until the end of 2015.\(^{12}\)

As noted above, Mauritania had announced the completion of clearance of all known areas of anti-personnel mine contamination in November 2015. The PNDHD had reported the release in 2015 of seven mined areas covering a total of 2.95km\(^2\) with the destruction of 35 anti-personnel mines and 47 anti-vehicle mines.\(^{15}\)

Mauritania has explained that the reasons for its inability to meet its initial Article 5 deadline of 1 January 2016 included lack of financial resources, insufficient progress in demining, use of only manual clearance, and difficult soil and climatic factors.\(^{21}\) In its second extension request, Mauritania undertook to initiate and maintain dialogue with stakeholders with the aim of acquiring relevant topographic and cartographic information to determine the exact location of its northern border and to develop plans to address any contaminated areas identified within its jurisdiction.\(^{22}\) Specifically it pledged to:

- Conduct a survey and mapping exercise of the northern border
- Maintain dialogue with stakeholders in the Western Sahara conflict to find a solution to clarifying the problem
- Develop and implement an action plan to address any contaminated areas if necessary
- Inform states parties of progress at the annual meetings and through Article 7 reports; and
- Maintain the PNDHD and demining units for residual clearance and risk education.

2 Article 7 Report (for 2016), Form D; statement of Mauritania, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 8 June 2017; and email from Alioune ould Menane, PNDHD, 29 March 2017.

3 Analysis of Mauritania’s Second Article 5 deadline Extension Request submitted by the Committee on Article 5 Implementation to the 14th Meeting of States Parties, 17 November 2015, p. 2.

4 Ibid., 21 April 2014.

5 Article 5 deadline Extension Request, 2 April 2015, p. 4. In the original French: “nous suspectons que le dispositif de sécurité le long de la frontière avec le Sahara occidental, composé de fortification et champs de mines interfère en territoire Mauritanien surtout qu’il n’existe aucune frontière naturelle”.

6 Revised Second Article 5 deadline Extension Request, 6 September 2010, p. 3; and email from Melissa Andersson, Norwegian People’s Aid (NPA), 17 September 2015.

7 Decree No. 1960/MDAT/MDN establishing the PNDHD, 14 August 2007.

8 Decree No. 001358/MDAT establishing the Steering Committee of the PNDHD, 3 September 2007.

9 Email from Alioune ould Menane, PNDHD, 29 March 2017; and interview, in Geneva, 5 September 2017.

10 Email from Alioune ould Menane, PNDHD, 29 March 2017.

11 Ibid.

12 Emails from Alioune ould Menane, PNDHD, 1 September 2016; and Melissa Andersson, NPA, 12 September 2016 and 13 March 2017.

13 Statement of Mauritania, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 8 June 2017.

14 Ibid.; and Article 7 Report (for 2016), Form D.

15 Email from Alioune ould Menane, PNDHD, 25 October 2016. NPA’s figures for its operations were just under 2km² released. Email from Melissa Andersson, NPA, 12 September 2016.

16 It submitted the request in April 2015, despite being on track to complete clearance of all known areas containing anti-personnel mines by the end of the year. Under the five-year extension, the Mauritanian government would enter into a dialogue with “all of the stakeholders in the Western Sahara conflict” so as to clarify “the status of the suspected areas” Second Article 5 deadline Extension Request, 2 April 2015, p. 4.


18 Statement of Mauritania, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 8 June 2017.

19 Emails from Alioune ould Menane, PNDHD, 1 September 2016 and 29 March 2017; and Article 7 Report (for 2016), Form D.

20 Emails from Alioune ould Menane, PNDHD, 1 September 2016 and 29 March 2017.

21 Article 5 deadline Extension Request, 3 February 2010, pp. 3–4.

22 Decision on the request submitted by Mauritania for a Second Article 5 deadline Extension Request, 4 December 2015.
MOZAMBIQUE

ARTICLE 5 DEADLINE: 1 JANUARY 2015
DECLARED COMPLETION BUT HAS OUTSTANDING MINED AREAS

<table>
<thead>
<tr>
<th>MINE ACTION PROGRAMME PERFORMANCE</th>
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<tr>
<td>Improving performance</td>
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</tbody>
</table>

PERFORMANCE SCORE: AVERAGE 6.1 5.5
PERFORMANCE COMMENTARY

Mozambique announced it had fulfilled its Anti-Personnel Mine Ban Convention (APMBC) Article 5 survey and clearance obligations in September 2015, to date one of the most heavily affected states to have done so. In March 2016, however, an additional mined area, initially estimated to be 63,000m², was identified by non-technical survey in Cabo Delgado province.

Mozambique failed to meet its obligations to report on this discovery or to request another Article 5 clearance extension deadline at the following APMBC Meeting of States Parties in December 2016, but in June 2017 it announced this newly identified contamination along with two other mined areas nearby, covering a total area of just under 139,000m², had all been cleared.

As at October 2017, four small areas suspected to contain anti-personnel mines also remained submerged in Inhambane province, which Mozambique has pledged to monitor and address as soon as access can be gained.

RECOMMENDATIONS FOR ACTION

■ Mozambique should undertake all efforts to address the four remaining submerged suspected mined areas as soon as possible, ensure that they are clearly marked and monitored, and report on the status of the areas to APMBC states parties regularly.

■ Mozambique should ensure sufficient national capacity remains in place to deal with mine or explosive remnants of war (ERW) contamination. If future mine contamination is suspected or confirmed, Mozambique should inform states parties to the APMBC of all mined areas found, request another extended Article 5 deadline if required, and report on the status of programmes for their release.

■ Mozambique should ensure that the national mine action database is transferred to an appropriate government ministry and that resources are allocated to maintain the database.

CONTAMINATION

Mozambique formally declared compliance with its Article 5 obligations at the APMBC Fourteenth Meeting of States Parties in December 2015, after announcing its completion of anti-personnel mine clearance on 17 September 2015. In a public ceremony, Minister for Foreign Affairs and Cooperation, Oldemiro Baloi, declared the country to be free of the “threat” of mines following survey and clearance of more than 3,000 areas across a total of more than 55km² in 2008–14 and the destruction of over 86,000 anti-personnel mines.

In March 2016, international demining non-governmental organisation (NGO) APOPO, which remained in country after September 2015 and responded to a number of isolated mine and ERW tasks in southern, central, and northern provinces of Mozambique in coordination with the National Demining Institute (IND), identified a mined area covering 63,000m² during non-technical survey in Nangade district, Cabo Delgado province, near the border with Tanzania. The IND stated that the mined area identified in Nangade required “significant confirmed funds to deploy sufficient capacity to adequately and safely resolve the threat in accordance with IMAS [International Mine Action Standards]”.

Norwegian People’s Aid (NPA), which was clearing the last remaining cluster munition remnants (CMR) in the country in 2016, secured funding to clear the mined area in early 2017. After clearance operations began in February 2017, subsequent investigation by NPA identified two further mined areas nearby, one covering approximately 14,000m² and a second with an estimated size of 8,000m². Clearance of all areas was completed on 29 May 2017, with a total of just under 139,000m² released, and the destruction of 115 anti-personnel mines and three items of UXO.

According to the IND, four small suspected mined areas with a combined size of 1,881m² remain underwater in Inhambane province. At the intersessional meetings in June 2017, Mozambique informed states parties it would reassess the status of the submerged areas during the month and reiterated its commitment that the remaining areas would be continuously monitored and addressed once the water level receded and access could be gained. The IND visited the areas in June 2017 and confirmed they remained submerged and inaccessible.

Mozambique previously reported the existence of “suspended” mined areas in its declaration of completion of Article 5 obligations submitted in December 2015, which it defined as “suspected hazard areas that remain seasonally or permanently submerged under water in Inhambane province”. It further stated that all suspended areas “were subjected to technical survey and clearance up to the water line during the annual dry season with no direct evidence found to confirm the presence of mines in any of these areas. Nevertheless the portion of the SHA that remains underwater will be marked and regularly monitored to confirm if the area ever dries enough to allow further technical survey”.

Table 1: Mined areas by province (as at October 2017)

<table>
<thead>
<tr>
<th>Province</th>
<th>Suspected areas</th>
<th>Area (m²)</th>
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<tr>
<td>Inhambane</td>
<td>4</td>
<td>1,881</td>
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Table 1: Mined areas by province (as at October 2017)
Mozambique was contaminated with mines, mostly anti-personnel, as a legacy of nearly 30 years of conflict that ended in 1992. Mozambique also has residual contamination from ERW, including unexploded ordnance (UXO). The IND has reported that 47 items of UXO were destroyed in 2016. According to NPA, the mined area identified in 2016 in Nangade district had both a social and economic impact on the local border community, whose economic activity primarily consists of small scale cross-border trade on a key transit route between Tanzania and Mozambique. Clearance of the mined area ensures safe passage of individuals between the two countries, and for the community of Mungano, the nearest settlement to the minefield, frees extra land for cultivation, and allows children to attend the Mungano primary school, located only 20 metres from the minefield, without the fear of landmines.

**PROGRAMME MANAGEMENT**

There is no national mine action authority as such in Mozambique. The IND serves as the national mine action centre in Mozambique, reporting to the Ministry of Foreign Affairs. Provincial demining commissions have been created to assist in planning mine action operations. Beginning in 1999, the United Nations Development Programme (UNDP) provided technical assistance, but its support programme ended in 2015. As at mid-2016, UNDP no longer had a budget for mine action-related activities in Mozambique. At the same time, amid a growing national economic crisis, the government put in place strict austerity measures which saw financial support to the IND reduced drastically. The lack of sufficient funding resulted in the institution being downsized during the year, with only key staff remaining at the start of 2017. NPA expressed concern at the IND’s lack of resources and its ability to maintain a capacity to address residual mine and ERW contamination.

**Quality Management**

The IND stated that only limited quality assurance (QA) activities, primarily to APOPO’s ammunition clearance operations at the Malhazine depot, could be undertaken during the year. APOPO reported, however, that there was regular coordination and cooperation with the IND on all residual risk tasks. In its operations in Nangade, NPA stated that in addition to regular internal QA and quality control (QC) activities, external QA was provided by IND QA officers in the form of a one-week QA visit in April 2017.

**Information Management**

In 2016, the Information Management System for Mine Action (IMSMA) database remained with the IND and was managed by two information management staff at the IND’s office in Maputo. The IND had reported plans to shift responsibility of the IMSMA database to a government ministry; however, as at August 2017, this had not been formalised, and the future of the database remained uncertain.

**Operators**

In 2016, Mozambique had two international demining operators in country: NGOs APOPO and NPA. During the year, APOPO maintained a presence of approximately 50 personnel, primarily to clear ammunition around the Malhazine weapons depot in Maputo city. It seconded personnel for ad hoc survey, EOD, and clearance of residual risk tasks on a call-out basis. While NPA’s operations in 2016 were to carry out CMR clearance only, from February to end-May 2017, NPA deployed two teams of a total of 16 deminers to conduct manual clearance of the mined area identified in Nangade.
LAND RELEASE

According to Mozambique, in April 2016, following two suspected mine incidents in Nangade district, Cabo Delgado province, a mined area covering an estimated 63,000m² was confirmed through non-technical and technical survey carried out by APOPO and IND survey teams along the Mozambique-Tanzania border.29 NPA began clearance activities on the 63,000m² area at Mungano in Nangade on 1 February 2017. Following completion of clearance of that mined area, further investigation by technical survey identified two additional mined areas, one with a size of 14,000m² in Chicamba village, approximately 3.5km from Mungano, and a third area with a size of 8,000m², some 500 metres from the larger minefield at Mungano, which, according to NPA, formed part of an old mine belt at the Mozambique-Tanzania border.30 Clearance of all areas was completed on 29 May 2017, with a total of 138,958m² released, including 7,537m² by manual clearance and 27,885m² by technical survey, with the destruction of 115 anti-personnel mines and 3 items of UXO.31

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with its second extension for a period of ten months granted by states parties in December 2013), Mozambique was required to destroy all anti-personnel mines in mined areas under its jurisdiction or control no later than 1 January 2015. On 1 December 2015, at the Fourteenth Meeting of States Parties in Geneva, Mozambique officially declared that it had completed its Article 5 obligations on 17 September.

While Mozambique had made considerable progress in clearing mined areas and was planning to complete all clearance in accordance with its extended Article 5 deadline, it was unable to do so, and in June 2014, Mozambique failed to request another extension at the Third APMBC Review Conference in Maputo. It was thus in serious violation of the Convention from 1 January to September 2015, having received a no-cost extension from international donors to complete demining activities in 2015.32

In late 2016, UNDP reported that a number of key challenges remained in the phasing out Mozambique’s national mine action programme. These included difficulties in digitalising demining completion reports from NGO operators and the need for a back-up system to avoid the loss of data.33 The transfer of the database, along with information management staff, to the Ministry of Land, Environment, and Rural Development and the proposed transfer of database copies for storage with the Ministry of Interior and the Ministry of State Administration, had still to occur as at August 2017. The future of the IND, which employed 24 staff, also remained uncertain.34

According to the IND, due to the nature of the mine contamination in Mozambique and the lack of mine maps, the risk remained that mines would be found after Mozambique’s declaration of compliance with Article 5. After the completion of clearance in September 2015, the Government of Mozambique embarked on training and equipping the provincial police to be able to respond to EOD call-outs. In total, as at October 2016, the IND had trained and certified 194 police officials from all provinces to handle residual threats, and provided provincial commanders with equipment such as personal protective kits, explosives, and metal detectors.35 According to NPA, no further police EOD or residual risk related trainings were carried out as at August 2017.36

Mozambique stated in its declaration of completion of its Article 5 obligations that if previously unknown areas of mine contamination were subsequently discovered, it would:

- Immediately inform states parties of any discovery and report any mined areas in accordance with its Article 7 transparency obligations and at APMBC meetings
- Ensure the effective exclusion of civilians from any contaminated areas
- Destroy all anti-personnel mine contamination as soon as possible, and
- If it cannot destroy all contamination in the mined area before the next meeting of states parties, submit a request for another extended Article 5 clearance deadline in accordance with its obligations as an APMBC state party.37
While noting that it had not followed the course indicated in its declaration of completion by failing to inform states parties to the APMBC of the discovery of additional contamination at the subsequent Meeting of States Parties in December 2016, or to submit a request for another extended Article 5 clearance deadline, Mozambique reported in detail on the discovery of the mined area in Nangade in its Article 7 transparency report submitted in April 2017 and informed states parties of its identification and clearance in June 2017, at the Convention’s intersessional meetings.  As noted above, Mozambique also announced that the IND would reassess the status of the remaining four submerged suspected hazard areas in Inhambane province and reiterated that the areas would be continuously monitored and cleared once access could be gained and the water level receded. The IND visited the areas in June 2017 and confirmed they remained underwater and inaccessible for operations.

The Government of Mozambique did not provide any funding for field operations in 2016, though it continued to pay the salaries of key IND staff. The IND expected it would continue to do so, for as long as it remained the coordinating authority for mine action-related activities. However, the IND emphasised that with the reduction in financial support from the government, its activities and outreach would be severely affected in 2017, as was the case in 2016.

The IND reported that significant training had been provided to provincial police units in a training partnership between the police and the United States Africa Command in 2016 and it was hoped that the police units would be able to address any future contamination found after 2017.

In April 2017, APOPO closed its programme in Mozambique after it was unable to secure funding to complete its ammunition clearance operations at the Mathezine weapons depot complex. Following an official handover ceremony on 1 June 2017, NPA demobilised its mine clearance operations in Nangade district. It stated that no new reports of suspected mined areas in Nangade district, or in the wider Cabo Delgado province, were received.

1 Email from Hans Risser, Chief Technical Advisor, Mine Action, UNDP, 13 October 2015.
3 Email from Ashley Fitzpatrick, Project Manager, APOPO, 17 October 2016; and information confirmed by IND in email from Lucia Simao, UNDP, 18 October 2016.
4 Information confirmed in IND in email from Lucia Simao, UNDP, 18 October 2016.
5 Statement of Mozambique, Intersessional meetings, Geneva, 8 June 2016; and email from Aledra Robert Iga, Programme Manager, NPA, 5 June 2017.
6 Email from Aledra Robert Iga, NPA, 5 June 2017.
7 Statement of Mozambique, APMBC intersessional meetings, Geneva, 8 June 2017; Article 7 Report (for 2016), Forms C and F; and email from Aledra Robert Iga, NPA, 5 June 2017. The areas were initially recorded as having a total size of 5,107m², which, following clearance of 3,226m² by Handicap International (HI) in 2015, left a total of 1,881m² remaining to be addressed in 2016.
8 Statement of Mozambique, Intersessional meetings, Geneva, 8 June 2017. In its April 2017 Article 7 transparency report, Mozambique reiterated that the “total areas suspected due to inaccessibility due to the high-level of water are 1,881m² with 4 tasks remaining” and confirmed that the areas are “earmarked for future clearance once access is regained”. The report also erroneously lists the size of remaining contamination in the four areas as 3,226m². Article 7 Report (for 2016), Forms C and F.
9 Email from Aledra Robert Iga, NPA, 17 August 2017.
10 Declaration of completion of implementation of Article 5, submitted by Mozambique, 16 December 2015, p. 5. The HALO Trust, which had been tasked by the IND to address 24 mine tasks all with a size of less than 1,000m² in Inhambane province in 2015, confirmed that while it was able to resurvey and cancel or clear the majority of the areas, a number were inaccessible due to being underwater and would require to be released at a later date when the water had subsided. HALO Trust reported that the areas were among patches of standing water, swamps, and rivers, and only were accessible during the drier months of the year. It deployed three manual teams to resurvey thirteen of the minefields, during which it cleared six areas (finding no anti-personnel mines) and cancelled a further three, but reported that the remaining areas were inaccessible due to their being entirely underwater. Emails from Chris Pym, Southern Africa Regional Director, HALO Trust, 17 May 2017; and Calvin Ruysen, Regional Director for Central Asia, HALO Trust, 15 September 2016.
11 Article 7 Report (for 2016), Form J; and email from Aledra Robert Iga, NPA, 5 June 2017.
12 Response to questionnaire by IND, received by email via Aledra Robert Iga, NPA, 25 April 2017.
13 Ibid.; and email from Aledra Robert Iga, NPA, 5 June 2017.
14 Email from Aledra Robert Iga, NPA, 4 May 2017.
16 Skype interview with Aledra Robert Iga, NPA, 7 June 2016.
17 Email from Aledra Robert Iga, NPA, 23 March 2017.
18 Skype interview with Aledra Robert Iga, NPA, 7 June 2016.
19 The strategy further calls for the development of a national policy on the management of residual contamination and the drafting of standing operating procedures (SOPs) on responding to residual contamination and risk education, and the formalisation of a solid coordination system between the ERW centre and relevant authorities, and the establishment of a sustainable archiving system to ensure the long-term availability of information. Republic of Mozambique Ministry of Foreign Affairs and Cooperation National ERW and Training Centre, “National Strategy on Management of Residual Contamination 2015–2017”, undated; and response to questionnaire by IND, received by email via Aledra Robert Iga, NPA, 25 April 2017.
20 Response to questionnaire by IND, received by email via Aledra Robert Iga, NPA, 25 April 2017; and email from Aledra Robert Iga, NPA, 28 August 2017.
21 Ibid.
22 Response to questionnaire by IND, received by email via Aledra Robert Iga, NPA, 25 April 2017.
23 Email from Ashley Fitzpatrick, APOPO, 29 May 2017.
24 Email from Aledra Robert Iga, NPA, 4 May 2017.
26 Email from Ashley Fitzpatrick, Grant and Regional Manager, APOPO, 29 May 2017.
27 Emails from Aledra Robert Iga, NPA, 25 April 2017 and 5 June 2017.
28 Statement of Mozambique, Intersessional meetings, Geneva, 8 June 2017.
29 Ibid.; and email from Aledra Robert Iga, NPA, 3 May 2017. According to NPA, the area measuring 14,000m² was reported as mined by locals to NPA during clearance operations at Mungano.
Emails from Afedra Robert Iga, NPA, 5 June 2017 and 28 August 2017. At the first area with an initial size of 63,000m² in Mungano, a total of 112,723m² was released and 99 anti-personnel mines found and destroyed, including 5,252m² by manual clearance, 19,383m² by technical survey, and 88,088m² through cancellation. At the second area with an initial size of 14,000m² at Chicamba, a total of 14,800m² was released and eight anti-personnel mines found, with clearance of 1,115m², reduction of 4,229m² by technical survey, and cancellation of 9,456m². At the third area with an initial size of 8,000m², a total of 11,435m² was released with eight anti-personnel mines destroyed: 1,170m² by clearance, 4,273m² reduced by technical survey, and 5,992m² cancelled. The mines destroyed were of the types M969 and AUPS fragmentation and blast anti-personnel mines.

In September 2015, APOPO responded to one task in Massingir district, Gaza province, and destroyed a total of two anti-personnel mines during clearance of an area of 2,102m². In a second task in Guijah, Gaza province, it cancelled 40,000m² through non-technical survey after discovering one item of UXO, but without finding any evidence of mines. In addition to confirming the 63,000m² area in Nangade in 2016, in Maputo province, APOPO cleared an area of 16m² in a police yard suspected to contain buried items, but did not discover any mines or UXO. Also in 2016, in Sofala province, it addressed a task in Chamba district, and released a total of 5,200m², including clearance of 1,447m² and reduction by technical survey of 3,553m². No mines or UXO were found. Mozambique’s Article 7 Report for 2016 reports slightly different figures for APOPO’s outputs for a slightly different timeframe, reporting that in 2016, 65,102m² of land was confirmed by APOPO to contain landmines, 2,102m² were cleared, and 5,216m² reduced by technical survey, and a total of two anti-personnel mines and one anti-vehicle mine recovered and destroyed. Email from Ashley Fitzpatrick, APOPO, 29 May 2017; and Article 7 Report (for 2016), Form F.

Email from Ashley Fitzpatrick, APOPO, 14 October 2016.

Email from Lucia Simao, UNDP, 18 October 2016.

Email from Lucia Simao, UNDP, 18 October 2016; and Afedra Robert Iga, NPA, 28 August 2017.

Email from Afedra Robert Iga, NPA, 5 June 2017.
**NIGER**

**ARTICLE 5 DEADLINE: 31 DECEMBER 2020**
*(NOT CLEAR IF ON TRACK TO MEET DEADLINE)*

<table>
<thead>
<tr>
<th>MINE ACTION PROGRAMME PERFORMANCE</th>
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<td>Problem understood</td>
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<td>National funding of programme</td>
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<td>Timely clearance</td>
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<td>Land release system in place</td>
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<td>National mine action standards</td>
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<tr>
<td>Reporting on progress</td>
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<td>Improving performance</td>
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</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

| PERFORMANCE SCORE: AVERAGE | 5.8 | 6.2 |
PERFORMANCE COMMENTARY

In December 2016, Niger was granted its third Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension, for a period of four years until the end of 2020. It failed to submit a detailed workplan to accompany the extension request as required by 30 April 2017, nor has it provided sufficient information to justify requiring up to four years to clear a relatively small area of remaining contamination. It is also in violation of its obligation to submit annual Article 7 transparency reports.

RECOMMENDATIONS FOR ACTION

■ Niger should provide a detailed workplan to accompany its revised Article 5 extension request, with benchmarks against which progress can be assessed, including a monthly and annual breakdown of areas to be addressed and a corresponding budget.
■ Niger should provide regular updates on progress in addressing its Article 5 obligations and submit annual Article 7 reports, which it has failed to do since 2012.
■ Niger should develop a resource mobilisation plan to meet funding needs beyond expected national contributions, and should accept offers of assistance in a timely manner, which would improve the speed and efficiency of clearance and enable completion far earlier than 2020.

CONTAMINATION

At the end of 2016, Niger reported that only one suspected hazardous area (SHA) remained, with an estimated size of 196,523m² and believed to contain both anti-personnel and anti-vehicle mines. This mined area had been discovered during survey of the mined area nearby that had been the subject of Niger’s extension request in 2016.

Previously, at the end of 2015, Niger had approximately 22,300m² of anti-personnel mine contamination remaining from a mined area identified in 2014, covering 39,000m². The area, located at Madama military post, was identified during an assessment mission in June 2011 and initially estimated to cover 2,400m². Technical survey in 2014 concluded that the extent of contamination was considerably larger than the earlier estimate. Niger deployed a team of 60 deminers to the area in November 2014, and reported that, as at November 2015, more than 17,000m² had been cleared with 750 mines destroyed. On 25 October 2016, Niger confirmed that 39,304m² had been demined, with the destruction of 1,075 mines. It is not known if the area as a whole has yet been formally released.

Five additional SHAs were also identified in Agadez region (in the Achouloulouma, Blaka, Enneri, Orida, and Zouzoudinga) but they were believed to contain only anti-vehicle mines. Niger reported that non-technical and technical survey in May 2014 had removed the suspicion of the presence of anti-personnel mines.

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 French MI AP ID 51 mines, which date back to the French colonial era. Niger’s contamination includes other areas that contain only anti-vehicle mines, which are the result of rebellion in 1990–2000 as well as fighting in 2007 between the Nigerien army and a non-state armed group, the Nigerien Justice Movement (Mouvement des Nigériens pour la Justice), and some splinter factions.

In 2015–16, there were a number of reports of casualties and incidents involving the use of “landmines” and victim-activated improvised explosive devices (IEDs) by Boko Haram, primarily in the south-eastern Diffa region along the border with Nigeria, as Niger increased its participation in joint military offensives against Boko Haram as part of a Multi-National Joint Task Force launched in 2015. Most reports appear to describe the use of locally produced victim-activated improvised explosive devices (IEDs) made by Boko Haram, which were either anti-personnel mines or anti-vehicle mines. It is not clear how many civilians were casualties of these devices in 2015–16; a number of reports cite mainly Nigerien soldiers, but also civilians killed or injured by mines, in incidents which appear to have involved improvised roadside bombs targeting vehicles.

In one incident, in January 2016, at least six Nigerien soldiers were reported to have been killed by an explosion when an army vehicle detonated a mine 10km from Kabalewa, in Diffa region, on the banks of the Yobe river along the border with Nigeria. In February 2015, two people on a horse and cart were killed in Zaourararm when a mine exploded beneath it, thought to have been planted by Boko Haram. Just days earlier, two soldiers were reported to have been killed and four injured by a mine laid by Boko Haram near the town of Bosso.
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.

Niger’s first extension request in 2013 included a workplan for 2014–15 requiring clearance of the Madama mined area, technical survey in the northern Kawar (Kaouar) department (Agadez region), and verification of other suspected mined areas. Niger’s third extension request submitted in 2016 contains a vague workplan for 2016–20, but does not contain details of annual clearance outputs or milestones.15

Operators

Niger reported that, as at November 2015, it had drafted national mine action standards in accordance with the International Mine Action Standards (IMAS) and was in the process of training deminers and eight community liaison officers for deployment in Kawar. It has reportedly had between 60 and 90 deminers operating at Madama since November 2014; in mid-2015, however, it acknowledged that due to lack of adequate equipment, it was not possible for all deminers to work at the same time.16

In May 2015, Norwegian People’s Aid (NPA) conducted an evaluation mission in Niger and subsequently offered to provide assistance to national demining efforts by donating equipment to enable the deployment of more deminers and short-term technical support to improve Niger’s clearance productivity.17 Niger has not accepted the support NPA offered.

LAND RELEASE

According to Niger, as at 25 October 2016, all 39,304m² of the confirmed mined area at Madama had been cleared, with the destruction of 1,075 mines.18 Previously, Niger reported that from the initiation of operations at Madama in November 2014 to November 2015, a total of 17,000m² had been cleared and 750 mines destroyed.19

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the four-year extension request granted by states parties in 2016), Niger is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2020.

States parties decided to grant this second request while noting, as with its previous extension request, that Niger had failed to provide a detailed annual workplan for clearance and benchmarks against which to assess progress. As such, Niger was requested by states parties to provide a revised detailed workplan with a list of all areas known or suspected to contain anti-personnel mines, along with monthly and annual projections of which areas would be addressed during the extension period. The importance of submitting an updated Article 7 report on an annual basis was further emphasised.20

Niger failed to submit a revised workplan by 30 April 2017, but at the convention’s intersessional meetings in June 2017, Niger informed states parties of monthly and annual demining projections, beginning in July 2017 through to July 2020, including a total of 25,000m² to be addressed in 2017; 68,500m² in 2018; 69,247m² in 2019; and 35,000m² in 2020, for a total of 197,747m² to be addressed.21 Niger has not, however, submitted an updated Article 7 report covering calendar year 2016, also due by 30 April 2017. At the intersessional meetings, it stated it was unable to submit an updated Article 7 report as requested and that it was waiting for assistance from France, which was to be provided in the summer of 2017, to conduct a field evaluation in order to better refine its planning and inform the report.22 Niger’s Article 5 clearance deadline under its first extension request expired on 31 December 2015. It stated that due to greater than expected contamination at Madama and the identification of the other area of suspected mine contamination, it would not meet this deadline. On 12 November 2015, just a few weeks before the Fourteenth Meeting of States Parties, Niger submitted a second request for a five-year extension until 31 December 2020.
Instead, states parties decided to grant Niger a one-year extension only, noting that Niger had failed to submit its request within the agreed timeline prior to the meeting and thus had not permitted time for sufficient analysis or discussion. The decision “noted that Niger and the Convention as a whole would benefit from a full extension process taking place” and requested that, as such, Niger “submit a request, in accordance with the established process, by 31 March 2016.” The decision also observed that the plan presented by Niger in the request was “workable but lacks ambition” and requested that Niger provide, in its revised submission, an updated work plan with an up-to-date list of all areas known or suspected to contain anti-personnel mines and annual clearance projections during the period covered by the request.

In April 2016, Niger re-submitted its extension request for a period of four years, until 31 December 2020. The revised submission includes geo-coordinates for the Madama mined area, but fails to include a detailed annual work plan or any specific annual projections for the clearance of the remaining mined areas, despite this being an essential part of any extension request, and it having been explicitly requested to do so by the meeting of states parties.

In its extension requests, Niger has noted desert environment, insecurity, and lack of funding as challenges for the implementation of its clearance obligations, along with the remote location of contamination and the need for a weekly military escort to carry out demining.

Niger funded all mine action activities in 2014–15. Under its latest extension request, Niger has said that more than US$3.2 million in funding is needed to fulfill 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 mobilized from external donors.

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. However, as noted above, following an assessment mission to Niger in May 2015, NPA submitted an offer to provide Niger with assistance, including provision of personal protective equipment, so that more deminers could work simultaneously, as well as a technical advisor to evaluate current methodology and trial equipment, which it believed could significantly increase speed and productivity. Danish Demining Group also offered to help Niger to complete clearance, but Niger did not respond to either organisation’s offer.

At the Fifteenth Meeting of States Parties in December 2016, France announced that it would provide support to contribute to the clearance of the area around Madama fort, set to begin in 2017. In June 2017, Niger confirmed that it had accepted France’s offer for technical support for an evaluation of the terrain around Madama, which it stated would better inform its planning and allow it to prepare an updated Article 7 transparency report. Given the relatively small amount of suspected contamination remaining, Niger should be able to complete survey and clearance of this limited area of contamination well in advance of its four-year extended deadline.
1 Executive Summary of Niger’s Third Article 5 deadline Extension Request, 4 October 2016.
2 Second Article 5 deadline Extension Request, 6 November 2015, pp. 6 and 8.
3 Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015; and statement of Niger, Third Review Conference, Maputo, 24 June 2014.
5 Second Article 5 deadline Extension Request, 6 November 2015, p. 8; and Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015, p. 2. Niger’s extension request stated that 17,000m² had been cleared and 628 mines destroyed. Second Article 5 deadline Extension Request, 6 November 2015, pp. 6 and 8.
6 Analysis of Niger’s Third Article 5 deadline Extension Request, 25 October 2016, p. 3.
7 Observations on the extension request submitted by Niger by the Committee on Article 5 Implementation, 27 November 2015, p. 4; and statement of Niger, Intersessional meetings (Standing Committee on Mine Action), Geneva, 11 April 2014.
8 Third Article 5 deadline Extension Request, 15 March 2016, p. 6.
9 Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015; and statement of Niger, Third Review Conference, Maputo, 24 June 2014.
15 Third Article 5 deadline Extension Request, received 15 April 2016.
16 Niger stated that in addition to the 60 deminers active at Madama since November 2014, 40 were trained in February 2015, 30 of whom were said to have been deployed by April 2015. Statement of Niger, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 25 June 2015; and interview with Chris Natale, Mine Action Advisor, Norwegian People’s Aid (NPA), in Geneva, 26 June 2015.
17 Interview with Chris Natale, NPA, in Geneva, 26 June 2015.
18 Analysis of Niger’s Third Article 5 deadline Extension Request, 25 October 2016, p. 3. In its revised second extension request, Niger gave new, but conflicting reports that as at March 2016, “more than 39,304m² had been demined and close to 1,075 mines removed”, but then also stated that “93,042m²” had been demined, and a total of 1,075 mines destroyed. It clarified to the Committee on Article 5 Implementation on 25 October 2016 that 39,304m² had been cleared and 1,075 mines destroyed.
19 Observations on the extension request submitted by Niger by the Committee on Article 5 Implementation, 27 November 2015, p. 4.
20 Additionally, States Parties stipulated four areas on which Niger should report, including progress made in accordance to its forthcoming 2016–20 workplan: any negative or possible impacts on implementation deriving from changes in the security situation; efforts to mobilise necessary financial and technical support; and any external finance and assistance received along with resources made available by the Government of Niger. “Decision on the request submitted by Niger for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention”, 15th Meeting of States Parties, Santiago, 1 December 2016.
21 It erroneously reported, though, that this total was 196,253m². Statement of Niger, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 8 June 2017.
22 Ibid.
23 “Decision on the request submitted by Niger for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention”, 14th Meeting of States Parties, Geneva, 4 December 2015.
24 Ibid.
25 Third Article 5 deadline Extension Request, 15 March 2016 (received 15 April 2016).
26 Historically, from 2002–06, Niger consistently reported the existence of mined areas in the country. However, at the 2008 intersessional meetings, Niger declared that no areas on its territory were suspected to contain anti-personnel mines, stating it had evidence only of the presence of anti-vehicle mines. Nonetheless, in May 2012, more than two years after the expiry of its Article 5 clearance deadline, Niger reported to states parties that at least one mined area contained anti-personnel mines in. In July 2013, more than four years after its original deadline expired, Niger submitted its first extension request, following the discovery of one known and five suspected mined areas in the Agadez region in June 2011. In granting the request, states parties regretted the delay between the discovery of contamination and the beginning of demining. See: Article 7 reports for 2002–06; statement of Niger, Intersessional meetings (Standing Committee on Mine Action), Geneva, 5 June 2008 and 28 May 2012; and Article 5 deadline Extension Request, Decision, 5 December 2013.
27 Article 5 deadline Extension Request, 1 July 2013; Executive summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015, p. 2; and Third Article 5 deadline Extension Request, 15 March 2016, p. 14.
29 Third Article 5 deadline Extension Request, 15 March 2016, pp. 11–13; and Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015, p. 3.
30 Statement of Niger, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 19–20 May 2016; statement of Niger, 14th Meeting of States Parties, Geneva, 1 December 2015; Third Article 5 deadline Extension Request, 15 March 2016, p. 13; and Executive Summary of Niger’s Second Article 5 deadline Extension Request, 27 November 2015, p. 3.
31 Email from Chris Natale, NPA, 29 July 2016.
34 Statement of Niger, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 8 June 2017.
In 2016–17, numerous incidents involving both civilian and military casualties from “landmines” and a range of IEDs planted by Boko Haram continued to be reported in the north-east of Nigeria. The majority of the reports appear to describe victim-activated IEDs made by Boko Haram, which function as either anti-personnel mines or anti-vehicle mines.

The extent of contamination from mines and other explosive devices is not known. Incidents involving mines and IEDs have been reported in Borno, Yobe, and Adamawa states, with Borno state the most heavily affected. According to the Nigerian military, the Sambisa forest in Borno state, Boko Haram’s stronghold, has been heavily mined, along with “extensive” mine use by Boko Haram around military positions.1

The United Nations Mine Action Service (UNMAS) carried out a scoping mission to the three north-eastern states in April 2017 to assess the extent of the threat from munitions, including IEDs, explosive remnants of war (ERW), and “unconfirmed but credible reports of landmines”. It received reports of the use of both anti-personnel and anti-vehicle mines around defensive positions, emphasising that Boko Haram’s use of victim-activated pressure-plate operated IEDs functioned as landmines.2

The CONTAMINATION

ARTICLE 5 DEADLINE: 1 MARCH 2012
(NEEDS TO REQUEST EXTENSION)

NIGERIA

RECOMMENDATIONS FOR ACTION

■ Nigeria should urgently clear any anti-personnel mines, including victim-activated improvised explosive devices (IEDs) on its territory on the basis of humanitarian needs and priorities. It should also take immediate steps to minimise harm to civilian populations, including the provision of risk education.

■ Nigeria should inform states parties to the Anti-Personnel Mine Ban Convention (APMBC) of the discovery of any contamination from anti-personnel mines, including victim-activated IEDs, and report on the location of all suspected or confirmed mined areas under its jurisdiction or control and on the status of programmes for their destruction.

■ As soon as security conditions permit, non-technical survey should commence in Nigeria’s three most conflict-affected provinces, Borno, Yobe, and Adamawa states.

■ Where appropriate, Nigeria should encourage and facilitate the provision of assistance and expertise from humanitarian demining organisations.
UNMAS confirmed that use of explosive devices by Boko Haram was extensive, including body-borne IEDs, vehicle-borne IEDs, pressure-plate-activated IEDs, and to a lesser extent, command wire and radio-controlled IEDs. In particular, Boko Haram had made significant use of simple pressure-plate-activated IEDs "effectively as very large de facto landmines" on main supply routes, primarily to attack military convoys, it said.1

A November 2015 assessment carried out in Adamawa and Borno states by international demining organisation Danish Demining Group (DDG) had noted local community reports of a number of local government areas in Borno state they thought needed clearance, including: Dikwa, Marte, Kukawa, Ngala, Bama, Gwoza, and Kala-Balge.2 Interviewees identified contamination including anti-personnel and anti-vehicle mines resembling Chinese No. 4 anti-personnel mines and Type 72 anti-vehicle mines; a variety of body-borne, vehicle-borne, and remotely controlled IEDs; as well as cluster munition remnants, mortars, rockets, and rocket-propelled grenades, hand grenades, and Man-Portable Air Defence Systems (MANPADS).3

In 2015, the Nigerian army warned civilians of the threat of IEDs using adapted submunitions. Caches of French-made air-delivered BLG-66 "Beluga" cluster munitions were reportedly found in Adamawa state, alleged to have been taken from stockpiles of the Nigerian armed forces or smuggled in from Libya.4 Contamination from mines and IEDs has had a serious humanitarian impact, preventing the return of internally displaced persons (IDPs) and exacerbating the crisis in the region.5 In October 2016, the governor of Adamawa state confirmed that many IDPs continued to be unable to return to their farms due to a fear of landmines.6 Roads were closed to civilian traffic by the military due to the presence of mines or IEDs and there were numerous reports of civilian casualties and farmers who feared returning to work their fields, contributing to sharply worsening food shortages.7 According to UNMAS, as at April 2017, Borno state hosted 80% – 1.5 million – of Nigeria’s IDP population, and 400,000 returnees were living in areas affected by the conflict.8 It reported that the security situation in Adamawa and Yobe states had improved gradually, but remained volatile, especially in the north-eastern part of Yobe.9

According to UNMAS, in 2016–17, the significant majority of the casualties from locally produced mines and IEDs were soldiers. More than 300 military casualties were caused by IEDs in December 2016–April 2017, according to a Nigerian Brigade Commander.10 The number of reported civilian casualties remained low, though UNMAS assessed that this was because most IDPs were still outside former conflict areas or were in secured local government areas.11 It also reported that the likelihood of explosive accidents might significantly increase with the planned mass return of more than one million refugees and IDPs.12 It similarly expected a significant threat to UN and humanitarian agencies with the expansion of relief efforts and increased use of main supply routes.13

While the number of civilian casualties from mines and IEDs was thought to be low, in 2016–17 several were reported. In June 2017, three loggers were killed outside Abbari village, in Konduga district of Borno state, when their truck struck a mine laid by Boko Haram.14 In October 2016, a number of IDPs were injured after the Land Cruiser in which they were travelling hit a landmine in Ngom village, 20km from Maiduguri, on the road to Gamboru-Ngala. This incident occurred barely one hour after the military had approved the movement of 200 cars and trucks conveying IDPs and food items along the road to a liberated area on the border.15 In a number of incidents in 2015–16, civilians were reported to have been killed or injured when returning to villages and attempting to resume agricultural activities.16

There were also numerous reports of incidents and military casualties from mines or from vehicles driving over explosive devices planted along main roads, particularly in and around areas held by Boko Haram. In April 2017, a convoy carrying two Nigerian generals encountered a cluster of four IEDs at a crossing point near Firgi, Borno state, which were safely destroyed by the army’s explosive ordnance disposal (EOD) unit.17 In March 2017, a Cameroonian soldier on a joint military operation with the Nigerian army was killed after his vehicle hit a mine laid by Boko Haram in Kumshe, Borno state.18 In December 2016, a Nigerian officer and his security detail were reportedly killed after their vehicle detonated mines buried on a road close to Damasak in Borno state.19 In November 2016, five Nigerian soldiers were injured by a mine during a patrol close to Maiduguri, while in another incident, near the Chibok area of Borno state, two local militia members were killed and two injured after their patrol vehicle hit a mine.20 In September 2016, four soldiers were killed and sixteen were wounded by an IED planted by Boko Haram outside Maiduguri.21

Military casualties have also been reported among soldiers clearing mines. In 2015, two soldiers were killed and two others seriously wounded during clearance operations in Gudumbali town.22 UNMAS reported in April 2017 that manual render-safe procedures were the primary method used by the Nigerian military EOD teams, which could be contributing to a high number of casualties among EOD personnel.23
PROGRAMME MANAGEMENT

Both Nigeria’s armed forces and police carry out EOD activities and ERW clearance. The state police have EOD units that support the army in clearing unexploded ordnance (UXO) and IEDs. The army’s ERW clearance is primarily focused on facilitating military operations and clearing roads and areas to facilitate access for troops to carry out attacks on Boko Haram and to keep military supply routes open.26

In March 2017, the United States reported donating demining and EOD equipment to Nigeria and providing mine action training for Nigeria’s EOD teams at the Nigerian School of Military Engineering.27 In December 2016, a media source published photos of a “newly-acquired” Slovak-made Bozena demining machine, which it said had been deployed on roads in Borno state.28 In 2015, it was reported that Nigeria had ordered 10 demining machines from a Slovakian company, with five scheduled for delivery in 2015 and the remainder in 2016.29 In 2015, 24 Mine-Resistant Ambush Protected Vehicles (MRAPs) were said to have been given to the Nigerian army by the United States.30

LAND RELEASE

It is not known how much mine or EOD clearance has been carried out by the Nigerian military. In April 2017, the Chief of Army Staff, Lieutenant-General Tukur Buratai reported that the army was carrying out limited clearance of routes in forested areas to enable troop movements, but said that humanitarian demining of the Sambisa forest as such had not begun. He called for assistance from the UN and NGO demining organisations.31

In October 2016, though, in response to returning local residents’ fears of landmine explosions in areas formerly held by Boko Haram, another senior Nigerian military commander had given assurances that freed communities in the north-east, once certified by the military, were safe from the threat of mines and IEDs. All efforts were being made to ensure that roads said to have been laid with IEDs were cleared, he said, noting that the army had received a large amount of demining equipment, which would be deployed following the training of personnel.32

In February 2015, the military was said to have cleared more than 1,500 landmines laid by Boko Haram around the town of Baga and in the Sambisa forest, using armoured personnel vehicles and armoured tanks with mine-sweeping capabilities.33 Other media reports in 2015 confirmed that the military was using mechanised demining equipment to clear roads and paths for military operations against Boko Haram in Sambisa forest, but stated that the available machines were insufficient for the vast area concerned.34 In another account in Adamawa state, it was reported that the military was working to clear mines from recaptured areas, focusing on roads, schools, and clinics, but farms were not considered a high priority despite many casualties having occurred when civilians returned to their fields.35

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, Nigeria was required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2012. In December 2009, Nigeria informed the Second APMBC Review Conference that, “as soon as some limited numbers of anti-personnel landmines were discovered in some parts of Nigeria, we took prompt action to identify and to destroy these mines to protect civilian lives and community livelihoods”.36 At the Eleventh Meeting of States Parties in November 2011, Nigeria declared it had cleared all known anti-personnel mines from its territory.37

Under the Convention’s agreed framework, in the event a mined area is discovered after the expiry of a state party’s Article 5 clearance deadline, it should immediately inform all other states parties of this discovery and undertake to destroy or ensure the destruction of all anti-personnel mines as soon as possible. Nigeria has not submitted an Article 7 transparency report since 2012.

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.38 As at September 2017, Nigeria had not made a public declaration of any newly discovered anti-personnel mine contamination to states parties of the APMBC.


11. Ibid.

12. Ibid., p. 3.

13. Ibid., p. 4.

14. Ibid., p. 3.

15. Ibid.


30. Ibid.


32. Ibid., p. 6.

33. Ibid.


39. Statement of Nigeria, 11th Meeting of States Parties, Phnom Penh, 29 November 2011. In January 2017, a civil-war-era landmine was found in Ebonyi state, which villagers thought was an IED. Police forensics concluded it was a landmine left over from the conflict which ended 45 years ago which had washed up in a river. A bomb squad destroyed the device, and according to the police, the area was searched and no evidence of other contamination was found. J. Eze, “Nigeria: Civil War Explosive Found in Ebonyi Community – Police”, AllAfrica, 17 January 2017, at: http://allafrica.com/stories/201701180015.html.

Oman is suspected to be contaminated by mines, though the precise location and extent of any residual threat is not known. In its initial APMBC Article 7 transparency 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.\(^1\)

According to its 2015 report, during the mid-1960s to mid-1970s the presence of rebel movements in Dhofar led to “vast” areas being affected by anti-personnel and anti-vehicle mines. After the end of the conflict in 1975, the government made significant efforts to clear the areas, but it is impossible to be sure that the areas have been fully cleared. This is for three reasons: the size of the region (about 99,000km\(^2\)); 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.\(^2\)

In 2001, it had been reported that the Royal Army of Oman had mapped seven zones of SMAs based on historical records of battlefield areas, unit positions, and mine incident reports.\(^3\)

**RECOMMENDATIONS FOR ACTION**

- Oman should present plans for implementation of its Anti-Personnel Mine Ban Convention (APMBC) Article 5 obligations at the earliest opportunity, at least at the Sixteenth Meeting of States Parties.
- In doing so, Oman should detail any needs for international technical assistance in non-technical and technical survey of mined areas.

**PROGRAMME MANAGEMENT**

Oman has not had a functioning mine action programme. In its Article 7 transparency report for 2016, however, it reported that survey and clearance is being performed by its army engineers.\(^4\)
LAND RELEASE

Oman has reported that it cleared mined area at Sarfait in Dhofar governorate in 2016, but it has not reported the area cleared nor the number and type of mines that were destroyed. Sarfait is a settlement on the coast of the Arabian Sea, near the border with Yemen.

In addition, Oman stated that a number of suspected mined areas in Dhofar governorate have been marked with warning signs. Minefield fencing will be erected “based on need”.

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, Oman is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 February 2025.

It is too early to say whether Oman will meet this deadline but it should be readily achievable if modern land-release approaches are employed successfully. Oman did not take the floor at the Fourteenth or Fifteenth Meeting of States Parties to present a plan to implement its Article 5 obligations. In its Article 7 report for 2016, Oman stated only that mined areas will be destroyed “in cooperation with any linked entity and without conflicting with Omani sovereignty”.

1 Initial Article 7 Report, 2015, pp. 4–5.
2 Ibid., pp. 4–5.
4 Article 7 Report (for 2016).
5 Ibid.
6 Ibid.
7 Ibid.
**ARTICLE 5 DEADLINE: 1 MAY 2018**
(UNCLEAR WHETHER ON TRACK TO MEET DEADLINE)

**CONTAMINATION**

The extent to which Palau remains contaminated with anti-personnel mines is unclear. Palau is contaminated by explosive remnants of war (ERW) and UXO on many of its 200 islands, left over from World War II, when it was the scene of a number of land and naval battles between Japanese and American forces. An estimated total of 2,800 tons (2.8 million kg) of ordnance was dropped or fired on Palau. 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. 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).

CGD conducted a community survey on Peleliu island in late 2009 that found that more than one-quarter of households or community infrastructure were contaminated with ERW. Local inhabitants are exposed to ERW while hunting, fishing, collecting shellfish, and engaging in agricultural activities. A follow-up survey of all households in Peleliu state and Angaur state was conducted in 2010, which led to further reports of contamination in agricultural areas, including taro fields and banana plantations, as well in traditional food-gathering areas where the population collects land crabs and hunts fruit bats for food.

Clearance efforts to date have included “a combination of ‘spot tasks’ in response to reports of UXO, visual battle area clearance of general areas and sub-surface clearance of specified areas, like walking tracks and around the power station.” In Peleliu the work has reportedly “been complicated” by the presence of UXO in caves, and also the presence of human remains and war artefacts in the areas where UXO are found.

**RECOMMENDATIONS FOR ACTION**

- Palau should ensure that permission is granted for non-technical survey of Peleliu and Ngiwal states.
- Palau should ensure that the remainder of historical information on contamination, survey, and clearance is acquired, including Cleared Ground Demining (CGD) data from Peleliu and Ngiwal states, in order to complete population of the unexploded ordnance (UXO) database in Information Management System for Mine Action (IMSMA).
- Palau should obtain the necessary information regarding the mines reportedly found and cleared by CGD on Peleliu state in 2014–15, and determine if there are areas suspected to contain anti-personnel mines, especially the caves in the Umubrogol mountains (Bloody Nose Ridge). If suspected mined areas are believed to exist, Palau should complete survey of these areas as soon as possible, to determine whether or not any anti-personnel mines remain.
In 2011, Palau stated for the first time in its Anti-Personnel Mine Ban Convention (APMBC) Article 7 transparency report that it had mined areas on its territory. Contamination to date has included Japanese anti-vehicle and anti-personnel mines as well as sea mines, with anti-personnel mines reported in the Umubrogol mountains (Bloody Nose Ridge) and Death Valley regions of Peleliu state. In its earlier Article 7 reports, Palau had declared no known or suspected mined areas.

Subsequently, in its Article 7 report for 2011, Palau stated that clearance had been completed of all anti-personnel mines at the only two areas with confirmed contamination. It was also reported that areas containing sea mines remained to be cleared. Palau further reported that areas containing abandoned anti-personnel mines remained in caves at Bloody Nose Ridge in the Umubrogol mountains in Peleliu state, recording that: “Landmines have been found stored in the complex cave and tunnel systems of the former battlefield. A total of 608 caves exist – operations have only taken place in 34 caves to date.”

At that time, CGD confirmed that anti-personnel mine contamination was only of abandoned stockpiled mines. In December 2011, in its statement to the APMBC Eleventh Meeting of States Parties, Palau claimed that it was not “obligated under the AP Convention to destroy emplaced antipersonnel mines because it never produced, stockpiled, used, nor transported them.”

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.” In addition, Palau also reported JE-type sea mines in two locations in Airai state, and affirmed that the mines had been used in both anti-boat and anti-personnel roles. Palau also reported that its contamination “was a result of a fiercest battle fought in the Pacific during WWII. With such circumstance, Palau is seeking assistance toward island wide survey to know its mine[d] areas and or suspected mine[d] areas.”

Palau did not submit Article 7 reports for 2013, 2014, or 2015, as it is obligated to do by the APMBC. In December 2015, however, CGD reported having cleared laid and armed anti-personnel and anti-vehicle mines in Palau between January 2014 and November 2015. The location of clearance was not specified, but was believed to be Bloody Nose Ridge, Peleliu state.

In its UXO Action Plan 2017–19, Palau records that “A total of 43 anti-personnel landmines have been cleared”, and that “it has ‘cleared all known mined areas’ in compliance with the APMBC.”

In October 2015, the Palau authorities confirmed they were in the process of applying Palau’s UXO Policy and would collect relevant data from clearance operators to build Palau’s understanding and awareness of contamination and for its submission of APMBC transparency reports. In 2017, Palau submitted its Article 7 transparency report for 2016, in which it reported that there have “never been validated mined areas that contain or are suspected to contain anti-personnel mines under the jurisdiction or control of Palau.”

PROGRAMME MANAGEMENT

Palau is in the process of establishing a mine action programme to address its ERW/mine contamination. Under the authority of Executive Order No. 335 of 14 May 2013, issued by the Office of the President, a UXO Advisory Committee was established. The Committee has reportedly met a number of times since it was established, and an informal working group established in 2010 had also met prior to the establishment of the Committee.

In June 2015, during meetings between Norwegian People’s Aid (NPA) and government officials from the National UXO Advisory Committee, it was decided that a series of capacity building workshops would be held with the government, with support from NPA and funding from the United States. The aim of the workshops was to support Palau’s development of a national UXO policy, a national UXO action plan, and draft national UXO standards. A first workshop was held in July 2015, a second in August 2015, and the third and final workshop in January 2016.

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.

As at August 2017, Palau was said to have the capacity to direct trained national personnel to clear priority areas of abandoned explosive ordnance (AXO) and UXO, and to conduct low-order demolitions on single items using thermite. A new government demolition area is planned to become operational soon, which will be run by the National Safety Office and will be available to all clearance operators.

Strategic Planning

The UXO Advisory Committee has overseen the development of the UXO Policy and UXO Action Plan 2017–19, which were enacted by Presidential Executive Order 392, signed on 1 March 2017. The UXO policy outlines national coordination measures and assigns responsibilities to the relevant ministries. It also formally documents the role of the UXO Advisory Committee, which is composed of government ministries, states, agencies, and organisations. The Director of the Bureau of Domestic Affairs within the Ministry of State acts as the secretariat.

Furthermore, a UXO Technical Working Group, chaired by the National Safety Office and consisting of representatives at working level from each ministry, Palau’s states, and other concerned organisations, has been established by the Advisory Committee. The UXO Technical Working Group assists the Advisory Committee with its work, particularly on the technical aspects of UXO destruction.
Palau, in conjunction with international partners including NPA, CGD, and JMAS, is planning, coordinating, and implementing a nationwide, non-technical survey (NTS), referred to in the UXO Action Plan 2017–19 as a “general UXO survey”, to confirm the UXO-affected areas of the country. NPA is conducting the non-technical survey, which “will gather documentary information from a variety of sources, such as previous surveys, NGO progress reports, other ministries, states, police, construction agencies, dive operators and historical records. All data collected during the general survey is to be stored in IMSMA.”

In addition, all information from NPA is backed up and delivered to the Palau Automated Land and Resource Information System (PALRIS), in the Office of Planning and Statistics, which sits under the Ministry of Finance. In order to better understand the level of remaining contamination and to manage clearance efforts, Palau strongly encourages its international partners, including CGD, in the spirit of cooperation, to share data to be qualified and quantified in Palau’s geographic information system (GIS) system for sustainable development.

Standards

The UXO Advisory Committee is also tasked to determine rules and regulations for the quality and standard of work performed by agencies like the National Safety Office (in the Ministry of Infrastructure, Industries and Commerce), the police, international organisations, NGOs, and foreign militaries. These rules and regulations, known as ‘Palau UXO Standards’, are based on the International Mine Action Standards (IMAS) and have been drafted with the support of NPA.

NPA supported the Palau National Safety Office in the drafting of the Palau UXO standards. An initial workshop in August 2015 identified a list of 21 UXO standards needed in Palau – this included adopting certain IMAS in full, tailoring others to the situation in Palau, and developing some standards for situations unique to Palau. According to Palau’s UXO Action Plan 2017–19, “This should not become a long and drawn-out process, and standards should be issued in draft form as soon as possible and then reviewed after six months of application.” As at April 2017, Palau reported that it was still in the process of reviewing the draft national standards. In July 2017, the standards were streamlined to concentrate more on permissions and legalities for the removal of ERW rather than the technical aspects of clearance.

Information Management

Previously, no centralised database contained historical information/data on, for example, the location and clearance of UXO, which could be retrieved for planning and prioritisation purposes. However, with the support of NPA, the National Safety Office established a national UXO database in January 2017, to coordinate survey and clearance of UXO and mine contamination.

With the adoption of the UXO Policy and UXO Action Plan 2017–19, the Palau authorities now have a mandate to collect historical data from operators conducting UXO and landmine clearance in Palau, and verify and qualify data for reporting to the Palau leadership, local communities, and the international community. With the appropriate structure now in place, Palau will be better placed to report on ERW contamination, survey, and clearance to the Palau authorities, local communities, and the international community, including as part of its obligations under the APMBC.

The National Safety Office now receives both historical and current data on contamination, survey, and clearance, to populate the IMSMA database. All items found to-date have been reported by operators, and entered into the UXO database, with the exception of historical data from CGD. Although CGD is now submitting its 2017 clearance data, as at September 2017, it had yet to submit its data from 2009 to 2016 to the Palau National Safety Office for entry into the national UXO database, and for qualification and validation.

In addition, as at July 2017, the United States corps of engineers had yet to provide details of the location and type of explosive ordnance cleared during decades of clearance and construction work in Palau.

Operators

CGD has been conducting ERW clearance operations in Palau, both on land and in the sea, since 15 September 2009. The clearance project is focused on Peleliu and Angaur – two southern islands of Palau, and aims to reduce the immediate risk of ERW on local communities and tourists.

In 2012, JMAS, a Japanese demining NGO, began working in Palau, with a focus on underwater UXO clearance. JMAS’s activities to date have included monitoring of the ‘Helmet Wreck’ off Malakal, Koror, and other wreck sites, and undertaking underwater surveys. JMAS planned to deploy two explosive ordnance disposal (EOD) teams for UXO survey in 2017, each of which would conduct a ten-day survey each month, using GPS and aqua-sonar equipment, magnetic anomaly detectors, underwater remote-controlled cameras, underwater scooters, still and video cameras, and protective diving suits. As at March 2017, JMAS was awaiting authorisation and approval of the required permits to begin its 2017 projects, during which it planned to survey and clear Helmet Wreck, and extend its operations to Ngatpang state and Ngeremlengui state after obtaining the required authorisation and permits. The required authorisations, approvals, and permits from Koror state were issued during subsequent months. As at September 2017, JMAS was still awaiting the necessary documentation from the states of Ngatpang and Ngeremlengui, although JMAS did conduct a survey of the port of Ngeremlengui state as part of the submarine fibre-optic-cable project under the Ministry of Finance.

In 2015, NPA received a grant to assist Palau to strengthen national capacity to manage and coordinate the UXO sector, and to help undertake surveys and UXO clearance; and subsequently initiated a programme of support. NPA reported that from April 2017 it had begun working under the National Safety Office, as the “ERW/UXO team”. NPA planned to continue to transfer national capacity to this team in 2017.

In addition, NPA began non-technical survey on 15 September 2016, employing 11 mine action personnel to conduct the survey. NPA’s mine action team has undergone EOD level 1 training and was scheduled to
undertake EOD level 2 training in May 2017. In January 2017, NPA began clearance of spot tasks, followed by clearance of hazardous areas in March. In addition, as at August 2017, personnel had also been assigned permanently to provide EOD cover to Palau’s water and sewer improvement projects. All three NGOs rely on direct funding from foreign donors, which includes the Governments of Belgium, Japan, New Zealand, and the United States. Palau expected its mine action capacity to remain the same in 2017.

In addition, mines were also believed to have been encountered during a “Last Human Remains Mission” undertaken in 2015 by Japan in a repatriation operation involving the Palau Historic Preservation Office (HPO), also known as the Bureau of Cultural and Historic Preservation, under the Ministry of Community and Cultural Affairs (MCCA). The Government of Japan will reportedly clear caves on Peleliu as part of the programme to repatriate human remains from World War II.

**LAND RELEASE**

NPA started non-technical survey on 18 September 2016, in the state of Koror. As at August 2017, NPA had completed non-technical survey of all states, except for Peleliu and Ngiwal, where permission had not yet been granted for non-technical survey. No evidence of anti-personnel mine contamination had been found in non-technical survey operations to date.

JMAS did not encounter any anti-personnel mines or sea mines in 2016, but it did discover 10 items of ERW in the shallow waters off Koror state. In addition, JMAS found three ammunition boxes and four depth charges at Chuyo Maru, and four ammunition boxes, one machine gun shell container, one cartridge container, and one “unknown” container in Urakami Maru.

In February 2017, CGD confirmed it had not encountered any emplaced anti-personnel mines during its clearance operations in Palau in 2016. Previously, however, in December 2015, CGD reported having cleared five type 93 HE blast anti-personnel mines, which were laid and armed, in two separate caves, between January 2014 and November 2015. 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 improvised mine (using modified aircraft bomb components), found on a beach. 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]”. These mines are covered by the APMBC.

As at July 2017, CGD had provided data on ERW cleared in 2017, but had yet to provide the National Safety Office with the requested historical information on suspicious, laid or armed landmines found in Peleliu state. Until this information is provided by CGD, the Palau authorities are unable to validate and qualify the information regarding the anti-personnel mines reported by CGD in 2015.

**ARTICLE 5 COMPLIANCE**

Under Article 5 of the APMBC, Palau 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 May 2018.

Until recently, it was not believed that Palau had mined areas containing anti-personnel mines, other than a residual risk of contamination. Rather, it was thought the remaining mines were in abandoned stockpiles, which fall under Article 4 of the APMBC. However, in December 2015, CGD reported clearing a number of emplaced anti-personnel mines between January 2014 and November 2015.

As at April 2017, Palau reported that JMAS and NPA had not reported any emplaced, laid, or armed anti-personnel mines since 2012, and that CGD had yet to submit its information and data to the National Safety Office for entry into the national UXO database, and for validation and qualification. Failure of CGD to submit its pre-2017 survey and clearance data, including regarding its clearance operations in Peleliu state, is preventing Palau from gaining a full understanding of the national status of ERW contamination.

In 2017, when asked whether Palau intended to submit an Article 5 extension request, Palau responded that the National Safety Office would “submit its APMBC Article 7 reporting until such time the Palau National Safety Office have validated information about suspicious, laid or armed landmine in its jurisdiction”. In its Article 7 report for 2016, however, Palau maintains that with respect to the location of mined areas: “This matter is not applicable as there [have] never been validated mined areas that contain or are suspected to contain anti-personnel mines under the jurisdiction or control of Palau.”

The Palau authorities affirm that once CGD provides the National Safety Office with the requested CGD survey and clearance data, including information on any laid and armed anti-personnel mines discovered, they will then be in a position to validate and qualify this information, in order to determine whether or not any suspected mined area exists in Palau.
1 Statement of Palau, Sixth Meeting of States Parties, Zagreb, 29 November 2005.
2 US military statistics included in the document provided to Landmine Monitor by email from Cassandra McKeown, Finance Director, CGD, 19 May 2010.
4 Emails from Luke Atkinson, Programme Manager, Norwegian People’s Aid [NPA], 11 and 12 July 2017.
5 Draft document provided to the Monitor by email from Cassandra McKeown, CGD, 19 May 2010; and CGD, “Republic of Palau Project”, at: www.clearedground.org.
6 Document provided to Landmine Monitor by email from Cassandra McKeown, CGD, 18 July 2011.
7 Email from Cassandra McKeown, CGD, 19 May 2010.
9 Article 7 Report [for 2010], Form C.
10 Article 7 Report, Form C, for the periods 1 May to 14 September 2008 and 16 September 2008 to 16 September 2009.
11 Article 7 Report, Form C (for 2011).
12 Email from Cassandra McKeown, CGD, 18 July 2011.
14 Article 7 Report [for 2012], Form C.
15 Ibid.
16 Ibid.
17 Email from Steve Ballinger, Operations Director, CGD, to the Palau Authorities, 1 December 2015.
19 Email from Eunice Akiwo, Director, Bureau of Domestic Affairs, Ministry of State, 20 October 2016.
20 Article 7 Report [for 2016], Form C.
21 Article 7 Report [for 2016].
24 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.
26 Article 7 Report [for 2016], Form A.
27 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
32 Email from Eunice Akiwo, Ministry of State, 29 September 2017.
35 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
38 Email from Eunice Akiwo, Ministry of State, 21 April 2017.
39 Article 7 Report (for 2016), Form A.
40 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
47 CGD, “Republic of Palau Project”.
49 Email from Yasuo Terada, JMAS, 17 March 2017.
50 Ibid.
51 Email from Yasuo Terada, JMAS, 13 October 2017.
57 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
58 Email from Steve Ballinger, CGD, to the Palau Authorities, 1 December 2015.
61 Email from Yasuo Terada, JMAS, 17 March 2017.
63 Email from Steve Ballinger, CGD, to the Palau Authorities, 1 December 2015.
64 Ibid.
65 Ibid.
66 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
67 Interview with Eunice Akiwo, Ministry of State, in Geneva, 8 February 2017.
68 Email from Steve Ballinger, CGD, to the Palau Authorities, 1 December 2015.
70 Email from Balkuu Kumangai, Ministry of Public Infrastructure, Industries and Commerce, 3 April 2017.
71 Article 7 Report (for 2016), Form C.
72 Interview with Eunice Akiwo, Ministry of State, in Geneva, 8 February 2017.
PERU

ARTICLE 5 DEADLINE: 31 DECEMBER 2024
(ON TRACK TO MEET DEADLINE)

PERU

PERFORMANCE COMMENTARY
Peru’s clearance output in 2016 remained tiny in comparison with other affected states and even dropped from the level achieved the previous year. Peru’s request for a new extension was granted by the Fifteenth Meeting of States Parties, although the additional seven-year-and-ten-month period to fulfil its obligations under Article 5 of the Anti-Personnel Mine Ban Convention (APMBC) is unacceptably long.

MINE ACTION PROGRAMME PERFORMANCE

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<tr>
<td>National funding of programme</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: POOR

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.6</td>
<td>5.0</td>
</tr>
</tbody>
</table>
RECOMMENDATIONS FOR ACTION

- Peru should consider using mine detection dogs or other technical survey methods to speed up land release in the Condor mountain range (Cordillera del Condor).
- Peru should distinguish between suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs) in its reporting.
- Peru should clarify how it understands reporting on land released and ensure that this conforms to the International Mine Action Standards (IMAS).
- Peru should seek to complete clearance in no more than five years.

CONTAMINATION

Residual mine contamination in Peru results from a 1995 border conflict with Ecuador. The mined section of the border was predominantly in the Condor mountain range that was at the centre of the dispute. As at early August 2016, 140 SHAs were said to cover a total of 479,974m² remained in the districts of Achuime, Cenepa, Santiago and the square kilometre of Tiwinza. Peru variously stated in its latest Article 7 transparency report that as at March 2017, remaining mine contamination totalled 475,174m² across 140 confirmed hazardous areas, but in the same report it claimed that as at the end of 2016, 426,325m² remained across 134 CHAs. As set out in Table 1 below, though, Peru has planned for clearance beginning in January 2017 of 128 areas covering only 411,694m².

The size and extent of mined areas varies widely, with one such area only 5m² in size while the largest, by far, is estimated to extend over 160,000m². 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 2008, Peru claimed that mines have had a severe socio-economic impact on those living in affected areas (estimated to number some 400,000 across the Condor mountain range). While some socio-economic impact persists, today this cannot be considered severe. The Cordillera del Condor is a nature reserve.

PROGRAMME MANAGEMENT

The national mine action programme is managed by the Interministerial Executive Council of the Peruvian Mine Action Centre (Centro Peruano de Acción contra las Minas Antipersonal, CONTRAMINAS), which is chaired by the Ministry of Foreign Affairs. CONTRAMINAS is responsible for setting strategy and priorities and for overall coordination of mine action activities.

Strategic Planning

According to Peru’s strategic demining plan, which was annexed to its 2016 extension request, remaining suspected mine contamination of some 0.41km², spread across 128 SHAs, will be released by 31 December 2024. Peru expected to clear 6,318 mines from the hazardous areas. The plan for the eight years beginning 1 January 2017 is as follows:

Table 1: Plans for clearance in 2017–24

<table>
<thead>
<tr>
<th>Year</th>
<th>Sector</th>
<th>Mined areas</th>
<th>Area (m²)</th>
<th>AP mines</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Tiwinza</td>
<td>14</td>
<td>37,450</td>
<td>833</td>
</tr>
<tr>
<td>2018</td>
<td>Tiwinza</td>
<td>16</td>
<td>95,230</td>
<td>720</td>
</tr>
<tr>
<td>2019</td>
<td>Cenepa</td>
<td>20</td>
<td>9,458</td>
<td>746</td>
</tr>
<tr>
<td>2020</td>
<td>Cenepa</td>
<td>16</td>
<td>12,301</td>
<td>653</td>
</tr>
<tr>
<td>2021</td>
<td>Achuime</td>
<td>18</td>
<td>180,965</td>
<td>392</td>
</tr>
<tr>
<td>2022</td>
<td>Santiago</td>
<td>16</td>
<td>28,225</td>
<td>838</td>
</tr>
<tr>
<td>2023</td>
<td>Santiago</td>
<td>15</td>
<td>31,360</td>
<td>776</td>
</tr>
<tr>
<td>2024</td>
<td>Santiago</td>
<td>13</td>
<td>16,705</td>
<td>1,360</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>128</td>
<td>411,694</td>
<td>6,318</td>
</tr>
</tbody>
</table>

AP = Anti-personnel
Standards

In April 2013, under the Binational Cooperation Programme (Programa Binacional de Cooperación) established in 2000, Ecuador and Peru adopted a Binational Manual for Humanitarian Demining to unify the demining procedures of both states in accordance with the IMAS. In 2016, the Geneva International Centre for Humanitarian Demining (GICHD) was providing support to CONTRAMINAS for the Information Management System for Mine Action (IMSMA) database.

Quality Management

Until the end of 2013, the Organization of American States (OAS) provided technical and financial assistance to Peru’s mine action operations, which it initiated in May 2011 through its Assistance Mission for Mine Clearance in South America (MARMINAS). Quality management is now assured through the Peruvian Army’s Directorate General for Humanitarian Demining (DIGEDEHUME), headquartered in Lima.

LAND RELEASE

The total mined area reportedly released in 2016 was less than 48,500m². Release by clearance amounted to only 18,317m², compared with clearance in 2015 of 76,335m². A further 4,786m² was cancelled by non-technical survey while 25,748m² was reduced by technical survey in 2016. Land release operations in April 2016 through March 2017 included the destruction of 1,886 anti-personnel mines.

Peru has not yet used machines for demining, and until 2015 mine detection dogs (MDDs) were only used for quality control after clearance. In 2015, MDDs were used to identify mines for the first time. Their use should be expanded significantly to both identify the location of mined areas and to reduce and release land within those areas. Peru should seek international assistance for this work. In its revised Second Article 5 deadline extension request, Peru announced that it would be using both machines and MDDs for demining.

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMB (and in accordance with the seven years and ten months’ extension granted by states parties in 2016), Peru is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 31 December 2024. This is Peru’s second Article 5 extension.

In fact, Peru should easily be able to complete clearance by 2020 using the full range of land release techniques and efficient, targeted clearance. At least 75,000m² can be cleared each year based on a Mine Action Review of data supplied by DIGEDEHUME and on discussions with senior officials at the General Directorate.

In the last five years, though, Peru has reported clearing a total of only some 140,000m² of mined area with the destruction of about 9,500 mines (see Table 2).

Table 2: Mine clearance in 2011–15

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (m²)</th>
<th>Mines destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>18,317</td>
<td>1,886*</td>
</tr>
<tr>
<td>2015</td>
<td>76,335</td>
<td>897</td>
</tr>
<tr>
<td>2014</td>
<td>8,458</td>
<td>478</td>
</tr>
<tr>
<td>2013</td>
<td>25,715</td>
<td>2,374</td>
</tr>
<tr>
<td>2012</td>
<td>13,791</td>
<td>4,021</td>
</tr>
<tr>
<td>Totals</td>
<td>142,616</td>
<td>9,656</td>
</tr>
</tbody>
</table>

* Covers the period April 2016 to March 2017

In its revised second extension request, submitted in August 2016, Peru estimated that US$38.6 million would be needed to finish the job, all of which was due to be funded by the Peruvian government. Based on the figures it has supplied almost half of this total could be saved by completing clearance within only five additional years.

In granting Peru’s extension request, the Fifteenth Meeting of States Parties called on Peru to provide, by 30 April 2018, an updated workplan for the remaining period covered by the extension detailing the results of the activities to meet its strategic objectives, an updated list of all areas known or suspected to contain anti-personnel mines, annual projections of which areas and what area would be dealt with during the remaining period covered by the request and by which organization, and an updated budget.
Analysis of the request submitted by Peru for an extension of the deadline for completing the destruction of anti-personnel mines in accordance with Article 5 of the Convention, Submitted by the Committee on the Implementation of Article 5 (Costa Rica, Ecuador, Ireland and Zambia), §9.

Discussion with CONTRAMINAS, Lima, 14 March 2016; and with the Peruvian Army’s Directorate General for Humanitarian Demining (DIGEDEHUME), Lima, 15 March 2016.

Revised Article 5 deadline Extension Request, 20 August 2008.

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: 411,694m² as compared with 412,094m² in the first version of the request. See: Revised Second Article 5 deadline Extension Request, July 2016, p. 4.

Revised Second Article 5 deadline Extension Request, July 2016, p. 4.

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, 2016, §13.

Presentation by DIGEDEHUME, Lima, 15 March 2016.

Article 7 Report [for 2016], Forms C and F2.

Presentation by DIGEDEHUME, Lima, 15 March 2016.

Revised Second Article 5 deadline Extension Request, July 2016, pp. 5–6.

This is on the basis of 48 military deminers working for 160 days each year and each deminer clearing an average of 10m² per day. Discussion with DIGEDEHUME, Lima, 15 March 2016.

Statement of Peru, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 25 June 2015. Different figures for clearance were reported in 2016: clearance in 2013 was said to amount to 29,025m², while clearance in 2012 was reportedly of 15,377m². Presentation by DIGEDEHUME, Lima, 15 March 2016.

Revised Second Article 5 deadline Extension Request, July 2016, p. 18.

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, §e.
<table>
<thead>
<tr>
<th>MINE ACTION PROGRAMME PERFORMANCE</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: VERY POOR**

3.4 3.0
**PERFORMANCE COMMENTARY**

Senegal’s mine action programme showed very limited signs of improvement in 2016, with the commencement of survey activities in areas previously inaccessible due to security concerns in north-west Casamance, and the clearance by Handicap International (HI) of two areas covering just over 29,000m² with the destruction of 20 anti-personnel mines. Senegal’s timely submission of an updated Article 5 extension request workplan for 2016–21 is also an encouraging development. As at September 2017, however, HI was planning to end its demining operations. However, overall progress remained slow for yet another year, as Senegal continued to fail to make significant progress in meeting its legal obligations to demine as soon as possible. This failure, combined with its unwillingness to clear mines around military bases, raises serious doubt as to Senegal’s compliance with its core obligations under the Anti-Personnel Mine Ban Convention (APMBC). It is unclear whether national political will exists to address its remaining mine contamination.

**RECOMMENDATIONS FOR ACTION**

- **Senegal should complete non-technical survey as soon as possible and, where security allows, establish a more complete and accurate estimate of its remaining mine contamination.** It should revise its Article 5 workplan and extension request milestones on the basis of results from survey activities as greater clarity is gained on the extent of remaining contamination.
- **Senegal should ensure suspected hazardous areas (SHAs) are recorded on the basis of demonstrable evidence and with specific size estimates.**
- **It should prioritise clearance and technical survey in areas readily accessible that clearly evidence the existence of mines.**
- **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, as well as to restore confidence among donors and international operators in its mine action programme.**
- **CNAMS should engage the Senegalese Armed Forces to participate in mine action activities and provide information on the location of mined areas and other resources to support clearance.**
- **Senegal should clarify the total extent of contamination remaining against the inconsistencies in its reporting on progress towards implementing its Article 5 obligations and its extension request targets.**
- **Senegal should provide regular updates on any changes to the security situation which might affect its ability to meet its extension request goals and report on efforts to facilitate dialogue with stakeholders on mine action activities in the ongoing peace talks.**

**CONTAMINATION**

Senegal has still to establish an accurate assessment of the extent of its mine contamination, 18 years after becoming a state party to the APMBC. In 2016–17, it continued to report inconsistent figures for the amount of confirmed and suspected contaminated areas remaining, as it had in previous years.

According to CNAMS, as at 31 December 2016, a total of 81 areas of anti-personnel mine contamination remained to be addressed, of which 61 were confirmed hazardous areas (CHAs) with a total size of 305,486m² and 20 were SHAs with an unknown size. In addition, as in 2015, Senegal reported that 144 areas still remained to be surveyed, including 127 areas in Bignona department, 4 in Oussouye, and 13 in Ziguinchor. In April 2017, however, CNAMS also reported that 52 CHAs, of which 41 were CHAs covering a total of 529,027m² and 11 CHAs with an unknown size, remained to be addressed. Previously, at the end of 2015, Senegal had reported 83 areas of confirmed and suspected contamination with a size of nearly 1.6km². Of this, a total of 56 were CHAs with a total size of 465,127m² had been identified, and 27 were SHAs whose extent had not been defined, it said. However, in its 2017 Article 7 report, Senegal gave a different account, stating that at the end of 2015, a total of 47 CHAs with a total size of 233,840m² remained to be addressed, along with 20 SHAs with an unknown size.

Four departments (Bignona, Goudomp, Oussouye and Ziguinchor) out of the total of forty-five in Senegal still contain confirmed or suspected mined areas. The affected departments are located in the Casamance region of Senegal, between Gambia to the north and Guinea-Bissau to the south.
In 2016, HI conducted non-technical survey for the first time in 80 localities near the north-western portion of the Senegal-Gambia border in the Casamance region, which had formerly been inaccessible for mine action operations due to security concerns. Five new SHAs were established as a result of the survey. A further 11 localities in Bignona in the north-west were tasked for non-technical survey in April 2016. The survey confirmed seven areas as mined, one in the district of Niaguiss in Ziguinchor region, a second in the district of Nyassia in the department Ziguinchor, and a further five in the district of Niagha, in the department of Goudomp, in Sedhiou region.7

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.8 The extent of contamination is better known in the south of Casamance, where previous survey in the region has identified several SHAs, between the Guinea-Bissau border and the Casamance river to the north and Atlantic Ocean to the west.9

Programme Management

The National Commission for the Implementation of the Ottawa Convention serves as the national mine action authority for Senegal. Demining operations in Casamance are coordinated by CNAMS. Regional mine action coordination committees have been established in Kolda, Sédhiou, and Ziguinchor departments.

Sporadic international technical assistance was provided to the programme by the United Nations Development Programme (UNDP) in 2008–14, in particular through a technical or chief technical advisor.12

Strategic Planning

Senegal submitted an updated workplan in accordance with its Article 5 extension request in May 2017 for the remainder of its extension period, until 1 March 2021. The plan contains a list of all known or suspected contaminated areas and establishes annual targets for the amount of contamination to be addressed. However, there are inconsistencies and incompatibilities in its reporting on the total contamination remaining and the size of projected annual milestones for land release. Additionally, Senegal’s extension request is until March 2021, but the plan does not contain details of work to be carried out after 2018.

According to the updated workplan, Senegal would address 17 CHAs with a total size of approximately 169,771m² in 2017; and 24 CHAs with a size of 343,856m² and 11 CHAs with an unknown size, along with non-technical survey of the remaining 144 areas, in 2018; and any areas confirmed as CHA by survey activities in 2019–20.13 This would appear to indicate that at least 513,626m² of CHA will be addressed; however, according to Senegal’s most recent Article 7 transparency report, only about 305,000m² of CHA remained as of the end of 2016. Senegal has alternatively reported that a total of 41 CHAs with a combined size of 529,023m² would be addressed in 2017–18, along with 11 SHAs of unknown sizes; and that the 144 unsurveyed areas will be subjected to non-technical survey in 2019. It has estimated the remaining contaminated area to cover a total of 1.3km².14

The workplan does not include a detailed budget to accompany planned activities, nor does it include a resource mobilisation plan to account for how external funding will be secured.

Standards

There were no significant developments regarding Senegal’s national mine action standards in 2016. According to HI, the standards have not been updated since 2013.15

N/K = Not known

<table>
<thead>
<tr>
<th>Department</th>
<th>CHAs</th>
<th>Size (m²)</th>
<th>SHAs</th>
<th>Size (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bignona</td>
<td>19</td>
<td>34,690</td>
<td>11</td>
<td>N/K</td>
</tr>
<tr>
<td>Goudomp</td>
<td>25</td>
<td>162,994</td>
<td>0</td>
<td>N/K</td>
</tr>
<tr>
<td>Oussouye</td>
<td>13</td>
<td>77,240</td>
<td>4</td>
<td>N/K</td>
</tr>
<tr>
<td>Ziguinchor</td>
<td>04</td>
<td>30,562</td>
<td>5</td>
<td>N/K</td>
</tr>
<tr>
<td>Totals</td>
<td>61</td>
<td>305,486</td>
<td>20</td>
<td>N/K</td>
</tr>
</tbody>
</table>

Table 1: Anti-personnel mine contamination by province (as at end-2016)
Quality and Information Management

In 2016, HI reported that internal and external quality assurance (QA) and quality control (QC) was carried out on its operations, and that 25% of land processed was subjected to QC using manual deminers, machines, or dogs. It stated that CNAMS QA officers conducted at least one visit per month to each site and that the areas of Boutoute and Diagnon were sampled during the year.\(^{14}\)

CNAMS reported there were no changes to the national quality or information management systems during 2016.\(^{17}\) According to HI, CNAMS’s Information Management System for Mine Action database system was upgraded in 2015.\(^{18}\)

Operators

With new funding from the United States (US), HI initiated a new 14-month project in July 2015 for non-technical survey of 80 localities and technical survey covering some 53,000m\(^2\).\(^{19}\) In 2016, HI deployed a total of 15 deminers and 14 support personnel, two mine detection dogs (MDDs), and a mechanical excavator, which was introduced for the first time in 2016. HI stopped using the MDDs in December 2016 “due to lack of performance”.\(^{20}\) HI remained the only international mine action operator in Senegal in 2016 and as at September 2017 was preparing to end its demining operations in the country for lack of funding.\(^{21}\)

HI was also sole international demining operator in Senegal until mid-2012, when new clearance capacities were added with the arrival of Mechem and Norwegian People’s Aid (NPA). In 2014, however, NPA withdrew from Senegal as a result of “government-imposed limitations on demining activities”, which had prevented it from deploying demining resources where the necessary clearance could be done safely, and from undertaking non-technical survey in areas suspected to be contaminated but which had not been surveyed.\(^{22}\) The withdrawal was followed by loss of funding from the European Union (EU), Germany, and Norway.\(^{23}\) In 2015, Mechem ended its operations in Senegal due to lack of funding.

LAND RELEASE

The total mined area reported released by HI in Senegal in 2016 was 147,650m\(^2\): just under 118,300m\(^2\) through survey and 29,350m\(^2\) by clearance, with the destruction of 20 anti-personnel mines. In comparison, HI released 911,000m\(^2\) by survey in 2015, including just over 908,000m\(^2\) through non-technical survey and a further 3,000m\(^2\) by technical survey, but no anti-personnel mine clearance occurred.

CNAMS has reported that 21 CHAs with a size of just over 101,370m\(^2\) were released by either clearance or technical survey between 2015 and 31 March 2017, with the destruction of 22 mines.\(^{24}\) Prior to this, Senegal reported release of about 730,725m\(^2\) and destruction of 383 mines in 2008–13. Most of these results were achieved between February 2012 and May 2013 with 548,137m\(^2\) cleared, representing three-quarters of the total and 259 mines destroyed.\(^{25}\)

Survey in 2016

In 2016, HI reported confirming two mined areas with a combined size of 29,350m\(^2\), including one area in Niaguiss, Ziguinchor department with a size of 14,000m\(^2\) (22,162m\(^2\) were subsequently cleared) and one area in Goudomp, Sédiou department with a size of 15,350m\(^2\). It also cancelled seven SHAs with a total size of 62,235m\(^2\) in Goudomp. A total of 56,061m\(^2\) was reduced by technical survey.\(^{26}\) CNAMS did not, however, report that any non-technical survey was carried out in 2016.\(^{27}\)

Previously, nearly 911,000m\(^2\) of SHA was released by survey activities in 2015. HI, which began surveying in December 2015, reported that as at 31 December 2015, it had already cancelled 19 SHAs with a size of 908,000m\(^2\) and reduced a further 3,043m\(^2\) by technical survey.\(^{28}\)

Clearance in 2016

In 2016, HI cleared the two areas confirmed in Niaguiss and Goudomp with a combined size of 29,350m\(^2\), destroying 19 anti-personnel mines in Niaguiss, and 1 anti-personnel mine and 2 anti-vehicle mines in Goudomp. HI attributed the increased clearance output in 2016, along with the significant increase in land released by technical survey, to its ability to carry out additional technical survey tasks with six-months of funding provided by a Government of Senegal grant, and the use of a mechanical excavator to support manual demining.\(^{29}\)

In its updated 2016–21 workplan, CNAMS reported that nine areas with a size of 58,414m\(^2\) were cleared in 2016, and one anti-personnel mine destroyed.\(^{30}\) However, it reported differing totals that 58,594m\(^2\) was cleared in 2016, with the destruction of 19 anti-personnel mines, while also reporting separately that a total of 56,061m\(^2\) was cleared with the destruction of 18 anti-personnel mines and one anti-vehicle mine.\(^{31}\)

No anti-personnel mines were cleared in Senegal in 2015. CNAMS has given conflicting accounts that two areas with a size of 29,156m\(^2\) were cleared in 2015, while also stating that a total of 3,043m\(^2\) was cleared during the year; however no anti-personnel mines were reportedly found according to either claim.\(^{32}\)

Deminer safety

There were no accidents involving deminer safety in 2016. The last reported incident occurred in 2013, when a number of Mechem deminers working in the village of Kaïlou (Ziguinchor department) were kidnapped, some of whom were held for 90 days, although all were later safely released.\(^{33}\)
Inconsistency in Clearance Task Orders Since 2013

Senegal has been criticised for issuing task orders assigning clearance assets to areas not known to be affected by mines. It has also been accused of failing to clear considerable mine contamination in unmarked minefields around former and active Senegalese military bases, despite being readily accessible and under the control of the Senegalese Armed Forces.

In November 2013, Mechem, operating with funds administered by UNDP, was tasked to clear sections of National Road 6 (Route nationale 6, RN6) and a dozen laterite quarries used in a project to renovate the RN6, in areas not known to be affected by mines.34 However, Senegal cited its political-security situation to justify deployment of its clearance assets in areas where the safety of its demining teams could be guaranteed.35

According to HI, when task orders were given in November 2013, only one polygon crossed by the RN6 in Sindone Lagoua (20km from Ziguinchor) was recorded as an SHA in the IMSMA database, and the quarries had never been recorded as suspected or confirmed mined areas.36

Additionally, reports indicated that considerable mine contamination may lie in unmarked minefields around former and active Senegalese military bases.37 But since the resumption of clearance operations and even though most of the military bases can be readily accessed – as they are under the control of the Senegalese Armed Forces – they have not been cleared nor even considered as a priority for demining operations. Some areas are confirmed as contaminated: these include the village of Djirack, in which operations were planned to start in 2016 though this did not occur, reportedly for logistic and security reasons.38 Others remain as either SHAs or as credible, if unrecorded and unconfirmed, reports of contamination by local populations, such as in Badème, Basséré, Kouring, and Santhiaba Mandjack.39

Some clearance around military installations was carried out by HI in 2007–12 in Darsalam and Gonoum, during which 177 anti-personnel mines were destroyed in cooperation with the Senegalese armed forces, and by Mechem in 2013 in Mpack, during which 136 anti-personnel mines were destroyed (representing all the mines found that year).40

In August 2016, CNAMS reported that in its criteria for prioritising tasks, emphasis was put on the level of security, the economic importance of the area, the desire of populations to return to areas, and the social cohesion of communities.41 It reported that “indeed, there is a significant amount of land demined in relation to the number of mines discovered”, while claiming that “it must be remembered that the main interest is to remove suspicion and to make accessible to local populations land which had formerly been abandoned”.42

In 2017, HI reported that task criteria were developed according to the results of the non-technical survey carried out by HI in 2014, and updated information from further survey in 2016 and priorities reported by the local communities.43 It reported, however, that more than 50% of areas cleared in 2016 had no evidence of anti-personnel mine contamination.44

**ARTICLE 5 COMPLIANCE**

Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2015), Senegal is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2021.45

In granting the second extension request in December 2015, states parties noted that Senegal “did not have clear knowledge of the size and location of areas that will warrant mine clearance” as well as its commitment “to undertake technical survey activities and to develop a cancellation procedure which may result in implementation proceeding much faster and in a more cost-effective manner”.46

Senegal has claimed that the circumstances impeding compliance with its international legal obligations include general insecurity; MFDC reticence to agree to demining operations; the eight-month suspension of operations in 2013; ongoing concerns over deminer safety; and a decrease in technical and financial resources in recent years.47 Senegal has also stated that security conditions and lack of funding could affect its ability to complete clearance in a timely manner.48

In fact, since 2013, the apparent wilful lack of land release and concrete political will to address its mine problem, and as a consequence, the inadequate use of clearance capacities, have prevented Senegal from fulfilling its Article 5 obligations. This led to the withdrawal of a major operator and the loss of financial support from key donors, explaining in part the sharp reduction in its clearance capacities. Indeed, while Senegal recorded a significant increase in clearance productivity in 2012–13, the way CNAMS has allocated tasks after the 2013 kidnapping has been criticised for directing resources and clearance assets to areas without credible risk of mine contamination, while requests from operators to conduct survey prior to deploying clearance assets were denied.49

Senegal’s 2015 extension request foresees expenditure of some US$11.5 million to support its mine action programme, of which $6.4 million would be allocated to technical survey and clearance. Senegal has pledged to contribute to about 30% of the total to cover the running costs of its programme (approx. $3.3 million).50 Senegal’s updated workplan for 2016–21 does not, though, include a detailed budget for activities scheduled under its annual targets. It notes that Senegal’s own annual contribution in 2015–16 was nearly $1.8 million and that external funding of $781,478 was provided by the United States to HI.51

In its Article 7 report for 2016, Senegal claimed that FCFA 500 million [some US$850,000] would be assigned for mine action from the national budget annually.52 According to CNAMS, its operating costs are included in the national budget, but reported that resources allocated for 2015 were not able to be mobilised until late 2016, due to complex procurement procedures. No national budget allocation for mine action operations had been recorded for 2017, it said.53 Positively, however,
in April 2017, HI reported that following the release of a local call for tender by the Senegalese Ministry of Foreign Affairs, HI received a six-month grant for mine action of FCFA 122.6 million (approximately US$200,000).54

Senegal’s submission of an updated workplan for 2016–21 in accordance with its Article 5 extension obligations is encouraging. However, serious questions remain about the likelihood of its implementation, which is highly dependent on security conditions. Senegal has regularly indicated that all demining operations would be conducted within the framework of the ongoing peace talks and would first be approved by MFDC in meetings with Senegalese officials.55 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.54 There is no explanation in the action plan presented in Senegal’s second extension request of how peace negotiations conducted in Dakar by the Reflection Group on Peace in Casamance (Groupe de Réflexion sur la Paix en Casamance, GRPC) will include the issue of mine clearance.

In August 2017, CNAMS reiterated that the implementation of the revised workplan and the feasibility of the 2021 mine clearance deadline are based on the assumption that the GRPC obtains the MFDC’s agreement on the inclusion of demining activities in the peace process, in order to allow for the rapid deployment of demining teams.56 In the workplan, CNAMS stated that it was unable to provide detailed updates on the development of the peace process as it is not a member of the GRPC negotiation group. However, it reported that events in the Gambia had improved the security situation in the north of Casamance, particularly in the department of Bignona, allowing significant numbers of displaced persons to return. It expected that the continued evolution of the peace process would ensure better security conditions and improve access for mine clearance in planned locations.54

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.59

Along with the timely submission of the updated workplan in 2017, the extension of survey into previously inaccessible areas and limited clearance in 2016 are also positive developments, after previous years of stagnation in mine action operations, and Senegal’s apparent reluctance to deploy clearance assets in CHAs, such as around military installations. Senegal still lacks a comprehensive understanding of its mine problem and concerns have been raised that its continued failure to clear contaminated areas around existing military bases verges on use of anti-personnel mines, a violation of Article 1 of the APMBC. According to NPA, there is overwhelming evidence that laying of landmines by rebel forces was sporadic, while the Sudanese Armed Forces placed hundreds, if not thousands, of mines around military outposts in Casamance.60

However, in August 2017, CNAMS informed Mine Action Review that CNAMS has already demined around all the military bases, with the help of the army where that was necessary.61 Mine Action Review has found scant evidence to support this claim. HI has reported, though, that its teams cleared 22,162m² in Boutoute-Djibanar in connection with a former army base between 24 April 2015 and 23 December 2016, destroying “around” 19 anti-personnel mines.

In April 2017, HI was optimistic that Senegal can still meet its Article 5 deadline of 1 March 2021 as an increase in funding was foreseen and the security situation in the region was improving.62 However, it noted that key challenges such as the presence of undetectable anti-personnel mines remained, along with the need to optimise the use of mine action assets dependent on levels of funding received.63 As at late September 2017, however, HI was ending operations in Senegal for lack of funding.

In August 2017, CNAMS had reiterated its three priorities for meeting Senegal’s 2021 Article 5 deadline: agreement of all parties to the conflict on the principle of clearance of mined areas; access to conduct non-technical survey in the 144 communities not yet surveyed; and mobilisation of resources to enable increased demining productivity.64
2018 have a size of “343,856.451m²”. Senegal’s 2017 Article 7 report, Jean-Michel Mathiam, HI. 2017, incorporating input from Jason Mudingay Lufuluabo and Ibid. In March 2013, clearance operations were progressing rapidly as a consequence of the new demining capacity brought by Mechem and NPA. As they approached MFDC-controlled areas, a faction of the rebel group called publicly for a halt to humanitarian demining on the ground that clearance teams had reached a “red line beyond which operators’ safety could not be guaranteed”. Joint Press Release from MFDC, CNAMS, Geneva Call, the Sao Domingos Prefect, and APRAN-SDP, 20 March 2013.

46. Analysis of Senegal’s request for a second Article 5 deadline extension submitted by the Committee on Article 5 Implementation, 17 November 2015, p. 1.

Ibid., p. 22.

Ibid.

Ibid.

Ibid.

Senegal’s 2017 Article 7 report, Jean-Michel Mathiam, HI.

49. Millet, “Clearance and Compliance in Casamance: is Senegal doing all it should?”.

50. Analysis of Senegal’s request for a second Article 5 deadline extension submitted by the Committee on Article 5 Implementation, 17 November 2015, p. 28.


52. Article 7 Report (for 2016), Form D.

53. Email from Ibrahima Seck, CNAMS, 18 August 2017.

54. Email from Ibrahima Seck, CNAMS, 18 August 2017.


57. Email from Ibrahima Seck, CNAMS, 18 August 2017.


Ibid.

Ibid.

Ibid.

Ibid.

Email from Ibrahima Seck, CNAMS, 18 August 2017.

Email from Ibrahima Seck, CNAMS, 18 August 2017.
### Mine Action Programme Performance

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

**Performance Score: Average**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance Score</strong></td>
<td>5.4</td>
<td>5.6</td>
</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

In 2016, Serbia did not release any mined area. Serbia submitted a revised Anti-Personnel Mine Ban Convention (APMBC) implementation workplan, including updated milestones towards meeting its 2019 clearance deadline. However, the modest funds for demining allocated from Serbia’s national budget, alone, are not sufficient to implement the workplan, and Serbia is hindered by a lack of international funding. A re-assessment of the potential for increased use of technical survey by the Serbian Mine Action Centre (SMAC), taking into account Serbia’s context-specific challenges and risk management requirements, is needed to improve land release efficiency and may help Serbia attract greater international support.

RECOMMENDATIONS FOR ACTION

■ Serbia should commit more national resources for survey and clearance of mined areas, in order to fulfil its Article 5 obligations as soon as possible.
■ SMAC should not conduct full clearance in areas where appropriate use of non-technical and technical survey would be more efficient in defining the actual hazardous area.

CONTAMINATION

As at 1 April 2017, 13 suspected hazardous area (SHAs) in Bujanovac covering more than 2.63km² were suspected to contain anti-personnel mines (see Table 1). This represents a slight increase, compared to the estimated 1.94km² of mined area across 13 suspected mined areas as at February 2016, and is due to newly identified mined area discovered during non-technical survey conducted by SMAC in 2016.

Previously, for 2013, Serbia had reported 1.2km² of confirmed mined area and 2km² of suspected mined area. However, SMAC subsequently decided to re-categorise all confirmed areas as only suspected, based on a reassessment of earlier survey results that revealed a small number of mines across a relatively large area. In line with more efficient land-release methodology, which emphasises the need for evidence to confirm areas as hazardous, in 2015 SMAC announced its intention to use an integrated approach using survey, manual demining, MDDs, and other assets to cancel suspected areas without contamination, and thereby reduce to a minimum the area confirmed as mined, which would be subject to full clearance. However, following a change of director in the final quarter of 2015, the decision was taken to prioritise clearance over survey.

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. Contamination also exists within Kosovo (see separate report).

Table 1: Anti-personnel mine contamination by village (as at April 2017)

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Village</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bujanovac</td>
<td>Ravno Bučje</td>
<td>3</td>
<td>575,020</td>
</tr>
<tr>
<td></td>
<td>Končulj</td>
<td>5</td>
<td>1,181,820</td>
</tr>
<tr>
<td></td>
<td>Dobrosin</td>
<td>1</td>
<td>248,000</td>
</tr>
<tr>
<td></td>
<td>Breznica</td>
<td>1</td>
<td>275,800</td>
</tr>
<tr>
<td></td>
<td>Djordjevac</td>
<td>1</td>
<td>145,100</td>
</tr>
<tr>
<td></td>
<td>Lučane</td>
<td>1</td>
<td>73,200</td>
</tr>
<tr>
<td></td>
<td>Turija</td>
<td>1</td>
<td>131,400</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>13</td>
<td>2,630,340</td>
</tr>
</tbody>
</table>
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). The Sector for Emergency Management is responsible for developing standard operating procedures (SOPs), accrediting demining operators, and supervising the work of SMAC. 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, license demining organisations, and conduct risk education. A new director of SMAC was appointed by the Serbian government in the autumn of 2015. SMAC reported that in 2016, restructuring resulted in a greater proportion of operational posts among its staff, with personnel dedicated to survey, project development, and quality control.

Standards

According to SMAC, survey and clearance operations in Serbia are conducted in accordance with the International Mine Action Standards (IMAS). National mine action standards (NMAS) were said to be in the final phase of development as at September 2015. In February 2016, however, the new director of SMAC reported that the NMAS were still being developed, and due to more pressing priorities within SMAC, would not be finalised until 2017. 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/SOPs to define methods and techniques for humanitarian demining in Serbia. However, this process has been hindered due to lack of human capacity and resources. Under new directorship, SMAC has reassessed its land release methodology for addressing mine contamination remained the same as at May 2017. 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.

According to SMAC, in the context of Serbia, there is limited potential to obtain additional information on the location of mined areas from those who laid the mines during the conflict. SMAC uses the results of the non-technical survey to “enable the defining of confirmed hazardous areas for which SMAC develops corresponding project tasks to commence demining tasks. Critical to this is the cancellation of areas registered as mine suspected areas that, through survey, are confirmed not to contain mines (in accordance with IMAS).” SMAC’s primary objection 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 clusters of unrecorded mines. Most of the remaining suspected mined areas in Serbia are mountainous with challenging terrain and thick vegetation. The fact that these areas have not been accessed since the end of the conflict, due to suspicion of mines, means that the land is unmanaged, making it even less accessible. SMAC deems that most of the suspected mined areas are therefore, not appropriate for the use of MDDs or machinery.

In response to the stated preference of international donors for technical survey above clearance, however, where appropriate, SMAC is prepared to conduct technical survey, in a form adjusted to the context of Serbia.

Quality Management

SMAC and its partner organisations undertake quality assurance (QA) and QC of clearance operations in mine- and ERW-affected areas. On every clearance project, SMAC QC and QA officers are said to sample between 5% and 11% of the total project area, depending on project complexity and size.
Information Management

SMAC does not use the Information Management System for Mine Action (IMSMA) at present, but has been discussing for some time the possibility of the system’s future installation with the Geneva International Centre for Humanitarian Demining (GICHD). However, as at April 2017, SMAC confirmed there had been no progress in these discussions.

Operators

SMAC does not itself carry out clearance or employ deminers but does conduct survey of areas suspected to contain mines, cluster munition remnants (CMR), or other ERW. Clearance is conducted by commercial companies and non-governmental organisations (NGOs), which are selected through public tender procedures executed by ITF Enhancing Human Security. No mine clearance operations were conducted in Serbia in 2016.

LAND RELEASE

No mined area in Serbia was released by survey or clearance in 2016.

Survey in 2016

SMAC reported that it conducted non-technical survey in 2016 and early 2017, which resulted in an increase of almost 0.7km² in SHA.

No land was reported as released through clearance or survey in 2016, which represents a decrease compared to 2014 when 0.41km² was cleared. The failure to release land in 2016 was reported to be due to lack of funding.

Serbia announced in May 2016 that the tender process for implementation of 2016 mine clearance projects in Konculj, Ravno Vucje, Turisko Brdo, and Tustica, was due to be concluded in the near future. In December 2016, however, Serbia confirmed that fund matching had not been received in 2016, and the clearance projects could not be implemented.

Progress in 2017

In 2017, SMAC reported that it had developed a technical survey project for 2017, totalling almost 1km², which will confirm or reject suspicion of mine contamination in the project area. Area confirmed as contaminated will then be subject to clearance, and the remaining area cancelled. Having submitted the project to the ITF Enhancing Human Security, SMAC secured funding for the project from national sources matched by international funding from the United States. As at August 2017, tender procedures were being finalised for the selection of a contractor.

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2013), Serbia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2019. Serbia is not on track to meet this deadline.

As late as May 2012, Serbia had hoped to meet its original Article 5 deadline, but in March 2013 it applied for a five-year extension. In granting the request, the Thirteenth Meeting of States Parties noted that “implementation could proceed much faster if Serbia was able to cover part of demining costs and thereby become more attractive for external funding.” The states parties further noted that the plan presented by Serbia was “workable, but it lacks ambition, particularly given the small amount of mined area in question.”

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 its extension request estimate of remaining contamination or plans for the extension period.

Table 2: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td>0.41</td>
</tr>
<tr>
<td>2014</td>
<td>0.27</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>0.16</td>
</tr>
<tr>
<td>Total</td>
<td>0.84</td>
</tr>
</tbody>
</table>
Serbia has fallen behind the clearance plan it set out in its 2013 Article 5 deadline extension request, which envisaged clearance of just under 0.49km² in 2013; just over 0.57km² in 2014; and just over 4.1km² in 2015. In its original extension request Serbia also predicted it would complete survey by the end of 2015, which it did not achieve. In 2015, Serbia reported that it had adjusted its extension request plan and predicted that of the remaining 2.85km² of mined area, some 1.2km² would be surveyed in 2015 and the remaining 1.65km² in 2016. Of this, Serbia expected to clear a total of 1.6km² by 2018: 0.4km² in 2015, 0.6km² in 2016, and 0.6km² in 2017.

In March 2016, Serbia submitted an updated workplan to the APMBC Implementation Support Unit, announcing plans to address 0.8km² in 2016; 0.6km² in 2017; and 0.52km² in 2018; and to carry out “additional check-up and verification” in 2019.

However, Serbia was already falling behind on the 2016 updated workplan, as no land was released in 2016. Furthermore, non-technical survey resulted in an increase of 0.7km² in the total mined area. In April 2017, Serbia included a new updated completion workplan in its Article 7 transparency report. It now plans to address five areas totalling 1km² in 2017; five areas totalling 1.2km² in 2018; and three areas totalling 0.45km² in 2019. Serbia cautioned that implementation of clearance projects might be affected by funding, but that if additional funds were provided, the work could be completed more quickly.

In addition, Serbia reported that it faced additional challenges in complying with its Article 5 deadline, noting again that the remaining mine contamination is of an unknown origin, with mines having been emplaced with no particular pattern and without minefield records; climatic conditions preventing access to some contaminated areas for parts of the year; and challenges posed by contamination from CMR and other unexploded ordnance (UXO). While its latest Article 7 report does include Serbia’s intention to undertake non-technical survey to delineate confirmed mined areas for clearance and cancel areas with no evidence of mine-contamination, the report does not make any reference to the use of technical survey, and only references the use of full clearance to release confirmed mined areas.

Since 2015, Serbia has been allocating funds for demining. In 2016, around €150,000 was allocated to SMAC from the Serbian national budget for salaries and running costs, and SMAC’s project and survey activities, in addition to €100,000 for survey and clearance operations. Serbia did not receive funding from international donors in 2016.

The same amount of national funding was maintained in 2017. As at May 2017, SMAC reported that national funds had been allocated for mine clearance operations in 2017, and that SMAC was in discussions with donors to match these funds.

Serbia has stated that despite economic difficulties and the lack of national funding it remains strongly committed to making Serbia mine-free by 2019, and will make all efforts to meet its Article 5 deadline. However, no land was released by survey or clearance in 2016, and unless funds are secured to implement Serbia’s latest updated completion plan, it seems extremely unlikely that Serbia will meet its deadline.
31 Email from Branislav Jovanović, SMAC, 4 May 2015.
32 Ibid.
33 Ibid.
34 Email from Sladana Košutić, SMAC, 6 April 2017.
36 Email from Sladana Košutić, SMAC, 6 April 2017; and Article 7 Report (for 2016), Form D.
37 Email from Sladana Košutić, SMAC, 6 April 2017.
38 Emails from Darvin Lisica, NPA, 13 April and 6 May 2016.
39 Emails from Darvin Lisica, NPA, 11 April 2017; and Sladana Košutić, SMAC, 6 April 2017.
40 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017.
41 Email from Sladana Košutić, SMAC, 6 April 2017.
42 Ibid; Article 7 Report (for 2016), Form D; and Statement of Serbia, Intersessional meeting, Geneva, 8 June 2017.
44 Email from Sladana Košutić, SMAC, 6 April 2017; and Article 7 Report (for 2016), Form D.
45 Statement of Serbia, Intersessional Meetings (Committee on Article 5 Implementation), Geneva, 19 May 2016.
47 Email from Sladana Košutić, SMAC, 4 August 2017; and Article 7 Report (for 2016), Form D.
48 Statement of Serbia, Intersessional meetings (Standing Committee on Mine Action), Geneva, 23 May 2012.
49 Analysis of Serbia’s Article 5 deadline Extension Request, submitted by the President of the 12th Meeting of States Parties on behalf of the States Parties mandated to analyse request for extensions, 2 December 2013.
51 Article 7 Report (for 2014), Form F.
52 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 ISU, 3 March 2016, and provided to Mine Action Review by the ISU upon request.
53 Email from Sladana Košutić, SMAC, 6 April 2017; and Article 7 Report (for 2016), Form D.
54 Article 7 Report (for 2016), Form D.
55 Ibid.
56 Ibid., Forms D and E.
57 Article 7 Report (for 2016), Form D.
58 Email from Sladana Košutić, SMAC, 6 April 2017; interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and Article 7 Report (for 2016), Form D.
59 Statement of Serbia, 15th Meeting of States Parties, Santiago, 29 November 2016; and Article 7 Report (for 2016), Form D.
60 Email from Sladana Košutić, SMAC, 6 April 2017; interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017; and Article 7 Report (for 2016), Form D.
61 Interview with Jovica Simonović, SMAC, Belgrade, 16 May 2017
62 Statements of Serbia, Intersessional meetings (Committee on Article 5 Implementation), Geneva, 19 May 2016, and 15th Meeting of States Parties, Santiago, 29 November 2016; and email from Sladana Košutić, SMAC, 6 April 2017.
Despite the initiation of survey activities along the Somali-Ethiopia border, considerable further efforts are needed to establish a baseline of anti-personnel mine contamination across Somalia. There is a need for much greater support for the Somalia Explosive Management Authority (SEMA) to enable it to assume an effective leadership role over mine action. Operators would welcome a greater focus on the implementation of mine action operations.
RECOMMENDATIONS FOR ACTION

- Greater priority needs to be accorded to demining by Somalia, including for survey. Somalia should ensure timely survey and clearance of anti-personnel mines in accordance with its Anti-Personnel Mine Ban Convention (APMBC) obligations.
- The Federal Government of Somalia should intensify efforts to improve security conditions in areas contaminated with mines and explosive remnants of war (ERW) to allow for the safe deployment of mine action teams.
- Somalia should ensure timely survey and clearance of anti-personnel mines in accordance with its Anti-Personnel Mine Ban Convention (APMBC) obligations.
- Somalia should be more aware of, and commit more resources for SEMA and mine action operations.
- SEMA should be supported to secure parliamentary approval for its legislative framework and to gain recognition as a salaried civil service government entity.
- SEMA should clarify its structure, organigram, and staffing and ensure greater cohesion between its five Federal State offices and state-level consortiums.

CONTAMINATION

As a result of the Ethiopian-Somali wars in 1964 and 1977–78 (also known as the Ogaden war), and more than 20 years of internal conflict, Somalia is significantly contaminated with mines and ERW. According to the United Nations (UN), anti-personnel and anti-vehicle mines were laid as recently as 2012 in the disputed regions of Sool and Sanaag.1

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.

No comprehensive estimates yet exist of mine and ERW contamination in Somalia. However, 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.2 Other contaminated areas lie along the border with Ethiopia, in Galgudud, Gedo, and Hiraan regions.3 Non-technical survey initiated in 2015 identified more than 6km² of mined area and found that 74 of 191 communities were impacted by mines and ERW, of which 13 reported an anti-personnel mine threat.4

In Somaliland, The HALO Trust reported that as at June 2017, a total of 16 mixed anti-personnel and anti-vehicle minefields remained to be cleared with a size of just over 1.6km², the majority of which are barrier minefields or military base perimeter minefields.5

In the Puntland state administration, mine and ERW contamination was assessed during Phase 2 of a Landmine Impact Survey (LIS), implemented by the Survey Action Centre (SAC) and the Puntland Mine Action Centre (PMAC) in the regions of Bari, Nugaal, and the northern part of Mudug.6 The LIS was conducted from February to April 2005 and identified 35 communities affected by a total of 47 suspected hazardous areas (SHAs). The LIS estimated that about 151,000 people – around 6% of the population of some 2.5 million – live in mine-affected communities.7

Insecure and poorly managed stockpiles of weapons and ammunition, as well as use of improvised explosive devices (IEDs), including locally produced mines, 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.8

In 2017, the United Nations Mine Action Service (UNMAS) reported that mine and ERW contamination in Somalia continued to restrict community access to basic services and economic opportunities and remained an impediment to stability, security, and ultimately, recovery and development.9 The HALO Trust reported that threats of minefields constrained pastoral herders from moving their flocks freely and accessing important water sources, which in a harsh desert climate plagued by famine and drought, are essential for community survival.10

According to The HALO Trust, in Somaliland anti-personnel mine contamination continued to present an ongoing threat to life among the primarily pastoralist populations, which rely heavily on agriculture and land for livestock grazing. These groups are constantly moving across Somaliland, putting herders and animals at higher risk from the threat of mines and ERW, it said.11
PROGRAMME MANAGEMENT

According to SEMA, as at October 2016, mine action management in Somalia was "temporarily" divided into two geographical regions: Somalia and Somaliland. The respective centres responsible for mine action in each of these areas are SEMA and the Somaliland Mine Action Centre (SMAC). SEMA reported that it maintains a presence across Somalia through its five Federal State members, the SEMA Puntland State Office, SEMA Galmudug State Office, SEMA Hirshabelle State Office, SEMA South West State Office, and SEMA Jubaland Office. Under each of the five Federal State members is an independent consortium of local NGOs.

SEMA was established in 2013 as the mine action centre for southern Somalia, replacing the Somalia National Mine Action Authority (SNMAA) created two years earlier. SEMA's goal was to assume full responsibility for all explosive hazard coordination, regulation, and management by December 2015. UNMAS reported that "significant steps" were made in late 2015 towards "the transfer of responsibilities to a national authority" with Somalia's Council of Ministers endorsing SEMA's legislative framework, policy, and budget, making it responsible for managing and coordinating all contamination in Somalia.

In June 2016, SEMA reported that its legislative framework was still awaiting the approval of the Federal Parliament. However, parliamentary elections which began in September 2016 resulted in a period of government paralysis and the legislative framework was not adopted. Due to the lack of parliamentary approval, SEMA did not receive government funding in 2016, nor had it received any financial assistance from UNMAS since December 2015. A seven-month grant from UNMAS expired in December 2015, under which SEMA was expected to have established itself as a sustainable national mine action institution.

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, PMAC has coordinated mine action with local and international partners, including Danish Demining Group (DDG) and Mines Advisory Group (MAG). It runs the only police explosive ordnance disposal (EOD) team in Puntland, which is responsible for collecting and destroying explosive ordnance.

Somaliland

In 1997, UNDP assisted the government of Somaliland to establish SMAC, which is responsible for coordinating and managing demining in Somaliland. Officially, SMAC is under the authority of the Vice-President of Somaliland, who heads the interministerial Mine Action Steering Committee. The HALO Trust reported that meetings with SMAC were convened on a monthly basis in 2016.

Strategic Planning

SEMA developed a national mine action policy, which as at September 2017, had received one reading in the Somali Parliament but had yet to be ratified. The document only existed in Somali and no translations were available, nor had any versions been disseminated to national or international mine action operators. Operators raised concerns that the policy was drafted with little to no input from international mine action stakeholders or the international donor community. NPA reported, however, that it was intended that the policy would be translated and shared with mine action operators in 2017 as part of a UK Department for International Development (DFID)-funded capacity building project.

In 2017, the recently elected Somali Government approved The Somalia National Development Plan 2017–2019, outlining priorities for recovery and development. Mine and ERW contamination is recognised as a hindrance to socio-economic development and a security concern for sustainable development initiatives, and clearance is identified as a crucial part of stabilisation efforts in the national development process.

In 2015, the Federal Government of Somalia’s Ministry of Internal Security and SEMA developed a national strategy document, the "Badbaado Plan for Multi-Year Explosive Hazard Management", in coordination with Federal State members, the UN Assistance Mission in Somalia (UNSOM), and UNMAS. The plan’s overarching objective is to support the Federal Government in fulfilling its obligations under the APMBC and the Convention on Cluster Munitions, with a focus on national ownership through the institutional development of SEMA federal state entities, the training of national police EOD teams, and the creation of employment opportunities for local Somalis, including from at-risk groups such as youths and former combatants, to undertake clearance operations in their own communities. A separate plan was developed for explosive hazard management by the police. As the Badbaado Plan sets out its duration as "the next 2 or 3 years", an updated national strategy document will need to be developed, and as at September 2017, NPA reported that discussions were underway to begin this process with SEMA.

Somaliland’s latest strategic mine action plan expired in 2014. In May 2017, HALO Trust reported that it intended to work with SMAC to develop a mine action strategy in 2017–18.

Standards

UNMAS developed NTSGs for Somalia in 2012–13. The NTSGs are not, however, specific to the Somali context, and in 2017, there were calls for their review and revision to ensure they represent best practices for tackling the specific explosive threat in Somalia.

Mine action standards remained in place in Somaliland with no changes reported in 2016.
Quality Management

NPA reported that SEMA conducted external quality assurance (QA) of its battle area clearance (BAC) tasks during 2016. The HALO Trust said that no external QA of its tasks was conducted in 2016 and reported that, as at May 2017, only one visit by a SEMA representative had occurred since the start of the year. No field visits to conduct QA by international managers could be carried out due to security concerns, it said. In June 2017, SEMA confirmed that clearance projects had been initiated without a strong QA/quality control (QC) process in place and called for further capacity building of SEMA to carry out QA/QC before awarding future contracts.

In Somaliland in 2016, HALO Trust reported that SMAC returned to conducting formal handovers of completed cleared areas after a lack of funding prevented it from doing so in 2015. The HALO Trust was working with SMAC to reduce the backlog of cleared areas awaiting handover as a result.

Information Management

No changes were reported to the quality of the national IMSMA database nor were there significant developments in information management in 2016. In July 2017, UNMAS reported having made several attempts to hand over the IMSMA database to SEMA, but said that lack of capacity within SEMA had left the agency unable to accept the responsibility. UNMAS was continuing to process the data as an interim measure until SEMA has sufficient capacity to administer the database on its own. NPA reported in September 2017, however, that SEMA, with assistance from NPA, had developed new IMSMA reporting formats to be used by operators for the duration of 2017 and that UNMAS had submitted all recent reports to SEMA for inclusion into the database. It said that SEMA had two staff working with the database with NPA’s support.

In Somaliland, HALO Trust reported continuing regular checks of its information management system to ensure accuracy of reporting and stated that it transfers all data to SMAC, which then inputs it into its IMSMA database.

Operators

DDG began operations in the country in 1999 with mine and ERW clearance in Somaliland and has since undertaken programmes in Mogadishu, Puntland, and Somaliland. In 2016, DDG continued to focus its activities on EOD and risk education and did not conduct any mine or BAC.

While 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 to conduct survey and clearance in southern Somalia. Its capacity increased from 38 staff at the start of the year to 185 in December 2016, due to a planned enlargement of mine clearance operations. It reported significant gains in training and technical competence, and correspondingly in clearance output, during the year.

In 2016, MAG continued its arms management and destruction programme across south-central Somalia, Puntland, and Somaliland. MAG previously conducted non-technical survey and EOD in Puntland, along with training and support to police EOD teams, but halted its mine action programme in August 2013. In 2016, MAG mobilised six teams through partners to provide risk education to both communities and returnees at way stations as they entered southern Somalia. Additionally, it sought further funding to support the Puntland police EOD teams but was not successful.

In 2016, NPA conducted BAC around Mogadishu and the Banaadir region, and initiated assessment activities as part of a capacity-building programme for SEMA.

From 1 September 2015 to 31 May 2016, UNMAS contracted the Ukrainian commercial operator Ukrboronservice to undertake mine action-related tasks in south-central Somalia. It deployed four MTTs along with nine community liaison officers in support of AMISOM projects to conduct survey and clearance of ERW, main supply route assessments, stockpile and ammunition management, and explosive hazard risk education. Ten government police EOD teams were also deployed in Somalia.

In Somaliland, HALO Trust’s programme deployed three mechanical assets and employed 427 demining personnel, as well as 94 support staff and 51 temporary staff from local communities in 2016.

LAND RELEASE

Just over 1.2km² of land was released in total in Somalia and Somaliland in 2016, including nearly 0.04km² through mine clearance in Somalia, and close to 1.2km² of mined area through survey and clearance in Somaliland. No anti-personnel mines were cleared in Somalia, though 5.3km² was confirmed as mined through survey.

This compares to 2015, when approx. 1.8km² of mined area was released through survey and clearance in Somaliland. As in 2016, no areas containing mines were released in Somalia, but 6km² of area was confirmed as mined by survey.

No formal land release occurred in Puntland in 2016; operations consisted only of risk education and EOD spot tasks. In Puntland, very little mine clearance has been conducted since the LIS was completed in 2005. According to MAG, the impact from mines is still unclear and further non-technical and technical survey is required to ensure the cost effectiveness and positive impact of future clearance.
Survey in 2016
No comprehensive overview of SHAs exists in Somalia, and as at 2017, no nationwide survey had been conducted, mainly due to the security situation.56

In 2016, HALO Trust reported confirming nearly 5.3km² of mine contamination, including just over 3.3km² in the Hiran region of Hirshabelle state, 1.1km² in the Galgudud region of Galmudug state, and 0.8km² in the Bakool region of South-West state.57 Previously, from the deployment of its teams in May 2015–31 December 2015, HALO Trust reported confirming over 6km² of mined areas in southern Somalia, including more than 75 minefields through non-technical survey.58

As at June 2017, HALO Trust reported that since operations began in May 2015, it had surveyed a total of more than 16km² of hazardous area in southern Somalia.59

The HALO Trust informed Mine Action Review that it was conducting non-technical survey activities in southern Somalia under methodology developed on the basis of experience gained in Somaliland. Under this methodology, all areas recorded by non-technical survey are treated as confirmed hazardous areas.60

In 2017, HALO Trust reported that experienced non-technical survey team supervisors from Somaliland were overseeing and building the capacity of survey teams in southern Somalia, but acknowledged that some areas surveyed may require refinement and a “progressive approach” to land release. 61

In Somaliland in 2016, HALO Trust confirmed a total of two areas with a size of just over 86,000m² as mined and reduced close to 52,650m² through technical survey.62 In contrast, in 2015, HALO Trust reported cancelling three areas with a total size of nearly 0.1km² and confirming a further 2.5km² as mined.63

Clearance in 2016
From the initiation of clearance activities in the last quarter of 2016, HALO Trust reported clearing three mined areas covering just over 40,000m² in southern Somalia: one in Hiran region, Hirshabelle state, with a size of 5,169m² and two in Galgudud region, Galmudug state, covering 34,860m². No mines or unexploded ordnance (UXO) were found.44 No anti-personnel mine clearance was carried out in southern Somalia in 2015.

NPA did not commence mine clearance activities in south Somalia until March 2017.64 During 2016, it operated three BAC teams for surface ERW clearance in Mogadishu and its outskirts.65

In Somaliland in 2016, HALO Trust reported clearing 12 areas of anti-personnel mine contamination with a size of just over 1.1km² with the destruction of 109 anti-personnel mines, 51 anti-vehicle mines, and 33 items of UXO. It completed 153 EOD call-outs, resulting in the destruction of a further 12 anti-personnel mines, 18 anti-vehicle mines, and 132 items of UXO.67 This was a slight decrease from 2015, when just over 1.6km² containing anti-personnel mine contamination was cleared, with the destruction of a total of 104 anti-personnel mines, 44 anti-vehicle mines, and 192 items of UXO, along with a further 12 anti-personnel mines destroyed in EOD spot tasks.68 HALO Trust reported that the decrease in clearance output was in part due to the fact that many high density areas of anti-personnel mine contamination have already been addressed and comparatively more land containing anti-vehicle mine contamination remains.69

Deminer Safety
In September 2016, two HALO Trust staff were killed and one permanently disabled in a shooting incident in Galmudug state. The HALO Trust reported that the incident was due to a conflict between rival sub-clans and was not directly targeted at its operations. Nevertheless, it was forced to withdraw from Galmudug as a result.70

ARTICLE 5 COMPLIANCE
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.

In seeking to meet its treaty deadline, Somalia must confront a number of challenges, not least of which is the security situation in much of the country. It does not effectively control mine action operations in Somaliland.

In May 2017, HALO Trust and NPA reported that it was unlikely that Somalia would meet its Article 5 deadline, due to key factors such as the slow pace of clearance to date and the lack of development and capacity building of SEMA to fulfil a robust coordinating role.71

SEMA continued to be hindered by a lack of federal funding in 2016.72 NPA reported that UNMAS had stopped funding SEMA in the expectation that its legislative framework would be approved by the Federal Parliament and that funding for SEMA would be allocated from the national budget.73 However, due to the lack of parliamentary approval, SEMA did not receive funding from the government in 2016. As noted above, a seven-month grant from UNMAS expired in December 2015 under which SEMA was expected to have established itself as a sustainable government entity.74
SEMA has highlighted the need for international assistance, greater transparency on bilaterally funded projects, better coordination and information sharing between operators, SEMA, and its Federal State member offices, and ensuring sufficient capacity to conduct independent QA/QC activities as key areas of concern. 

In an email to Mine Action Review SEMA’s director complained that international demining operators were working “without respecting the rules of HMA [humanitarian mine action]” in Somalia. He further stated that “donors can do a lot in involving SEMA in their funding decision and listen [to] our priorities” and called on UNMAS to “fulfil[s] the UN General Assembly mandate on HMA correctly in this country”. “It is better that you highlight this issue in your report”, he said.

SEMA began staffing its office in 2016, but as at May 2017, did not have sufficient capacity to manage the reporting and coordination requirements of a national mine action centre. Operators continued to raise concerns that less time should be directed at political liaison between stakeholders, and that facilitating the implementation of demining operations must be given higher priority.

Greater clarity on SEMA’s role and cohesion between SEMA and its five Federal State offices, as well as national consortiums, would also facilitate communication between stakeholders and more efficient implementation of mine action activities. Security and the safety of demining staff amid political tension and violence remained significant concerns for operations in certain areas.

The HALO Trust expected its capacity to decrease slightly at the beginning of 2017 due to a relocation of operations where some staff members could not be deployed. There was a potential for a small increase in funding in September, which would allow for additional hiring and expanded operations.

In 2017, NPA was training five survey teams to be deployed in all of southern Somalia’s states. Additionally, as at May 2017, NPA had deployed two survey teams and one clearance team and commenced operations in the northern disputed territories of Sool and Sanaag. Additionally, under a DFID-funded partnership project, NPA was providing capacity development for SEMA on managing the IMSMA database, conducting external QA/QC and accreditation, and trainings for SEMA management staff.

In Somaliland, The HALO Trust reported that provided that operational capacity is maintained, it hoped to complete clearance of the last known and accessible mined area by mid-2019, two years later than the end-2017 date it initially reported, which it said was due to the need to reduce operational capacity and the fact that new hazardous areas identified through survey requiring clearance. Droughts affecting Somaliland at the start and end of 2016 caused delays in clearance in certain remote areas, but despite this, a large number of contaminated areas in the far west and far east were completed during the year. This will allow increased clearance in central Somaliland in 2017, and improved efficiency of clearance teams through closer support from HALO Trust’s headquarters in Hargeisa, it said.

The HALO Trust emphasised the importance of establishing a national residual capacity to address contamination found after 2019, especially due to the nature of mine-laying in Somaliland. In June 2017, HALO Trust began working with the Office of the Vice President, SMAC, and the National Demining Agency (NDA) of Somaliland to develop a five- to ten- year transition plan from an internationally funded clearance capacity to a state-funded, state-led, state-coordinated, and state-implemented capacity, with the goal of complete national ownership of the residual threat. Under the plan, HALO Trust envisioned a two-year transition phase to reduce its presence and establish full government capacity, possibly followed by a two-year mentoring phase. The HALO Trust stressed the necessity of coordinating any future mine action initiatives between operators, and in line with the objectives of the national ownership plan.

The HALO Trust reported that positive indicators towards the goal of building a nationally owned capacity to address residual contamination in 2017 included the allocation of funding for SMAC and NDA from the national budget; a growing interest from the Somaliland authorities to demonstrate functioning independent institutions; and increased awareness of the benefits of national ownership with the arrival of international companies and requests for commercial clearance, including for construction/infrastructure projects and road building.

In 2017, HALO Trust planned to continue to prioritise manual and mechanical mine clearance of the remaining confirmed hazardous areas in Somaliland. It expected a reduction in funding and capacity in the future due to a shift in donor interest towards funding mine action operations in southern Somalia and the gradual completion of clearance of large-scale contamination in Somaliland. It intended to shift operations to southern Somalia from 2019.

3 Response to Monitor questionnaire from Klaus Ljoerring Pedersen, Danish Demining Group (DDG), 8 May 2012, and Article 7 Report, (for 16 April 2012–30 March 2013), Form C.
4 Email from Tom Griffiths, Regional Director North Africa, The HALO Trust, 25 May 2016.
5 Email from Tom Griffiths, HALO Trust, 31 May 2017.
7 SAC, “Landmine Impact Survey, Phase 2: Bari, Nugaal and Northern Mudug Regions”, SAC, 2005, p. 5. Of the 35 communities, 9 were categorised as “high impact” and 9 as “medium impact”, while 8 sites were identified for spot-clearance tasking.
8 UNMAS, “2015 Portfolio of Mine Action Projects, Somalia”.
10 Email from Tom Griffiths, HALO Trust, 31 May 2017.
11 Ibid.
12 Email from Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.
13 Ibid.
14 NPA raised concerns there was no transparency as to which NGOs were represented in each consortium however, and that there was a lack of information shared with other stakeholders in-country regarding the structure and mandate of the consortiums in relationship to the NGOs they were representing. Email from Hilde Jørgensen, Acting Country Director, NPA, 20 September 2017.
15 Interview with Mohamed Abdulkadir Ahmed, SEMA, in Geneva, 9 April 2014; and email from Kjell Ivar Breili, UNMAS, 12 July 2015.
16 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
19 Email from Hilde Jørgensen, NPA, 3 May 2017.
20 Emails from Terje Eldaan, NPA, 22 October 2016; and Mohamed Abdulkadir Ahmed, SEMA, 14 October 2016.
21 Email from Mohammad Sediq Rashid, UNMAS, 8 June 2017.
24 Ibid.
25 Email from Tom Griffiths, HALO Trust, 31 May 2017.
27 Email from Hilde Jørgensen, NPA, 3 May 2017.
31 Email from Tom Griffiths, HALO Trust, 31 May 2017.
32 Email from Tom Griffiths, HALO Trust, 31 May 2017.
33 Email from Terje Eldaan, Programme Manager, NPA, 5 June 2016; and response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
34 Email from Tom Griffiths, HALO Trust, 19 May 2017.
35 Email from Tom Griffiths, HALO Trust, 31 May 2017.
36 Email from Hilde Jørgensen, NPA, 3 May 2017.
37 Emails from Tom Griffiths, HALO Trust, 19 and 31 May 2017.
38 Email from Mohamed Abdulkadir Ahmed, SEMA, 1 June 2017.
39 Email from Tom Griffiths, HALO Trust, 31 May 2017.
40 Emails from Hilde Jørgensen, NPA, 3 May 2017; and Tom Griffiths, HALO Trust, 19 May 2017.
41 Email from Dandan Xu, Associate Programme Management Officer, UNMAS, 12 July 2017.
42 Email from Hilde Jørgensen, NPA, 20 September 2017.
43 Email from Tom Griffiths, HALO Trust, 31 May 2017.
45 Email from Roger Fasth, Global Operations Manager, DDG, 10 May 2017.
46 Email from Tom Griffiths, HALO Trust, 19 May 2017.
47 Email from Tom Griffiths, HALO Trust, 31 May 2017.
48 Emails from Bill Marsden, Regional Director, East and Southern Africa, MAG, 18 May and 21 September 2017.
49 Emails from Hilde Jørgensen, NPA, 3 May and 20 September 2017.
50 Email from Mohammad Sediq Rashid, UNMAS, 8 June 2017.
51 Email from Hussein Ibrahim Ahmed, Operations Coordinator, UNMAS, 22 June 2016.
52 Email from Tom Griffiths, HALO Trust, 31 May 2017.
53 Emails from Tom Griffiths, HALO Trust, 19 and 31 May 2017; and Hilde Jørgensen, NPA, 3 May 2017.
54 Emails from Terje Eldaan, NPA, 5 June 2016; Tom Griffiths, HALO Trust, 25 May 2016; and Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016; response to questionnaire by Tom Griffiths, HALO Trust, 20 May 2015; and email from Kjell Ivar Breili, UNMAS, 7 July 2015.
55 Response to Landmine Monitor questionnaire by Homera Cheema, MAG, 28 April 2014.
56 UNMAS, “2017 Portfolio of Mine Action Projects, Somalia”.
57 Email from Tom Griffiths, HALO Trust, 31 May 2017.
58 Emails from Tom Griffiths, HALO Trust, 25 May 2016; and Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
59 Email from Tom Griffiths, HALO Trust, 19 May 2017.
60 Email from Tom Griffiths, HALO Trust, 31 May 2017.
61 Ibid.
62 Ibid.
63 Email from Tom Griffiths, HALO Trust, 25 May 2016.
64 Email from Tom Griffiths, HALO Trust, 31 May 2017. HALO Trust also destroyed 365 items of UXO during BAC of 66,300m² and marked or destroyed 106 items of UXO in 19 completed UXO tasks, out of 124 surveyed.
65 Email from Hilde Jørgensen, NPA, 3 May 2017.
66 Ibid. NPA completed approx. 32.5km² of surface BAC using a mechanical asset in 2016.
67 Email from Tom Griffiths, HALO Trust, 31 May 2017.
68 Email from Tom Griffiths, HALO Trust, 25 May 2016. HALO Trust reported that of the total area cleared by HALO in 2015 [3,348,899m² of anti-personnel and anti-vehicle contamination], 2,079,055m² had no contamination from anti-vehicle mines, 824,811m² had no contamination from either anti-personnel or anti-vehicle mines, and 702,858m² had no contamination. It stated that due to the “sporadic and sparse nature of the remaining mine threat in Somali land most clearance tasks are very low density and some yield no landmines or explosive items though this is likely to all devices having been initiated or lifted by the local community rather than incorrect survey”.
69 Email from Tom Griffiths, HALO Trust, 31 May 2017.
70 Ibid.
72 Emails from Tom Griffiths, HALO Trust, 19 May 2017; and Mohamed Abdulkadir Ahmed, SEMA, 14 June 2016.
73 Emails from Terje Eldaan, NPA, 5 June and 14 June 2016.
74 Email from Mohammad Sediq Rashid, UNMAS, 8 June 2017.
75 Email from Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
76 Email from Mohammed Abdulkadir Ahmed, SEMA, 22 September 2017.
77 Emails from Hilde Jørgensen, NPA, 3 May 2017; and Tom Griffiths, HALO Trust, 19 May 2017.
79 Email from Tom Griffiths, HALO Trust, 19 May 2017.
80 Email from Tom Griffiths, HALO Trust, 31 May 2017.
81 Email from Hilde Jørgensen, NPA, 3 May 2017.
82 Email from Anna Roughley, DfID Project Co-ordinator, NPA, 23 May 2017.
83 Email from Tom Griffiths, HALO Trust, 31 May 2017.
84 Ibid.
85 Ibid.
86 Ibid.
87 Ibid.
88 Ibid.
89 Ibid.


**ARTICLE 5 DEADLINE: 9 JULY 2021**
(NOT ON TRACK TO MEET DEADLINE)

**SOUTH SUDAN**

**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
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<td>Problem understood</td>
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<td>5</td>
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<tr>
<td>Target date for completion of mine clearance</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>5.7</td>
</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

South Sudan’s mine action programme continued to improve in 2016 despite the challenges posed by ongoing armed conflict and an escalation of violence in July, which led to many operators suspending their activities. While the amount of land released by clearance and technical survey fell by nearly half from the previous year due to restrictions on movement and increasing insecurity, the amount of land cancelled through non-technical survey increased nearly fourfold from the previous year, bringing the total amount of mined area released in 2016 to just under 20km², compared with 9.5km² in 2015. However, despite increased clearance activities, new hazardous areas continued to be identified on a monthly basis.

RECOMMENDATIONS FOR ACTION

- South Sudan should make every effort to minimise the risk to civilians from mines and unexploded ordnance (UXO).
- South Sudan should increase its financial support for operational mine action. Greater support should also be provided to the National Mine Action Authority (NMAA) to build its capacity to develop effective mine action plans and policies.
- Continued efforts should be made to ensure accurate reporting by operators of mine action data and recording according to International Mine Action Standards (IMAS) land release terminology.
- South Sudan should develop a resource mobilisation strategy and initiate policy dialogue with development partners on long-term support for mine action.

CONTAMINATION

South Sudan is heavily contaminated by anti-personnel mines, anti-vehicle mines, and other explosive weapons that were employed 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, on 15 December 2013, commencing a new multi-dimensional conflict across the country.

According to the United Nations Mine Action Service (UNMAS), as at the end of 2016, South Sudan had a total of 254 areas suspected to contain anti-personnel mines, covering a total area of nearly 82.3km², as set out in Table 1.

Table 1: Mine and Explosive Remnants of War contamination (as at end-2016)

<table>
<thead>
<tr>
<th>Type of contamination</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-personnel mines</td>
<td>254</td>
<td>82,278,885</td>
</tr>
<tr>
<td>Anti-vehicle mines</td>
<td>74</td>
<td>1,539,818</td>
</tr>
<tr>
<td>Cluster munition remnants</td>
<td>142</td>
<td>4,584,943</td>
</tr>
<tr>
<td>Other UXO</td>
<td>247</td>
<td>3,535,684</td>
</tr>
<tr>
<td>Totals</td>
<td>717</td>
<td>91,939,329</td>
</tr>
</tbody>
</table>

SHAs = Suspected hazardous areas
UXO = Unexploded ordnance

Nine of South Sudan’s (formerly ten) states contain suspected mined areas, with Central Equatoria the most heavily contaminated, followed by Eastern Equatoria and Jonglei, according to UNMAS (see Table 2).

Table 2: Anti-personnel mine contamination by former state (as at end-2016)

<table>
<thead>
<tr>
<th>State</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Equatoria</td>
<td>135</td>
<td>3,765,919</td>
</tr>
<tr>
<td>Eastern Equatoria</td>
<td>58</td>
<td>4,978,522</td>
</tr>
<tr>
<td>Jonglei</td>
<td>32</td>
<td>30,724,553</td>
</tr>
<tr>
<td>Lakes</td>
<td>2</td>
<td>23,500</td>
</tr>
<tr>
<td>North Bahr El Ghazal</td>
<td>8</td>
<td>39,173,413</td>
</tr>
<tr>
<td>Upper Nile</td>
<td>106</td>
<td>80,100</td>
</tr>
<tr>
<td>Warrap</td>
<td>1</td>
<td>8,400</td>
</tr>
<tr>
<td>West Bahr El Ghazal</td>
<td>4</td>
<td>2,829,933</td>
</tr>
<tr>
<td>Western Equatoria</td>
<td>13</td>
<td>694,545</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>254</strong></td>
<td><strong>82,278,885</strong></td>
</tr>
</tbody>
</table>
The full extent of South Sudan’s explosive remnants of war (ERW) contamination remains unknown. SHAs continue to be identified, while the existing threat is being compounded by the renewed heavy fighting since December 2013, which continues to result in new UXO contamination, particularly in Greater Equatoria, Jonglei, Unity, and Upper Nile states.7 Ongoing and increasing insecurity persisted in greatly limiting access to many areas of the country, severely impeding efforts to confirm or address contamination, particularly in the Greater Upper Nile region.8

Mine, cluster munition remnant, and ERW contamination in South Sudan continues to pose a physical threat to local populations, prevents the delivery of vital humanitarian aid, curtails freedom of movement, and significantly impedes the development of affected communities.9 In 2016, due to the escalating violence, internally displaced populations were particularly vulnerable to landmines and other munitions as they moved across unfamiliar territory, often lacking information about the pattern of conflict and contamination. Mine and ERW contamination continued to limit access to agricultural land and increased food insecurity, at a time when nearly four million South Sudanese were facing famine. During the year, UNMAS documented numerous examples of mines and other munitions preventing the delivery of food and other humanitarian aid.10

Despite the signature of the Agreement on the Resolution of the Conflict in the Republic of South Sudan in August 2015, UNMAS reported that in 2016, armed conflict continued across the country and expanded into new areas, which it said “continues to litter vast swathes of land, roads and buildings” with munitions.11 UNMAS reported that an average of 160 previously unknown hazardous areas were discovered each month in 2016.12

Mine Action Review is not aware of any confirmed reports of new use of anti-personnel mines in the renewed conflict, which began in 2013.13 In March 2015, however, a group of states monitoring the ceasefire in South Sudan reported that a government army officer “stated clearly that anti-personnel mines had been deployed in the area around Nassir”, in Upper Nile state, by government forces.14 In response, South Sudan’s army information director, Malaak Ayuen, denied that government forces had used mines.15

In December 2015, South Sudan informed states parties to the Anti-Personnel Mine Ban Convention (APMBC) that it had not been feasible to carry out a verification mission to investigate the allegation due to lack of access from continuing armed conflict in the area. It stated that a committee would be established to investigate the allegation as soon as security conditions permitted and welcomed the participation of members of UNMAS and civil society on a verification mission.16 UNMAS confirmed in April 2017 that no further investigations had taken place.17

At the start of 2017, almost eight million people in South Sudan were living with the constant threat of the presence of mines and ERW, including more than 2.3 million South Sudanese who have been forced to become internally displaced since the outbreak of fighting in 2013. According to UNMAS, surveys of internally displaced persons identified a fear of ERW as among the most significant reasons for their inability to return home.18 UNMAS has claimed that the socio-economic cost of mines and ERW in South Sudan in terms of interrupted agricultural production, food insecurity, halted commerce, and the lack of freedom of movement is “incalculable”.19

PROGRAMME MANAGEMENT

The South Sudan Demining Authority (SSDA) – now named the National Mine Action Authority (NMAA) – was established in 2006 by presidential decree to act as the national agency for coordination, planning, and monitoring of mine action in South Sudan.20

Under UN Security Council Resolution 1996 [2011], UNMAS was given the responsibility to support South Sudan in demining while strengthening the capacity of the NMAA. Accordingly, UNMAS (with the NMAA) has been overseeing all mine action in South Sudan through its main office in Juba, and sub-offices in Bentiu, Bor, Malakal, and Wau.21 UNMAS is responsible for accrediting mine action organisations, developing national mine action standards, establishing a quality management system, managing the IMSMA database, and tasking operators.22

While it is planned that eventually NMAA will assume full responsibility for all mine action activities, South Sudan’s National Mine Action Strategic Plan 2012–2016 notes that the government did “not have the financial and technical capacity to support its mine action program. UN agencies, development partners, and international organizations will need to support the program in providing technical and financial assistance”.23 UN Security Council Resolution 1996 authorised UNMISS to support mine action through assessed peacekeeping funds.24

In May 2014, the UN Security Council adopted Resolution 2155 in response to the conflict that broke out in December 2013. The resolution, which marked a significant change in mine action policy, effectively ended the mission’s mandate to support capacity development of government institutions. The NMAA informed Mine Action Review in September 2017 that the transition from UN to national ownership was in limbo and progress towards achieving this goal had effectively stopped. The NMAA said it lacked the basic means to fulfil its functions.25
Strategic Planning

Following the expiry of the 2012–16 National Mine Action Strategy, the NMAA, in close collaboration with the Geneva International Centre for Humanitarian Demining (GICHD) and with support from UNMAS, started developing South Sudan’s new national mine action strategy in 2017. A first strategy stakeholder workshop was organised in Juba in August 2017 to agree on the mine action programme’s vision, mission, goals, and objectives. The new national strategy will be finalised by 2018. There were no significant changes in 2016 to the existing strategic plan for 2012–16, which was developed by the NMAA with assistance from the GICHD and UNMAS. The main objectives of the plan were to ensure that:

- South Sudan is in a position to comply with all international instruments related to mines and ERW and can conduct and manage the national mine action programme.
- The scope and location of the mine and ERW contamination are fully recorded, and all high-impact contaminated areas are identified, prioritised, cleared, and released.
- The national mine action programme contributes to poverty reduction and socio-economic development by being mainstreamed into development programmes.

Standards

While there were no changes to the National Technical Standards and Guidelines (NTSGs) for mine action in South Sudan during 2016, according to UNMAS, revisions to the NTSGs that were implemented from October 2015 contributed to more efficient land release. The NTSGs are jointly monitored by UNMAS and the NMAA.

Quality Management

UNMAS reported carrying out external quality assurance (QA) and quality control (QC) operations throughout 2016 on all mine action operators in South Sudan. It stated that at the end of the year the QA/QC system was amended slightly, but QA/QC activities were set to continue with the same level of coverage for all operators in 2017.

Due to constraints on the movement of UN staff due to increasing security concerns, at the end of 2016, UNMAS contracted a private company, Janus Global Operations, to conduct external QA/QC on behalf of UNMAS in South Sudan.

Operators

Four international demining non-governmental organisations (NGOs) operated in South Sudan in 2016: DanChurchAid (DCA), Danish Demining Group (DDG), Mines Advisory Group (MAG), and Norwegian People’s Aid (NPA). Four commercial companies also conducted demining: G4S Ordnance Management (G4S), Mechchem, Dynasafe MineTech Limited (DML) (formerly MineTech International, MTI), and The Development Initiative (TDI).

According to UNMAS, at its peak in 2016, mine action capacity in South Sudan included 62 technical teams, the bulk of which was in commercial companies, along with six mechanical assets, and one team supported by mine detection dogs (MDDs). However, this capacity lay idle in the second half of 2016, after conflict resurfaced in Juba and insecurity spread across the country. As at September 2017, survey and clearance capacity had not returned to the levels prior to the July 2016 crisis, and according to UNMAS, remained dependent on the re-establishment of secure operating conditions.

UNMAS assigns mine action tasks to operators. In 2016, MAG began deploying Multi-Task Teams (MTTs) with mechanical support from a PT-300D mine clearance machine, a MineWolf 330, and three Bozena machines which allowed for a sizeable increase in the scale of its operations on large-area clearance tasks. Its staff level rose to a total of 200, a significant increase in capacity from 2015. Two MTT teams and one MineWolf team under UN contracts were, however, demobilised after insecurity led to the cancellation of the contracts in September 2016. In 2016, DDO changed its operational focus to responding to explosive ordnance disposal (EOD) call-outs and did not engage in mine clearance operations.

NPA changed its operations to deploy smaller, more mobile teams focusing on non-technical and technical survey, with support from its MDDs, and for emergency EOD. Teams were re-accredited and a new operations base opened in Juba, although the teams could not be deployed because of the security situation. Following an internal restructuring, NPA reassessed the viability of its programme in South Sudan and with no signs of improvement in security conditions the decision to close the programme indefinitely in November 2016.

LAND RELEASE

In 2016, nearly 20km² of mined area was released through survey and clearance, including more than 2.6km² through clearance and technical survey, and a further 17.2km² through non-technical survey. In total, nearly 27.8km² was released back to local communities, with the destruction of 585 anti-personnel mines, 200 anti-vehicle mines, and 20,190 items of UXO. In addition, 1,272km of roads were opened through route assessment and verification. This was a result of a resurgence of violence that resulted in mine action operations being suspended for much of the second half of 2016 and a dramatic reduction in areas across the country where operations could safely be carried out.

Overall land release in South Sudan doubled in 2016, from close to 14km² in 2015 to 28km² in 2016, due to a large increase in land cancelled through non-technical survey and an increase in battle area clearance. The amount of mined area reduced by technical survey and cleared, however, fell from 5.1km² in 2015 to 2.6km² in 2016, in large part due to a significant decrease in the amount of mechanical clearance and technical survey. This was a result of the deterioration of the security situation and greater restrictions on safe movement. There was a corresponding decrease in 2016 in the number of mines and UXO destroyed, down from the 1,715 anti-personnel mines, 473 anti-vehicle mines, and 27,395 items of UXO destroyed in 2015, and also a reduction in...
the amount of roads opened through route assessment and verification, from that of just over 3,000km in 2015.42

In total, UNMAS has also reported that, from 2004 to end-2016, more than 13,580 hazards have been addressed, over 1,175km² of land has been released (cancelled, reduced and cleared), and 27,573km of roads opened, with nearly 31,253 anti-personnel mines, 5,735 anti-vehicle mines, and 902,360 items of UXO destroyed.43

Survey in 2016

As summarised in Table 3, in 2016, a total of 18 mined areas covering just under 17.2km² were cancelled through non-technical survey, and almost 71,400m² was reduced by technical survey. In addition, 30 areas covering nearly 1.8km² were confirmed as mined, according to UNMAS records.44

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs cancelled</th>
<th>Area cancelled (m²)</th>
<th>SHAs confirmed as mined</th>
<th>Area confirmed (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCA</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>200,396</td>
<td>0</td>
</tr>
<tr>
<td>DDG</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,060</td>
</tr>
<tr>
<td>G4S</td>
<td>6</td>
<td>2,238,894</td>
<td>13</td>
<td>557,096</td>
<td>2,324</td>
</tr>
<tr>
<td>MECHEM</td>
<td>2</td>
<td>563,194</td>
<td>2</td>
<td>41,808</td>
<td>0</td>
</tr>
<tr>
<td>MAG</td>
<td>1</td>
<td>750,034</td>
<td>6</td>
<td>185,833</td>
<td>0</td>
</tr>
<tr>
<td>DML</td>
<td>7</td>
<td>279,292</td>
<td>2</td>
<td>51,528</td>
<td>67,015</td>
</tr>
<tr>
<td>TDI</td>
<td>1</td>
<td>13,257,399</td>
<td>6</td>
<td>796,941</td>
<td>0</td>
</tr>
<tr>
<td>UNMAS</td>
<td>1</td>
<td>77,489</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>18</td>
<td>17,166,302</td>
<td>30</td>
<td>1,833,602</td>
<td>71,399</td>
</tr>
</tbody>
</table>

TS = Technical survey

Clearance in 2016

A total of 74 mined areas covering nearly 2.6km² were released by clearance in 2016, with the destruction of 585 anti-personnel mines and 200 anti-vehicle mines (see Table 4).44 This is nearly half of the amount cleared in 2015, which UNMAS had reported as the highest ever total land reduced through technical survey and cleared since the inception of humanitarian mine clearance in South Sudan in 2004.45 According to UNMAS, the reduction in mine clearance in 2016 was caused by the deteriorating security situation.50

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAG</td>
<td>11</td>
<td>380,479</td>
<td>38</td>
<td>4</td>
<td>325</td>
</tr>
<tr>
<td>MECHEM</td>
<td>6</td>
<td>74,199</td>
<td>2</td>
<td>9</td>
<td>203</td>
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<tr>
<td>DCA</td>
<td>2</td>
<td>1,655</td>
<td>19</td>
<td>10</td>
<td>815</td>
</tr>
<tr>
<td>G4S</td>
<td>28</td>
<td>697,898</td>
<td>373</td>
<td>101</td>
<td>14,620</td>
</tr>
<tr>
<td>DDG</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>626</td>
</tr>
<tr>
<td>DML</td>
<td>18</td>
<td>924,602</td>
<td>127</td>
<td>52</td>
<td>139</td>
</tr>
<tr>
<td>TDI</td>
<td>7</td>
<td>495,711</td>
<td>13</td>
<td>24</td>
<td>416</td>
</tr>
<tr>
<td>NPA</td>
<td>0</td>
<td>1,179</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>74</td>
<td>2,575,723</td>
<td>585</td>
<td>200</td>
<td>17,145</td>
</tr>
</tbody>
</table>

AP = Anti-personnel
AV = Anti-vehicle
Deminer Safety

On 12 April 2016, two members of DDG’s EOD team were killed by gunmen when their vehicle was ambushed as they travelled to the field from their base in Yei, Central Equatorial state, for a routine EOD call-out. The outbreak of violence across the Equatorial states in July 2016 affected many operators, including MAG, which experienced an ambush during evacuation to Nimule, on the Ugandan border, resulting in the death of one national medic and gunshot wounds to three other staff. Two ambulances were set on fire and a large proportion of the team’s equipment was lost.

ARTICLE 5 COMPLIANCE

In accordance with Article 5 of the APMBC, South Sudan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 9 July 2021. South Sudan is not on track to meet this deadline.

UNMAS has highlighted the serious obstacles posed to mine action operations by ongoing fighting and insecurity, lack of access to contaminated areas, and new UXO contamination, along with continuing significant challenges from lack of infrastructure and access to vast areas of the country, and the unpredictable rainy seasons. Given the current security situation, UNMAS stated in 2017 that it is not likely that South Sudan can meet its July 2021 Article 5 deadline.

Table 5: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared or reduced (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2.65</td>
</tr>
<tr>
<td>2015</td>
<td>5.10</td>
</tr>
<tr>
<td>2014</td>
<td>2.72</td>
</tr>
<tr>
<td>2013</td>
<td>4.33</td>
</tr>
<tr>
<td>2012</td>
<td>4.20</td>
</tr>
<tr>
<td>Total</td>
<td>19.00</td>
</tr>
</tbody>
</table>

While operators raised concerns over the lack of government funding for the NMMA and mine action activities in the country, according to UNMAS, the Transitional Government of National Unity in South Sudan paid the salaries of the staff of the NMMA in 2016. In December 2016, at the APMBC Fifteenth Meeting of States Parties, South Sudan requested support for the NMMA to enable it to undertake QA/QC and field visits, for training in areas of concern such as information management and operations, and for institutional capacity building and office hardware and supplies as well as transportation.

As reported above, the surge in conflict in July 2016 had a significant impact on demining activities across the country. Operations south of Juba were suspended due to security concerns for most of the second half of the year. Due to the spread and intensification of conflict in the Equatoria region, DDG was forced to shut down all clearance operations across Western, Central, and Eastern Equatoria April 2016, following the attack on its staff. It resumed operations in Unity and Upper Nile states two weeks later, but work remained suspended across Equatoria as at June 2017.

MAG suspended its operations on 8 July 2016 and all international staff left the country soon after. Due to the persistent conflict, operations could only be restarted in November 2016 in the small state of Terekeka, Central Equatoria, north of Juba, after the retraining of three MTTs. After long periods of stand-down of operations due to a combination of restructuring issues, and constantly increasing security threats towards its staff with no sign of improvement, NPA closed its operations in South Sudan indefinitely in November 2016.

In 2017, MAG was continuing to concentrate operations in Terekeka state, Central Equatoria due to ongoing nationwide insecurity, with the aim of declaring Terekeka free from the threat of ERW within five years. It expected that with additional donor funding, it would increase its non-technical survey capacity and deploy five community liaison and five technical teams during the year. MAG hoped to return to its earlier staff capacity by mid-2017, provided that it was successful in winning back the UN contracts that had been cancelled due to insecurity in 2016. DDG expected to continue to focus on EOD call-outs during the year.

2 Email Robert Thompson, UNMAS, 18 April 2017; and UNMAS, “2017 Portfolio of Mine Action Projects: South Sudan”.
3 Emails from Robert Thompson, UNMAS, 18 April 2017; and Tim Lardner, Programme Manager, UNMAS, 21 September 2017. UNMAS reported that discrepancies in the total figures for anti-personnel mine contamination as at end-2016, taking into account contamination released and confirmed during 2016, versus that which was reported at end-2015, were likely the result of a period of data reconciliation during the year.
4 Emails from Tim Lardner, UNMAS, 7 and 21 September 2017; and Article 7 Report (for 2016), Form C.
5 Emails from Tim Lardner, UNMAS, 7 September 2017; and Robert Thompson, UNMAS, 18 April 2017; and Article 7 Report (for 2016), Form C. 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.
6 Email from Tim Lardner, UNMAS, 18 September 2017.
7 Ibid., 14 October 2016.
Ibid.

According to the International Campaign to Ban Landmines (ICBL), there were no allegations of new anti-personnel mine use in the renewed fighting which began in 2013; in 2011, however, there were several incidents of apparent anti-personnel mine use. A fact-finding mission was sent to investigate the reports in Jonglei, Unity, Upper Nile, and Western Bahr El Ghazal states in June–July 2013, during which civil authorities and Sudan People’s Liberation Army (SPLA) commanders denied using anti-personnel mines, though SPLA officials affirmed that mines had been laid by rebel forces in Unity and Jonglei states. See Landmine Monitor, “Country Profile: South Sudan, Mine Ban Policy”, 30 October 2014, at: http://the-monitor.org/en-gb/reports/2015/south-sudan/mine-ban-policy.aspx.


Gridneff, “South Sudan Army’s Landmine Use Escalates War, Monitors Say”.

Statement of South Sudan, 14th Meeting of States Parties, Geneva, 1 December 2015.

Ibid.

UNMAS, “2017 Portfolio of Mine Action Projects: South Sudan”.


Email from Tim Lardner, UNMAS, 4 October 2017.


Information provided by Åsa Masselberg, Advisor, Strategic Management, GICHD, 21 September 2017.


Email from Robert Thompson, UNMAS, 18 April 2017.

Ibid.

Ibid.

Emails from William Maina, DDG, 2 May 2017; and Bill Marsden, MAG, 11 May 2017.

Emails from Robert Thompson, UNMAS, 18 April 2017; Bill Marsden, MAG, 11 May 2017; and William Maina, DDG, 2 May 2017.

UNMAS, “IMSMA Monthly Report – December 2016”. This includes a total of nearly 8,000km² released through battle area clearance.

Emails from Robert Thompson, UNMAS, 18 April 2017; Bill Marsden, MAG, 11 May 2017; and William Maina, DDG, 2 May 2017.

Emails from Frédéric Martin, Programme Manager, NPA, 5 April and 4 May 2017.

Ibid.


Emails from Robert Thompson, UNMAS, 18 April 2017; and Tim Lardner, UNMAS, 7 September 2017. MAG reported clearing a total of five areas with a size of 451,830m² and destroying 26 anti-personnel mines, 2 anti-vehicle mines, and 112 items of UXO. DDG reported clearing two areas with the destruction of six anti-personnel mines; it did not report figures for the size of the areas cleared or other munitions destroyed. NPA reported processing 49 mine items in landmines; a total of 12.7km² released through battle area clearance.

Emails from Bill Marsden, MAG, 11 May 2017; and Bill Marsden, MAG, 11 May 2017.

Emails from Robert Thompson, UNMAS, 18 April 2017; Bill Marsden, MAG, 11 May 2017; and William Maina, DDG, 2 May 2017.

UNMAS, “About UNMAS in South Sudan”, updated March 2015; and UNMAS “About UNMAS in South Sudan”, updated May 2016.

Email from Robert Thompson, UNMAS, 18 April 2017.

Emails from Robert Thompson, UNMAS, 18 April 2017; Bill Marsden, MAG, 11 May 2017; and William Maina, DDG, 2 May 2017.

Emails from William Maina, DDG, 2 May 2017; and Danish Refugee Council, “Two national employees have lost their lives in South Sudan”, 12 April 2016, at: http://reliefweb.int/report/south-sudan/two-national-employees-have-lost-their-lives-south-sudan.

Emails from Bill Marsden, MAG, 11 May 2017 and 21 October 2016.

UNMAS, “About UNMAS in South Sudan”, updated March 2015; and UNMAS “About UNMAS in South Sudan”, updated May 2016.

Email from Robert Thompson, UNMAS, 18 April 2017.


Emails from Robert Thompson, UNMAS, 19 April 2017; Bill Marsden, MAG, 11 May 2017; and William Maina, DDG, 2 May 2017.

Statement of South Sudan, 15th Meeting of States Parties, Santiago, 30 November 2016.

Emails from William Maina, DDG, 2 May 2017 and 5 June 2017.

Email from Bill Marsden, MAG, 11 May 2017.

Email from Frédéric Martin, NPA, 4 May 2017.

Email from Bill Marsden, MAG, 11 May 2017.

Email from William Maina, DDG, 2 May 2017.
## MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

5.2 (2016) 4.8 (2015)
PERFORMANCE COMMENTARY

Sudan’s mine action programme performance output increased significantly in 2016, more than doubling output from 2015, a result of a large increase in the number of teams deployed for survey and clearance. Along with progress in land release, government funding for mine action doubled, and signs from the Sudanese National Mine Action Centre (NMAC) of increasing transparency, communication, and an apparent willingness to facilitate international cooperation and assistance are encouraging. Despite this, Sudan is not on track to meet its extended Article 5 deadline of 2019. Since most contamination is in Blue Nile and South Kordofan states, both of which are still affected by conflict, Sudan’s ability to meet its Article 5 obligations is highly dependent on security and access, as well as on resources.

RECOMMENDATIONS FOR ACTION

■ Sudan should regularly update states parties to the Anti-Personnel Mine Ban Convention (APMBC) on access to, and progress in, clearing contamination in Blue Nile and South Kordofan states.
■ Sudan should re-establish conditions that allow international demining organisations to conduct land release in Sudan.
■ 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 develop a resource-mobilisation strategy for its mine action programme.

CONTAMINATION

At the end of 2016, Sudan had 100 areas containing anti-personnel mines, covering a total of just over 19km². According to NMAC, of this total, 2.6km² is confirmed to contain anti-personnel mines, and anti-personnel mine contamination is suspected in a further 16.6km². An additional 30 areas are suspected to contain anti-vehicle mines covering nearly 5km², as set out in Table 1.²

The overall contamination is a decrease from the end of 2015, when NMAC reported that 112 hazardous areas with a total of just under 21km² remained, of which 2.8km² was confirmed and 18.1km² suspected to contain anti-personnel mines.³ Thirty-nine areas were suspected to contain anti-vehicle mines, with a total size of nearly 6km².³ According to the United Nations Mine Action Service (UNMAS), as at April 2017, 104km² or 79% of Sudan’s total 131.7km² of recorded areas with mines or explosive remnants of war (ERW) had been released.⁵

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 since claimed thousands of victims.⁴ 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 unexploded ordnance (UXO).

Table 1: Mine contamination (as at end-2016)⁷

<table>
<thead>
<tr>
<th>Type of contamination</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-personnel mines</td>
<td>55</td>
<td>2,604,237</td>
<td>45</td>
<td>16,553,617</td>
</tr>
<tr>
<td>Anti-vehicle mines</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>5,001,271</td>
</tr>
<tr>
<td>Totals</td>
<td>55</td>
<td>2,604,237</td>
<td>75</td>
<td>21,554,888</td>
</tr>
</tbody>
</table>

CHAs = Confirmed hazardous areas   SHAs = Suspected hazardous areas

At the end of 2016, of Sudan’s mine- and ERW-affected states, five contained anti-personnel mines: South Kordofan, Kassala, Blue Nile, Red Sea, and Western Kordofan. Blue Nile and South Kordofan were believed to be the most heavily contaminated, as set out in Table 2.⁸ According to NMAC, however, as these two states have been inaccessible due to insecurity for more than four years, the information recorded in the database for these states may no longer be accurate, and survey will be carried out as soon as the security situation permits.⁸ No mines have been reported in Darfur, where the main threat is from UXO.⁹

In May 2016, Gadaref state was declared free of mines and ERW.¹⁰ In May 2017, Red Sea state was declared free of mines; the month before, Forobaranga, in West Darfur, became the first locality in the Darfur region to complete clearance of ERW.¹¹ As at April 2017, clearance of Kassala state was on track to be completed by the end of the year.¹²
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 mine-/ERW-contaminated areas have been registered as dangerous areas in the database, causing the LIS baseline of 221 hazards to expand significantly, including to encompass areas not originally surveyed.15 As at April 2017, a total of 2,973 hazardous areas had been registered in the Information Management System for Mine Action (IMSMA) database since 2002, of which UNMAS reported 2,771 had been released through various clearance methods, leaving a total of 202 hazardous areas with a size of just over 27.5km² to be addressed.16

Mine Action Review is unaware of any confirmed reports of new use of anti-personnel mines in Blue Nile or South Kordofan states since conflict began in 2012. However, in 2013, non-state armed groups were alleged to have laid mines on the border between Sudan’s White Nile state and South Sudan’s Upper Nile region, with reports of resultant civilian casualties and loss of livestock.17

In 2002 through to the end of 2016, at least 2,059 mine and ERW casualties were recorded, of whom 589 were killed and the other 1,470 were injured. In 2016, a total of 26 victims were registered.18

Mines and ERW continue to pose a daily threat to the lives of civilians in Sudan in 2017 and have a significant detrimental impact on the socio-economic development of local communities, constraining humanitarian access and the delivery of aid, and posing a particular risk for internally displaced persons and refugees.19 In the Abyei area, the UN has repeatedly expressed concern over the threat of mines and ERW and their impact, including by obstructing the safe return of the displaced and preventing safe migration.20

While no mines have been found in Darfur, ERW continue to pose a serious threat to civilians, to peacekeepers from the UN Mission in Darfur (UNAMID), and to the delivery of humanitarian aid. ERW in Darfur includes unexploded air-delivered bombs, rockets, artillery and mortar shells, and grenades.21

Since South Sudan’s independence, new conflicts in Abyei and in Blue Nile and South Kordofan states have resulted in increased UXO contamination in Sudan.22 The IMSMA database does not hold data on contamination in Abyei due to persistent conflict and restrictions on access.23

### PROGRAMME MANAGEMENT

The Sudanese National Mine Action Authority (NMAA) and NMAC manage Sudan’s mine action programme, with responsibility for coordinating all mine clearance, including accreditation and certification of demining agencies. In January 2015, UNMAS, which had opened an emergency programme in Sudan in 2002, reassumed the UN lead in mine action efforts in Sudan and in providing assistance and technical support to NMAC, after a handover to the UN Development Programme (UNDP) for one year in 2014.24

In 2016, 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.25 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 around Abyei and facilitating access by assessing and clearing priority areas and routes.26

In Darfur, under the umbrella of UNAMID, UNMAS works under the name of the Ordnance Disposal Office (ODO) in direct support of UNAMID priorities.27 In 2017, Dynasafe MineTech Limited (DML), a commercial company, was awarded a new UN contract for fiscal year 2017–18 to conduct ERW rapid-response clearance and to provide mentoring support to national Multi-Task Teams (MTTs) in Darfur.28 In 2012–15, commercial operator The Development Initiative (TDI) was contracted by UNAMID to assess, survey, identify, mark, and clear contamination in all five Darfur states.29 Mine action in Darfur is funded through assessed peacekeeping funds for UNAMID.30

### Strategic Planning

In April 2017, Sudan revised its multi-year National Mine Action Plan for 2016–19 in order to meet its obligations under the APMBAC. As noted above, Gadaref state was declared mine and ERW free in May 2016, while clearance of Red Sea state was completed in May 2017.31 According to the plan, if funding is secured and when security permits, work will start in South Kordofan and the remainder of Blue Nile, with the aim of completing mine clearance in Blue Nile by December 2017 and in South Kordofan by April 2019.32 However, the plan notes that meeting these targets “is becoming extremely challenging given the short time remaining”, and without sufficient international funding and improvements in access, Sudan will need to request another Article 5 extension.33

### Table 2: Anti-personnel mine contamination by state (as at end-2016)34

<table>
<thead>
<tr>
<th>State</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Nile</td>
<td>4</td>
<td>219,663</td>
<td>5</td>
<td>905,583</td>
</tr>
<tr>
<td>South Kordofan</td>
<td>48</td>
<td>2,182,597</td>
<td>33</td>
<td>15,538,719</td>
</tr>
<tr>
<td>Kassala</td>
<td>3</td>
<td>201,977</td>
<td>2</td>
<td>59,555</td>
</tr>
<tr>
<td>Red Sea</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>27,769</td>
</tr>
<tr>
<td>Western Kordofan</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>21,991</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>55</strong></td>
<td><strong>2,604,237</strong></td>
<td><strong>45</strong></td>
<td><strong>16,553,617</strong></td>
</tr>
</tbody>
</table>
Standards

In May 2015, NMAC stated that a review of National Mine Action Standards (NMAS) was ongoing and that a new version would be published on its website after their approval. In June 2017, NMAC reported that the process of reviewing the NMAS was in its final stages. According to NMAC, draft standards are shared with all partners and mine action operators during their accreditation process.

Quality Management

NMAC reported that its quality management section regularly monitors all field operations, and that 18 monitoring visits and four accreditation visits were carried out in 2016. Tokar locality in Red Sea state was sampled in 2016. UNAMID confirmed that in addition to its internal quality assurance (QA) procedures, external QA for DML’s operations in Darfur was carried out jointly by UNMAS and NMAC during the year.

Information Management

In March 2017, NMAC’s national IMSMA database was upgraded to the latest version, with the assistance of the Geneva International Centre for Humanitarian Demining (GICHD). As at June 2017, NMAC reported that database clean-up was ongoing. Previously, the IMSMA geographic information system (GIS) function had been subject to United States (US) import restrictions. The embargo issue was finally resolved in 2016 with the support of the US Embassy in Khartoum and the GICHD. The database does not contain information on the disputed Abyei area.

LAND RELEASE

According to NMAC, overall land release in Sudan significantly increased in 2016 compared to 2015, with more than 6.4km² of mined and battle area released during the year, compared to 1.67km² in 2015. The greater output was due to more teams being deployed during the year and a large increase in funding.

The total of 6.4km² released in 2016 included clearance of just over 1km² of mined area and close to 1.5km² of battle area clearance (BAC), compared to 0.4km² of mined area containing anti-personnel mines cleared in 2015, and nearly 1.2km² of BAC. A total of more than 3.8km² was released by survey, including over 1.5km² cancelled by non-technical survey and more than 2.3km² reduced by technical survey in 2016. No land was released by survey in 2015.

Operators

In 2016, no international non-governmental organisation (NGO) was demining in Sudan. Commercial operator DML contracted to clear ERW in Darfur and to provide support for national MTTs, deployed two seven-person rapid-response teams and a mentoring capacity of six persons, with a total staff of 29 personnel.

Since 2015, NMAC has made several calls for international NGO operators to undertake demining in Sudan. Previously, two international demining NGOs with programmes in Sudan closed down operations owing to government restrictions that impeded their operations. DanChurchAid (DCA) ended its operations in 2012. In June 2012, the Sudanese government’s Humanitarian Aid Commission (HAC) ordered Mines Advisory Group (MAG) and six other NGOs that provided humanitarian aid to leave Gadaref, Kassala, and Red Sea states in eastern Sudan. Following months of negotiations with HAC and donors, MAG ended its operations in Sudan, leaving in early 2013.

National demining operators are JASMAR for Human Security, National Units for Mine Action and Development (NUMAD), and FPDO. In 2016, a total of nine MTTs, five manual clearance teams (MCTs), two mine detection dog (MDD) teams, four Mine Action Teams, and one integrated MineWolf team were deployed for mine action operations. This was a significant increase from 2015 capacity of six MCTs and one MDD team.

Table 3: Anti-personnel mine survey in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs cancelled</th>
<th>Area cancelled (m²)</th>
<th>SHAs confirmed as mined</th>
<th>Area confirmed (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMAD</td>
<td>6</td>
<td>1,494,738</td>
<td>10</td>
<td>282,052</td>
<td>2,327,945</td>
</tr>
<tr>
<td>FPDO</td>
<td>0</td>
<td>8,938</td>
<td>0</td>
<td>0</td>
<td>10,000</td>
</tr>
<tr>
<td>Totals</td>
<td>6</td>
<td>1,503,676</td>
<td>10</td>
<td>282,052</td>
<td>2,337,945</td>
</tr>
</tbody>
</table>

TS = Technical survey
Clearance in 2016

According to NMAC, 1,044,104 m² was released by clearance in 2016, almost all by NUMAD. A total of 776,780 m² was cleared manually, 89,690 m² by mechanical demining assets, and a further 177,634 m² by MDDs, with the destruction of 105 anti-personnel mines, 24 anti-vehicle mines, and 8,851 items of UXO. This more than doubled clearance output in 2015, when just over 423,000 m² was released by clearance.

Table 4: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DML</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4,393</td>
</tr>
<tr>
<td>FPDO</td>
<td>0</td>
<td>1,000</td>
<td>105</td>
<td>11</td>
</tr>
<tr>
<td>NUMAD</td>
<td>16</td>
<td>1,037,956</td>
<td>24</td>
<td>4,392</td>
</tr>
<tr>
<td>JASMAR</td>
<td>0</td>
<td>5,148</td>
<td>0</td>
<td>55</td>
</tr>
<tr>
<td>Totals</td>
<td>16</td>
<td>1,044,104</td>
<td>105</td>
<td>8,851</td>
</tr>
</tbody>
</table>

AP = Anti-personnel
AV = Anti-vehicle mine

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension granted by states parties in 2013), Sudan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 April 2019. It is not on track to meet this extended deadline.

In June 2017, NMAC reported that Sudan would not meet its extended Article 5 deadline of 2019, due to limited funding received in 2013–15, and that Sudan would likely submit a request for a third extension. Despite this, NMAC was positive about the significant improvements to the national mine action programme during 2016, including an increase in staff capacity and stability.

NMAC also reported that a number of international NGOs had expressed an interest in working in Sudan, which it said would further strengthen mine action capacity and deliver a standardised quality of survey and clearance. At the same time, it emphasised the challenges facing the programme, such as securing funding and the continuing inaccessibility of certain areas of South Kordofan and Blue Nile states.

Sudan’s ability to meet its Article 5 extension request milestones remains heavily dependent on improved security in the heavily affected states of Blue Nile and South Kordofan. As noted above, according to Sudan’s Article 5 extension workplan, if funding is secured, and when security permits, work will start in South Kordofan and the remainder of Blue Nile, with the aim of completing mine clearance by April 2019.

According to the workplan, Sudan intended to release 0.2 km² through survey and clearance in Blue Nile state in 2017, followed by 2.6 km² in 2018, and the remaining 5,560 m² by 1 April 2019. In South and West Kordofan states, Sudan projects to release a total area of just over 1 km² in 2017, a further 19.9 km² in 2018, and an additional 1.8 km² to 1 April 2019. However, the updated plan for 2017–19 notes that meeting these targets “is becoming extremely challenging given the short time remaining”, and without sufficient international funding and improvements in access, Sudan will need to request another Article 5 extension.

Additionally, in September 2017, NMAC informed Mine Action Review that the figures in its workplan were based on its operational plan for 2014–19, which it stated were no longer realistic. New projections would depend on funding and the security situation in South Kordofan and Blue Nile states, and will be revised and included in a forthcoming extension request.

In April 2017, NMAC reported that limited access was available to “a few locations” contaminated with mines and ERW in Blue Nile state, and that with “expected peace in the region”, reiterated that the remaining contamination could be addressed in 2017–18 to declare the state free of mines by April 2019. Once the security situation permits, survey teams would be deployed to conduct a new survey in Blue Nile, which is anticipated to register new hazardous areas, it said. NMAC reported, however, that the remaining contamination in South Kordofan state will require the most effort, time, and funding.

In June 2017, in addition to insecurity and limited funding, Sudan cited weather conditions during the rainy season, road conditions, the state of vehicles and equipment, information gathering, deeply buried mines, environmental concerns over the impact of mine action operations, and information management as the programme’s key challenges.

Other significant factors which continue to impede Sudan’s progress include a lack of clearance capacity formerly provided by international demining operators. Table 5 summarises progress in land release over the past five years.
On 24 May 2017, Red Sea state was declared mine-free. According to UNMAS, Kassala state was also on track to complete clearance in 2017. Ongoing peace talks and the possibility of a six-month extension to the ceasefire in South Kordofan and Blue Nile states could also allow clearance in previously inaccessible areas, it said. On 24 April 2017, Forobaranga, in West Darfur, became the first locality in the Darfur region to be declared free of ERW, after nine years of clearance, and sometimes re-clearance, of the area. A pilot survey aimed at addressing any potential residual ERW was also launched.

The Government of Sudan contributed US$2 million to mine action operations in 2016, doubling its funding for mine action from $1 million in 2015, and up from almost $0.5 million in 2014. In May 2016, NMAC reported that funding for the mine action programme had become an item within the Sudanese national budget, and in June 2017, it stated that the Government had promised to fund the programme with a further US$2 million in 2017. In mid-2017, UNMAS reported that the national mine action programme had secured $2 million from Japan, Italy, and the United States, and the Sudan Humanitarian Fund.

In April 2017, NMAC projected that $71 million would be required for Sudan to complete its Article 5 obligations by its 2019 deadline. In addition to funding for mine action operations and capacity building, Sudan specifically requested assistance with updating its detectors, additional vehicles, and maintenance for clearance machines, along with EOD trainings for deminers, and trainings in operations, QA, and non-technical survey.

During 2016 and the first half of 2017, Sudan hosted a number of donor coordination events on mine action in-country, as well as internationally, most notably on the margins of the intersessional meetings of the Convention in June 2017. It convened a meeting together with the APMB’s Committee on the Enhancement of Cooperation and Assistance as part of the Committee’s “individualised approach” initiative, which aims to create a platform to promote frank, informal, and detailed discussions on the needs and challenges for implementing Sudan’s Article 5 obligations with the donor community, partners for South-South and regional cooperation, mine action operators, and other relevant stakeholders.

Sudan’s increased transparency in reporting and communication, and its apparent desire to facilitate international cooperation and assistance are encouraging. It is also positive that a number of international demining organisations have expressed interest in the possibility of conducting operations in Sudan.

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1 Email from Ali Abd Allatif Ibrahim, Chief of Operations, NMAC, 4 June 2017. Sudan’s Article 7 Report (for 2016), Form C, reports that 55 confirmed areas with a total size of 2,604,237m² and 44 areas with a size of 16,533,048 m² remained as at end-2016; however, the figures provided in the report do not match these totals and the report does not include contamination figures for Blue Nile state.


4 Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.


7 Email from Ali Abd Allatif Ibrahim, NMAC, 4 June 2017.

8 Ibid.


10 Article 7 Report (for 2015), Forms C and F.

11 Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.


14 Email from Ali Abd Allatif Ibrahim, NMAC, 4 June 2017.

15 Article 5 deadline Extension Request Executive Summary, 25 November 2013, pp. 2–3.


20 UN Security Council Resolutions 2104 (2013), and 2205 (2015).


---

Table 5: Release of mined area in 2012–16 (km²)

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared</th>
<th>Release by survey</th>
<th>Total area released</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>1.04</td>
<td>3.84</td>
<td>4.88</td>
</tr>
<tr>
<td>2015</td>
<td>0.42</td>
<td>0</td>
<td>0.42</td>
</tr>
<tr>
<td>2014</td>
<td>2.47</td>
<td>1.18</td>
<td>3.65</td>
</tr>
<tr>
<td>2013</td>
<td>0.77</td>
<td>9.61</td>
<td>10.38</td>
</tr>
<tr>
<td>2012</td>
<td>0.55</td>
<td>0</td>
<td>0.55</td>
</tr>
<tr>
<td>Totals</td>
<td>5.25</td>
<td>14.63</td>
<td>19.88</td>
</tr>
</tbody>
</table>
24 Email from Javed Habibulhaq, UNMAS, 13 June 2016.
28 Email from Dandan Xu, Associate Programme Management Officer, UNMAS, 12 July 2017.
33 Ibid.
35 Email from Ali Abd Allatif Ibrahim, NMAS, 4 June 2017.
36 Emails from Ahmed Elser Ahmed Ali, NMAS, 9 May and 8 June 2016.
37 Email from Hatim Khamis Rahama, NMAS, 14 June 2017.
38 Email from Ali Abd Allatif Ibrahim, NMAS, 4 June 2017.
39 Email from Jafry McMurdo, UNAMID, 14 June 2017.
41 Email from Ali Abd Allatif Ibrahim, NMAS, 4 June 2017.
43 Email from Javed Habibulhaq, UNMAS, 2 June 2016.
44 Email from Javed Habibulhaq, UNDP, 11 May 2015.
45 Email from Jafry McMurdo, Programme Manager Ordnance Disposal Office, UNAMID, 14 June 2017.
47 ICBL, “ICBL Comments on Sudan’s Article 5 Extension Request”, May 2013.
49 “Sudan causes frustration among NGOs”, News 24, 13 June 2012.
50 MAG, “MAG departs Sudan after six years of work to remove remnants of conflict”, 7 March 2013.
51 Email from Hatim Khamis Rahama, NMAS, 14 June 2017.
54 NMAS, “IMSMA Monthly Report – March 2017”. Sudan’s IMSMA database reports list land released through technical survey as “cancelled” and land released through non-technical survey as “cancelled GMAA [General Mine Action Assessment]”.
56 Email from Ali Abd Allatif Ibrahim, NMAS, 4 June 2017.
57 Email from Ghasan Ibrahim Mohamed, NMAS, 8 September 2016.
58 Email from Ali Abd Allatif Ibrahim, NMAS, 4 June 2017.
60 Email from Ahmed Elser Ahmed Ali, NMAS, 9 May 2016; and Article 7 Report (for 2015), Form F, p. 12. According to NMAS, a total of 122,341m² was processed as “overlap” as part of area confirmation of clearance in 2015. Email from Ghasan Ibrahim Mohamed, NMAS, 8 September 2016.
61 Email from Ali Abd Allatif Ibrahim, NMAS, 4 June 2017.
62 Ibid.
63 Ibid.
64 Email from Ahmed Elser Ahmed Ali, NMAS, 9 May 2016.
65 Email from Ali Abd Allatif Ibrahim, NMAS, 4 June 2017.
68 Ibid.
69 Ibid, pp. 11–12.
70 Email from Hatim Khamis Rahama, NMAS, 20 September 2017.
71 Ibid. p. 11.
76 Email from Ali Abd Allatif Ibrahim, NMAS, 4 June 2017; UNMAS, “2017 Portfolio of Mine Action Projects, Sudan”; Article 7 Reports (for 2015), Form F; and (for 2014), Form A.
77 Emails from Ahmed Elser Ahmed Ali, NMAS, 9 May 2016; and Ali Abd Allatif Ibrahim, NMAS, 4 June 2017.
**TAJIKISTAN**

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

<table>
<thead>
<tr>
<th>MINE ACTION PROGRAMME PERFORMANCE</th>
<th>For 2016</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
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<td>5</td>
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<tr>
<td>National funding of programme</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

<table>
<thead>
<tr>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2</td>
<td>5.0</td>
</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

Tajikistan’s mine action programme performance improved in the latest reporting period, with a doubling of clearance output compared to 2015. The Union of the Sappers of Tajikistan (UST), a national not-for-profit demining organisation, became operational for non-technical survey, which it undertook for a significant number of the unsurveyed minefields on the Tajik-Afghan border. In addition, continuing efforts were made to improve task prioritisation and land release techniques. The granting of permission by Tajikistan border authorities in January 2017 for clearance operations to restart on the Tajik-Afghan border, after more than two years of security restrictions, is a very positive development, which will enable release of the country’s most densely contaminated mined areas.

A humanitarian demining law was ratified in 2016, though it seems that humanitarian clearance operators were not consulted during the drafting process. In addition, a National Strategy on Humanitarian Mine Action for 2017–20 and National Mine Action Standards were also approved by the government in 2016. The national strategy, however, is very general, without meaningful detail on how and when the strategy will be implemented. This will instead be outlined in an Anti-Personnel Mine Ban Convention (APMBC) Article 5 completion plan for 2016–20, which the Tajikistan National Mine Action Centre (TNMAC) is in the process of developing. While Tajikistan’s reporting on the extent of mined area and on clearance data improved for 2016, there were still issues with the quality, accuracy, and disaggregation of survey data.

RECOMMENDATIONS FOR ACTION

- Tajikistan should, as soon as possible, complete survey of the 58 mined areas along the Tajik-Afghan border whose records were made publicly available in September 2013, in order to clarify the actual extent of mine contamination.

- Tajikistan should finalise its Article 5 completion workplan, including precise and clear milestones for all mined areas in Tajikistan. The workplan should include information on how Tajikistan plans to address “inaccessible areas” and “non-executable tasks”, which are not recognised or defined terms under the APMBC.

- Tajikistan should report more accurately and consistently on land release data disaggregated by product (cancelled, reduced and cleared), activity (non-technical survey, technical survey, and clearance), and classification (suspected hazardous area (SHA) and confirmed hazardous area (CHA)), in a manner consistent with the International Mine Action Standards (IMAS).

CONTAMINATION

At the end of 2016, Tajikistan had more than 7.76km² of mine contamination across 147 CHAs, and 1.97km² of suspected mine contamination across 77 SHAs, as set out in Table 1. The mined areas are located in three provinces and fourteen districts of Tajikistan.

By May 2017, contamination had come down to 7.7km² of confirmed mined area in 144 CHAs, and 1.7km² of suspected contamination (based on desk analysis) in 58 unsurveyed minefields. A further 1.1km², in nine battle areas, contains explosive remnants of war (ERW) only. While Norwegian People’s Aid (NPA) completed clearance of the remaining known area of cluster munition remnants (CMR) contamination in August 2017, additional, previously unknown CMR were found later in the year during 2017 battle area clearance (BAC) at two locations in Rasht valley of the Central Region by the Swiss Foundation for Mine Action (FSD). This is a small reduction in overall baseline contamination compared to the end of 2015, when Tajikistan had 6.76km² of confirmed contamination (5.72km² of confirmed “accessible” and “executable” mined area and 1.04km² of “inaccessible” and “non-executable” areas), in addition to an estimated 3.6km² of suspected mined area still to be surveyed.
<table>
<thead>
<tr>
<th>Province</th>
<th>District</th>
<th>No.</th>
<th>Area (m²)</th>
<th>No.</th>
<th>Area (m²)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBAO</td>
<td>Darvos</td>
<td>4</td>
<td>163,828</td>
<td>2</td>
<td>20,000</td>
</tr>
<tr>
<td></td>
<td>Vanj</td>
<td>8</td>
<td>1,348,450</td>
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<td>0</td>
</tr>
<tr>
<td></td>
<td>Shugnan</td>
<td>3</td>
<td>56,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Ishkoshi</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td>15</td>
<td>1,568,278</td>
<td>3</td>
<td>25,000</td>
</tr>
<tr>
<td>Khatlon</td>
<td>Farkhor</td>
<td>6</td>
<td>96,800</td>
<td>1</td>
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<tr>
<td></td>
<td>Hamadoni</td>
<td>3</td>
<td>80,772</td>
<td>6</td>
<td>177,000</td>
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<tr>
<td></td>
<td>Panj</td>
<td>24</td>
<td>1,606,285</td>
<td>13</td>
<td>204,000</td>
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<tr>
<td></td>
<td>Jayhun</td>
<td>8</td>
<td>135,636</td>
<td>10</td>
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<tr>
<td></td>
<td>Shokhin</td>
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<td>3,030,085</td>
<td>37</td>
<td>1,064,000</td>
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</tr>
<tr>
<td></td>
<td>Shahri</td>
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<td>30,000</td>
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<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td>124</td>
<td>4,979,578</td>
<td>67</td>
<td>1,760,000</td>
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<tr>
<td>Central Region</td>
<td>Darvos</td>
<td>4</td>
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<td>0</td>
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<td>85,600</td>
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<tr>
<td></td>
<td>Tavildara</td>
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<td>50,000</td>
<td>2</td>
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<tr>
<td></td>
<td>Khovaling</td>
<td>1</td>
<td>80,000</td>
<td>5</td>
<td>135,000</td>
</tr>
<tr>
<td><strong>Subtotals</strong></td>
<td></td>
<td>8</td>
<td>1,216,400</td>
<td>7</td>
<td>185,000</td>
</tr>
</tbody>
</table>

*The approximate size of the suspected minefields is an estimate, based on desk analysis, and pending further survey.*

Mine contamination in Tajikistan is the consequence of different conflicts. Tajikistan’s border with Afghanistan was mined by Russian forces in 1992–98; the border with Uzbekistan was mined by Uzbek forces in 2000–01; and the Central Region of Tajikistan was contaminated as a result of the 1992–97 civil war.6

Mine contamination remains in the provinces of Khatlon and Gorno-Badakhshan Autonomous Region (GBAO) along the Tajik-Afghan border region (reported to contain 60,357 anti-personnel mines), and in the Central Region.7 Shuroobod, in the Khatlon region on the Afghan border, is the most heavily mined district, and most of the mines were dropped by helicopter due to the inaccessibility for vehicles and people.8

In 2013, following a FSD survey, FSD and the Tajikistan Mine Action Centre (TMAC) concluded that no mines remain on the Tajikistan side of the border with Uzbekistan.9 However, in its National Strategy on Humanitarian Mine Action for 2017–20, Tajikistan reports that the population living in dangerous areas near the Tajik-Uzbek border are mainly engaged in livestock, agriculture, fodder, and collection of firewood, and that “despite the high degree of mine risk, the local population is forced to operate in hazardous areas”. Furthermore, the strategy also states that “as a result of natural disasters, it is possible that some minefields or individual mines have moved to the territory of the Republic of Tajikistan, although at the moment, their exact location and area are not known”. The strategy also refers to Mine Risk Education (MRE) measures, including those to minimise the number of mine or unexploded ordnance (UXO) accidents during demining; to establish a transparent mechanism for reporting incidents involving mines or UXO; and refers to “questionable mined areas”.10 This raises doubts about whether the Tajik-Uzbek border is in fact mine-free, as previously reported.

A national survey in 2003–05 by FSD estimated that mine and ERW contamination extended over 50km².11 Tajikistan subsequently alleged that lack of experience among the initial survey teams, the absence of minefield records and other important information, and inadequate equipment contributed to the first impact survey not generating sufficiently robust results. As a result, the sizes of SHAs were miscalculated and their descriptions not clearly recorded.12 While most minefield records are of good quality, some records, for example for areas where mines were dropped by helicopter, do not reflect the reality on the ground, and as such the records have to be verified and validated by non-technical survey and data analysis.13

In September 2013, records of 110 previously unrecorded and unsurveyed minefields were made public for the first time, with security constraints said to have prevented survey activities in the past.14 The number of minefields was subsequently confirmed as 107 (not 110).15 All are
Programme Management

The Commission for the Implementation of International Humanitarian Law (CIIHL) acts as Tajikistan’s national mine action authority (TNMAC), responsible for mainstreaming mine action into the government’s socio-economic development policies.24

In June 2003, the Government of Tajikistan and the United Nations Development Programme (UNDP) established TMAC with a view to the mine action programme becoming fully nationally owned in the short- to medium-term,27 though this did not actually occur for more than ten years. TMAC was made responsible for coordinating and monitoring all mine action activities.28 Since then, TMAC has acted as the secretariat for the CIIHL, to which it also reports.29

On 3 January 2014, TNMAC was established by government decree to replace TMAC.30 Prior to this, lack of legal recognition had presented problems for TMAC,31 including, for example, its inability to open a bank account to receive and disburse funds.32 The importance of clarifying the centre’s status had been highlighted in the 2012 evaluation of UNDP support to mine action in Tajikistan.33 Since its nationalisation TNMAC believes its cooperation with national ministries and agencies has improved.34

While transition to national ownership is considered to have been successful, UNDP’s Support to Tajikistan Mine Action Programme (STMAPI) project will continue until at least the end of 2017 to support the building of sustainable national structures and TNMAC’s technical capacity.35

The Ministry of Defence plays a significant role in Tajikistan’s mine action sector. With its adoption in July 2013 of the Strategic Plan on Humanitarian Demining (2013–16), the Ministry has sought to focus on three main objectives: to further support demining; to enhance national capacities; and to create the conditions for a sound national mine action programme.36 The OSCE Programme Office in Dushanbe supported the Ministry of Defence to develop an updated plan, entitled “Ministry of Defence of the Republic of Tajikistan Co-operation Plan for Humanitarian Demining 2018–23”. The draft plan was developed in August and September 2017, through a joint working group, and as at early October, was with the Ministry of Defence.37

Areas for land release are prioritised on a district-by-district basis, based on tasks issued by the Tajik government, requests from local authorities, and the capacities of demining agencies. Issues of accessibility due to mountainous terrain and adverse weather conditions during winter limit access to some designated priority tasks, as do security restrictions.38 There is typically a six-month operational season in Tajikistan, from May to October, but in the Central Region mined areas are only accessible for up to four months. As such, while the priority for clearance of mined areas in the Afghan border of the Khatlon region is lower than for example the Khaburabod pass in the Sagirdasht area of the Central Region, clearance teams are deployed to the Khatlon region at the beginning of the working season, as it is accessible, whereas mined areas in the Central Region are not.39

The Geneva International Centre for Humanitarian Demining (GICHD) is working with TNMAC and UNDP to develop a prioritisation system and tool for Tajikistan, which will identify distinct criteria and indicators for the separate regions.40 In May 2016, the GICHD facilitated a two-day prioritisation workshop in Dushanbe, attended by TNMAC, UNDP, and clearance operators, which resulted in a list of agreed criteria and indicators to help set priorities.41 Following the workshop, TNMAC and UNDP gathered geodata which would represent these indicators for use in the pilot of PriSMA (the Priority Setting Tool for Mine Action), and the pilot subsequently began in July 2017 and was completed as of September 2017.42 A second version of PriSMA was due to be completed in November 2017, with updates based on feedback from pilot countries, including Tajikistan. Once completed, TNMAC and UNDP will run a second pilot of new version of PriSMA. Discussions will take place on how to incorporate priority setting in Tajikistan’s strategy, and how PriSMA can be integrated into Tajikistan’s existing priority setting workflow in 2018.43

PROGRAMME MANAGEMENT

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Strategic Planning

The previous national mine action strategic plan (NMASP) 2010–15 expired at the end of 2015. A new National Strategy on Humanitarian Mine Action for 2017–20 was approved by the Government of Tajikistan on 25 February 2017. The national strategy is, however, very general and while it includes a “plan”, which lists the various overarching activities to implement the strategy, it lacks detail on prioritisation of clearance tasks, timelines, or capacities for survey and clearance operations. This is disappointing as Tajikistan has, over several years, benefitted from support on strategic planning from GICHD, including a regional workshop with participants from the Afghan mine action programme and the Tajik programme in November 2014, during which key strategic planning principles were presented and discussed.

In addition, in April 2015, GICHD supported the facilitation of a strategy stakeholder workshop, in collaboration with UNDP, to develop a new national strategy to replace the existing one which was due to expire. All relevant stakeholders, including humanitarian operators, and representatives from several government ministries, actively participated in the workshop, which focused on ensuring that implementation of the strategy could be monitored, that objectives were SMART, and that timelines were clear.

There was, however, a long delay in translating the final strategy document, and unfortunately there is reportedly little resemblance between the first draft resulting from the 2015 strategy workshop and Tajikistan’s final national strategy for 2017–20, approved by the government in February 2017. One stated reason for this, reported to GICHD by TNMAC, is that the national strategy was converted into a government template. It is, however, unfortunate that several important aspects of the original draft, including SMART objectives, targets, and indicators, were removed during this process.

Operators were not consulted on the final version of the national strategy, but only in the draft “Anti-Personnel Mine Ban Convention Article 5 Completion Plan 2016–20”, which focuses on mine contamination, and for which operators advised that the national strategy’s planning concept needed more work for it to become sufficiently robust. This recommendation, however, is not reflected in the planning details of the final National Strategy on Humanitarian Mine Action for 2017–20 approved by the government.

TNMAC is still in the process of finalising the draft Article 5 completion plan for 2016–20 referred to above, and which contains more detail on operationalisation and implementation of the strategy, and which will be reviewed each year. As at May 2017, it was still being revised and finalised by TNMAC. Based on the October 2016 draft, the completion plan seeks to focus on the most heavily mined regions, which are along the Afghan border. From June to September, during favourable weather in the high-altitude areas, efforts will focus on the Central Region. In conjunction with the Government of Tajikistan and the Tajik Border Forces, TNMAC will prioritise land release activities using a district-by-district approach based on the following criteria: mined areas with economic and infrastructure impact; the number of unsurveyed minefield records in each district (those with a larger number of minefields records will be considered a priority for the deployment of non-technical survey teams); and the number of mined areas in each district (a smaller number of minefields will be considered a priority to deploy clearance teams to release the whole district).

As part of the draft Article 5 completion plan, Tajikistan has defined four different categories of mined areas: CHAs; “inaccessible CHAs”; “non-executable CHAs”; and “unsurveyed minefield records”. CHAs are defined as “An area declared dangerous due to the presence of mines”; inaccessible CHAs are defined as “CHA that is impossible to access by land release teams due to relief (like high mountains, steep slopes, etc.), small river islands, ground or other constraints including security”; non-executable CHAs are defined as “A CHA in which clearance is impossible to execute under current working conditions”, due to sandy soil, depth of items (60–70cm), or waterlogged ground. As at November 2016, Tajikistan had identified 23 areas, covering an estimated 1.3km², on the Tajik-Afghan border, which it deemed not accessible for further clearance operations due to “relief, sandy soil, islands, flows, mine located too deep (60–70cm), no access by road, and other constraints”.

TNMAC expects further inaccessible and non-executable tasks to be identified through non-technical survey or technical survey or during clearance; and that operating teams and TNMAC will agree on common criteria to declare an area/task as inaccessible or non-executable. In June 2017, Tajikistan reported that it needs “advisory support and exchange experience on addressing inaccessible areas and non-executable tasks, as well as on all other challenges faced”.

In May 2017, TNMAC reported that it is using a new approach to survey, in which, in addition to standard non-technical survey information gathering, survey teams are also using technical assets to identify actual evidence of mines and unexploded ordnance (UXO), including locating parts of, or whole mines, and items of UXO, as well as explosion craters, to confirm areas as contaminated.

Legislation and Standards

In 2015, Tajikistan drafted a humanitarian demining law, which covers all aspects of mine action. However, relevant non-governmental organisations (NGOs) are not believed to have been consulted during its drafting. The law, which was ratified by Tajikistan’s Parliament on 23 July 2016, was presented to mine action stakeholders in Tajikistan in September 2016, during a workshop hosted by TNMAC.

Tajikistan’s National Mine Action Standards (TNMAS) have been revised, and were approved by the Government of Tajikistan on 1 April 2017. The new standards have been translated into Russian and English.

Quality Management

TNMAC coordinates and monitors the Quality Management (QM) process in Tajikistan, and the TNMAS cover all QM requirements, both from a process and from a final product (released land) perspective.
Information Management

Tajikistan has reported that one of the challenges it faces in information management is retention of experienced staff. In 2016, Tajikistan enhanced its information management capacity by providing training to two information management officers and updating its information management system to IMSMA 6.0.

Operators

In 2016, combined FSD, NPA, UST, and Ministry of Defence operational capacity for survey and clearance in Tajikistan was 135 personnel across nine multi-purpose teams, one manual clearance team, and two non-technical survey teams – an increase over the 117 operational personnel deployed in 2015. Of this, NPA deployed four multi-purpose teams, totalling 46 personnel in 2016; FSD deployed one manual team, consisting of 13 personnel; and the Ministry of Defence’s Humanitarian Demining Unit (HDU) deployed five multi-purpose teams, totalling 67 personnel, and the UST deployed two non-technical survey teams, totalling nine personnel.

FSD and NPA are the two international demining operators in Tajikistan.

Having been forced to substantially reduce its demining activities in 2014 due to withdrawal of German funding, FSD deployed one Japanese-funded team in 2016. In 2017, FSD deployed a second demining team to address the additional tasks being allocated to it by TNMAC.

NPA started operations in Tajikistan in 2010; its arrival significantly increased the demining capacity of Tajikistan’s mine action programme and its clearance output. NPA reported that the number of operations staff deployed in 2016 fluctuated, due to security restrictions on the Tajik-Afghan border and weather limitations in the Central Region, and a subsequent lack of tasking by TNMAC that resulted. During maximum capacity NPA deployed 53 operations staff (including 29 deminers, 4 task supervisors, and 4 team leaders), in addition to 6 management and support staff.

Following the signature of an MoU with the Organization for Security and Co-operation in Europe (OSCE) in 2009, the Ministry of Defence established a Humanitarian Demining Group (HDG). Since TMAC’s nationalisation, the HDG has acted as a contractor for TNMAC, and OSCE funds the HDG through TNMAC. The HDG increased its operational capacities in 2016, increasing from three-multi-purpose teams in 2015 to five in 2016.

The OSCE office in Tajikistan has been supporting mine action since 2003. The OSCE’s strategy in Tajikistan is twofold: to support the development of national demining capacity; and to foster regional cooperation in border management and security. The OSCE supported the HDG via the UST, which it contracted to provide project management and administrative support to the Ministry of Defence’s Humanitarian Demining Unit in 2010–13.

Until 2015, limitations in Tajikistan’s legislation had prevented UST, a national not-for-profit organisation, gaining accreditation for demining activities. In 2015, UST obtained permission to conduct survey and received a grant from UNDP for technical and non-technical survey in the south of the country. UST is accredited to conduct non-technical survey, risk education, and victim assistance. In 2017, UST received additional accreditation to conduct non-technical survey with technical survey intervention, but it is not accredited to conduct stand-alone technical survey or clearance. As at early October 2017, UST was conducting non-technical survey with technical survey intervention, in line with the new land release methodology in Tajikistan.

 Neither mine detection dogs (MDDs) nor machines were used operationally in 2016. 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. Similarly, economic use of mechanical assets reached its limit, and as at November 2016, all areas suitable for machine deployment had been completed.

LAND RELEASE

Total mined area released by clearance in 2016 was 0.5km², with a further 0.95km² released by survey (both technical and non-technical). Almost 2.55km² was confirmed as mined.

Survey in 2016

In 2016, a total of 0.95km² was released through survey, by FSD, NPA, and the MoD. Whereas in Tajikistan’s Article 7 report for 2016, area cancelled and area reduced was disaggregated (see Table 2), TNMAC reported a combined, non-disaggregated figure for area released by survey, to Mine Action Review (see Table 3).

In addition, the UST confirmed 59 mined areas totalling 2.08km², during non-technical survey of Shamsiddin Shohin district, in Khatlon province in 2016.

Table 2: Anti-personnel mine survey by province in 2016

<table>
<thead>
<tr>
<th>Province</th>
<th>Area cancelled (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBAO</td>
<td>248,327</td>
<td>135,086</td>
</tr>
<tr>
<td>Central Region</td>
<td>411,109</td>
<td>159,749</td>
</tr>
<tr>
<td>Totals</td>
<td>659,436</td>
<td>294,835</td>
</tr>
</tbody>
</table>

TS = Technical survey
### Table 3: Anti-personnel mine survey by operator in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Province and District</th>
<th>Areas confirmed as mined</th>
<th>Area confirmed (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSD</td>
<td>GBAO (Darvos district) and Central Region (Tojikobod province)</td>
<td>1</td>
<td>140,000</td>
<td>178,897</td>
</tr>
<tr>
<td>NPA</td>
<td>GBAO (Darvos and Vanj districts) and Central Region (Lyaghsh district)</td>
<td>4</td>
<td>295,600</td>
<td>525,674</td>
</tr>
<tr>
<td>UST</td>
<td>Khatlon (Shamsiddin Shohin district)</td>
<td>59</td>
<td>2,083,000</td>
<td>0</td>
</tr>
<tr>
<td>MoD</td>
<td>GBAO (Vanj district)</td>
<td>1</td>
<td>30,000</td>
<td>249,700</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>65</strong></td>
<td><strong>2,548,600</strong></td>
<td><strong>954,271</strong>*</td>
</tr>
</tbody>
</table>

* TNMAC reported a combined figure for area cancelled and area reduced.

In addition, 1.45km² was cancelled in three battle area clearance (BAC) tasks in Rasht district of the Central Region, during joint NPA and TNMAC survey operations.91

### Clearance in 2016

In 2016, FSD, NPA, and the MoD/HDG cleared close to 0.5km² across 17 mined areas (4 of which were suspended and not yet completed as at the end of 2016), destroying 1,248 anti-personnel mines and 206 items of UXO (see Tables 4 and 5).92 This is double the clearance output compared to 2015, when 0.25km² was cleared, while significantly more mines were found and destroyed during land release operations in 2016.93

### Table 4: Mine clearance by province in 2016

<table>
<thead>
<tr>
<th>Province</th>
<th>District</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBAO</td>
<td>Darvoz</td>
<td>115,650</td>
<td>587</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Vanj</td>
<td>245,287</td>
<td>626</td>
<td>185</td>
</tr>
<tr>
<td>Central Region</td>
<td>Jirgatol</td>
<td>36,279</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Tojikobod</td>
<td>11,643</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Darvoz</td>
<td>87,937</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>496,796</strong></td>
<td><strong>1,248</strong></td>
<td><strong>206</strong></td>
</tr>
</tbody>
</table>

AP = Anti-personnel

### Table 5: Mine clearance by operator in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Province</th>
<th>District</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPA</td>
<td>GBAO</td>
<td>Vanj</td>
<td>2</td>
<td>15,116</td>
<td>131</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>GBAO</td>
<td>Darvoz</td>
<td>7</td>
<td>128,755</td>
<td>369</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Central Region</td>
<td>Jirgatol</td>
<td>1</td>
<td>36,279</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>FSD</td>
<td>GBAO</td>
<td>Darvoz</td>
<td>1</td>
<td>43,260</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>GBAO</td>
<td>Darvoz</td>
<td>1*</td>
<td>31,572*</td>
<td>232</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Central Region</td>
<td>Tojikobod</td>
<td>1</td>
<td>11,643</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>MoD</td>
<td>GBAO</td>
<td>Vanj</td>
<td>1</td>
<td>55,162</td>
<td>74</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>GBAO</td>
<td>Vanj</td>
<td>3*</td>
<td>175,002*</td>
<td>421</td>
<td>157</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td><strong>17</strong></td>
<td><strong>496,789</strong></td>
<td><strong>1,248</strong></td>
<td><strong>206</strong></td>
</tr>
</tbody>
</table>

* Clearance suspended and not yet completed as at end-2016.

TNMAC reported that better use is being made of technical survey to collect direct evidence of contamination, and to ensure that CHAs do indeed contain mines.94 NPA also reported the application of more efficient land release techniques over SHAs and CHAs in the Central Region, GBAO, and the Tajik-Afghan border and increased cancellation of non-contaminated land.95
An agreement on cooperation between the Governments of Tajikistan and Afghanistan was signed in 2014, and TNMAC has coordinated with the UN Mine Action Centre for Afghanistan (UNMACCA) and Afghanistan’s Directorate of Mine Action Coordination (DMAC) on land release approaches, NMAS, exchange visits, cross-border projects, victim assistance, and risk education. However, in 2015 and 2016, due to increased security in northern parts of Afghanistan (along the Tajik border), the Border Forces denied permission for clearance operations in the Khatlon border region – an area that contains nearly three-quarters of all mine contamination in Tajikistan. In 2016, the Border Forces only permitted non-technical survey operations in Shamsiddin Shohin district of Khatlon province, to survey some of the 101 previously unrecorded minefields. As such, two UST survey teams were established; these conducted non-technical survey in 2016, and survey continued in 2017. As at August 2016, TNMAC was negotiating with the Border Forces for the opportunity to start mine clearance operations in Khatlon region, and in January 2017 greater access for clearance and survey operations were granted along the Tajik-Afghan border, in particular to Shamsiddin Shohin district.

**ARTICLE 5 COMPLIANCE**

Under Article 5 of the APMBC (and in accordance with the ten-year extension granted by states parties in 2009), Tajikistan is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 April 2020. It is not on track to meet its deadline.

The first quarter of each calendar year is typically not conducive for clearance operations, so in order to meet the deadline, clearance would need to be completed by the end of 2019. Current land release output, insecurity along its border with Afghanistan, and the inaccessibility and/or operational difficulty of some mined areas, means that Tajikistan will not finish in time. Tajikistan reported in June 2017 that: “There is a need to increase the demining capacity in Tajikistan in order to ensure timely implementation of the Ottawa Convention obligations by 2020. Of course this will require additional resources.”

In total during the last five years, Tajikistan has cleared less than 5km² of mined area (see Table 6). Progress was hampered in 2015 and 2016 due to restricted access for clearance in the Afghan-Khan border region owing to a heightened security situation in Kunduz and other areas in north-east Afghanistan. This resulted in clearance operations originally scheduled for preparation in January 2016, with deployment in mid- to late-February, being delayed until May. It also saw clearance focused on the mountainous Central Region, where adverse weather means the demining window is much shorter, with additional challenges posed by the need to access remote locations and to ensure medical evacuation.

**Progress in 2017**

Improved security conditions in 2017 have enabled greater access for survey and clearance operations along the Tajik-Afghan border, following the permission of the Border Forces Command of Tajikistan, which was granted in late January. Previously, in 2016, security restrictions had meant that only limited non-technical survey had been possible along the border, and TNMAC had instead focused demining capacity in the Central Region. As mentioned, increased access granted in early 2017 included the Shamsiddin Shohin district in the southern Tajik-Afghan border of Khatlon province, which is the most heavily mined district in Tajikistan, accounting for a significant proportion of overall contamination in the country. In early October 2017, humanitarian demining organisations had received tentative indications from TNMAC that the remaining districts of the Tajik-Afghan border that had been closed might also be opened for survey and clearance.

TNMAC has said that it anticipates that Tajikistan will complete survey and clearance of mined areas by the end of 2020, but has acknowledged that this is contingent on sufficient funding and capacity, as well as the security situation at the Tajik-Afghan border, both of which could affect its ability to complete. This also does not take into account how Tajikistan plans to release the “inaccessible” and “non-executable” areas, referred to below.

Tajikistan is in the process of finalising an Article 5 completion plan for 2016–20 in which it will “demonstrate clear and reasonable evidence and efforts of Tajikistan to complete its obligation in time.” However, the draft completion plan (as at 4 October 2016) only outlined Tajikistan’s plans to address accessible and executable CHAs. “Inaccessible” and “non-executable” areas have been excluded from land release activities during the Article 5 completion period, and will be defined as “residual threat.” This is not compliant with Tajikistan’s Article 5 survey and clearance obligations. In June 2017, at the APMBC intersessional meetings, Tajikistan reported that it needs “advisory support and exchange experience on addressing inaccessible areas and non-executable tasks, as well as on all other challenges faced.”

**Table 6: Mine clearance in 2012–16**

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.50</td>
</tr>
<tr>
<td>2015</td>
<td>0.25</td>
</tr>
<tr>
<td>2014</td>
<td>0.65</td>
</tr>
<tr>
<td>2013</td>
<td>1.99</td>
</tr>
<tr>
<td>2012</td>
<td>1.10</td>
</tr>
<tr>
<td>Total</td>
<td>4.49</td>
</tr>
</tbody>
</table>
In the Tajik-Afghan Border region, after deducting 23 “inaccessible” and “non-executable” areas, 60 CHAs covering some 2.67km² remain to be addressed under TNMAC’s draft October 2016 completion plan, while in the Central Region, 10 CHAs remain to be addressed, covering 1.74km². TNMAC predicts that the proportion of land manually cleared and reduced by technical survey will remain the same as the average of the last six years, namely 40% and 33% accordingly. Therefore, it predicts that from the 5.72km² of total CHA, only 3.83km² will be subjected to full clearance.

In addition, with regards to the unsurveyed minefield records along the Tajik-Afghan border, it is assumed that about 20% of mined areas will not be accessible or executable for land release operations, and about 10% will be cancelled through non-technical survey.

Depending on weather conditions, land release operations in the Khatlon region of the border usually start in February/March; the GBAO part of the border only becomes accessible from May until October; and the Central Region from June until September.

In its draft Article 5 completion plan for 2016–20, Tajikistan estimates that to clear 5.52km² of CHA (and excluding the unsurveyed minefield records on the Tajik-Afghan border, and “inaccessible” and “non-executable” areas) by the end of 2019, would require about 24 manual clearance teams annually clearing an average total each year of 1.4km². Alternatively, a lesser, but still increased, capacity of 14 manual clearance teams could take approximately seven years (2015–23), based on current clearance rates. Most recently, in its Article 7 transparency report for 2016, Tajikistan estimates that it will clear a total of almost 4.9km² in 93 mined areas in 2017–19. This comprised 1.52km² across 22 mined areas in 2017; 1.66km² across 42 mined areas in 2018; and 1.71km² across 29 mined areas in 2019. The 4.9km² of mined area that Tajikistan plans to clear by 2020 represents approximately half the overall combined confirmed and suspected mined area which totals over 9.7km² (see Table 1). This suggests that Tajikistan is currently well behind schedule to meet both its APMBC Article 5 deadline of 1 April 2020 and TNMAC’s expected completion of the end of 2020; and highlights the need for increased capacity and optimum application of non-technical and technical survey to release areas found not to be mine-contaminated, and focus clearance efforts only where contamination is confirmed.

Tajikistan reported that in 2016, a total of US$2.2 million was spent on mine action, the majority through international funding from Japan, Norway, Switzerland, and the United States. Of this, the Government of Tajikistan supported TNMAC coordination activities with some US$40,000 in 2016, a slight increase compared to the US$38,000 provided in 2015. In addition, the Tajik government provides in-kind and technical support to the programme which it equates to some US$700,000 annually, which has remained constant. No national funding is provided for survey and/or clearance of mined areas.

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1 Email from Muhabbat Ibromzoda, Director, TMAC, 22 May 2017; and Article 7 Report (for 2016).
2 Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.
3 Telephone interview with Aubrey Sutherland, Country Director, NPA, 27 September 2017; and email, 9 October 2017.
5 Email from Muhabbat Ibromzoda, TMAC, 22 May 2017; and Article 7 Report (for 2016).
7 TNMAC, Draft Article 5 Completion Plan 2016–20, 4 October 2016.
8 Ibid.
9 Emails from Parviz Mavlonkulov, TMAC, 12 March 2014 and Muhabbat Ibromzoda, TMAC, 19 March 2014; and TNMAC, Draft Article 5 Completion Plan 2016–20, 4 October 2016.
13 Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.
14 Statement of Tajikistan, 14th Meeting of States Parties, Geneva, 1 December 2015.
17 Email from Muhabbat Ibromzoda, TNMAC, 30 September 2015.
18 Ibid.
19 Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.
20 TNMAC Draft Article 5 Completion Plan 2016–20, 4 October 2016; and statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.
22 Email from Muhabbat Ibromzoda, Director, 22 May 2017.
23 Ibid.
24 Email from Aubrey Sutherland-Pillai, NPA, 10 August 2016.
25 Article 7 report (for 2016).
26 Article 5 deadline Extension Request, 31 March 2009, p. 4.
30 Email from Muhabbat Ibromzoda, TNMAC, 3 April 2015.
33 Ibid., pp. 27–29.
34 Email from Muhabbat Ibromzoda, TNMAC, 12 May 2015.
37 Email from Luka Buhin, OSCE Office in Tajikistan, 9 October 2017.
38 Email from Muhabbat Ibromzoda, TNMAC, 22 May 2017.
39 Email from Muhabbat Ibromzoda, TNMAC, 22 May 2017; and Statement of Tajikistan, 15th Meeting of States Parties, Santiago, 30 November 2016.
Emails from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017; and Aubrey Sutherland, NPA, 14 March 2017; and Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.

Emails from Aubrey Sutherland-Pillai, NPA, 10 August 2016; and Wendi Pedersen, Focal point for Tajikistan, GICHD, 5 October 2017.

Email from Wendi Pedersen, GICHD, 5 October 2017.

Ibid.

Interview with Muhbatt Ibrohimzoda, TNMAC, and Ahad Mahmudov, Programme Manager, UNDP, in Geneva, 23 June 2015.


Email from Asa Massleberg, GICHD, 5 October 2017.

Ibid.

Ibid.

Emails from Aubrey Sutherland, NPA, 2 September 2016 and 22 June 2017.

Interview with Muhbatt Ibrohimzoda, TNMAC, and Abdulmain Karimov, Project Manager, UNDP, in Geneva, 10 February 2017.

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017.


Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017.

Email from Aubrey Sutherland-Pillai, NPA, 18 October 2016.

Emails from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016 and 22 May 2017.

Email from Aubrey Sutherland-Pillai, NPA, 18 October 2016.

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017.


Email from Muhabbat Ibrohimzoda, TNMAC, 22 May 2017.

Email from Aubrey Sutherland-Pillai, NPA, 18 October 2016.

Emails from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016 and 22 May 2017.

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Email from Aubrey Sutherland-Pillai, NPA, 18 October 2016.

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017.


Email from Chris Rennick, Operations Office, FSD, 20 March 2017. There was also a discrepancy between FSD and TNMAC data regarding survey data for Darvos district, for which FSD reported 24,000m² as cancelled, whereas TNMAC did not report any area cancelled by FSD for this district. Furthermore, FSD reported an additional 170,000m² of mined area confirmed in Darvos and 157,000m² confirmed in Tojikobod, which TNMAC did not report. There was also a discrepancy between NPA and TNMAC data regarding the area of land confirmed as mined in Darvos District, for which NPA reported an additional 412,790m² of mined not reported by TNMAC.

Emails from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017; and Aubrey Sutherland, NPA, 14 March 2017.

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017.

Email from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016.

Article 7 Report (for 2016).

Emails from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017; Chris Rennick, FSD, 20 March 2017; and Aubrey Sutherland, NPA, 14 March 2017. FSD and NPA figures disaggregated area cancelled and area reduced, whereas TNMAC only reported a combined figure. There was also a discrepancy between FSD and TNMAC data regarding survey data for Darvos district, for which FSD reported 24,000m² as cancelled, whereas TNMAC did not report any area cancelled by FSD for this district. Furthermore, FSD reported an additional 170,000m² of mined area confirmed in Darvos and 157,000m² confirmed in Tojikobod, which TNMAC did not report. There was also a discrepancy between NPA and TNMAC data regarding the area of land confirmed as mined in Darvos District, for which NPA reported an additional 412,790m² of mined not reported by TNMAC.

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Email from Aubrey Sutherland, NPA, 14 March 2017.

Emails from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016 and 22 May 2017.

Ibid.

Email from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016.

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017; and Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.

Email from Chris Rennick, FSD, 20 March 2017. There was also a discrepancy between FSD and TNMAC data regarding clearance data for Darvos district, for which FSD reported an additional 74,000m² of clearance, but 15 fewer anti-personnel mines destroyed, compared to TNMAC; and between NPA and TNMAC data, for which NPA reported 131,321m² of clearance in Darvos, destroying 23 anti-personnel mines.

Emails from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016 and 22 May 2017.

Email from Aubrey Sutherland, NPA, 14 March 2017.

Emails from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016 and 22 May 2017.

Ibid.

Email from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016.

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017; and Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.

Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017; and email from Aubrey Sutherland, NPA, 14 March 2017.

Email from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016.

Email from Aubrey Sutherland, NPA, 14 March 2017.

Email from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016 and 22 May 2017.

Ibid.

Emails from Muhbatt Ibrohimzoda, TNMAC, 19 August 2016; and Aubrey Sutherland-Pillai, NPA, 10 August 2016; and Statement of Tajikistan, 14th Meeting of States Parties, Geneva, 1 December 2015.


Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017.

Ibid.


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Ibid.

Ibid.

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Ibid.


Statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.


Ibid.

Ibid.

Ibid.

Article 7 Report (for 2016).

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017; and Article 7 Report (for 2016); and statement of Tajikistan, Intersessional meetings, Geneva, 8 June 2017.

Email from Muhbatt Ibrohimzoda, TNMAC, 22 May 2017.
THAILAND

ARTICLE 5 DEADLINE: 1 NOVEMBER 2018
(FIVE-YEAR EXTENSION REQUESTED)

Thailand continued to make progress defining the extent of contamination, cancelling large suspected hazardous area (SHA) and submitting a second Article 5 deadline extension request that set out targets for further significant release, but these targets looked ambitious as the pace of land release slowed markedly in 2016.

MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Targeted clearance</td>
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<td>7</td>
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<tr>
<td>Efficient clearance</td>
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<td>7</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>8</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: AVERAGE

6.3 | 6.6
RECOMMENDATIONS FOR ACTION

- Thailand should accelerate non-technical survey and clearance to achieve its extension request land release milestones.
- Thailand should step up contacts with Cambodia to facilitate mine clearance in border areas and present detailed plans for clearance of defined tasks for approval by the National Committee for Humanitarian Mine Action (NMAC) and discussion with Cambodian authorities.
- Thailand should present detailed plans and timelines for completion of clearance on the border with the Lao People’s Democratic Republic (Lao PDR).
- Thailand should clarify the capacity needed to achieve the land release targets set out in its second Article 5 deadline extension request, including civilian deminers, and the plans for mobilising resources to support it.

CONTAMINATION

Thailand is affected by mines as well as by explosive remnants of war (ERW), including both abandoned explosive ordnance and unexploded ordnance (UXO), the result of conflicts on its borders with Cambodia, Lao PDR, Malaysia, and Myanmar.

A 2001 Landmine Impact Survey (LIS) identified 27 of Thailand’s 76 provinces, and more than 500,000 people, as mine/ERW-affected, estimating total mine/ERW contamination at 2,557km².¹ Thailand’s revised Article 5 deadline extension request, submitted in 2008, claimed it had released 1,355km² of this area, leaving a total of 1,202km² of suspected hazardous area (SHA). This included an estimated 528km² of “real minefield” requiring manual clearance.² Subsequent non-technical survey in partnership with Norwegian People’s Aid (NPA) has shown that only a small proportion of this area is contaminated.

By the start of 2017, Thailand reported that 14 of 77 provinces are still mine-affected with a total of 309 SHAs covering 422km² (see Table 1). Three-quarters of this suspected contamination (approximately 319km²) was concentrated in seven provinces bordering Cambodia. Of the remainder, 69.6km² or 16% was on the border with Lao PDR, 33km² (8%) was on the border with Myanmar; and the remaining fragment was in Yala province along the border with Malaysia.³ By July 2017, the Thai Mine Action Centre (TMAC)’s estimate of total contamination had fallen to less than 410km².⁴

Table 1: Mine contamination by province (km²)⁵

<table>
<thead>
<tr>
<th>Region</th>
<th>Province</th>
<th>End-2014 CHAs*</th>
<th>Area</th>
<th>End-2015 SHAs*</th>
<th>Area</th>
<th>End-2016 SHAs</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Chiang Mai</td>
<td>4</td>
<td>28.97</td>
<td>5</td>
<td>35.49</td>
<td>4</td>
<td>25.62</td>
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<td>Chiang Rai</td>
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<td></td>
<td>Nan</td>
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<td>2.65</td>
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<td>0</td>
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<td></td>
<td>Pittanuloke</td>
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<td>32.99</td>
<td>1</td>
<td>32.99</td>
</tr>
<tr>
<td></td>
<td>Tak</td>
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<td>10.06</td>
<td>1</td>
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<td>1</td>
<td>0.37</td>
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<tr>
<td></td>
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<td>3.35</td>
<td>1</td>
<td>3.35</td>
<td>1</td>
<td>3.35</td>
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<tr>
<td>North-east</td>
<td>Buriram</td>
<td>15</td>
<td>19.48</td>
<td>15</td>
<td>19.48</td>
<td>15</td>
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<tr>
<td></td>
<td>Surin</td>
<td>32</td>
<td>39.56</td>
<td>32</td>
<td>37.60</td>
<td>32</td>
<td>30.54</td>
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<tr>
<td></td>
<td>Sisaket</td>
<td>56</td>
<td>93.47</td>
<td>54</td>
<td>88.87</td>
<td>54</td>
<td>88.87</td>
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<tr>
<td></td>
<td>Ubon Ratchathani</td>
<td>75</td>
<td>122.85</td>
<td>71</td>
<td>119.95</td>
<td>71</td>
<td>112.42</td>
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<tr>
<td>East</td>
<td>Sakeo</td>
<td>32</td>
<td>9.78</td>
<td>29</td>
<td>10.11</td>
<td>29</td>
<td>9.56</td>
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<tr>
<td></td>
<td>Chanthaburi</td>
<td>24</td>
<td>5.13</td>
<td>24</td>
<td>5.13</td>
<td>21</td>
<td>4.69</td>
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<td></td>
<td>Trad</td>
<td>75</td>
<td>91.55</td>
<td>72</td>
<td>88.41</td>
<td>72</td>
<td>86.65</td>
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<tr>
<td>South</td>
<td>Chumporn</td>
<td>2</td>
<td>6.92</td>
<td>2</td>
<td>6.92</td>
<td>2</td>
<td>6.92</td>
</tr>
<tr>
<td></td>
<td>Yala</td>
<td>6</td>
<td>1.15</td>
<td>6</td>
<td>1.15</td>
<td>6</td>
<td>1.15</td>
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<tr>
<td>Totals</td>
<td></td>
<td>328</td>
<td>474.26</td>
<td>314</td>
<td>450.74</td>
<td>309</td>
<td>422.61</td>
</tr>
</tbody>
</table>

* As part of a re-survey of contaminated areas TMAC reclassified confirmed hazardous areas (CHAs) as SHAs.
PROGRAMME MANAGEMENT

Thailand created NMAC in 2000, chaired by the prime minister and with responsibility for overseeing the national mine action programme, but after 2008 it never convened. The NMAC was reconstituted in May 2017, still with the prime minister as chairman. It was expected to meet for the first time before the Sixteenth Meeting of States Parties of the Anti-Personnel Mine Ban Convention (APMBC) and thereafter to meet annually. 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.

TMAC was established in 1999 under the Armed Forces Supreme Command to coordinate, monitor, and conduct mine/ERW survey, mine clearance, mine/ERW risk education (RE), and victim assistance throughout Thailand. TMAC is also responsible for establishing a programme to meet Thailand’s obligations as a state party to the APMBC. However, TMAC has had to contend with limited funding and, as a military organisation, with regular rotation of personnel at all levels.

Lieutenant-General Prasopchai Kongburan, who took over as Director General in 2016, was its tenth director since TMAC became operational in 2000 and the sixth in the last six years.

Strategic Planning

Thailand’s revised Second Article 5 Extension Request, submitted in August 2017, set out a two-phase programme for completing clearance, seeking an extension of just over five more years to 31 December 2023. Phase 1, spanning 2017 and 2018, expected release of 63.8km² of suspected contamination, leaving the remaining 358.8km² to be tackled in the requested five-year extension period.

Table 2: Planned land release 2017–2023

<table>
<thead>
<tr>
<th>Province</th>
<th>Area to be released in Phase 1 (m²)</th>
<th>Area to be released in Phase 2 (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sa Kaeo</td>
<td>366,850</td>
<td>9,192,948</td>
</tr>
<tr>
<td>Trat</td>
<td>19,199,151</td>
<td>67,454,225</td>
</tr>
<tr>
<td>Chanthaburi</td>
<td>754,820</td>
<td>3,936,224</td>
</tr>
<tr>
<td>Buriram</td>
<td>0</td>
<td>19,483,928</td>
</tr>
<tr>
<td>Surin</td>
<td>1,869,334</td>
<td>28,670,745</td>
</tr>
<tr>
<td>Sisaket</td>
<td>17,981,799</td>
<td>70,883,609</td>
</tr>
<tr>
<td>Ubon Ratchathani</td>
<td>22,478,947</td>
<td>89,945,265</td>
</tr>
<tr>
<td>Uttaradit</td>
<td>0</td>
<td>3,345,061</td>
</tr>
<tr>
<td>Phitsanulok</td>
<td>0</td>
<td>32,990,520</td>
</tr>
<tr>
<td>Tak</td>
<td>0</td>
<td>366,772</td>
</tr>
<tr>
<td>Chiang Mai</td>
<td>0</td>
<td>25,615,188</td>
</tr>
<tr>
<td>Chumphon</td>
<td>0</td>
<td>6,924,647</td>
</tr>
<tr>
<td>Yala</td>
<td>1,145,139</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>63,796,040</td>
<td>358,809,132</td>
</tr>
</tbody>
</table>

The request draws attention to potential obstacles to completion, including border demarcation, difficult terrain, financial constraints, and unforeseen circumstances such as flooding and political upheavals. Border demarcation poses a particular concern. The request states that Phase 1 is intended to release all SHAs outside border areas, leaving Phase 2 to tackle areas to be demarcated on its borders covering 358.8km², or 85% of the outstanding suspected contamination.

The extension request also proposed a Phase 1 budget of THB443.4 million (US$12.3 million) for Phase 1, including THB 376 million from TMAC and THB48.5 million from two internationally funded humanitarian operators, NPA and the Thai Civilian Deminers Association (TDA). TMAC’s costs, however, have far exceeded the Thai government funding of TMAC in the two previous years (THB 69 million in 2015 and THB 68 million in 2016).

Standards

TMAC drafted its first national mine action standards with NPA’s support in 2010 and formally adopted them in June 2012. A revision of the standards was completed on 1 April 2015, mainly amending chapters on land release and baseline survey.

Operators

TMAC completed accreditation of operators for the first time in March 2015, accrediting its four HMAUs, one international NGO (NPA), and two national NGOs (Thai Civilian Deminers Association — TDA — and PRO). Operators are now required to renew their accreditations annually.
TMAC reported employing a total of around 276 operations staff and 61 headquarters personnel in 2015—16 and the previous Director General, Lieutenant-General Wittaya Wachirakul had expected to reduce the size of HMAUs 1 and 4 in the course of 2016. The extension request said TMAC would employ 330 operations personnel in the four HMAUs and 172 headquarters staff.

NPA, the only international operator working in Thailand, has supported TMAC operations since 2011, conducting non-technical survey in the north in cooperation with HMAU 3 in 2015 and shifting to Ubon Ratchathani province in 2016, working with 18 personnel, half of them women.

LAND RELEASE

Thailand released a total of 28.19 km² in 2016, 98% of it cancelled by non-technical survey. The total was almost one-third less than in 2015, a record year for land release in Thailand when NPA and HMAU 3 were able to cancel large areas of SHAs in northern Thailand that proved to be uncontaminated and TMAC reported an almost tenfold increase in area cleared.

However, NPA-HMAU3’s survey results in 2016 reinforced earlier findings indicating that only a small percentage of Thailand’s SHA is actually mined. NPA-HMAU 3 teams conducted non-technical survey on a total of 16,247,355 m² in Ubon Ratchathani province in 2016, of which 10,163,208 m² was cancelled, 4,027,868 m² was designated “area without evidence” and only 2,056,279 m² was identified as hazardous. A further 156,918 m² outside the SHAs it surveyed were also found to be contaminated. For areas without evidence, HMAU 3 later in 2017 conducted the TS and so far, none of them was identified as hazardous.

To fulfil the Phase 1 targets set out in its extension request, TMAC planned to release 34.74 km² in 2017 and 29.05 km² in 2018. By the end of July 2017, TMAC appeared to be slipping behind schedule and had released a total of only 12.88 km².

Table 3: Land release in 2016

<table>
<thead>
<tr>
<th>Province</th>
<th>Area released by NTS (m²)</th>
<th>Area reduced by TS (m²)</th>
<th>Area cleared (m²)</th>
<th>Total area released (m²)</th>
<th>AP mines destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiang Mai</td>
<td>9,879,650</td>
<td>0</td>
<td>0</td>
<td>9,879,650</td>
<td>0</td>
</tr>
<tr>
<td>Chiang Rai</td>
<td>920,297</td>
<td>0</td>
<td>0</td>
<td>920,297</td>
<td>0</td>
</tr>
<tr>
<td>Ubon Ratchathani</td>
<td>7,580,562</td>
<td>0</td>
<td>0</td>
<td>7,580,562</td>
<td>0</td>
</tr>
<tr>
<td>Surin</td>
<td>6,812,494</td>
<td>0</td>
<td>246,671</td>
<td>7,059,165</td>
<td>469</td>
</tr>
<tr>
<td>Trat</td>
<td>1,679,746</td>
<td>0</td>
<td>77,624</td>
<td>1,757,370</td>
<td>518</td>
</tr>
<tr>
<td>Chanthaburi</td>
<td>383,243</td>
<td>0</td>
<td>65,750</td>
<td>448,993</td>
<td>223</td>
</tr>
<tr>
<td>Sakeo</td>
<td>472,665</td>
<td>71,537</td>
<td>4,193</td>
<td>548,395</td>
<td>21</td>
</tr>
<tr>
<td>Totals</td>
<td>27,728,657</td>
<td>71,537</td>
<td>394,238</td>
<td>28,194,432</td>
<td>1,231</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  
NTS = Non-technical survey  
TS = Technical survey

Survey in 2016

Thailand released 27.8 km² through survey in 2016, continuing the focus on survey that TMAC started five years earlier. Of the total, 27.7 km² was cancelled by non-technical survey and 0.07 km² reduced by technical survey. This included 14.39 km² cancelled in the northeast (Surin and Ubon Ratchathani provinces), 10.8 km² in the north (Chiang Mai and Chiang Rai) and 2.06 km² cancelled in eastern Thailand (Trat and Chanthaburi).

NPA, after working with HMAU 4 in 2015 conducting non-technical survey in northern Thailand, shifted operations back to the border with Cambodia, working in 2016 in the north-eastern province of Ubon Ratchathani where teams identified additional contamination of 155,918 m² and cancelled 7.6 km². Under an amendment to its memorandum of understanding with TMAC at the end of 2016, NPA started conducting survey in Sisaket province in 2017, expecting to work on 13 tasks over the year. It was also to work with HMAU 2 on survey of SHA’s in Trat province.

Clearance in 2016

After record clearance results in 2015, TMAC’s clearance rate fell sharply in 2016, releasing only 0.39 km², of which nearly two-thirds was in Surin province and most of the rest in Trat and Chanthaburi provinces bordering Cambodia. TDA, which completed a Japan-funded, 19-month project clearing 2.5 km² of Surin province in October 2015, started a second project in Surin in September 2016 with $0.8 million in funding from the JAPAN-ASEAN Integration Fund. Funding was due to continue for two years.
ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the nine-and-a-half year extension granted by states parties in 2008), Thailand is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 November 2018. Thailand will miss its deadline and submitted a request for a five-year extension in April 2017, followed by a revised request in August.

The extension request benefits from the progress of NTS in the past four years, providing a much clearer assessment of remaining contamination, but the timelines appeared extremely ambitious when compared to the previous five years. The extension request stated that Thailand has excellent relations with its neighbours and has accelerated contacts on border cooperation, but has yet to demonstrate practical results on a significant scale.

Table 4: Extension request 2019–2023: land release targets (km²)

<table>
<thead>
<tr>
<th>Year</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>72.12</td>
<td>72.06</td>
<td>73.23</td>
<td>74.54</td>
<td>66.86</td>
</tr>
</tbody>
</table>

With 85% of Thailand’s remaining contamination in border areas where access may be restricted by security or demarcation issues, its ability to meet its revised deadline is hostage to developing cooperation with its neighbours. The extension request stated that Thailand has excellent relations with its neighbours and has accelerated contacts on border cooperation, but has yet to demonstrate practical results on a significant scale.

Table 5: Land release in 2012–16 compared to 2008 extension request targets (km²)

<table>
<thead>
<tr>
<th>Year</th>
<th>Mined area cleared</th>
<th>Area released by survey</th>
<th>Total area released</th>
<th>Extension Request target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.39</td>
<td>27.80</td>
<td>28.19</td>
<td>64.18</td>
</tr>
<tr>
<td>2015</td>
<td>2.05</td>
<td>39.67</td>
<td>41.72</td>
<td>61.95</td>
</tr>
<tr>
<td>2014</td>
<td>0.23</td>
<td>24.84</td>
<td>25.07</td>
<td>62.92</td>
</tr>
<tr>
<td>2013</td>
<td>0.31</td>
<td>31.91</td>
<td>32.22</td>
<td>41.05</td>
</tr>
<tr>
<td>2012</td>
<td>0.29</td>
<td>20.6</td>
<td>20.89</td>
<td>41.95</td>
</tr>
<tr>
<td>Totals</td>
<td>3.27</td>
<td>112.91</td>
<td>148.09</td>
<td>272.05</td>
</tr>
</tbody>
</table>

With 85% of Thailand’s remaining contamination in border areas where access may be restricted by security or demarcation issues, its ability to meet its revised deadline is hostage to developing cooperation with its neighbours. The extension request stated that Thailand has excellent relations with its neighbours and has accelerated contacts on border cooperation, but has yet to demonstrate practical results on a significant scale.
**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

| Score  | 5.3 | 4.9 |
PERFORMANCE COMMENTARY

In 2016, Turkey, with the support from United Nations Development Programme (UNDP) and the Geneva International Centre for Humanitarian Demining (GICHD), made progress in operationalising the Turkish Mine Action Centre (TURMAC), drafting national mine action standards, establishing an information management system, and implementing its March 2015 workplan for mine clearance. In June 2016, mine clearance operations, managed by UNDP, began under Phase 1 of the European Union [EU] Eastern Border Mine Clearance project. However, despite these positive developments, Turkey is not on track to meet its extended Anti-Personnel Mine Ban Convention (APMBC) Article 5 clearance deadline of March 2022. It must accelerate efforts to survey and clear non-border areas, in addition to areas on its south-eastern border, including with Iraq, and along the border with Syria.

RECOMMENDATIONS FOR ACTION

■ TURMAC should finalise its national strategic mine action plan for 2017–19 as soon as possible.
■ It should also ensure that national mine action standards that ensure application of best practice in land release are approved as soon as possible, so that technical survey may be given priority over full clearance so as to accurately delineate the contaminated area.
■ Turkey should mobilise the necessary resources for survey and clearance operations beyond the EU Eastern Border Mine Clearance project.
■ Turkey should move forward, without delay, to demine both non-border areas and its south-eastern border and its border with Syria.
■ 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 its workplan.
■ Turkey should 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.
■ Turkey and Cyprus should heed the UN Security Council’s renewed call for access to all remaining mined areas inside and outside the Buffer Zone.

CONTAMINATION

Turkey is contaminated with anti-personnel and anti-vehicle mines, as well as improvised explosive devices (IEDs), with at more than 172km² of confirmed mined area across 3,080 areas, 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 quantified.2 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. Mines were also laid around military installations.3

Table 1: Contamination by province (as at end-2016)4

<table>
<thead>
<tr>
<th>Region</th>
<th>SHAs</th>
<th>Area (m²)</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>AP mines in CHAs</th>
<th>AV mines in CHAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syrian border</td>
<td>84</td>
<td>Unknown</td>
<td>1,308</td>
<td>144,290,431</td>
<td>413,152</td>
<td>194,678</td>
</tr>
<tr>
<td>Iraqi border</td>
<td>373</td>
<td>Unknown</td>
<td>596</td>
<td>2,862,835</td>
<td>79,017</td>
<td>0</td>
</tr>
<tr>
<td>Iranian border</td>
<td>38</td>
<td>Unknown</td>
<td>467</td>
<td>21,207,047</td>
<td>198,190</td>
<td>0</td>
</tr>
<tr>
<td>Armenian border</td>
<td>0</td>
<td>0</td>
<td>42</td>
<td>1,097,077</td>
<td>20,275</td>
<td>0</td>
</tr>
<tr>
<td>Non-border areas</td>
<td>206</td>
<td>Unknown</td>
<td>667</td>
<td>3,107,849</td>
<td>34,410</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>701</td>
<td>Unknown</td>
<td>3,080</td>
<td>172,565,239</td>
<td>745,044</td>
<td>194,678</td>
</tr>
</tbody>
</table>

SHAs = Suspected hazardous areas  CHAs = Confirmed hazardous areas  AP = Anti-personnel  AV = Anti-vehicle
The baseline mine contamination as at the end of 2016 is slightly lower than that reported for the end of the previous year, as 122,764m² was reported as having been cleared on the border with Iran during 2016. However, no mined area had been formally released by Turkey to date, and Turkey has also not reported on areas reduced and cancelled in 2016, which it plans to report “at a future date”.6

The number of reported mines in confirmed mined areas decreased by 9,845 during 2016, which Turkey states is the result of destruction of 9,008 anti-personnel on the Iranian border, as part of the EU Eastern Border Mine Clearance project, and 837 anti-personnel mines destroyed on the Syria border, during construction of a border security surveillance system.7

According to Turkey, its western borders with Bulgaria and Greece, as well as the border with Georgia, are mine-free.8

Government forces emplaced landmines during the 1984–99 conflict with the Kurdistan Workers’ Party (Partiya Karkerên Kurdistan, PKK) in the south-east of the country. According to the Ministry of Foreign Affairs, these mines have been progressively cleared since 1998.9 In addition to mines laid by Turkish security forces, non-state armed groups have also emplaced mines and IEDs, rendering the clearance process more complex.10

Eighteen of Turkey’s eighty-one provinces still contain mined areas. 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

In its Article 5 deadline extension request, submitted in March 2013, Turkey estimated that a total of 3,520 confirmed and suspected mined areas covered almost 215km². This estimate was provisional as the size of the (then) 346 suspected mined areas had not even been estimated.12

In March 2015, Turkey submitted an updated workplan for its mine clearance activities, in which it reported a total of 3,080 CHAs containing mines and 701 SHAs, of which the CHAs cover almost 173km².13 The estimated area of contamination and the number of emplaced mines have not yet been quantified for the 701 SHAs; therefore the total estimated contaminated area is likely to be significantly larger. The greatest mined area is on the border with Syria (approximately 144km²), with smaller areas on the borders with Iran (approximately 21km²), Iraq (less than 3km²), and Armenia (just over 1km²). A further 873 mined areas covering a total of approximately 3km² have been identified in “areas other than borders”.14

In Annex II to its updated workplan, Turkey offered a comparison between contamination reported at the time of its 2013 Article 5 extension request and the revised contamination data reported in its 2015 workplan.15 The comparison showed that in border areas the number of SHAs rose by 216, while the number of CHAs went down by 118, corresponding to a 41.39km² reduction in CHA between the 2013 extension request and the 2015 workplan. In non-border areas the number of CHAs increased by 30, with the area of CHA increasing by 0.49km² between the two datasets. In addition, the number of SHAs in non-border areas increased by 139.

Turkey has proffered a range of explanations for these discrepancies, mostly related to information management problems.

Mine contamination in Turkey has both a humanitarian and economic impact. Up to 80% of mined areas along the Syrian border are on arable land, which cannot be used. The risk to livestock is widespread, especially where fencing is damaged. Mined areas have also prevented access for development activities.16

In 2016, Turkey reported 57 casualties, including 14 fatalities, from anti-personnel mines.17 This included eight civilians (four children and four adults) who were wounded, and 50 military personnel (36 wounded and 14 killed).18 While this is still a high number, it is a significant decrease on the 215 anti-personnel mines casualties, including 29 fatalities, which Turkey reported for 2015.19

Northern Cyprus

Turkey’s original Article 5 clearance deadline was 1 March 2014. In 2013, states parties granted Turkey an eight-year extension until 1 March 2022, for clearance of mines in Turkey, but Turkey did not request additional time for clearance of the areas it controls in northern Cyprus.20

PROGRAMME MANAGEMENT

Previously, Turkey had reported that efforts were underway to centralise coordination of clearance activities through efforts by the Ministry of National Defence to establish a national mine action authority (NMAA) and a national mine action centre (NMAC). In its 2013 Article 5 deadline extension request, Turkey reported that a draft law on the establishment of an NMAA and an NMAC had been completed and was awaiting input from other ministries before delivery to the Prime Minister to submit to parliament.21

In January 2015, Law No. 6586 on the “Establishment of a National Mine Action Centre and Amendment of Some Other Laws” was adopted by the Turkish Grand National Assembly; the law entered into force on 3 February 2015. The law aims to define the modalities and provide the basis regarding functions, jurisdictions, and responsibilities of NMAC, which will carry out humanitarian clearance of mines and/or unexploded ordnance (UXO) in Turkey.22 The law entitles the Turkish mine action centre, now known as TURMAC, which was established under the Ministry of National Defence, to elaborate policies for this clearance; plan and steer related activities and monitor their implementation; and carry out the necessary coordination and cooperation with domestic and foreign institutions.23
TURMAC was established on 3 February 2015, and a director of the centre was appointed in August of the same year. As at February 2016, core staff had been recruited and the centre was in the initial stages of becoming operational. However, following the attempted coup in Turkey in July 2016 TURMAC’s director was dismissed. In late August 2016, Colonel Aydin İmren was appointed as the new head of TURMAC. Law 671 of 15 August 2016 and the subsequent enactment of Law 6757 of 9 November 2016 put TURMAC under the Directorate of General Plans and Principles within the Ministry of National Defence.

TURMAC’s capacity-development efforts are being implemented in partnership with UNDP and the GICHD, as well as other national partners. A capacity needs assessment conducted by UNDP and the GICHD in October 2016 highlighted several capacity gaps for TURMAC. The assessment is the basis on which TURMAC is developing its capacity for 2017 and beyond. As at June 2017, TURMAC reported that capacity development was progressing as planned. TURMAC reported plans to be fully operational by the end of 2017, after approval of proposed organisational changes and the appointment of required personnel.

Strategic Planning

Turkey has still to develop a national mine action strategy. In March 2015, Turkey reported that following the official inauguration of TURMAC, a national mine action strategy for 2016–22 would be prepared in 2015 and submitted to the Council of Ministers. However, the strategy was delayed until after the general elections in Turkey, which took place in November 2015. The attempted coup in July 2016 has further delayed the strategy. In its APMBC Article 7 transparency report for 2015, Turkey stated that TURMAC was preparing a national mine action strategy, which would be submitted to the Council of Ministers by the end of 2016.

A national strategic mine action plan for 2017–19 has now been drafted, and TURMAC reported that the necessary coordination with ministerial bodies was ongoing as at June 2017. Once completed, the strategic plan will be submitted to the Council of Ministers for approval, after which it will be published in the Official Gazette. Turkey envisaged this would be completed by the end of 2017. The three-year plan reportedly covers national capacity development, the clearance of mined areas and areas containing UXO, provision of mine risk education, assistance to mine victims, and the Syrian border security surveillance system.

Turkey’s workplan is divided into planned survey and clearance per region and will be finalised after TURMAC has developed a national mine action strategic plan, and that further revisions were possible due to ongoing investigation and survey of mined areas in the border regions. As at June 2017, Turkey reported that a survey plan is now included in the Draft National Strategic Mine Action Plan for 2017–19. The summaries of the workplan, by region, are reflected below.

Prioritisation of clearance appears to be influenced more by where permission is granted for operations and where funding can be secured than by humanitarian impact. For example, areas currently being cleared as part of the EU Eastern Border Mine Clearance Project will remain as restricted areas (due to their location) even after completion of mine clearance. While these minefields pose humanitarian risk (particularly to refugees crossing the borders), the greater humanitarian impact appears to be from minefields in the interior of the country, which Turkey is not yet addressing. TURMAC reported that for the EU Eastern Border Project, survey and clearance is conducted geographically from north to south in order to improve cost, time, and labour efficiency; but that clearance of other areas was prioritised according to impact.

Syrian border

In its Article 5 deadline extension request, Turkey accorded priority to clearing the Syrian border, which is 911km long and on average 350 metres wide, and 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. According to Turkey, minefields in this region are clearly mapped, marked, fenced, and well known to the local population. Turkey originally expected to complete clearance of mines along the Syria border by the end of 2019.

A bidding process for clearance operations on the Syrian border, initiated on 2 February 2012, was officially cancelled on 20 June 2013 due to armed conflict in Syria. Planned mine clearance along the border is on hold and will begin only once the conflict ends. In June 2017, TURMAC reported that under the draft strategic mine action plan for 2017–19, survey of SHAs in Sanliurfa province was scheduled for 2018; and in Sirnak province (in parts of the province bordering Syria) and Hatay province for 2019. Furthermore, survey of CHAs in Gaziantep, Hatay, Kilis, and Mardin provinces were planned for 2017/2018.

It should also be noted that military demining teams have been deployed along the Syria border, to enable safe construction of the Border Security Surveillance System, which consists of a 730km-long modular concrete wall and impoundment (supported by a fence), roads, and surveillance system. Demining efforts in support of the construction of the surveillance system also include survey and clearance of areas suspected or confirmed to contain locally produced mines and other explosive devices deployed by non-state armed groups. According to online media sources, the three-metre-high wall is being built behind minefields and deep ditches, and is reinforced with barbed wire and steel fences, and there are also watch towers and around the clock military patrols. The Border Security Surveillance System, construction of which began in 2015, was expected to be completed by the end of 2017.
Eastern borders

Turkey’s 2013 Article 5 extension request sets out plans for clearance of its eastern borders, beginning with the Armenian border and continuing southwards to the borders with Azerbaijan, Iran, and Iraq. It was forecast that 13.5 km² would be cleared in Phase 1 of the project and 2.4 km² in Phase 2 (see below). Demining for both phases was envisaged to start by the end of 2014, after completion of the tender process with demining companies. Two-thirds of the total cost of the three-phase project, amounting to €30 million, was expected to be financed as part of an EU “Pre-accession Financial Assistance Scheme”.

In 2015, Turkey confirmed that mine clearance along the eastern borders would be carried out as part of a two-phase EU Integrated Border Management Project, under the supervision of the Ministry of Interior in a joint project with UNDP. The project, which was launched in May 2015 to address the humanitarian and border management challenges posed by mine contamination, aims to contribute to social and economic development through demining and more secure borders in Eastern Turkey. Phase 1, scheduled for 2015–17, was expected to result in the clearance of 223 mined areas over an area of just less than 11.67 km² and the destruction of 189,863 anti-personnel mines. Phase 2 of the project is scheduled for 2017–19, but the number of mined areas and total area to be cleared is yet to be determined, and is subject to continuing survey. A budget of €26.4 million has been allocated for the first phase and €13.4 million for the second. With the establishment of TURMAC, the mine action centre became the main government partner to UNDP in the Eastern Border Mine Clearance Project. Under the project, UNDP is managing the demining operations and quality assurance along the eastern border and supporting capacity development of TURMAC.

In December 2015, Turkey reported it was working with UNDP on the tender process, and that a clearance contractor had been identified, with the contract due to be signed imminently as part of the Eastern Border Mine Clearance Project. In February 2016, Turkey reported that the demining tender had been awarded to Denel MECHEM (MECHEM), as part of a consortium in which national operators would be sub-contracted by MECHEM. Phase 1 of the project was officially announced in April 2016, with clearance operations beginning in June. It was scheduled to be completed by December 2017.

Previously, task dossiers received by clearance operators as part of the Eastern Border Mine Clearance Project were classified, which had implications for QA and security clearance. However, according to TURMAC, as at June 2017, the task dossiers for the project were no longer classified as secret. UNDP is encouraging TURMAC to apply efficient land release practice and make use of evidence-based survey (instead of full clearance) to confirm the presence or absence of mines in areas between marked minefields.

With regard to Phase 2 of the project, Turkey reported that “the contract was ongoing” in cooperation with UNDP, and that it was expected to be completed in accordance with the planned schedule (i.e. 2017–19).

South-eastern/Iraqi border

Under the draft strategic mine action plan for 2017–19 survey is planned of suspected mined area in Sırnak 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. Clearance along the south-eastern/Iraqi border is not scheduled to commence until 2019, after completion of Phases 1 and 2 of the Eastern Border Mine Clearance Project, and because of the conflict in Syria. Clearance of the 969 mined areas, totalling just over 2.86 km², is scheduled to take place in 2019–21, with the destruction of 79,017 anti-personnel mines. This represents all known mine contamination in this region. The resources for the clearance will be determined by TURMAC, and the national strategic mine action plan for 2020–22 will include a mine clearance plan for this region.

Non-border areas

In its 2013 Article 5 deadline extension request, Turkey reported that partial clearance in non-border areas would be conducted by the Turkish armed forces until the establishment of an operational national mine action authority and mine action centre and a subsequent tendering process. It was expected that clearance would be conducted in 2015–22. No dedicated budget had been allocated for clearance in these interior regions. To date, mine clearance in non-border areas has been conducted only on a very limited scale, for instance to clear paths in case of urgent need. At the time of its 2015 updated workplan, Turkey estimated that all 873 mined areas in non-border areas would be cleared by 2021, amounting to total clearance of 3.1 km², with the destruction of 34,410 anti-personnel mines. This represents all known mine contamination in the region.

Of the total interior contaminated area, the Turkish armed forces were forecast to clear 280 mined areas over 1.51 km² with the destruction of 18,558 anti-personnel mines. Cleared areas were planned to be certified and opened for humanitarian use following the establishment of the NMAC, which has now been established. The remaining 593 mined areas, over 1.59 km², including destruction of 15,852 anti-personnel mines, were forecast to be cleared in accordance with the mine action plan, once it has been prepared. A budget for clearance of Turkish Lira 84.3 million (approx. $29 million) was due to be elaborated in detail by TURMAC. In this region, Turkey prioritises mine clearance activities based on areas used for military operations; areas with low or no risk of terrorist threat; and areas where the local population may benefit from agriculture and livestock.

No mine clearance took place in non-border areas in 2016. However, the draft national mine action plan for 2017–19 reportedly includes plans for survey of suspected mined area in interior areas of Mardin, Siirt, and Sırnak provinces in 2018, and Hakkari province in 2019; and survey of confirmed mined area in Diyarbakır and Siirt in 2019. Furthermore, TURMAC reported that clearance of non-border areas was also scheduled for 2018 and 2019, but that both survey and clearance may be subject to revision.
Legislation and Standards

In March 2013, Turkey reported that an "Interministerial Coordination Board", which in practice functioned as an NMAA, had been working to develop Turkish Mine Action Standards (TMAS), using the International Mine Action Standards (IMAS) as a template.80 Previously, all land-release activities were based on the standards and principles outlined in the Syrian Border Mine Clearance Standards (SBMCS), prepared by the Ministry of National Defence on the basis of IMAS. According to Turkey, although these standards were developed exclusively for the Syrian border, they are also relevant for other areas.81

As part of Phase 2 of the Eastern Border Mine Clearance Project, UNDP and the Ministry of Interior developed the Eastern Border Mine Clearance Standards (EBMCS) based upon IMAS and the SBMCS. The EBMCS form the basis of all clearance operations (demining) carried out as part of the project. They have been elaborated on the basis of experience gained during a number of demining operations around the world and adapted to the operational conditions and requirements of demining in Turkey.

UNDP and GICHD are assisting TURMAC to formulate new national mine action standards based upon IMAS, the SBMCS, and the EBMCS.82 Turkey reported that it had developed a land release policy relating to the Eastern Border Mine Clearance Project, which will allow for efficient land release. In addition, as at June 2017, national mine action standards (including a national land release policy) had also been drafted and sent to the Turkish Standardisation Institute for approval. Of the 19 standards, 2 have been published and 4 were expected to be published soon. The remainder were under review and were planned to be finalised by the last quarter of 2017.83

Quality Management

Cleared areas are re-checked with mechanical demining systems following the completion of clearance operations. Additionally, a few days later, final controls are executed with mine detectors and mine detection dog (MDD) teams.84

As part of its mandate under the Eastern Border Mine Clearance Project in Turkey, UNDP is responsible for managing mine clearance services, QA/QC services and post-clearance certification to provide confidence that clearance and quality requirements defined in the standards have been met and that cleared land is safe for use.85 UNDP has reported that, following an international tender process, it awarded a contract for QA/QC services to RPS-Explosive Engineering Services in March 2016. In April 2016, UNDP and TURMAC completed the accreditation of RPS-Explosive Engineering Services, and the company then began the accreditation process for the mine clearance contractor under the Eastern Border Mine Clearance Project.84 In addition, TURMAC oversees on-site operations and regularly attends operational working group meetings in the field.87

Information Management

UNDP and the GICHD are supporting TURMAC for the establishment of a functioning information management (IM) system.86 UNDP was maintaining a project database to record all operational data related to the Eastern Border Mine Clearance Project until a national mine action database can be established in TURMAC.87 In its APMBC Article 7 transparency report for 2016, Turkey reported that it planned to establish IMSMA and provide training to TURMAC personnel in 2017.88 As at June 2017, 12 TURMAC personnel had undergone IMSMA training, and IMSMA was expected to be fully operational by January 2018.89 Due to national security concerns, much of the minefield data remains classified, presenting a challenge to mine action information management in Turkey.90

Operators

As at June 2017, mine clearance operations in Turkey were being conducted by MECHEM, under the Eastern Border Mine Clearance project, and by the Turkish Armed forces along the Syria border, to support construction of the Border Security Surveillance System.91

MECHEM, a South African company, which is partnering with national sub-contractor Altay, was awarded the tender for mine clearance under Phase 1 of the EU Eastern Border Mine Clearance project by UNDP in December 2015.92 MECHEM was subsequently accredited in Turkey, and as at June 2017, was employing 140 deminers, although it was planning to increase capacity to 200 in July of the same year. MECHEM did not deploy MDDs in 2016, as the dogs had not yet received accreditation. Accreditation was subsequently granted, and as at June 2017, 30 MDDs were being deployed, along with one MineWolf.95 As noted above, RPS, a UK company, is contracted for QA and QC.96

Demining units of the Turkish Armed Forces have a total operational capacity of 85 deminers, 6 MDDs, and 4 machines.97 As at June 2017, organisational accreditation of the Turkish Armed Forces Demining Units had been completed,98 but operational accreditation of the military demining troops was ongoing and due to be finalised in 2017.99
LAND RELEASE

Turkey reported that 122,764m² of mined area had been cleared in 2016 on its border with Iran, but that no mined area had been formally released to date. Turkey also did not provide information on the area of land reduced or cancelled in 2016, but stated that this information would “be reported in the following years”.100

In addition, Turkey reported to Mine Action Review that more than 3.36km² of mined area had been cleared on the Syrian border in 2016, to enable safe construction of the Border Security Surveillance System.101

Survey in 2016

A comprehensive desk assessment of minefield records of the Eastern and Syrian Borders was conducted in 2016,102 but information on area cancelled has not yet been reported. According to the observations of the Committee on Article 5 Implementation, produced for the Intersessional Meetings in June 2017, Turkey indicated that it would provide information on these areas in its 2017 report.103

Clearance in 2016

MECHEM, with sub-contracting partner Altay, began clearance operation of Phase 1 of the EU Eastern Border Mine Clearance Project in June 2016.104 As at September 2016, manual clearance operations were reportedly taking place along the Armenian border, in mapped and fenced minefields on flat terrain.105 However, the only clearance reported by TURMAC as part of the Eastern Border Mine Clearance Project in 2016 was 9,008 anti-personnel mines which were cleared in Igdir Province, on the Iran border, releasing 122,764m².106

In addition, as part of demining efforts in support of the construction of the Border Security Surveillance System, military demining teams were deployed along the Syria border, and destroyed a further 414 mines in 2016.107 While the corresponding amount of mined area cleared during the demining operations to enable safe construction of the Border Security Surveillance System was not reported in Turkey’s Article 7 transparency report, as required by the APMBC, TURMAC reported to Mine Action Review that more than 3.3km² had been cleared long the Syria border in 2016.108 Clearance data relating to the area of land released along the Syria border, during survey and clearance to support construction of the Border Security Surveillance System, has not been officially reported to-date, as QA/QC procedures had not yet been completed, and the Turkish armed forces demining units are not yet accredited operationally.109

Table 2: Anti-personnel mine clearance in 2016110

<table>
<thead>
<tr>
<th>Province</th>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iran border</td>
<td>Denel MECHEM</td>
<td>5</td>
<td>122,764</td>
<td>9,008</td>
<td>1</td>
</tr>
<tr>
<td>Syria border</td>
<td>Turkish Armed Forces Demining Units</td>
<td>N/A</td>
<td>3,305,925</td>
<td>414</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td>5</td>
<td>3,428,689</td>
<td>9,422</td>
<td>1</td>
</tr>
</tbody>
</table>

No mine clearance was conducted in 2016 along the South-eastern/Iraqi border or in non-border areas.111
ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the eight-year extension granted by states parties in 2013), Turkey is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2022. Turkey is not on track to meet this deadline.

Turkey’s original Article 5 deadline was 1 March 2014. At the Eleventh Meeting of States Parties in December 2011, Turkey disclosed that clearance of its border with Syria would not be completed until 2016. In 2012, it acknowledged to the Twelfth Meeting of States Parties that it would seek an extension to its deadline.112

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.113

In its 2013 request, Turkey cited a number of circumstances that had impeded it from carrying out mine clearance, including: delays in the establishment of an NMAA and NMAC which will supervise clearance activities; adverse weather conditions allowing clearance to be conducted for only five or six months a year; security problems posed by the continuation of the terrorist threat; mined territory contaminated with metal residue resulting from the fight against terrorism; uncertainties about the mine-free status of some areas due to the irregular completion of registration forms; and topographical challenges. According to Turkey, the eastern and south-eastern borders and non-border areas are the most complicated to address due to topographical difficulties.114

The 2013 extension request provided more detail on Turkey’s mine contamination and its plans to tackle them than had previously been the case, but shed no light on some key issues, creating uncertainty over the prospects of it fulfilling its clearance obligations. No budget had at that time been allocated for clearance of mined areas in the interior of the country, which have caused most of Turkey’s mine casualties. A budget was subsequently allocated in Turkey’s 2015 updated workplan.115

In granting the 2013 Article 5 deadline Extension Request, the Thirteenth Meeting of States Parties recalled the number of efforts to be carried out during 2013–14, crucial to the success of the implementation of Turkey’s plan, and requested that Turkey report to the Third Review Conference in June 2014 on: the tendering processes for clearance along Turkey’s border with Syria and the results of any related demining efforts and annual milestones of expected progress; the tendering processes for the clearance of areas along Turkey’s eastern borders; developments in the establishment of the NMAA and NMAC; and process in clearance of mined areas in non-border areas.116 Turkey did not provide an update on clearance progress at the Third Review Conference, but did subsequently submit a workplan in March 2015.117

Turkey 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.118

Turkey’s total mine clearance to date only amounts to a tiny fraction of its overall mine contamination, and more than 13 years after becoming a state party to the APMBC, Turkey has only made very marginal progress in addressing mine contamination.

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>122,764*</td>
</tr>
<tr>
<td>2015</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>157,251</td>
</tr>
<tr>
<td>2013</td>
<td>Unknown</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>280,015</td>
</tr>
</tbody>
</table>

* TURMAC also reported to Mine Action Review that a further 3,305,925m² had been cleared on the Syria border, as part of the demining efforts in support of the construction of the Border Security Surveillance System.120

The commencement of clearance operations in June 2016, for Phase 1 of the EU Eastern Borders project (in the provinces of Ardahan, Kars, Igdir, and Agri), is a welcome development. Funding for first two Phases of this project is provided by the EU (75% of funding), Turkey (24%), and the UN (1%).121 As at June 2017, Turkey was in the process of determining how to fund Phase 3 of the project.122

Implementation of the project in the provinces of Van and Hakkari risked facing significant security challenges if fighting continues between Turkey and the PKK.

In granting Turkey’s Article 5 deadline extension, the Thirteenth Meeting of States Parties noted that “any additional delays in the establishment of an NMAA and NMAC should not further delay clearance efforts from proceeding”.123 Unfortunately, clearance efforts do appear to have suffered unnecessary delays at least in part due to the lack of an NMAA and NMAC. The adoption in January 2015 of a mine action law resulted in the establishment of TURMAC. TURMAC, with capacity development support from UNDP and the GICHD, has since made steady progress towards becoming operational and assuming management and coordination of mine action in Turkey. TURMAC is entirely funded by national funding,124 as are Turkish Armed Forces demining units.125
While Turkey’s submission of an updated workplan for Article 5 implementation in March 2015 and the establishment and operationalisation of TURMAC can be viewed as positive developments. The 2017 workplan itself only included plans to address a small portion (10%) of overall mine contamination, and it was unclear how and when the remaining contamination will be addressed. However, in 2017, TURMAC reported that the draft national strategic mine action plan for 2017–19 also includes plans for survey of SHA and CHA in the south-eastern/ Iraqi border, the Syrian border, and non-border areas. TURMAC reported that it planned to complete survey training by the third quarter of 2017, and to have survey capacity by October 2017.

Based on the current rate of clearance, Turkey is not on track to complete implementation of Article 5 by its deadline in 2022. TURMAC, however, claims that Turkey is planning to meet its Article 5 deadline of 1 March 2022, but also recognises potential obstacles, including: the possibility that the demining contractor for the EU Eastern Border Mine Clearance Project will not meet its deadline for Phase 1; potential delays to the project for Phase 2; the fact that political uncertainties in Syria and Iraq may hinder survey and clearance activities on these borders, in addition to non-state armed groups hindering demining operations in other areas; and weather conditions limiting clearance to no more than seven months a year.
60 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016.
62 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
63 Ibid.
64 Interview with Hans Risser, UNDP Istanbul Regional Hub, Geneva, 7 September 2016.
65 Statement of Turkey, 15th Meeting of States Parties, Santiago, 29 November 2016.
66 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
67 Ibid.
69 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
71 Ibid., p. 7; and email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
74 Ibid., pp. 4 and 5.
75 Ibid., p. 6.
76 Ibid., p. 4.
77 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
78 Ibid.
79 Ibid.
82 Email from Hans Risser, UNDP Istanbul Regional Hub, 3 October 2016; and Article 7 Report (for 2015), Form F.
83 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017; and Article 7 Report (for 2016), Form A; and Statement of Turkey, intersessional meetings (Standing Committee on Victim Assistance), Geneva, 8 June 2017.
87 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
89 Interview with Hans Risser, UNDP Istanbul Regional Hub, Geneva, 7 September 2016.
90 Article 7 Report (for 2016), Form A; and Statement of Turkey, intersessional meetings (Standing Committee on Victim Assistance), Geneva, 8 June 2017.
91 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
93 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
94 UNDP, “Turkey, UNDP begin clearing landmine along eastern borders”, 4 April 2016.
95 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
96 UNDP, “Turkey, UNDP begin clearing landmine along eastern borders”, 4 April 2016.
97 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
98 Ibid.
99 Article 7 Report (for 2016), Form A, Form A; Statement of Turkey, intersessional meetings (Standing Committee on Article 5 Implementation), Geneva, 8 June 2017; and email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
100 Article 7 Report (for 2016), Forms A and D; and email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
101 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
102 Article 7 Report (for 2016), Form A; and Statement of Turkey, intersessional meetings (Standing Committee on Victim Assistance), Geneva, 8 June 2017.
103 “Preliminary observations of the committee on Article 5 implementation – observations on the implementation of Article 5 by Turkey”, 8 June 2017.
105 Interview with Hans Risser, UNDP Istanbul Regional Hub, 7 September 2016.
106 Article 7 Report (for 2016), Form D; and email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
110 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
111 Ibid.
112 Statements of Turkey, 11th Meeting of States Parties, Phnom Penh, 1 December 2011; and 12th Meeting of States Parties, Geneva, 5 December 2012.
116 Decision on Turkey’s Article 5 deadline Extension Request, 13MSP, 5 December 2013.
121 Ibid.
122 Ibid.
123 Decision on Turkey’s Article 5 Extension Request, 13th Meeting of States Parties, 2-5 December 2013.
124 Email from Lt.-Col. Halil Shen, TURMAC, 21 June 2017.
125 Ibid.
126 Ibid.
127 Ibid.
128 Ibid.
**UKRAINE**

**ARTICLE 5 DEADLINE: 1 JUNE 2016**
*(IN SERIOUS VIOLATION OF ARTICLE 5)*

<table>
<thead>
<tr>
<th>MINE ACTION PROGRAMME PERFORMANCE</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Improving performance</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: POOR**                                   | 4.4      | 4.4      |
PERFORMANCE COMMENTARY

Ukraine has not yet submitted an Article 5 extension request, and therefore remains in serious violation of the Anti-Personnel Mine Ban Convention (APMBC). While survey and clearance of areas contaminated with anti-personnel mines did take place in 2016, the full extent of demining operations is not known due to the absence of sufficiently detailed information from the Ukrainian authorities. Furthermore, the overall effectiveness and efficiency of mine action in Ukraine is being impeded by a delay in the adoption of a mine action law, necessary to clarify and strengthen the coordination of work among the different ministries and agencies, and to facilitate progress in strategic planning, information management, and national mine action standards.

RECOMMENDATIONS FOR ACTION

- Ukraine should ensure it does not use anti-personnel mines.
- Ukraine should request an extension to its APMBC Article 5 clearance deadline, without further delay.
- Ukraine should enact mine action legislation as soon as possible and formally establish a national mine action authority and a functioning national mine action centre to support clearance of mines, cluster munition remnants (CMR), and other explosive remnants of war (ERW).
- Ukraine should systematically collect disaggregated data on contamination from mines, CMR, and other ERW, as well as on progress in survey and clearance, and establish a centralised database for planning purposes.
- Ukraine should take all necessary measures to protect civilians from mines, CMR, and other ERW.
- Ukraine should continue to undertake non-technical survey to identify the extent and impact of anti-personnel mines (in particular in Donetsk and Luhansk), and should also undertake technical survey when possible, to confirm or reject the presence of mines, and help inform decisions on land release. Clearance should take place as soon as possible of areas confirmed as mined.

CONTAMINATION

Ukraine is contaminated by anti-personnel mines as a result of the ongoing conflict which broke out in 2014. In the first half of 2014, armed violence erupted between Ukrainian government forces and Russian-backed separatists in the Crimea 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, including by Ukrainian armed forces, though the full nature and extent of contamination is likely to remain unclear until an effective cessation of hostilities. A June 2016 report of the Office of the United Nations High Commissioner for Human Rights (OHCHR), covering 16 February to 15 May 2016, stated that "Ukrainian armed forces and armed groups continue to lay landmines, including anti-personnel mines, despite Ukraine’s obligations as a State party to the 1997 Mine Ban Treaty." The most recent OHCHR report, in September 2017, stated that: "The parties to the conflict repeatedly failed to honour commitments made under the Minsk agreements and subsequent renewed agreements to cease fire. Instead, they chose to perpetuate the conflict through the continued use of heavy weapons and laying of additional mines..." Prior to the current conflicts, Ukraine was affected by residual contamination of mines and other ordnance, mostly as a result of heavy fighting between German and Soviet forces in World War II, but also from combat in World War I. Ministry of Defence engineering units partially cleared affected areas in the mid-1970s, suggesting that a problem may remain, but the location and extent of any mine threat is not known.

In its Article 7 transparency report for 2015, Ukraine reported that exact information was not available on known or suspected areas containing anti-personnel mines under its jurisdiction or control, and no further information was provided on the nature or extent of the contamination, other than the fact that mined areas were being cleared in Donetsk and Luhansk. In its latest Article 7 report (for 2016), Ukraine reported that exact information on the number and types of mines was not available, but non-technical survey by non-governmental organisations (NGOs) identified mined areas in Lemans, Slavyansk, and Volnovansky districts in the Donetsk region, and Popasnyansky district, in Lugansk region.

In June and November 2016, Ukraine stated that, as a result of the ongoing fighting, "approximately 7,000km^2 was mined or suspected to be contaminated with mines and unexploded ordnance, primarily anti-personnel mines and improvised explosive devices through the fault of a neighbouring state." In August 2017, the government of Ukraine restated that approximately 7,000km^2 of the Lugansk and Donetsk oblasts were contaminated with mines and ERW.
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.\textsuperscript{11}

In February 2015, the Organization for Security and Co-operation in Europe (OSCE) reported contamination in Ukraine with OZM-72 bounding fragmentation mines, MON (50, 90, 100, and 200) directional anti-personnel mines, and TM-62 anti-vehicle mines.\textsuperscript{12} In an April 2015 Technical Briefing Note, Human Rights Watch reported the presence of at least two types of blast anti-personnel mines, three types of MON-series directional fragmentation mines, and OZM-72 bounding fragmentation mines that can function as anti-personnel mines depending on the type of fuze used, as well as PDM-1M anti-landing mines equipped with fuzes capable of being activated by the unintentional act of a person.\textsuperscript{13}

Over the last couple of years, the OSCE’s Special Monitoring Mission (SMM) in Ukraine has frequently reported observations on the use of anti-personnel mines, examples of which are detailed below. In September 2015, OSCE SMM observed four blast PMN-type anti-personnel mines on the outskirts of Pavlopil, a government-controlled village, 26km north-east of Mariupol.\textsuperscript{14} In January 2016, OSCE SMM observed 11 anti-vehicle mines and one Claymore-type anti-personnel mine making up part of a Ukraine Armed Forces defensive position in government-controlled Marinka (23km south-west of Donetsk).\textsuperscript{15} In April 2016, OSCE observed an anti-personnel mine south-west of an “LPR” checkpoint near Stanytsia Luhanska bridge (16km north-east of Luhansk).\textsuperscript{16} In September 2016, OSCE SMM observed a “string of anti-personnel mines (POM2),” in “DPR”-controlled Petrovskye, and anti-tank and anti-personnel mines along the closed crossing route between “LPR”-controlled Pervomaisk and government-controlled Zolote.\textsuperscript{17} On 28 September 2016, OSCE SMM observed a directional anti-personnel mine (MON 90) armed and with a detonator connected, adjacent to a “LPR” checkpoint manned by an “LPR” armed member, near the disengagement area around the Stanytsia Luhanska bridge.\textsuperscript{18} On 7 October 2016, the SMM was unable to access the road leading to the hill west of the Prince Ihor monument in “LPR”-controlled areas south of the Stanytsia Luhanska bridge, due to the presence of an anti-personnel mine (MON-90) on the edge of the road. Armed “LPR” members present reportedly told the SMM that the road was contaminated with mines, booby-traps, and UXOs.\textsuperscript{19}

On 21 January 2017, “DPR” members refused to remove anti-vehicle and anti-personnel mines observed by OSCE SMM to allow SMM to proceed through a checkpoint to T0519 road in Pikuzy.\textsuperscript{20} On 5 February 2017, in “LPR”-controlled Sokilnyky (38km north-west of Luhansk) the OSCE SMM saw two directional anti-personnel mines (one MON-50 and one MON-100 or 200) along the H-20 road west of Kruta Balka.\textsuperscript{21} On 8 February 2017, the OSCE SMM noted two anti-personnel mines still present near the Donetsk Water Filtration Station. One [POM-2] was about 10m from the main gate, north of the entry-exit road, and marked with a mine hazard sign. The other (MON-50/90) was west of the H20 highway and about 100m from a Ukrainian Armed Forces bunker.\textsuperscript{22} In addition, on 17 February 2017, the OSCE SMM saw a directional type of anti-personnel mine (assessed as MON-100) located across the road the abovementioned filtration station.\textsuperscript{23} On 23 April 2017, a vehicle of an OSCE SMM patrol was destroyed in an explosion, most likely caused by a landmine, on a regularly used road in Pryshyb village (controlled by armed groups) of Luhansk region, killing one and injuring two patrol members. The event claimed the first fatality since the Mission’s establishment.\textsuperscript{24}

In June 2015, at the APMBc intersessional meetings, Ukraine claimed that it had not used anti-personnel mines since signing the APMBc in 1999, but accused Russia of having used anti-personnel mines in the current conflict.\textsuperscript{25} At the intersessional meetings, Ukraine also asserted that approx. 8% of the territory in eastern Ukraine is contaminated with anti-personnel mines and improvised explosive devices (IEDs).\textsuperscript{26} It appeared that reports of minefields being emplaced to demarcate border areas after the annexation of the Crimea may actually have been either ‘phone minefields’ or areas containing trip-flares.\textsuperscript{27} However, in May 2016, Ukraine reported that it was possible that mines have been laid in occupied territories of the Autonomous Republic of Crimea, Kherson Province, and Donetsk.\textsuperscript{28}

Ukraine stated that illegal armed groups had used different types of mines, including those banned by the APMBc and which Ukraine does not possess. The mines which Ukraine alleged have been used by the opposition groups include PMN1, PMN2, PMN-4, POM-2R, OZM-72, MES type mines, and MON-15 mines with tripwire.\textsuperscript{29} 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.\textsuperscript{30}

Danish Demining Group (DDG), which collects casualty data from open media sources, recorded a total of 1,198 casualties (399 killed and 799 injured) from mines, CMR, and other ERW between June 2014 and May 2017.\textsuperscript{26} The HALO Trust also collects casualty data, and recorded more than 1,653 mine and ERW casualties since the start of the conflict in 2014, of whom 40% were civilians.\textsuperscript{31} In December 2016, Ukraine reported that “in less than three years 537 civilians including 68 children were injured and died from booby-traps and landmines in the East of Ukraine.”\textsuperscript{32} Ukraine has also reported that between 16 February and 15 May 2017, 36 civilians died and 157 were wounded in Donbas by munitions. This is 70% more than was reported for the same period the previous year, and in 40% of cases people died from mines and unexploded ordnance (UXO).\textsuperscript{33}
The Global Protection Cluster for Ukraine reports that “the presence or suspicion of ERW and mines contamination hamper[s] freedom of movement, agricultural activities and disrupt[es] essential services provision. Contamination at both formal and informal civilian crossing points is a particular concern.”

According to a September 2017 OHCHR report, between 16 May and 15 August 2017, there was an increase in the numbers of people travelling across the contact line, and on average 36,000 people travelled across the contact line each day.

In addition to posing a serious risk to human life, mines and ERW also have a detrimental socio-economic impact, preventing safe use of agricultural land for crops or grazing land for livestock – two major sources of livelihood.

A September 2017 OHCHR report noted an acute need to increase mine action, including risk education, as many agricultural land plots remain contaminated with mines and ERW. Mines and booby-traps are said to have been laid deliberately to block access to essential infrastructure as well as to forested areas where people gather wood to heat their homes. Those living in conflict-affected areas, especially around the contact line, are among the most vulnerable, including the elderly, persons with disabilities, and the poor. To heat homes in the winter, people go into the forest. This is said to have resulted in many fatalities and injuries.

Explosive contamination also pose a particular risk to the internally displaced and returning refugees, especially in areas fought over previously and which are now away from the frontline.

PROGRAMME MANAGEMENT

An interministerial working group was set up by the Cabinet of Ministers in February 2006. On 25 December 2009, the Cabinet of Ministers of Ukraine issued an order that tasked the Ministry of Defence, the Ministry of Emergency Situations, and Ukroboronservice (a state-owned commercial company), to put forward proposals for a national body to oversee demining.

On 2 September 2013, Presidential Decree No. 423 on the “National Mine Action Authority” authorising the authority’s establishment. Following the decree, the Ministry of Defence’s Department of Environmental Safety and Mine Action was tasked with coordinating demining nationally and serving as the secretariat to the NMMA in Ukraine.

As at June 2017, Ukraine was in the process of passing mine action legislation that would identify the executive bodies involved in mine action in Ukraine, “regulate” the national mine action authority, and mandate the development of a priority action plan.

Two draft bills were submitted to the parliament’s Committee on National Security and Defense. One of the drafts (no. 5189), dated 28 September 2016, was put forward by a member of parliament. The Committee recommended its rejection in April 2017. The other draft (no. 5189-1), dated 12 October 2016, from the Cabinet of Ministers of Ukraine, is in the process of being finalised.

This draft was originally sent to the Cabinet in late 2015, endorsed in February 2016, and then submitted by the Cabinet for parliamentary approval. A Cabinet reshuffle in April 2016 resulted in the Bill needing re-endorsement, after which it will be re-submitted for parliamentary approval. In 2016, the draft law faced opposition in the committee stage in parliament. It was sent back for improvements in April 2017. As at June 2017, the latest draft had been passed by the independent Defence Anti-Corruption Committee, but had yet to be passed by the Committee on National Security and Defence, but it was hoped parliament would soon adopt the necessary resolution.

On 7 June 2017, the Committee on National Security and Defence recommended that the Ukrainian Parliament reject both draft bills and create an interdepartmental working group for the elaboration of a new draft law on mine action. The Committee established a working group, chaired by member of parliament Andriy Teteruk, to work on a draft bill. The working group will conduct open discussions, with key stakeholder considerations taken into account, along with the other draft bills. This was discussed at a roundtable at the Ukrainian Parliament on 19 September, attended by key national and international stakeholders.

The lack of a legal framework for mine action has the potential to deter donors from funding activities, and also has a bearing on the legal status of demining organisations in the country in terms of registration as well as application for end-user certificates for demining equipment and explosives.

Some demining operators operational in Ukraine have been consulted as part of the legislative process of setting up institutions for mine action in Ukraine. The HALO Trust reported that it has actively participated in roundtables and public hearings on mine action legislation, organised by the Ministry of Defence, the OSCE Project Co-ordinator, and the Defence and Security Committee of the Verkhovna Rada. During these meetings, The HALO Trust supported the adoption of national legislation, and shared best practices and lessons learned from other affected countries.

The Geneva International Centre for Humanitarian Demining (GICHD) has been working with the OSCE Project Co-ordinator in Ukraine to help foster mine action institutions. A timeline for the establishment of a national mine action centre under the national mine action authority will be addressed once the mine action legislation has been adopted.

All areas of mine action in the Donetsk and Luhansk region, including humanitarian demining operations, are planned, coordinated, and controlled by the Ministry of Defence. Several other ministries are also involved in the sector, including the Ministry of Internal Affairs (under which sits the State Emergency Services of Ukraine (SESU), formerly known as the Ministry of Emergencies); the Security Services; the Ministry of Temporarily Occupied Territories and Internally Displaced Persons; the State Special Transport Services of the Ministry of Infrastructure; and the State Border Service.
The demining centre of the Ukrainian Armed Forces, in Kamyanets-Podilsky, focuses on building the military’s capacity for explosive ordnance disposal (EOD), including training and testing of methods and equipment, quality assurance (QA), and provision of EOD, counter-IED, and demining specialists. Experts from the North Atlantic Treaty Organization (NATO) provide training and advice at the centre. The Canadian government is helping to build Ukraine’s humanitarian demining capacity in eastern Ukraine, as part of a two-year project to support the development of policies, practices, and institutions; the provision of training; the creation of a digital map showing hazards and cleared areas; and the procurement of modern equipment.

All Ukrainian Armed Forces engineering units are involved in demining in eastern Ukraine and not solely EOD spot tasks. The units are also responsible for destroying all ERW and mines detected by SESU and clearance NGOs.

SESU has organisational control of humanitarian demining and is generally responsible for clearance. It established a “Special Humanitarian Demining Centre” in 2015 in Kiev. The centre’s remit includes coordination of SESU pyrotechnical teams (akin to rapid-response EOD teams) involved in technical and non-technical survey, demining, internal quality control (QC) of SESU units, information management, and handover of land cleared by SESU to local authorities, as well as risk education.

In addition, SESU has a training centre near Mereda, in the Kharkiv region, and the Special Transport Service has a centre in Chernihiv, both of which are focused largely on EOD and battle area clearance (BAC). SESU has begun to build a Regional Centre for Humanitarian Demining, based in Lysychansk in Luhansk region. The new centre will deploy trained SESU deminers to affected areas in Donetsk and Luhansk that are under Ukrainian control.

The Ministry of Temporarily Occupied Territories and Internally Displaced Persons was established by the Cabinet of Ministers of Ukraine in its Resolution 376, adopted on 8 June 2016. The Ministry’s tasks include implementation of a set of measures aimed at reducing the social, economic, and environmental impact of explosive objects; and coordination of the implementation of mine action activities aimed at reducing harm to civilians from the use of explosive objects (including CMR and mines).

The OSCE has a strong presence in Ukraine, with two separate missions each having its own mandate: the SMM and the OSCE Project Co-ordinator. The SMM is mandated to help reduce tensions in the country and to support peace, stability, and security. As part of this role, it gathers information and reports on alleged violations of fundamental OSCE principles. The OSCE Project Co-ordinator is mandated to plan, implement, and monitor projects that help Ukraine enhance its security, and develop its legislation, institutions, and practices in line with democratic standards.

In 2016–18, the Project Co-ordinator, with GICHD assistance, was planning to provide policy and legal support to Ukraine, including for the establishment of a national mine action programme overseen by a national mine action authority and centre and underpinned by national standards. The OSCE Project Co-ordinator has also been supporting, again with GICHD assistance, Ukraine’s use of the Information Management System for Mine Action (IMSMA). The OSCE Project Co-ordinator, with the support of the donors (Canada, EU, United Kingdom, and United States), is implementing two projects, which are working to enhance the training capacities of mine action training centres by revising the training curriculum, training national instructors, and supporting modernisation of demining equipment.

At the request of the Government of Ukraine, the UN conducted a mine action needs assessment mission on 23 January–5 February 2016. The aim of the mission was to assess the impact of mines and ERW and make technical recommendations for further humanitarian responses. The joint mission was composed of technical experts from the UN Development Programme (UNDP), the UN Children’s Fund (UNICEF), and the UN Mine Action Service (UNMAS). The key findings of the UN mission were that:

- The humanitarian impact of ERW is high, with two to five incidents each week, and the ERW contamination covers a huge area.
- ERW clearance capacities exist in Ukraine, but they need to be re-oriented away from their current activities of responding to call-outs for World War II bombs. They now need to undertake activities like surveys and information management.
- The understanding of humanitarian mine action needs to be addressed at all levels of government. At present the focus is only on military mine clearance but it needs to be extended to risk education, surveys, victim assistance and information management.
- The establishment of a civilian oversight and policy-making body for national mine action activities.

Strategic Planning

The Cabinet of Ministers Decree No. 131 of 18 February 2009 adopted the State Programme for Demining by the Ministry of Emergency Situations for 2009–14. The programme planned clearance of 15km² over five years with the destruction of 500,000 items of ERW.

Following an order from the Prime Minister of Ukraine on 30 November 2015, the Department of Environmental Protection and Mine Action developed a draft order of the Cabinet of Ministers of Ukraine, “On Approval of the Concept of the State Programme for Mine Action in Ukraine for 2017–2021”. This concept was announced by the Ministry of Defence in February 2016, and, as at July 2017, was on hold pending progress with the draft mine action law. In the meantime, Ukraine continues to work from an annual plan.

In October 2016, the GICHD organised the first workshop on strategic planning, in partnership with the OSCE Project Co-ordinator and the Democratic Control of Armed Forces (DCAF). As at June 2017, next steps in strategic planning were under consideration, related to progress in the draft mine action law.

Ukraine has developed a plan for humanitarian demining in the Donetsk and Luhansk regions, in areas it can access safely. The main goals for 2015 were demining of populated areas; security during rehabilitation of
Authority Order 230 of 8 August 2016. As at November 2016, Ukraine reported that as at November 2016, its main efforts were aimed at demining essential support systems of the population in the territory of Donetsk and Lugansk regions, namely power lines, gas and water pipelines, heating plants, as well as highways and railways. These tasks are carried out by the Armed Forces of Ukraine, the SESU, and the State Special Transport Service. According to Ukraine, due to regular violations of the Minsk Agreements by illegal armed groups, and the continuation of firing on their part, it is only possible to plan the clearance of the liberated territories for short periods of time.99

Standards
A special instruction for the identification, render-safe, and disposal of explosive items, based on the International Mine Action Standards (IMAS), was approved by the General Staff of the Ukrainian Armed Forces on 1 August 2014.90 Development of national standards in Ukraine has taken place with support from the GICHD, the OSCE Project Co-ordinator, and DCAF.91 On 27 January 2016, during the UN needs assessment mission, the Ukrainian Ministry of Defence expressed its support for IMAS to serve as national mine action standards.92 In Ukraine, all national standards must be approved by the Ukrainian Standardisation Authority in Ukraine.93 Ukraine Standardization, Certification and Quality, which is the Ukrainian Scientific and Research Training Center of Standardisation, Certification and Quality, which is the National Standardisation Authority in Ukraine.94 Ukraine subsequently adopted IMAS as “trial national regulatory acts” on 1 September 2016, under National Standardization Authority Order 230 of 8 August 2016.95 As at November 2016, Ukraine reported that it had adopted 42 international standards as national standards, with the support of the GICHD, the OSCE, and UNICEF.96

In January 2017, a subcommittee of mine action standardisation was created to help elaborate national mine action standards,97 and in April 2017, the National Standardisation Authority in Ukraine announced that an organising committee had been formed, comprising the Ministry for Temporarily Occupied Territories and Internally Displaced Persons together with other relevant ministries and departments, to establish a Technical Standardisation Committee.98 As at September 2017, the Committee had not yet been established.99 In the meantime, the Ministry of Defence is preparing drafts of national mine action standards in accordance with international best practice and drawing on the experience of other mine action programmes.100 On 28 August 2017, the Ministry of Defence announced the creation of a working group/sub-committee for the development of standards, within the Technical Committee TK176 of the Ministry of Defence, on standardisation of defence products.101 The sub-committee, which is drafting the national standards, has 28 members, including representatives of government ministries and international humanitarian demining organisations.102

Quality Management
The draft mine action law envisages a national mine action centre with a QA function.103 In the meantime, quality management (QM) of government clearance operations is overseen by the demining centre of the Ukrainian Armed Forces.104 Both DDG and HALO Trust are conducting internal QM. For DDG, team leaders and senior mine action personnel conduct QM tasks, while in The HALO Trust team leaders and supervisors conduct QC during clearance while a roving officer conducts QA.105

The HALO Trust is planning to deliver QM training to the future national mine action authority.106 Janus Global Operations (JGO) carried out a two-month project for The HALO Trust in 2017, during which it trained 12 members of the demining centre of the Ukrainian Armed Forces, in Kamyanets-Podilsky on QM techniques, including QA of humanitarian demining using manual and mechanical methods as well as mine detection dogs; battle area clearance; and EOD. The dozen Ukrainian military members and employees trained by JGO will now be able to perform QA for the national mine action authority/centre.107

Information Management
In cooperation with the OSCE Project Co-ordinator and GICHD, SESU began using the IMSMA database.108 In 2015, IMSMA was piloted by the GICHD and SESU in four regions of Ukraine.109 In November and December, IMSMA training was conducted for 10 regional operators, and SESU plans to expand use to 24 regional operators, grouped into eight regional centres (Volyn, Carpathian, Podolsky, Tauric, Dniprovsky, Eastern Polisky and Central) and the Operational Centre in Kiev.110 The GICHD reported that it has provided subsequent IMSMA training to staff from various government ministries and agencies and international NGOs.111 The HALO Trust is also supporting the OSCE Project Co-ordinator to set up IMSMA, and will assist the OSCE to develop technical and structural recommendations for an IMSMA system and work with the Ministry of Defence and other mine action stakeholders to develop standardised IMSMA-compatible reporting templates.112

As at October 2016, three government departments in Ukraine were using IMSMA: SESU, the Ministry of Defence, and the State Special Transport Services of the Ministry of Infrastructure. There are two functioning IMSMA databases for internal and external operational planning, monitoring, reporting, and archiving of contamination and clearance data in Ukraine. One is managed by SESU and the other by the MoD, which collects and analyses all mine action data from national operators and NGOs.113 The databases are reportedly complementary, as they are separated based on region, thematic area, and operational purpose.114 The Ministry of Defence reported that it plans to create a national IMSMA server.115 In June 2017, GICHD reported that it had conducted an Information Management assessment which will serve as basis to develop a roadmap for future collaboration with the SESU and Ministry of Defence.116
Operators

Following a presidential decree in September 2013, the Ministry of Defence is the central coordinating body for demining in Ukraine. However, a number of other ministries continue to deploy units to undertake clearance and disposal of ERW and mines, including SESU, the Ministry of Internal Affairs (National Police and National Guard), the Security Service, the State Special Transport Service, and the State Border Service. In addition to national demining capacity, MoU were signed between the Ministry of Defence and international humanitarian clearance operators, The HALO Trust (22 March 2016), the Swiss Foundation for Mine Action (FSD) (23 May 2016), and DDG (20 June 2016). A Ukrainian organisation, “Demining Team of Ukraine”, is also conducting demining in eastern Ukraine.

A Commission on Humanitarian Demining of SESU coordinates the activities of SESU pyrotechnic teams and determines SESU’s priorities. In December 2015, Ukraine reported that during the ongoing conflict SESU had suffered severe losses to its buildings and vehicles. Since then, DDG has secured equipment for four SESU pyrotechnic teams, which includes vehicles, detectors, and personal protective equipment (PPE). DDG trained the four teams in demining, including how to conduct operations in accordance with IMAS, and provided training to SESU medics associated with the teams. A similar project is also being implemented by the OSCE Project Co-ordinator and by NATO.

In addition to overall coordination of humanitarian demining in the Donetsk and Luhansk region, the Ministry of Defence is also responsible for all areas where the military are permanently stationed as well as for the Anti-Terrorist Operation (ATO) zone in Donbass. The Ministry’s Engineering Division conducts spot clearance of UXO. The State Border Service conducts demining in areas under its control on land and in the sea. The Ministry of Infrastructure’s Special Transportation Service is responsible for demining national infrastructure (e.g. railways and roads). The Ministry of Internal Affairs has an engineering department that conducts EOD, in particular of IEDs.

As at February 2016, in eastern Ukraine, SESU was deploying 30 pyrotechnic/demining teams (150 people, 60 vehicles); the Armed Forces of Ukraine were deploying 52 EOD teams (260 people, 86 vehicles), and the State Transport Service were deploying 5 EOD teams (25 people, 10 vehicles). As at November 2016, Ukraine put its demining capacity in Donetsk at 58 mine clearance teams, numbering up to 300 people and 88 pieces of equipment.

Ukroboronservice, a state enterprise whose activities include arms manufacture, also has a “humanitarian demining” section. As at June 2017, Ukroboronservice was not known to be conducting clearance operations in Ukraine. Three international demining organisations – DDG, FSD, and The HALO Trust – are operating in Ukraine. DDG began risk education in late 2014 in Donbass and in February 2016 it began to conduct non-technical survey in government-controlled areas of the Donetsk and Luhansk regions. It received formal approval from the authorities to conduct survey at the beginning of April. As at May 2017, DDG was deploying one Multi-Task Team (MTT) capable of non-technical survey and visual, surface BAC. DDG was planning to train two demining teams in June 2017. DDG Ukraine currently primarily runs its operations out of offices in Severodonetsk, but also from Mariupol, and has its head office in Kiev. As at May 2017, DDG had commenced non-technical survey in six regions of Ukraine, in order to assess the presence, nature, and extent of mines and ERW in conflict-affected communities in these areas. Information gathered by the teams will be used to analyse and plan where follow-on clearance is most urgently needed. In 2017, DDG was planning to train and deploy capacity in both manual demining and BAC, in addition to building support for the SESU in terms of equipment and training.

The HALO Trust launched its programme in November 2015 and began with a rapid assessment of mine and UXO contamination in Donetsk and Luhansk regions. In early 2016, HALO Trust began conducting non-technical survey, mine clearance, and BAC in government-controlled areas of Luhansk and Donetsk regions, more than 15km from the contact line. HALO Trust’s capacity as at end of 2016 was 91 deminers, which, by 24 May 2017, had increased to 143, with a further 26 forecast to join the organisation by the end of May. As at June 2017, this had risen to 170 HALO Trust staff, and by October the figure stood at 220. 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. Having previously faced issues hiring female deminers in 2016, due to Ukraine’s labour law, The HALO Trust consulted with lawyers and was informed that no law prevents women from working as deminers. Since the first quarter of 2017, The HALO Trust has recruited women interested in working as deminers, who have subsequently completed their training and become the first female humanitarian deminers in Ukraine.

The HALO Trust did not procure any mechanical assets for clearance purposes in 2016. As at May 2017, however, it was working with the Ukrainian authorities to import one armoured Volvo BM4400 loader, which will be used to clear both anti-personnel and anti-vehicle mines.

The HALO Trust planned to expand its operations in eastern Ukraine in 2017, by increasing the number of demining teams (each team consists of thirteen personnel) from seven to thirteen, adding two technical survey teams, and deploying one mechanical team. HALO Trust’s non-technical survey capacity was expected to remain largely the same in 2017 as the previous year, i.e. three teams. In addition, following a successful EOD course, it was expected that by the end of summer 2017, subject to the granting of permission and licences to use explosives and pyrotechnics, HALO Trust teams would be able to conduct EOD without the need for SESU support.
As at October 2017, permission had not yet been granted and discussions were ongoing, including around appropriate legislation that would allow for civilian use of explosives for non-industrial purposes.143

As at May 2017, HALO Trust was conducting non-technical survey in 11 districts of Donetsk region (Bakhmutskyi, Dobropilskyi, Kostantynivskyi, Lymanskyi, Marinskyi, Nikolskyi, Oleksandriivskyi, Pokrovskyi, Slovianskyi, Velykonosivskyi, and Yasynuvatskyi) and 4 districts of Luhansk region (Bilovodskyi, Markivskyi, Milovskyi, and Stanychno-Luhanskyi); and was conducting mine clearance in the Lymanskyi and Slovanskyi districts of Donetsk region and the Bilovodskyi and Stanychno-Luhanskyi districts of Luhansk region.144 The HALO Trust liaises closely with local authorities directly or through Civil-Military Co-operation Unit (CIMIC) to identify high priority tasks and the needs of impacted communities across Donetsk and Luhansk regions. The vast majority of HALO Trust operations were outside the 15km buffer zone, although on a few occasions, following requests from local authorities, HALO Trust was given permission to conduct non-technical survey and clearance near inhabited settlements as close as 2km from the current Line of Contact.145

LAND RELEASE

Since the outbreak of fighting in eastern Ukraine, clearance of mines and ERW has been undertaken by both Ukrainian government authorities and separatist groups;146 and international clearance operators have subsequently begun clearance in government-controlled areas. Clearance of ordnance in the Donetsk and Luhansk regions is typically reactive, taking place soon after attacks or when a report of contamination is received from the local community.150 Once identified, munitions are marked on the ground, and their position fixed and reported to the local authorities.151 Devices are either destroyed in situ or removed to storage areas or compounds.152

In February 2016, SESU claimed that, since the beginning of fighting in 2014, it had cleared around 140km² across the whole country, and disposed of more than 202,000 explosive objects.153 Non-technical survey is helping to identify contaminated land, especially in liberated areas.154 The Ukrainian Armed Forces are responsible for clearing ordnance in areas close to the front lines and former military positions.155 In December 2015, the working group of the Trilateral Contact Group on Ukraine agreed 12 priority areas for humanitarian demining.156

In areas controlled by pro-Russian rebel groups, separatists are said to be also clearing mines and ERW. In Donetsk, former SESU personnel, now organised under the separatist Donetsk People’s Republic, are undertaking the bulk of clearance around Donetsk city. Personnel are organised into regular shifts, with clearance said to be conducted both day and night.157

The Ukrainian authorities and the pro-Russian rebels are, to varying degrees, recording written logs of emergency call-outs and clearance operations;158 but data is not always disaggregated into weapon type.159 Clearance data is not available from pro-Russian separatist groups, and an accurate picture is not available of the scale of clearance being undertaken in eastern Ukraine or of remaining contamination.

FSD started operations in Ukraine in early 2015 with a small grant for risk education in conflict-affected areas in the east of the countries, run from its operational headquarters in Slaviansk and supported from its administrative headquarters in Kiev. FSD subsequently gained accreditation for survey and clearance operations, and had survey teams operating in eastern Ukraine since early 2017, including a full mine clearance and EOD capacity, which works closely with regional security forces to clear munitions from conflict-affected areas.160

In addition, a Ukrainian organisation, “Demining Team of Ukraine” is active in demining in eastern Ukraine.161 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.162

Survey in 2016

In 2016, non-technical survey in eastern Ukraine was conducted by international NGOs DDG, FSD, and The HALO Trust.163

Ukraine claimed that in 2016, non-technical survey was conducted on 12,500km² (125km²) overall, during which 394 explosive objects were found and neutralised.164 Ukraine also reported that through non-technical survey in 2016, 4.6km² of “suspicious territory” and 6.2km² of “dangerous territory” had been identified.165

In early 2016, The HALO Trust began conducting non-technical survey in government-controlled areas of Ukraine around the contact line, and up to 15km from the front-line.166 These are primarily areas where conflict occurred in 2014 and early 2015, before the contact line settled in its current position. Access closer to the contact line will depend on the security situation.167 Through its non-technical survey in 2016, The HALO Trust confirmed 19 areas as mined, totalling almost 2km².168

DDG also began non-technical survey in government-controlled areas in the Donetsk and Luhansk regions in early 2016 up to 60km from the current contact line, depending on the location of suspected hazardous areas (SHAs) and access granted by the relevant authorities.169 DDG had initially hoped to commence clearance operations in 2016.170 However, due to lack of funding, and the fact that Ukraine has not yet adopted national mine action legislation, clearance operations were postponed until the next operational season in 2017.171
Clearance in 2016

As at May 2017, only relevant data on mine clearance operations from The HALO Trust, DDG, and FSD had been made available to Mine Action Review for 2016. Thus, it was not known how much mined area was cleared by the various Ukrainian authorities.

The HALO Trust began mine clearance and BAC in March 2016. Planned clearance is prioritised in consultation with local stakeholders, but generally HALO Trust’s clearance is in response to requests from village and district councils. The HALO Trust’s primary concern is to reduce the number of mine and ERW incidents, and tasks are prioritised based on the greatest level of humanitarian threat. Any history of incidents is assessed, along with the extent of contamination and the proximity of the mines to the closest population, how often the land is used, and the density of mines in the area.

Through its mine clearance operations in 2016, The HALO Trust cleared a total area of 52,887m², in nine mined areas, with the destruction of four anti-personnel mines and twelve items of UXO (see Table 1).

Table 1: HALO Trust mine clearance in 2016

<table>
<thead>
<tr>
<th>District/village</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lymanskyi/Ozerne</td>
<td>4</td>
<td>25,708</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Slovianskyi/Andriivka</td>
<td>1</td>
<td>19,142</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Stanychno–Luhanskyi/Krasna Talivka</td>
<td>1</td>
<td>1,215</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Slovianskyi/Rai-Oleksandrovka</td>
<td>1</td>
<td>1,112</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Volnovaskyi/Pavlopil</td>
<td>1</td>
<td>120</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bilovodskyi/Niznobaranikivka</td>
<td>1</td>
<td>5,590</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>9</td>
<td>52,887</td>
<td>4</td>
<td>12</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  AV = Anti-vehicle

All clearance sites were surveyed by The HALO Trust prior to the start of work, to ensure there is an IMSMA hazard report for each site. However, no mines were discovered in three of the nine clearance tasks in 2016. According to HALO Trust, technical survey would be conducted for the first time in 2017 in order to confirm or reject the presence of mines and ERW, and help inform and justify land release decisions. The HALO Trust expects to receive additional access to areas within the buffer zone that are believed to have high levels of mine and ERW contamination. As at October 2017, HALO Trust had been granted access to work in the buffer zone, on a case-by-case basis. Items discovered by HALO Trust are destroyed by the Ministry of Defence, as only the Ukrainian Armed Forces are permitted to use explosives in the conflict zones. HALO Trust’s demining in Ukraine is conducted in coordination with the Ukrainian authorities and international organisations.

DDG also began non-technical survey in government-controlled areas of the Donetsk and Luhansk regions in early 2016 up to 60km from the current contact line, depending on the location of SHAs and access granted by the relevant authorities. DDG was scheduled to complete non-technical survey by the end of October 2016 and had initially hoped to commence clearance operations in 2016. However, due to lack of funding, and the fact that Ukraine has not yet adopted national mine action legislation, clearance operations have been postponed until the next operational season in 2017.

As at May 2017, HALO Trust and DDG survey had collectively identified use of anti-vehicle mines (TM-57 and TM-62 [both plastic and metal series] and PTM series); anti-personnel mines (OZM-72 fragmentation mines, and M0N, PMN, and P0M series); improvised fragmentation mines, and booby-trapped ERW (mainly tripwire-initiated systems connected to conventional munitions); cluster munitions (9N series) and remnants; rockets from multiple launch rocket systems (PG series); and unexploded mortar shells and grenades.

Update in 2017

Since the beginning of 2017, FSD has also initiated non-technical survey in eastern Ukraine, in addition to clearance operations approximately 48km from the contact line. Furthermore, following requests from local communities, very limited non-technical survey and clearance has occurred in the buffer zone where permissions and security allow, but the process is slow due to security restrictions, which is partly related to frequent cease-fire violations. As at October, HALO Trust had received permission to clear four separate sites within the buffer zone and to conduct non-technical survey in and around 20 settlements.
ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC, Ukraine was required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 June 2016. As at September 2016, Ukraine had not yet submitted an Article 5 deadline extension request, and was in serious violation of the Convention and thereby of international law.

Ukraine should inform states parties of the location of mined areas, and undertake to destroy or ensure the destruction of all anti-personnel mines as soon as possible. To put an end to its violation of international law, Ukraine needs to both request and be granted an extension to its Article 5 deadline by the other states parties at the Sixteenth Meeting of States Parties in Vienna.

At the Fourteenth Meeting of States Parties in 2015, Ukraine reported that it did not have access to some mined areas. According to the final report of the meeting, “Ukraine emphasized that it was fully aware of the need for strict compliance with the obligations under the Convention and notified its intention to seek an extension of the period of Ukraine’s implementation of Article 5. The official, duly compiled, request would be soon submitted to the States Parties for their consideration”.186

On 30 March 2016, though, Ukraine deposited an official communication to the other APMBC states parties via the UN Secretary-General, noting that it did not have full control over parts of its territory – namely the Autonomous Republic of Crimea, the city of Sevastopol, and certain districts of the Donetsk and Luhansk oblasts of Ukraine.187 However, Article 5 specifies that a state party is responsible for clearing mined areas under its jurisdiction or control. Therefore, suspected or confirmed mined areas that are under Ukraine’s control or under Ukraine’s jurisdiction (even if it does not have control or physical access to those areas), should all be covered in an extension request. Furthermore, Ukraine’s obligations under the APMBC still fully apply, including with regard to Article 5, irrespective of the fact that Ukraine continues to be engaged in an armed conflict.

At the Fifteenth Meeting of States Parties in 2016, Ukraine reiterated its commitment to implement its obligations under the Convention, including Article 5. It stated, “We are looking forward to closely engaging with the Article 5 Committee and the ISU in the beginning of 2017 in order to elaborate a way forward and find an appropriate solution to the unique situation and security challenges that Ukraine has been facing since February 2014.”188

At the APMBC intersessional meetings (on 8–9 June 2017), Ukraine expressed that it believed it to be unfair that other states had a 10-year deadline under Article 5, but Ukraine only had a two-year deadline (i.e. from the date of the new contamination in February 2014 until June 2016). Ukraine reiterated that it was demining areas under its control, but could not identify all areas where mines are known to be emplaced. Ukraine stated that it could submit [an Article 5 extension request], but any such decision should acknowledge that February 2014 was the date when mine contamination appeared; that Russian aggression is indicated as the reason; and that Ukraine will start implementing Article 5 once the integrity of the whole territory is restored.189 Ukraine also reported that to fill the gap in the convention, it had prepared a draft rational response for states where contamination appears after entry into forces but before the Article 5 clearance deadline.190

National funding is provided for clearance of mines and ERW, and the Department of Environmental Safety and Mine Action is a division of the Ministry of Defence, from which it is funded.191 Ukraine also receives assistance from foreign partners [OSCE and NATO] for demining equipment.192

With regards to international funding of humanitarian operators in 2017, The HALO Trust reported fewer donors, but increased overall funding.193 DDG reported that the funding outlook was slightly tighter in 2017, due to donors moving from emergency aid to development aid, which resulted in gaps in funding before these kick in.194

Russia is not a state party or signatory to the APMBC. Nonetheless, Russia has obligations under international human rights law to clear mines as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction, in any areas of Ukraine over which it exercises effective control.


6 Emails from Yuri Shahramanyan, Programme Manager, HALO Trust Ukraine, 24 May 2017; and Henry Leach, Head of Programme, DDG Ukraine, 29 May 2017.

7 Article 7 Report [for 2015], Form C.

8 Article 7 Report [for 2016], Form B.


11 Emails from Yuri Shahramanyan, HALO Trust, 24 May 2017; and Henry Leach, DDG Ukraine, 29 May 2017.


16 OSCE, “Latest from SMM based on information received as of 19:30hrs, 5 April 2016”, 6 April 2016.


19 OSCE, “Latest from SMM based on information received as of 19:30, 16 October 2016”, 20 October 2016.


26 Ibid.

27 CCW Amended Protocol II (Art. 28b) defines a phoney minefield as “an area free of mines that simulates a minefield. The term ‘minefield’ includes phoney minefields.”

28 Preliminary observations of the committee on cooperative compliance, “Ukraine”, Inter-sessional meetings, Geneva, 8–9 June 2017.

56 Email from Henry Leach, DGD Ukraine, 29 May 2017.

57 Emails from Yuri Shahramanian, HALO Trust, 24 May 2017; and Mike Barry, Programme Manager, FSD Ukraine, 1 June 2017.

58 Email from Yuri Shahramanian, HALO Trust, 24 May 2017.


61 Email from Lt.-Col. Yevhenii Zubarevskyi, MoD, 27 June 2017.

62 Emails from Anton Shevchenko, DSCE, 14 June 2016 and Gianluca Maspoli, GICHD, 20 June 2017.


65 Email from Lt.-Col. Yevhenii Zubarevskyi, MoD, 21 October 2016.


67 Email from Anton Shevchenko, DSCE, 14 June 2016.


75 Minutes of the Mine Action Support Group, UN, 11 October 2016.

76 Ibid.


82 Email from Gianluca Maspoli, GICHD, 20 June 2017.

83 Ibid.

84 Ibid.


87 Statement of Ukraine on Article 5, 15th Meeting of States Parties, Santiago, 29 November 2016.

88 Ibid.

89 CCW Amended Protocol II Article 13 Report (for 2014), Form D; and Protocol V Article 10 Report (for 2014), Form A.


93 Email from Pascal Rapillard, Head, External Relations and Governance, Policy and Communication, GICHD, 21 October 2016.


95 Email from Lt.-Col. Yevhenii Zubarevskyi, MoD, 27 June 2017.

96 “Notice on the establishment of a technical standardization committee”, National Standardisation Authority Ukraine, 14 April 2017.

97 Emails from Gianluca Maspoli, GICHD, 20 June and 27 September 2017.

98 Email from Miljenko Vahtaric, OSCE Project Co-ordinator, 26 June 2017.


100 Email from Miljenko Vahtaric, OSCE Project Co-ordinator, 27 September 2017; and “Reference material on mine action in Ukraine as of August 28, 2017”, Ministry of Defense website, at: http://www.mil.gov.ua/diyalnist/promtinma-diyalnist/.

101 Email from Adam Jasinski, HALO Trust, 18 May 2016.


103 Emails from Adam Jasinski, HALO Trust, 18 May 2016; and Rowan Fernandes, DGD Ukraine, 20 May 2016.

104 Email from Yuri Shahramanian, HALO Trust, 24 May 2017.


108 Ibid.

109 Email from Gianluca Maspoli, GICHD, 20 June 2017.

110 Email from Yuri Shahramanian, HALO Trust, 24 May 2017.

111 Emails from Lt.-Col. Yevhenii Zubarevskyi, MoD, 21 October 2016 and 27 June 2017; and Gianluca Maspoli, GICHD, 20 June 2017.

112 Email from Gianluca Maspoli, GICHD, 20 June 2017.

113 Email from Lt.-Col. Yevhenii Zubarevskyi, MoD, 27 June 2017.

114 Email from Gianluca Maspoli, GICHD, 20 June 2017.

116 Article 7 Report (for 2016), Form E.


120 Emails from Rowan Fernandes, DDG Ukraine, 20 May and 17 June 2016.

121 Email from Anton Shevchenko, OSCE, 14 June 2016.


123 Interview with Col. Oleksandr Schchebetiuk, Ukrainian Armed Forces, in Geneva, 26 June 2015; and email from Anton Shevchenko, OSCE, 23 June 2015.


125 Statement of Ukraine on Article 5, 15th Meeting of States Parties, Santiago, 29 November 2016.

126 See Ukroboronservice, undated, at: http://en.uos.ua/.

127 Email from Gianluca Maspoli, GICHD, 20 June 2017.

128 Ibid.; and Article 7 report (for 2016), Form F.

129 Email from Rowan Fernandes, DDG Ukraine, 20 May 2016.

130 Email from Henry Leach, DDG Ukraine, 29 May 2016.


133 Email from Henry Leach, DDG Ukraine, 29 May 2017.


135 Interview with Adam Jasinski, Programme Manager for Ukraine, HALO Trust, Thornhill, 28 April 2016; and email, 18 May 2016.

136 Email from Yuri Shahramanayan, HALO Trust, 24 May 2017.

137 Email from Nick Smart, Regional Director, Europe, HALO Trust, 6 October 2017.

138 Emails from Adam Jasinski, HALO Trust, 18 May 2016; and Yuri Shahramanayan, HALO Trust, 24 May 2017.

139 Email from Yuri Shahramanayan, HALO Trust, 24 May 2017.

140 Ibid.

141 Ibid.

142 Ibid.

143 Email from Nick Smart, HALO Trust, 6 October 2017.

144 Email from Yuri Shahramanayan, HALO Trust, 24 May 2017.

145 Ibid.


148 Protection Cluster Ukraine, “Eastern Ukraine: Brief on the need for humanitarian mine action activities”.

149 Side-event presentation by Mark Hiznay, HRW, in Geneva, February 2015, and interview, 18 February 2015.

150 Ibid.


152 Ibid.

153 “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, at the 19th International Meeting, 17 February 2016.


157 Email from Megan Latimer, GICHD, 3 July 2015.

158 Side-event presentation by Mark Hiznay, HRW, in Geneva, February 2015; and interview, 18 February 2015.


162 Ibid.

163 Interview with Adam Jasinski, HALO Trust, Thornhill, 28 April 2016; and email, 18 May 2016.

164 Email from Adam Jasinski, HALO Trust, 18 May 2016.

165 Email from Yuri Shahramanayan, HALO Trust, 24 May 2017.

166 Emails from Rowan Fernandes, DDG Ukraine, 20 May and 17 June 2016.

167 Email from Rowan Fernandes, DDG Ukraine, 17 June 2016.

168 Email from Oleksandr Lobov, DDG, 19 October 2016.

169 Email from Adam Jasinski, HALO Trust, 18 May 2016.

170 Email from Yuri Shahramanayan, HALO Trust, 24 May 2017.

171 Ibid.

172 Ibid.

173 Email from Adam Jasinski, HALO Trust, 18 May 2016.

174 Email from Yuri Shahramanayan, HALO Trust, 24 May 2017.

175 Email from Nick Smart, HALO Trust, 6 October 2017.


178 Emails from Rowan Fernandes, DDG Ukraine, 20 May and 17 June 2016.

179 Email from Oleksandr Lobov, DDG, 19 October 2016.

180 Email from Rowan Fernandes, DDG Ukraine, 17 June 2016.

181 Email from Oleksandr Lobov, DDG, 19 October 2016.


183 Email from Mike Barry, FSD Ukraine, 1 June 2017.

184 Email from Yuri Shahramanayan, HALO Trust, 24 May 2017.

185 Email from Nick Smart, HALO Trust, 6 October 2017.


188 Statement of Ukraine on Article 5, 15th Meeting of States Parties, Santiago, 30 November 2016.

189 Statement of Ukraine on Article 5, Intersessional meetings, Geneva, 8 June 2017.

190 Ibid.

191 Interview with Col. Oleksandr Schchebetiuk, Ukrainian Armed Forces, in Geneva, 26 June 2015.


193 Email from Yuri Shahramanayan, HALO Trust, 24 May 2017.

194 Email from Henry Leach, DDG Ukraine, 29 May 2017.
**UNITED KINGDOM**

**ARTICLE 5 DEADLINE: 1 MARCH 2019**
(Not on track to meet deadline)

**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance score: average</td>
<td>6.4</td>
<td>6.2</td>
</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

Having re-initiated clearance in Falkland Islands in 2015, the United Kingdom continued to make good progress in releasing mined area in 2016 and is currently working at what it deems to be the maximum capacity that can be safely deployed in the Falkland Islands. However, despite this, it is not on track to meet its extended Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline and will almost certainly need to submit an extension request in 2018. Its current phase of demining commenced in October 2016 and is expected to run until March 2018, during which the United Kingdom plans to clear 46 mined areas and carry out technical survey in preparation for clearance of a further 27.

RECOMMENDATION FOR ACTION

■ The United Kingdom should present detailed plans and timelines for completing demining in the Falkland Islands.

CONTAMINATION

The only mined areas under the jurisdiction or control of the United Kingdom are on the Falkland Islands, the result of conflict with Argentina in 1982. At the end of 2016, the United Kingdom had 77 mined areas covering 11.21km², as set out in Table 1. This is a small decrease from the 83 mined areas covering 11.63km² of mined area, as at March 2016, the result of demining in the last quarter of 2016.

Table 1: Contamination by province (as at end-2016)

<table>
<thead>
<tr>
<th>Area</th>
<th>Mined areas</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fox Bay</td>
<td>12</td>
<td>2.37</td>
</tr>
<tr>
<td>Port Howard and Port Fitzroy</td>
<td>6</td>
<td>1.30</td>
</tr>
<tr>
<td>Darwin and Goose Green</td>
<td>7</td>
<td>0.17</td>
</tr>
<tr>
<td>Murrell Peninsula</td>
<td>6</td>
<td>0.65</td>
</tr>
<tr>
<td>Stanley Area 1</td>
<td>8</td>
<td>0.32</td>
</tr>
<tr>
<td>Stanley Area 2</td>
<td>10</td>
<td>0.32</td>
</tr>
<tr>
<td>Stanley Area 3</td>
<td>4</td>
<td>0.58</td>
</tr>
<tr>
<td>Stanley Area 4</td>
<td>24</td>
<td>0.28</td>
</tr>
<tr>
<td>Totals</td>
<td>77</td>
<td>11.21</td>
</tr>
</tbody>
</table>

Although some clearance was undertaken in the early 1980s immediately following the Falklands conflict, between entry into force of the APMBC for the United Kingdom on 1 March 1999 and submission of its extension request in 2008, no further clearance took place.

In 2001, the United Kingdom and Argentina agreed to carry a feasibility study on the clearance of mines in the Islands. The study, which was undertaken by Cranfield University, was concluded in October 2007. The resultant report “highlighted the environmental and remediation challenges, the climatic constraints and the limitations of the existing local infrastructure and recommended a two-year trial. It concluded that the clearance of mines from all mined areas would be challenging, but technically possible and estimated that the task would take a minimum of 10 years subject to the outcome of the trial.”

In its 2008 Article 5 extension request, the United Kingdom reported that 117 mined areas remained over a total area of 13km², and containing just over 20,000 mines (anti-personnel and anti-vehicle). On the basis of additional information obtained during demining operations, the estimate for the total contaminated area was increased to 13.5km².

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 4,371 anti-personnel mines, 984 anti-vehicle mines, and 74 items of unexploded ordnance (UXO), including 21 submunitions. In addition, battle area clearance (BAC) operations during this period, resulted in just over 5km² of suspected hazardous area (SHA) being released, with the destruction of 87 items of UXO.

No civilian has ever been killed or injured by mines on the islands. Over the years, however, civilians have deliberately or inadvertently entered a minefield in numerous cases. For example, the Ministry of Defence reported “infringement” of minefields by a total of 6 locals and 15 foreign fishermen or tourists between March 2000 and December 2008. On 6 December 2008, three crew members of a Belgian yacht inadvertently entered a minefield at Kidney Cove on East Falkland but were not injured. In October 2002, a Falkland Islander was fined £1,000 for entering a minefield on Goose Green. It is a criminal offence on the Falkland Islands to enter a minefield.

The socio-economic impact of contamination on the islands is said to be minimal. All mined areas and SHAs have been “perimeter-marked and are regularly monitored and protected by quality stock proof fencing, to ensure the effective exclusion of civilians.” According to the United Kingdom, mined areas represent “only 0.1% of land used for farming. The mined areas cover a wide range of terrain including sandy beaches and dunes, mountains, rock scree, dry peat, wet swampy peat, and pasture land.” A number of instances of cattle, sheep, or horses entering the minefields have been recorded since 2000, some of which resulted in the animals’ deaths.
A National Mine Action Authority (NMAA) was established in 2009 to oversee clearance of mined areas. The UK Foreign and Commonwealth Office (FCO) chairs the NMAA, which contains representatives of the Ministry of Defence, the Falkland Islands government, a strategic advisor, and the project contractors.

**Strategic Planning**

Since 2010, mine clearance and battle area clearance (BAC) in the Falkland Islands have been conducted in four phases. Phase 1 took place from October 2009 to June 2010; Phase 2 from January to March 2012; Phase 3 from January to March 2013; Phase 4(a) from January to April 2015; and Phase 4(b) from September 2015 to March 2016.

In September 2016, the United Kingdom announced its plans for the next stage of survey and clearance operations in the Falkland Islands: Phase 5. This Phase will comprise of two stages, the first of which commenced in October 2016 and is expected to finish in March 2018, by the end of which the United Kingdom will have a more accurate picture of its remaining mine clearance challenge.

The United Kingdom does not currently have a strategic plan in place for completion of mine clearance on the Falkland Islands. However, according to the United Kingdom, the first stage of Phase 5 has been designed to provide a more accurate picture of the remaining mine clearance challenge. As this first stage concludes in March 2018, the information gathered will inform the strategic plan.

**Standards**

The United Kingdom does not have its own national mine action standards, but demining operations on the Islands are conducted according to the International Mine Action Standards (IMAS), and agreed upon by the NMAA. Each project’s Statement of Requirement contains the standards specific to the tasks being addressed. 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.

**Quality Management**

Fenix Insight was responsible for monitoring the latest phase of clearance on a daily basis and has undertaken external quality assurance (QA) and quality control (QC) of the operations. 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.

**Information Management**

In 2015, the United Kingdom disseminated reports on three phases of “exploitation work” conducted during Phases 1, 2, and 4 on the Islands. These reports, although specific to the Falklands, were released in the expectation they might be of broader interest to the mine action community, particularly with regard to the effects of aging and weathering of specific mine types. The reports focus on two anti-personnel mines, the SB33 (Italian) and the P4B (Spanish), and two anti-vehicle mine types, the SB81 (Italian) and the C38 (Spanish). Recent findings from analysis of recovered landmines in the Falkland Islands were presented as part of a side event hosted by the United Kingdom at the APMBC intersessional meetings in June 2017, entitled “Impact of Ageing of Landmines on Global Mine Action.”

**Operators**

In October 2014, the Governor’s Office in Port Stanley announced that demining contracts had been awarded to two companies for Phase 4 of clearance on the Islands. Battle Area Clearance, Training, Equipment and Consultancy International (BACTEC) was awarded the land release contract, while Fenix Insight was responsible for the Demining Project Office, which ensures quality management of demining operations.

To implement Phase 4, which began in January 2015, BACTEC had a team totalling 46 deminers, along with other support and management staff. In total, 74 staff were employed on the project. BACTEC also used three demining machines during operations: two flails and a tiller.

BACTEC and Fenix Insight were subsequently awarded the contracts for land release contractor and demining project office (including quality assurance) respectively, for Phase 5 of clearance, which commenced in October 2016. Capacity for Phase 5 operations was increased from previous phases, with a total of 108 personnel: 84 demining staff (7 teams of 12 (eight deminers, one supervisor, one team leader, a medic, and a driver per team); 7 technical staff (surveyors, mechanics, and excavator operators); 13 support staff, and 4 management staff. Mechanical equipment includes one anti-tank demining machine, three anti-personnel demining machines, two armoured excavators, in addition to the required transportation equipment.

No major changes in survey and clearance capacity were expected in 2017. The United Kingdom has noted that the Falkland Islands has limited capacity in terms of accommodation and medical/casevac (evacuation of casualties by air) facilities. Current staffing levels have reached the maximum that can be safely deployed on the Islands, but work was claimed to be progressing very well with the current capacity.
LAND RELEASE

During 2016, two phases of anti-personnel mine survey and clearance operations took place. The final three months of Phase 4b concluded in March 2016, while Phase 5 began in October of the same year. Between October and December 2016, 0.15km² was reduced by technical survey and a further 0.42km² released by clearance. In addition, survey confirmed nine areas as mined, totalling 0.18km².

Since the start of planned demining operations at the end of 2009, the United Kingdom has predominantly released land through full clearance. While non-technical and technical survey have formed part of the United Kingdom’s operations in the Falkland Islands for many years, the United Kingdom did not historically provide disaggregated data on the amount of land cancelled by non-survey, reduced by technical survey, and released by full clearance.

Survey in 2016

As recorded in last year’s Clearing the Mines 2016 report for the United Kingdom, during Phase 4(b) survey from September 2015 to March 2016, a total of more than 0.32km² was confirmed as mined. 34

Between the start of Phase 5 operations in October 2016 and the end of the year, 154,000m² in Stanley Area 3 was reduced through technical survey. In addition, nine areas totaling 180,057m² were confirmed as mined in Stanley Area 3, and Darwin and Goose Green. 35

Clearance Phases 1 – 4 (October 2009 to March 2016)

The first formal clearance operations since the United Kingdom became a State Party to the Mine Ban Treaty in 1999 took place at the end of 2009. In total, during the first four phases of clearance from October 2009 to March 2016, 35 mined areas were released, totalling just over 2km², with the destruction of 4,371 anti-personnel mines, 984 anti-vehicle mines, and 74 items of UXO, including 21 submunitions [see Table 2].

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Geographic area</th>
<th>Areas released</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fox Bay, Darwin and Goose Green, Stanley Area 1 and 3</td>
<td>4</td>
<td>89,540</td>
<td>678</td>
<td>568</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Stanley Area 1, 2 and 3</td>
<td>6</td>
<td>826,000</td>
<td>296</td>
<td>32</td>
<td>6</td>
</tr>
<tr>
<td>4(a)</td>
<td>Stanley Area 3</td>
<td>10</td>
<td>264,921</td>
<td>723</td>
<td>24</td>
<td>37</td>
</tr>
<tr>
<td>4(b)</td>
<td>Stanley Area 2 and 3</td>
<td>15</td>
<td>832,594</td>
<td>2,674</td>
<td>360</td>
<td>19</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>35</td>
<td>2,013,055</td>
<td>4,371</td>
<td>984</td>
<td>74</td>
</tr>
</tbody>
</table>

AP = Anti-personnel AV = Anti-vehicle

As noted in last year’s Clearing the Mines report for the United Kingdom, during Phase 4(b) clearance from September 2015 to March 2016, fifteen areas totalling just over 0.83km² were cleared. 37 Phase 4(b) had originally been expected to conclude in December 2015, but was extended by three months as one mined area proved especially difficult to clear due to the unexpected inaccuracy of the minefield records. 38 The United Kingdom allocated additional funding to the project which allowed contractors to complete, at the same time, more tasks than originally planned. 39

Clearance Phase 5 (October 2016 onwards)

Phase 5 survey and clearance operations will tackle the most complex, remote, and environmentally sensitive minefields. The first stage of Phase 5 commenced in October 2016 and is expected to run until March 2018, with a three-month stand down over the Austral winter beginning in June 2017. 40

Between the start of Phase 5 clearance operations in October 2016 and the end of the year, 423,210m² of mined area was cleared, with the destruction of 1,807 anti-personnel mines, 19 anti-vehicle mines, and one item of UXO [see Table 3].
Table 3: Mine clearance Phase 5 (October 2016 to May 2017)

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Geographic area</th>
<th>Areas released</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 (October to December 2016)</td>
<td>Stanley Area 2</td>
<td>6</td>
<td>423,210</td>
<td>1,807</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>5 (January to May 2017)</td>
<td>Stanley Area 2, 3, and 4</td>
<td>12</td>
<td>439,087</td>
<td>1,358</td>
<td>80</td>
<td>7</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>18</td>
<td>862,297</td>
<td>3,165</td>
<td>99</td>
<td>8</td>
</tr>
</tbody>
</table>

In some SHAs, machines (with a flail or tiller) are used to prepare the land for clearance, which improves productivity. All mechanically prepared ground is subsequently processed by deminers using visual search, detector search, raking, or full manual excavation drills. Furthermore, aerial drones, which were first introduced during Phase 4 clearance operations, are again being deployed during Phase 5. Use of drones to overfly SHAs helps to identify mine ‘dump’ locations, row markers, and other evidence that might have otherwise taken a manual team several days to locate. The United Kingdom deems the use of drones to be an excellent addition to the demining toolbox. As it progresses towards clearing sand-duned areas, heavy sand-sifting machinery will be introduced.

ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the ten-year extension granted by states parties in 2008), the United Kingdom is required to destroy all anti-personnel mines in areas under its jurisdiction or control as soon as possible, but not later than 1 March 2019. The United Kingdom is not on track to meet this deadline.

As at December 2015, the Article 5 Committee highlighted that total mined area cleared to date represented less than 10% of overall mine contamination, far less than the 48% the United Kingdom forecasted it would have cleared in its 2008 Article 5 deadline extension request. The Committee also observed that "the United Kingdom’s pace of implementation suggests that it will not be able to complete implementation of Article 5 by its deadline in 2019".44

At the conclusion of the phase 4b of demining operations in March 2016, just under 2km² of mined land had been cleared since the United Kingdom joined the APMBC, releasing a total of 35 mined areas (see Table 2 above). As at the end of Phase 4b, 83 mined areas, covering a total of 11.63km², remained to be released, and by the end of 2016 this had been reduced to 77 mined areas over 11.21km². In July 2017, the United Kingdom reported that meeting the 2019 deadline would be "challenging", and that its current priority was successful implementation of the first stages of the Phase 5, and agreeing on plans for demining beyond 2018. In both its reporting and planning, the United Kingdom is encouraged to clearly disaggregate data on the amount of mined area released (or planned for future released) through survey (both cancelled by non-technical survey and reduced through technical survey) and through clearance.

The Ninth Meeting of States Parties in December 2008 agreed to the United Kingdom’s request for a ten-year extension but noted the United Kingdom had agreed to provide, not later than the end of June 2010, a detailed explanation of how demining was proceeding and the implications for future demining in order to meet the United Kingdom’s obligations under Article 5. As at September 2017, the United Kingdom had not yet fulfilled this commitment, though it had reported on progress in clearance and plans for the forthcoming phase of demining. The Article 5 Committee stated at the June 2017 intersessional meetings that “updated information on United Kingdom’s plan to complete implementation of Article 5 by its deadline of 1 March 2019 would be welcomed, specifically indicating what geographical and quantified results are expected when, how, by whom and at what cost”. It also noted that the Convention as a whole would benefit if the United Kingdom, “provided an accounting of annual milestones of progress to be achieved during the remaining period of its extension request”. The United Kingdom has pledged to continue to provide updates on progress and share lessons learned.

The United Kingdom government funds all mine-clearance operations in the Islands. Many of the remaining mined areas are said to be in extremely remote locations, exposed to adverse weather conditions, and, in the United Kingdom’s opinion, pose negligible risk to civilians. 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 medical evacuation of any casualties. The United Kingdom expects these factors to become increasingly significant as the later phases of demining tackle the more remote and technically challenging minefields.
To date, the United Kingdom has prioritised clearance of areas closest to settlements and civilian infrastructure, resulting in release of areas closest to Stanley and the roads leading in and out of the Islands’ capital. In early 2016, the Ministry of Defence and the Foreign and Commonwealth Office commissioned the United Kingdom’s Defence, Science and Technology Laboratory to carry out a study to help prioritise clearance of the remaining minefields in a Phase 5 of demining. The 2016 study applied Multi Criteria Decision Analysis to rank all remaining minefields according to a range of factors including size/density of minefield; terrestrial factors (remoteness of location, topography, and difficulty of mine removal); human factors (proximity to life, benefits to local population of clearance, and political priorities of United Kingdom/Falkland Islands Government); and environmental factors (conservation of wildlife and adherence to local legislation). The resultant priority list formed the basis of the UK Government’s invitation to tender for the contract for Phase 5 demining. The final order of clearance will also take into account practicalities, such as the contractors’ capacity, weather, and time constraints. The United Kingdom has noted that the small humanitarian and socio-economic impact of the remaining mined areas in the Falkland Islands decreases as the mined areas closest to population centres are cleared.

The first stage of the latest phase of demining in the Falkland Islands (Phase 5), began in October 2016, with the deployment of some 90 deminers. During the first stage of Phase 5, 46 minefields totalling an estimated 111,150m² will be cleared, and a further 27, totalling an estimated 431,130m², will be subject to technical survey. For the first time, operators will be clearing mined areas for which there are no minefield records, after technical survey has been conducted. The survey work includes cutting lanes into suspected minefields in order to establish the position of any remaining mines, which will help to establish more accurately the extent of contamination in the remaining minefields, and help inform strategic planning.

The United Kingdom has also conducted an environmental impact assessment (EIA), which as at July 2017, was currently being discussed with the Falkland Islands Government prior to the affected areas being cleared.

The first part of Phase 5 is due to finish in March 2018, and detailed planning for clearance beyond that date was ongoing as at July 2017. The United Kingdom remains committed to keeping the APMBC informed of its progress and, as at July 2017, United Kingdom diplomats intended to provide details of clearance beyond 2018 at the APMBC Sixteenth Meeting of States Parties in December 2017.

The £20 million pledged for the latest phase of demining will be jointly funded by the Foreign and Commonwealth Office and Ministry of Defence.
24 Article 7 Report (for 2016), Form F.
25 Email from an official in the Arms Export Policy Department, FCO, 1 July 2016.
26 Email from an official in the Arms Export Policy Department, FCO, 3 June 2015; Intersessional meetings [Committee on Article 5 Implementation], Geneva, 25 June 2015; and exploitation reports available at: http://www.apminebanconvention.org/states-parties-to-the-convention/united-kingdom/.
27 Email from an official in the Arms Export Policy Department, FCO, 11 October 2017.
28 Email from an official in the Arms Export Policy Department, FCO, 15 July 2016.
29 Ibid.
30 Email from an official in the Arms Export Policy Department, FCO, 3 June 2015.
31 Email from an official in the Arms Export Policy Department, FCO, 15 July 2016; and Article 7 Report (for 2016), Form F.
32 Email from an official in the Arms Export Policy Department of the FCO, 28 July 2017.
33 Ibid.
34 Statement of the United Kingdom, Intersessional meetings [Standing Committee on Mine Action], Geneva, 19 May 2016; and emails from an official in the Arms Export Policy Department, FCO, 21 June and 15 July 2016.
35 Emails from an official in the Arms Export Policy Department of the FCO, 28 July and 31 August 2017.
36 Email from an official in the Arms Export Policy Department, FCO, 24 August 2016. There is a small discrepancy between the number of mines reported in the "Clearing Cluster Munition Remnants 2016" report for Phase 4(b) [2,675 anti-personnel mines and 351 anti-vehicle mines], as contained, and the number of mines recorded subsequently (2,674 anti-personnel mines and 360 anti-vehicle mines) 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 now correct.
37 Statement of the United Kingdom, Intersessional meetings [Standing Committee on Mine Action], Geneva, 19 May 2016.
38 Email from an official in the Arms Export Policy Department, FCO, 15 July 2016.
39 Emails from an official in the Arms Export Policy Department, FCO, 14 and 21 June 2016.
40 Statement of the United Kingdom, 15th Meeting of States Parties, Santiago, 29 November 2016; and emails from an official in the Arms Export Policy Department of the FCO, 2 June, 28 July, and 11 October 2017.
41 Emails from an official in the Arms Export Policy Department, FCO, 28 July, 31 August 2017, and 11 October 2017.
42 Emails from an official in the Arms Export Policy Department, FCO, 15 July 2016 and 28 July 2018.
43 Article 5 deadline Extension Request, 30 May 2008; and "Preliminary observations of the Committee on Article 5 implementation – observations on the implementation of Article 5 by the UK", 23 June 2015.
44 "Preliminary observations of the Committee on Article 5 implementation – observations on the implementation of Article 5 by the UK", 23 June 2015.
45 Email from an official in the Arms Export Policy Department, FCO, 15 July 2016.
46 Email from an official in the Arms Export Policy Department, FCO, 28 July 2017.
47 Ibid.
49 "Preliminary observations of the committee on Article 5 implementation – observations on the implementation of Article 5 by the UK", 8–9 June 2017.
50 Statement of the United Kingdom, Intersessional meetings, Geneva, 8 June 2017.
51 Email from an official in the Arms Export Policy Department, FCO, 3 June 2015.
52 Statement of the United Kingdom, Intersessional meetings, Geneva, 8 June 2017.
53 Ibid.
54 Ibid.
55 Emails from an official in the Arms Export Policy Department, FCO, 21 September 2016 and 28 July 2017.
56 Statement of the United Kingdom, Intersessional meetings, Geneva, 8 June 2017.
57 UK government, "UK pledges £20m for landmine clearance from the Falkland Islands", 14 September 2016, at: https://www.gov.uk/government/news/uk-pledges-20m-for-landmine-clearance-from-the-falkland-islands; and email from an official in the Arms Export Policy Department, FCO, 21 September 2016.
58 Email from an official in the Arms Export Policy Department, FCO, 28 July 2017.
59 Ibid.; and Article 7 Report (for 2016), Form F.
61 Email from an official in the Arms Export Policy Department, FCO, 11 October 2017.
62 Email from an official in the Arms Export Policy Department, FCO, 28 July 2017.
63 Emails from an official in the Arms Export Policy Department, FCO, 21 September 2016 and 28 July 2017.
64 UK government, "UK pledges £20m for landmine clearance from the Falkland Islands", 14 September 2016.
YEMEN

**MINE ACTION PROGRAMME PERFORMANCE**

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<thead>
<tr>
<th>Category</th>
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<td>Improving performance</td>
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**PERFORMANCE SCORE: POOR**

4.0  3.5

**PERFORMANCE COMMENTARY**

The Yemen Executive Mine Action Centre (YEMAC) sharply accelerated operations in 2016 focusing on emergency clearance of all munitions but faced limited access to contaminated areas because of continuing conflict as well as funding and capacity constraints.
RECOMMENDATION FOR ACTION

Yemen should give access to international demining operators to increase technical expertise and capacity and accelerate clearance.

CONTAMINATION

Yemen is contaminated with mines from conflicts in 1962–69 and 1970–83, the mines that were laid in border areas between North and South Yemen before they unified in 1990, and those used in successive conflicts that erupted since 1994, including the present conflict that flared in March 2015 and has added more mined areas. The extent of Yemen’s contamination is not known.

A Landmine Impact Survey (LIS) completed in 2000 identified suspected hazardous areas (SHAs) containing mines and explosive remnants of war (ERW) covering an estimated 922 km² and affecting 592 mine villages across 18 of Yemen’s 21 governorates. Yemen’s first Article 5 deadline extension request in 2008 stated that 710 km² had been released and 457 areas covering 213 km² remained to be “addressed.” Yemen’s latest Article 7 report submitted in 2017 said 569 SHAs covering 323 km² remained and that survey was expected to identify additional contamination. In a 2017 progress report, the United Nations Development Programme (UNDP) observed that “currently, there are very few tangible indicators measuring contamination or impact and what is available is outdated, ad hoc and often anecdotal.”

Multiple conflicts in the past decade that added to contamination included the 2010 insurgency in northern Saada governorate led by Abdul Malik al-Houthi and the 2011 insurgency around southern Abyan by militants belonging to Ansar al-Sharia, linked to al-Qaeda in the Arabian Peninsula. YEMAC reported that insurgents in Saada had laid locally produced mines, later clearing some but missing others.

In 2011, under former President Ali Abdullah Saleh, Yemen’s Republican Guard reportedly laid thousands of mines in the Bani Jarmoz area near Sana’a. The number of mines and extent of area affected remain to be determined. Information provided to YEMAC by local inhabitants in February 2014 suggested 25 villages were impacted.

A national NGO, Mwatana for Human Rights, documented mine use by Houthi forces and forces loyal to former president Ali Abdullah Saleh that killed at least 57 civilians in six governorates between July 2015 and October 2016. It reported they placed mines in residential areas, main streets, homes, farms, and paths frequented by civilians. A report by the UN High Commissioner for Human Rights stated that in the conflict which escalated in March 2015 mines were laid in areas controlled by Houthi rebels and associated forces. Between the flare up in hostilities in March 2015 and mid-2016, most minelaying was carried out in Aden, Marib and Taiz governorates, which also experienced the most ERW incidents although Abyan and Ibb governorates also experienced heavy landmine-related casualties.

Locally produced mines have also become a significant feature of the conflict in the past decade. YEMAC reported Houthi forces emplaced locally produced mines in Saada governorate during the 2006–09 insurgency and frequently clears “cold” or abandoned devices. Human Rights Watch said YEMAC had cleared locally produced mines in areas from which Houthi forces withdrew near the port city of Mokha in February 2017.

PROGRAMME MANAGEMENT

Yemen established a National Mine Action Committee (NMAC) in June 1998 by prime ministerial decree to formulate policy, allocate resources, and develop a national mine action strategy. NMAC, chaired by the Minister of State (a member of the cabinet), brought together representatives of seven concerned ministries. The government of President Abdu Rabbu Mansour Hadi was driven from power in Yemen in February 2015 and moved to Saudi Arabia where he stayed for many months, putting into doubt mine action institutional arrangements.

YEMAC was established in Sana’a in January 1999 as NMAC’s implementing body with responsibility for coordinating mine action in the country. It is supported by a Regional Executive Mine Action Branch (REMAB) and a National Training Centre in Aden, also set up in 1999, and a REMAB in al-Mukalla (Hadramout governorate) that was added in March 2004. REMABs are responsible for field implementation of the national mine action plan. YEMAC opened a branch in Saada in April 2016.

With the upsurge of conflict in 2014, YEMAC became, de facto, two organisations, split between the southern city of Aden controlled by the Saudi-led coalition and Yemen’s internationally recognised but exiled government, and the capital Sana’a, under the control of the Houthi. The Sana’a office coordinates operations in the north and centre of the country and the Aden office oversees operations in southern provinces.

The United Nations has supported mine action in Yemen since 1999 through a programme implemented by the UN Office for Project Services (UNOPS) but from 2003 the programme came under national management. UNDP deployed an international adviser to YEMAC at the end of 2014 to support planning and programme management and in 2016 added a second international staff member as well as recruiting national staff in Aden, Saada, and Sana’a. UNDP planned to add another international technical adviser before the end of 2017, to be based in Aden.
UNDP embarked on a new four-year project to run from 1 July 2017 until 30 June 2020, seeking four main outcomes:19

- Mine and UXO contamination would be mapped and impact assessed nationwide using primary and secondary resources.
- Non-technical and technical survey is conducted and mines and ERW cleared in the priority areas identified.
- Risk education on the developing threat of mines and UXO is provided to affected communities.
- Assistance to ERW survivors is enhanced with the identification of more implementing partners to support emergency care, rehabilitation, and vocational training.

UNDP estimated that to operate at full capacity, Yemen’s mine action programme needed some $15 million. Available funding for 2017 was estimated at around $6 million.20

Before 2015, Yemen had contributed some $3 million to $4 million annually but its contribution ceased in 2015 and 2016 after the escalation of hostilities.

Strategic Planning

YEMAC does not currently have a strategic plan for mine clearance but worked with UNDP on addressing the emergency threat to communities posed by all munitions, including mines, locally produced mines, cluster munition remnants, and unexploded aircraft and ground-launched ordnance. UNDP identified three main goals for emergency operations: preventing the situation from getting any worse; mitigating the impact of existing contamination; and for the longer term addressing Yemen’s APMBC obligations.21

Operators

All survey and clearance of mines and ERW are conducted by YEMAC. By the start of 2016, it had some 850 staff, of whom between 350 and 400 were said to be active, under the management of offices in Sana’a and Aden. These included three UXO clearance teams set up at the end of 2015 to focus on contamination in cities.22

YEMAC recruited 50 more staff in 2016 and at the peak of its activities in November had some 550 deminers engaged in field operations.23 By mid-2017, YEMAC reportedly had close to 800 active personnel.24

Danish Demining Group (DDG) has offices in Sana’a and Aden, and in 2016 provided risk education and explosive ordnance disposal training and equipment for YEMAC, mainly through its Aden office. DDG said it was in discussion with UNDP about expanding support to include training in non-technical survey and information management.25

The Marshall Legacy Institute was due to visit Yemen in September 2017 to assess the possibilities of reviving a Sana’a-based mine detection dog (MDD) programme with support from Norwegian People’s Aid (NPA).26

LAND RELEASE

YEMAC conducted clearance in nine of Yemen’s twenty-one governorates in 2016, clearing 3km² in what UNDP called a “quantum leap” from the previous year, when teams were able to conduct only very limited emergency spot clearance.27 The acceleration appears to have continued in the first half of 2017 when YEMAC reportedly cleared 2.9km².28

Survey in 2016

Continuous conflict in Yemen since March 2015 has prevented systematic survey. UNDP was working with Handicap International and the Geneva International Centre for Humanitarian Demining in 2017 on a rapid survey of contamination and impact based largely on open sources.29 YEMAC said it planned to re-survey 18 governorates over three years to 2020.30

Clearance in 2016

Of the 3km² of clearance in 2016 most occurred in Sana’a governorate (1.3km²) though the vast majority of mines were destroyed in the south. YEMAC reportedly destroyed 189,037 items of explosive ordnance in 2016, including 16,440 anti-personnel mines, 1,048 improvised devices, and 16,750 anti-vehicle mines. Aden governorate alone accounted for the destruction of 16,198 anti-personnel mines and 9,476 anti-vehicle mines. Substantial numbers of anti-vehicle mines were also cleared in Hadramaut (4,779), Lahej (1,692), and Taiz (934).31

In the first half of 2017, nearly 70% of the area cleared was in four governorates, including Sana’a (0.75km²), Hajjah (0.5km²), Sa’ada (0.43km²) and Aden (0.34km²). YEMAC cleared 334 anti-personnel mines and 1,373 anti-vehicle mines, most in the highly conflicted governorate of Taiz (255 anti-personnel mines and 1,099 anti-vehicle mines).32
ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the five-year extension granted in 2014), Yemen is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2020. This is Yemen’s second extension to its Article 5 deadline and it is not on track to meet this new deadline.

In an update to its extension request submitted in 2016, Yemen underscored the challenges posed by continuing hostilities, and the lack of adequate or multi-year funding for its operations. It said: “When there is a cessation to hostilities and YEMAC has greater access to the contaminated areas, a more accurate plan will be developed with greater accuracy in determining the end date.”

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1. Article 5 Extension Request Update, 10 March 2016, p. 4.
3. Article 7 Report (for 1 April 2016 to 31 March 2017), Forms D and L.
5. Article 7 Report (for 1 April 2009 to 31 March 2010), Form I.
7. Article 5 Extension Request Update, 10 March 2016, p. 3.
15. Email from Megan Latimer, Programme and Operations Coordinator (Afghanistan, Colombia, Ukraine), DDG, 29 May 2017.
20. Ibid.
25. Email from Megan Latimer, Programme and Operations Coordinator (Afghanistan, Colombia, Ukraine), DDG, 29 May 2017.
27. UNDP, “Support to eliminate the impact from mines and ERW – Phase IV, Annual Progress Report 2016”, Undated but 2017, p. 11. The governorates in which YEMAC was active in 2016 were Abyan, Aden, Al Dhale’e, Hadramaut, Hajjah, Lahej, Saada, Sana’a, and Taiz.
30. Article 7 Report (for 1 April 2016 to 31 March 2017), Form L.
32. Email from Aleksandar Mihajlov, UNDP, Yemen, 24 September 2017.
33. Article 5 Extension Request Update, 10 March 2016, p. 3.
ZIMBABWE

ARTICLE 5 DEADLINE: 1 JANUARY 2018
(EIGHT-YEAR EXTENSION REQUESTED)

MINE ACTION PROGRAMME PERFORMANCE

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PERFORMANCE SCORE: GOOD

7.0  
6.4
PERFORMANCE COMMENTARY

Building on progress achieved in 2015, Zimbabwe’s national mine action programme made major advances in 2016. The amount of mined area cleared in 2016 more than doubled compared to the previous year and re-survey of all suspected hazardous areas (SHAs) was completed during the year, enabling Zimbabwe to better estimate the extent of confirmed contamination remaining to be released.

In August 2017, Zimbabwe submitted a revised Article 5 deadline extension request for a period of eight years, until 2025, setting for the first time a deadline for the completion of mine clearance. The revised document is a substantial improvement on the request initially submitted in April. It presents a realistic estimate of remaining contamination, and clearly describes the resources, time, and funding needed for efficient completion of clearance. The approval in 2017 by the Zimbabwean Mine Action Centre (ZIMAC) of pilot projects of the use of mechanical demining assets and mine detection dogs (MDDs), and the arrival of two additional international clearance operators mean that Zimbabwe’s mine action programme is poised to make further significant progress in land release in 2018.

Operators reported that the strengthening of the mine action programme in 2016 was in large part due to a more solid working relationship between operators and ZIMAC, as well as to the efforts of ZIMAC to address a number of key areas, such as the quality of the national mine action database and consequent reporting, and the introduction of integrated demining assets and methodologies.

RECOMMENDATIONS FOR ACTION

- Zimbabwe should meet the annual mine clearance targets in its new national mine action strategy for 2018–25, working in continued cooperation with international operators.
- Zimbabwe should expand the application of integrated demining methodologies introduced in 2017, including mechanical assets and MDDs.
- Continued efforts should be made to ensure that all operators are using appropriate land-release methodologies and standards and that progress in information management and reporting is maintained.
- Increased resources and staffing capacity should be allocated to ZIMAC to enable it to effectively manage a fast growing national mine action programme.
- ZIMAC should promote the resource mobilisation plan set out in its Article 5 extension request and increase efforts to secure additional national and international funding in order to meet its 2025 clearance completion deadline.
- Broader efforts to mainstream mine action into planning and development processes in Zimbabwe should also be explored.

CONTAMINATION

At the end of 2016, Zimbabwe had a total of 66.2km² of confirmed mined area remaining. This is a significant drop from the nearly 75km² remaining at the end of 2015, and is due to cancellation of close to 6.3km² on the Rusitu to Muzite mined area and more than doubled clearance output from operators in 2016 compared to the previous year.

In its revised 2017 Article 5 extension request, Zimbabwe reported that during its previous extension period, from December 2014 to December 2016, almost 143km² (some two-thirds) of all recorded mined areas had been addressed, from a total of close to 209km² remaining as at December 2014.

Table 1: Mined areas (as at end-2016)

<table>
<thead>
<tr>
<th>Location</th>
<th>Confirmed mined area (m²)</th>
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<tr>
<td>Musengezi to Rwenya</td>
<td>25,716,432</td>
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<td>Sango Border Post to Crooks Corner</td>
<td>24,473,736</td>
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<td>Rusitu to Muzite Mission</td>
<td>8,702,023</td>
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<tr>
<td>Leacon Hill to Sheba Forest</td>
<td>7,281,912</td>
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<tr>
<td>Lusulu</td>
<td>56,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>66,230,103</strong></td>
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Zimbabwe’s contamination, the overwhelming majority of which is of anti-personnel mines, originates from the laying of minefields in the late 1970s during a conflict of decolonisation. At the time of its independence in 1980, Zimbabwe was left with seven major mined areas along its borders with Mozambique and Zambia, and one inland minefield laid by the Rhodesian Army. Initially, anti-personnel mines were laid in very dense belts (reportedly 5,500 mines per kilometre of frontage) to form a “cordon sanitaire”. Over time, this cordon sanitaire was breached or subject to erosion. In response, in many sections, a second belt of “ploughshare” directional fragmentation mines protected by anti-personnel mines was laid “inland” of the cordon sanitaire. Anti-vehicle mines were used extensively by insurgents but most were detonated by vehicles or have since been cleared.

At the end of 2016, remaining contamination comprised five minefields, referred to as: Musengezi to Rwenya, Sango Border Post to Crooks Corner, Rusitu to Muzite Mission, Leacon Hill to Sheba Forest, and Lusulu. The Victoria Falls to Mlibizi minefield was cleared in 1998–2005 while demining of the Burma Valley minefield was completed in 2015 and a former SHA at Kariba was cleared of improvised explosive devices (IEDs) in 2013.

The HALO Trust and Norwegian People’s Aid (NPA), the two NGOs conducting mine action in Zimbabwe in 2016, have reported that remaining mined areas are located close to populated areas and have considerable humanitarian, social, and economic impacts on local communities. The HALO Trust reported that in areas where it operates in the north-east of Zimbabwe, mines continue to block access to residential land, inhibit cross-border trading, deny small-scale farmers access to agricultural land, and separate communities from primary water sources, adversely affecting sanitation and livestock production. The threat to livestock is particularly severe and results in a heavy socio-economic impact as livestock is a major investment commodity in rural Zimbabwe.

ZIMAC likewise confirmed that anti-personnel mine contamination continued to have a socio-economic and humanitarian impact in 2016, most severely affecting poor, rural populations living along heavily mined border areas. Mines continued to prevent free movement of people, deny use of agricultural land, kill and injure livestock and impede access for grazing, halt the productivity of areas of commercial farming, and impel some poor communities to take unacceptable risks to use contaminated land. Accordingly, clearance of mined areas will generate opportunities for local farmers, commercial agriculture, business, and tourism, allow for the construction of schools and clinics, and enable the safe return of those displaced as a result of the mine threat.

**PROGRAMME MANAGEMENT**

The National Mine Action Authority of Zimbabwe (NAMAAZ) is a policy and regulatory body on all issues relating to mine action in Zimbabwe. ZIMAC was established in 2000 within the Ministry of Defence as the focal point and coordination centre of all mine action in the country. ZIMAC is mandated to report to NAMAAZ.

Since 2012, the International Committee of the Red Cross (ICRC) has provided assistance to the government of Zimbabwe to train ZIMAC personnel and to supply metal detectors, protective equipment, and trauma kits, under a joint cooperation agreement. In 2016, the ICRC continued to support ZIMAC, providing equipment and training as well as refresher courses for key staff.

In its fifth Article 5 deadline extension request in 2017, Zimbabwe again pledged to relocate ZIMAC outside of military installations once the Ministry of Defence has secured the necessary funds. In 2016, ZIMAC was still housed within military premises, reportedly owing to budgetary constraints.

**Strategic Planning**

In December 2016, ZIMAC held a strategy stakeholder workshop with support from the Geneva International Centre for Humanitarian Demining (GICHD) to develop Zimbabwe’s first-ever national mine action strategy.

The December 2016 workshop was followed by a strategy validation meeting in Harare in May 2017, at which ZIMAC and the GICHD presented the draft national strategy, following which the first draft was finalised. Zimbabwe’s National Mine Action Strategy 2018–2025 was due to be formally approved by the government by the end of 2017. The strategy timeline corresponds to Zimbabwe’s fifth Article 5 deadline extension request with the overall goal of completing clearance in 2025.

As reported above, Zimbabwe submitted a fifth Article 5 extension request in April 2017, for a period of eight years through to 31 December 2025. In August 2017, it submitted a revised version of the request, correcting errors in reporting and deleting outdated contamination estimates. The revised request marks a significant achievement for Zimbabwe’s mine action programme, setting for the first time an end date for completion of clearance. It also establishes a realistic estimate of remaining contamination, and sets attainable annual clearance targets, provided sufficient funding is secured. Operators commended the cooperative and inclusive process behind the preparation of the extension request and the national mine action strategic plan, as well as efforts to accurately define the amount of contamination remaining, enabled by the application of solid survey methodology in earlier years.
Standards

ZIMAC reported that national mine action standards would be revised in the second half of 2017, with input from all mine action stakeholders. Once disseminated, ZIMAC QA/QC officers will monitor their implementation.23 The HALO Trust confirmed that standards for mechanical clearance would be updated, as it was introducing mechanical clearance operations during the year, and NPA confirmed that revisions would also include standards for MDDs.24

Quality Management

ZIMAC reported that quality monitors were present on site at operations on a daily basis during 2016 and an independent quality control (QC) team was regularly dispatched to sample completed areas. Sample sizes varied with increasing confidence and capacity within the QC team during quality assurance (QA) processes, it said, and that in 2016, the NMCS, NPA, and HALO Trust had areas of 131,995m², 887,684m², and 2,155,310m² qualified for safe handover respectively.25

The HALO Trust reported that ZIMAC monitored all tasks of its clearance operations and carried out 10% sampling of completed tasks during the year.26 NPA confirmed that ZIMAC QA officers remained on site daily during clearance activities and ZIMAC QC occurred once during the year. According to NPA, ZIMAC was revising its approach to conducting QC in 2017, with the aim of improving efficiency, in line with International Mine Action Standards (IMAS) recommended procedures.27

Information Management

ZIMAC’s information management capacity showed significant signs of progress in 2016.28 ZIMAC reported that the national Information Management System for Mine Action (IMSMA) database was markedly improved during the year and that work was continuing in 2017 with GICHD assistance to input and improve historic operator data.29 The GICHD reported it conducted an information management baseline assessment in May 2017 and drafted a corresponding workplan. A key objective is to update the national database to ensure it includes all the information from the various operators, including historical data.30 Inflated and outdated baseline contamination estimates were eliminated from the database and erroneous reporting, such as for the total area released in the Burma Valley minefield, was corrected, as evidenced in Zimbabwe’s revised Article 5 extension request.31

Operators

The Zimbabwean Armed Forces’ National Mine Clearance Squadrons (NMCS) and, since 2013, The HALO Trust and NPA, all conduct land release in Zimbabwe. In 2013, ZIMAC tasked HALO Trust to survey and clear the Musengezi to Rwenya, Rushinga, and Mukumbura mined areas; NPA was assigned survey and clearance of the Rusitu to Muzite Mission, Leacon Hill to Sheba Forest, and Burma Valley mined areas; and the NMCS are responsible for survey and clearance of the Sango Border Post to Crooks Corner and Lusulu mined areas.32

In 2016, HALO Trust’s capacity more than doubled from 13 to 30 manual demining sections, with increased funding from the United Kingdom (UK) and United States (US).33 NPA reached its maximum operating capacity at the end of 2016 with a total of 56 deminers, up from 48 at the start of the year, also benefitting from additional funding.24 ZIMAC reported that the capacity of the NMCS increased from 120 deminers to 150 during the year.25

In 2016, ZIMAC began accrediting two further international demining operators, Mines Advisory Group (MAG) and APOPO, both of which were scheduled to begin operations in 2017.36 APOPO reported it had signed a Memorandum of Understanding (MoU) with ZIMAC and that the Ministry of Defence had granted permission for the organisation to begin operating in Zimbabwe. As at May 2017, it had been tasked to survey and clear a 37km-long stretch of minefield along the border with Mozambique, running south-west from the Sango Border Post to the Mwenezi river, in cooperation with the NMCS. It stated that, as at May 2017, a task assessment had been carried out and that it expected to recruit and train approximately 55 national operations and support staff in the second half of 2017 to deploy four manual demining sections.37 In September 2017, MAG had also signed an MoU with ZIMAC and established an office in Harare ready to support the start of clearance operations later in the year. MAG said it had been provided with a tasking profile in Mashonaland East incorporating a mined area that is 130km in length with a total area of more than 11.8km².38
Land Release

A total of nearly 9.5 km² of land was released by HALO Trust and NPA in 2016, including just under 3.2 km² of mined area released by clearance and technical survey and 6.3 km² cancelled by non-technical survey. This is more than double the total area released in 2015 (just under 4.1 km²). The significant increase in output in 2016 was the result of cancellation of nearly 6.3 km² at the Muzite to Rusitu mined area by NPA and ZIMAC survey teams and a doubling in total clearance output by the three operators.

Survey in 2016

Close to 7.8 km² of land was released by survey in 2016, including just under 6.3 km² cancelled through non-technical survey and 1.5 km² reduced through technical survey, with a further 9.8 km² confirmed as mined. This is more than twice the amount released by survey in 2015, when just over 3.4 km² of land was released.

In 2016, NPA reported that comprehensive combined non-technical and technical survey was carried out within the Leacon Hill to Sheba Forrest and Muzite to Rusitu mined areas as a joint exercise by ZIMAC officials and NPA teams. A total of nearly 6.3 km² was cancelled within the Muzite to Rusitu mined area and more than 8.7 km² confirmed, changing the status of the mined area from suspected to confirmed contamination. The survey also identified the time and capacity needed for completion of clearance of the minefield, as well as defining the direct and indirect beneficiaries and expected land use upon completion.

Survey in 2016

Table 2: Mined area survey in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs cancelled</th>
<th>Area cancelled (m²)</th>
<th>Areas confirmed</th>
<th>Area confirmed (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HALO</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>1,075,167</td>
<td>1,127,597</td>
</tr>
<tr>
<td>NPA (Muzite to Rusitu)</td>
<td>0</td>
<td>6,297,997</td>
<td>1</td>
<td>8,702,023</td>
<td>376,068</td>
</tr>
<tr>
<td>NMCS</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>0</strong></td>
<td><strong>6,297,997</strong></td>
<td><strong>10</strong></td>
<td><strong>9,777,190</strong></td>
<td><strong>1,503,665</strong></td>
</tr>
</tbody>
</table>

TS = Technical survey

Clearance in 2016

In 2016, the HALO Trust, NPA, and the NMCS cleared a total of just under 1.7 km² of mined area, destroying 23,193 anti-personnel mines, 4 anti-vehicle mines, and 14 items of unexploded ordnance (UXO). This is more than twice the amount cleared in 2015, when the three entities cleared a total of almost 0.71 km² of mined area.

The HALO Trust attributed the large increase in its clearance output in 2016 to a nearly doubling of its manual demining capacity thanks to increased UK and US funding. NPA reported that its increase in mine clearance in 2016 was due in part to the deployment of additional teams in January and October, but was primarily the result of a 50% reduction in the amount of fadeout required during clearance, from 10 metres to 5 metres, after a change in methodology approved by ZIMAC. Both NPA and HALO Trust emphasised the importance and positive impact of a supportive host government and ZIMAC's willingness to accept innovation in clearance methodologies as key reasons behind the increase in clearance output.

Table 3: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>HALO (all areas of operations)</td>
<td>30</td>
<td>1,027,704</td>
<td>16,699</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>NPA (Leacon Hill to Sheba Forest)</td>
<td>5</td>
<td>511,616</td>
<td>6,410</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>NMCS</td>
<td>1</td>
<td>131,995</td>
<td>84</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>36</strong></td>
<td><strong>1,671,315</strong></td>
<td><strong>23,193</strong></td>
<td><strong>4</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

AP = Anti-personnel    AV = Anti-vehicle
Deminer Safety

The HALO Trust reported that five of its staff were involved in five separate accidents during mine clearance operations involving R2M2 mines in 2016. Two deminers were injured in the accidents, while three were unharmed. NPA reported no accidents or injuries involving its mine action personnel since the start of its operations in 2013.

ARTICLE 5 COMPLIANCE

In June 2014, Zimbabwe was granted an Article 5 mine clearance deadline extension of three years until 1 January 2018. Since its initial Article 5 deadline expired on 1 March 2009, it has submitted three previous extension requests, the last of which expired on 1 January 2015. The current extension until 1 January 2018 is to enable further survey and clearance, but Zimbabwe is not committing itself to complete its clearance obligations within the requested period, nor will it manage to do so.

As noted above, Zimbabwe submitted a fifth extension request in April 2017, which it revised in August, for a period of eight years through to 31 December 2025, setting a deadline for the completion of clearance for the first time. According to its extension request workplan, a total of more 6.3km² would be addressed in 2017, followed by close to 8km² in 2018; 8.5km² in 2019; 9.1km² in 2020; 7.7km² in 2021; 7.8km² in 2022; 7.9km² in 2023; 6.7km² in 2024; and 4.2km² in 2025, for a total of just over 66.2km² of remaining contamination released.

In the request, Zimbabwe lists three primary factors which have prevented it from completing its Article 5 obligations thus far since becoming a state party to the Anti-Personnel Mine Ban Convention (APMBC): the extent of the contamination, inadequate national funding for demining, and a lack of demining equipment. Positively, however, Zimbabwe reported that the impact of these factors was ameliorated by the completion of re-survey, allowing efforts to focus on clearance; increasing partnerships between international operators and the government to build capacity; and continued assistance from the ICRC for better demining equipment.

In its 2017 extension request, Zimbabwe estimated that activities planned for the eight-year extension period through to completion of clearance will cost a total of almost US$130 million, with $12.7 million to be provided by the Government of Zimbabwe, including $0.6 million in 2017. The request states that resource mobilisation will be an ongoing effort, and that Zimbabwe will continue seeking support from the international community. To complement efforts, ZIMAC was also developing a website to increase the visibility of the mine action programme, it stated.

According to ZIMAC, although the government funds allocated have not been sufficient to contract commercial demining companies alongside the military’s demining efforts, it is a sign of the significant commitment to national ownership of the demining programme. Operators concurred that this is a demonstration of the commitment of the government to national mine action ownership, especially in the context of Zimbabwe’s economic crisis.

NPA reported receiving in-kind support during joint risk education activities carried out by NPA and the NMCS teams, along with assistance for the renewal of work permits. The HALO Trust did not report receiving in-kind support from the government in 2016, but noted the contributions of the NMCS to the national demining programme and the overall supportive operational environment, while raising some concerns about an increase in import bureaucracy and subsequent increases in costs and delays during the year.

In 2017, both NPA and The HALO Trust confirmed that the 2025 completion date was feasible, provided that a significant ramping up of funding is secured. HALO Trust was expanding its operations to include mechanical demining, with the deployment of an excavator/screener combination as a priority for the year. It did not expect significant changes to its manual demining capacity, though it was seeking to expand the number of sections, subject to funding.

NPA deployed 10 additional deminers in January 2017 and an MDD team in May, which it expected would equal the daily output of two of its manual demining teams. It planned to continue clearing within the Leacon Hill to Sheba Forest minefield and begin clearance within the Muzite to Rusitu minefield by September 2017, with a targeted release of 1.5km² by the end of the year. It likewise did not anticipate major changes in funding, so would continue to deploy seven manual clearance teams and one MDD team.

ZIMAC reported that with the commencement of MAG and APOPO’s operations in late 2017 a marked increase in land release output was expected. In addition, it emphasised that the introduction of MDD teams by NPA would increase the speed of technical survey while the deployment of mechanical assets by HALO Trust would reduce the time needed to remove deeply buried mines in manual demining. ZIMAC stated that the development of a new national mine action strategy had given the national programme a new impetus to complete clearance by 2025 and would help to ensure the full support of other relevant government departments to mine action.
Email from Capt. Cainos Tamanikwa, Operations Coordinator, ZIMAC, 4 July 2017.

2 Email from Capt. Cainos Tamanikwa, ZIMAC, 14 October 2016.

3 Revised Fifth Article 5 Extension Request, received 9 August 2017, p. 5.

4 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017; and Revised Fifth Article 5 Extension Request, received 9 August 2017, p. 5.

5 Fourth Article 5 deadline Extension Request, Executive Summary (received 31 December 2013), p. 1; and email from Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017.

6 HALO Trust, “Zimbabwe, History of Minelaying”, accessed 10 February 2014; Fourth Article 5 deadline Extension Request, Executive Summary; and Analysis of Zimbabwe’s Fourth Article 5 deadline Extension Request, submitted by the President of the 13th Meeting of States Parties on behalf of the States Parties mandated to analyse requests for extensions, 18 June 2014, p. 3.


8 Emails from Learnfirst Musiza, Operations Manager, NPA, 19 October 2015; and Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017; and Fourth Article 5 deadline Extension Request, 31 December 2013, p. 6.

9 Emails from Tom Dibb, Programme Manager, HALO Trust, 24 April 2017; and Claus Nielsen, Programme Manager, NPA, 31 March 2017.

10 Email from Tom Dibb, HALO Trust, 24 April 2017; and HALO Trust, “HALO clears over 5,000 mines in Zimbabwe”, Press release, undated but March 2015.

11 Email from Capt. Cainos Tamanikwa, ZIMAC, 14 October 2016.

12 Ibid.

13 Analysis of Zimbabwe’s Fourth Article 5 deadline Extension Request, 18 June 2016, pp. 2–4.

14 Fourth Article 5 deadline Extension Request, 31 December 2013, p. 7.


17 Revised Fifth Article 5 Extension Request, received 9 August 2017, p. 39.

18 Email from Capt. Cainos Tamanikwa, ZIMAC, 14 October 2016.


20 Emails from Capt. Cainos Tamanikwa, ZIMAC, 10 October 2017; and Åsa Massleberg, GICHD, 27 September 2017.

21 Email from Claus Nielsen, NPA, 21 September 2017.

22 Emails from Tom Dibb, HALO Trust, 24 April 2017; and Claus Nielsen, NPA, 31 March 2017.

23 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017.

24 Emails from Tom Dibb, HALO Trust, 24 April 2017; and Claus Nielsen, NPA, 31 March and 23 September 2017.

25 Ibid.

26 Email from Tom Dibb, HALO Trust, 24 April 2017.

27 Email from Claus Nielsen, NPA, 31 March 2017.

28 Email from Tom Dibb, HALO Trust, 24 April 2017.

29 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017.

30 Email from Åsa Massleberg, GICHD, 27 September 2017.

31 Emails Claus Nielsen, NPA, 31 March and 21 September 2017. NPA reported continuing to use a digital recording and mapping system, the DEDUCT Observer application in 2016, and that it was sending ZIMAC daily electronic updates on survey and clearance outputs through the DEDUCT system.

32 Analysis of Zimbabwe’s Fourth Article 5 deadline Extension Request, 18 June 2014, p. 4; and Fourth Article 5 deadline Extension Request, 31 December 2013, p. 27.

33 Email from Tom Dibb, HALO Trust, 24 April 2017.

34 Email from Claus Nielsen, NPA, 31 March 2017.

35 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017.


37 Email from Ashley Fitzpatrick, Grant and Regional Manager, APPOPO, 29 May 2017.

38 Email from Adam Komorowski, Regional Director, MAG, 29 September 2017.


40 Email from Tom Dibb, HALO Trust, 11 July 2016; interview with Fanuel Chitiyo, NPA, Mutare, 29 June 2016; and email from Capt. Cainos Tamanikwa ZIMAC, 14 October 2016.

41 Emails from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017; and Claus Nielsen, NPA, 31 March 2017.

42 Emails from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017; Tom Dibb, HALO Trust, 24 April 2017; and Claus Nielsen, NPA, 31 March 2017.

43 Email from Tom Dibb, HALO Trust, 11 July 2016; interview with Fanuel Chitiyo, Information Management Officer, NPA, Mutare, 29 June 2016; and email from Capt. Cainos Tamanikwa ZIMAC, 14 October 2016.

44 Email from Claus Nielsen, NPA, 31 March 2017.

45 Emails from Tom Dibb, HALO Trust, 24 April 2017; Claus Nielsen, NPA, 31 March 2017; and Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017. HALO reported debate within the local community as to whether commercial clearance had taken place in the nine areas it confirmed over 1km², during 1998–2000.

46 Email from Tom Dibb, HALO Trust, 11 July 2016; interview with Fanuel Chitiyo, Information Management Officer, NPA, Mutare, 29 June 2016; and email from Capt. Cainos Tamanikwa, ZIMAC, 14 October 2016.

47 Email from Tom Dibb, HALO Trust, 24 April 2017.

48 Ibid; and email from Claus Nielsen, NPA, 31 March 2017.

49 Emails from Tom Dibb, HALO Trust, 24 April and 29 September 2017; Claus Nielsen, NPA, 31 March 2017; and Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017.

50 Email from Tom Dibb, HALO Trust, 24 April and 29 September 2017.

51 Email from Claus Nielsen, NPA, 31 March 2017.

52 Under its three-year extension until January 2018, Zimbabwe undertook “to clarify the remaining challenge, understand what progress will be possible once partners operate at full capacity and once additional support has been identified, produce a detailed plan, and submit a subsequent request for fulfillment of its Article 5 obligations”. The purpose of the extension period is also to complete survey of all remaining areas and to clear approx. 4km² of mined area. Under the extension, Zimbabwe intended to meet the following milestones: clearance of 1.23km², during 1998–2000; confirmed over 1km², during 1998–2000; and the development of a national strategic plan on the basis of survey results in 2015; clearance of 1.28km² in 2016; and clearance of 1.51km² and the submission of a new clearance plan in 2017.

53 Revised Fifth Article 5 Extension Request, received 9 August 2017, pp. 8–9.


55 Fourth Article 5 deadline Extension Request, 31 December 2013, p. 7.

56 Revised Fifth Article 5 Extension Request, received 9 August 2017, p. 10.

57 Ibid, p. 47.

58 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017.

59 Revised Fifth Article 5 Extension Request, received 9 August 2017, p. 18.

60 Emails from Tom Dibb, HALO Trust, 24 April 2017; and Claus Nielsen, NPA, 31 March 2017.

61 Email from Claus Nielsen, NPA, 31 March 2017.

62 Email from Tom Dibb, HALO Trust, 24 April 2017.

63 Ibid; and email from Claus Nielsen, NPA, 31 March 2017.

64 Email from Tom Dibb, HALO Trust, 24 April 2017.

65 Email from Claus Nielsen, NPA, 31 March 2017.

66 Ibid.

67 Email from Capt. Cainos Tamanikwa, ZIMAC, 4 July 2017.

68 Ibid.
Fatima Wehbe, a 26-year old deminer in one of MAG’s mine clearance teams on the Blue Line, in southern Lebanon. “When I found my first mine, I was a little bit scared, but after that I just felt proud. I feel like I’ve achieved something that has value.” Lebanon, October 2017 ©Sean Sutton/MAG
STATES NOT PARTY
Armenia is now solely dependent on national survey and clearance capacity to address mine and explosive remnants of war (ERW) contamination, after The HALO Trust ceased demining operations in 2015 (though it continues to provide capacity development support). While clearance output decreased in 2016, a significant amount of land was cancelled by non-technical survey. Furthermore, if mine detection dogs (MDDs), in training since 2016, acquire accreditation in 2017, this could improve progress in technical survey operations.

**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>For 2016</td>
<td>5.5</td>
</tr>
<tr>
<td>For 2015</td>
<td>5.5</td>
</tr>
</tbody>
</table>
RECOMMENDATIONS FOR ACTION

- Armenia should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Armenia should clarify the extent of remaining mine contamination, including in military restricted zones.
- Armenia should develop a national mine action strategy, mobilise the necessary resources to finish mine clearance, and set a deadline for the completion of operations.

CONTAMINATION

As at April 2017, 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 contain anti-personnel mines, anti-vehicle mines, or a combination of both, as well as unexploded ordnance (UXO).¹

Of 97 confirmed hazardous areas (CHAs), 56 contain anti-personnel mines, totalling just over 2.9km². Three of the six suspected hazardous (SHAs), totalling just over 0.1km², may also be contaminated by anti-personnel mines. The breakdown of contamination by type is detailed in Table 1.²

Table 1: Contamination (as at April 2017)³

<table>
<thead>
<tr>
<th>Type of contamination</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP mines</td>
<td>42</td>
<td>2,222,857</td>
<td>2</td>
<td>105,123</td>
</tr>
<tr>
<td>AV mines</td>
<td>41</td>
<td>2,812,916</td>
<td>3</td>
<td>3,728,442</td>
</tr>
<tr>
<td>AP and AV mines</td>
<td>11</td>
<td>706,046</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AP mines and UXO</td>
<td>2</td>
<td>12,828</td>
<td>1</td>
<td>377</td>
</tr>
<tr>
<td>AP and AV mines and UXO</td>
<td>1</td>
<td>4,842</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>97</td>
<td>5,759,489</td>
<td>6</td>
<td>3,833,942</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  
AV = Anti-vehicle

Four of Armenia’s eleven provinces still contain CHAs or SHAs. Three are contaminated with both anti-personnel and anti-vehicle mines, while the fourth is contaminated solely with anti-vehicle mines, as set out in Table 2.⁴

Table 2: Contamination by province (as at April 2017)⁵

<table>
<thead>
<tr>
<th>Province</th>
<th>Type of contamination</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gegharqunik</td>
<td>AP mines</td>
<td>3</td>
<td>584,022</td>
<td>2</td>
<td>105,123</td>
</tr>
<tr>
<td></td>
<td>AV mines</td>
<td>5</td>
<td>2,428,128</td>
<td>3</td>
<td>3,728,442</td>
</tr>
<tr>
<td>Syunik</td>
<td>AP mines</td>
<td>33</td>
<td>1,471,284</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>AV mines</td>
<td>23</td>
<td>299,733</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>AP and AV mines</td>
<td>8</td>
<td>676,617</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>AP mines and UXO</td>
<td>2</td>
<td>12,828</td>
<td>1</td>
<td>377</td>
</tr>
<tr>
<td></td>
<td>AP and AV mines and UXO</td>
<td>1</td>
<td>4,842</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tavush</td>
<td>AP mines</td>
<td>6</td>
<td>167,551</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>AV mines</td>
<td>10</td>
<td>15,603</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>AP and AV mines</td>
<td>3</td>
<td>29,429</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Vayots Dzor</td>
<td>AV mines</td>
<td>3</td>
<td>67,452</td>
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<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>97</td>
<td>5,757,489</td>
<td>6</td>
<td>3,833,942</td>
</tr>
</tbody>
</table>
In addition, 14 CHAs and six SHAs contain only UXO. These areas, which total 1.4km$^2$ and 6.4km$^2$, respectively, are located in the provinces of Gegharqunik, Syunik, and Tavush.\textsuperscript{6}

This compares to 6.7km$^2$ of confirmed mined area and a further 17.3km$^2$ of suspected mined area, as at end of 2015.\textsuperscript{7} The significant decrease in SHA is because more than 14km$^2$ was cancelled by non-technical survey in 2016.\textsuperscript{8}

According to the Armenian Centre for Humanitarian Demining and Expertise (ACHDE), mine contamination in Armenia is typically not dense and does not follow set patterns.\textsuperscript{9} The ACHDE reports that 34,523 people, all in rural communities, are impacted by remaining mine and ERW contamination.\textsuperscript{10} Mine contamination in Armenia impacts a range of development activities, including agriculture and tourism.\textsuperscript{11} Priority for clearance is given to agricultural land.\textsuperscript{12}

Mine and ERW contamination in Armenia is primarily the consequence of armed conflict with Azerbaijan in 1988–94, which saw both sides use 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.\textsuperscript{13} While non-technical survey in 2012–13 by the Swiss Foundation for Mine Action (FSD) did not find evidence of mines outside the buffer zones in Ararat province, which borders Turkey, certain areas on that border remain unsurveyed because they are controlled by Russian border troops.\textsuperscript{14}

The 2005 Landmine Impact Survey (LIS) identified 102 SHAs in five districts bordering Azerbaijan. The LIS estimated that contamination covered more than 321km$^2$, affecting 60 communities.\textsuperscript{15} In August 2012, The HALO Trust conducted partial survey of 17 sites, cancelling 80% of the area identified by the LIS in those sites. However, HALO Trust activities were suspended following a grant awarded by the US Department of State to FSD to re-survey Armenia.\textsuperscript{16}

FSD conducted non-technical survey from November 2012 to May 2013.\textsuperscript{17} The survey found 131 “dangerous areas” totalling 47km$^2$ in four districts bordering Azerbaijan. Thirteen of these areas, totalling 1.8km$^2$, were found to contain only UXO and not mines.\textsuperscript{18} Of the 131 “dangerous areas”, 17 were SHAs estimated to cover 26km$^2$ and the other 114 were CHAs that covered 21km$^2$.\textsuperscript{19}

FSD was mandated by the Government of Armenia to survey impacted communities outside the military restricted zone. Therefore, 50 SHAs that fall inside the military perimeter were not included in the survey, which was conducted only within the internationally recognised boundaries of Armenia.\textsuperscript{20}

During the 2012–13 survey, FSD teams collected data on 271 non-recent mine victims. These records were submitted to the International Committee of the Red Cross (ICRC), which maintains a mine victim database in Armenia.\textsuperscript{21} In addition, the ACHDE is the coordination body to which all casualty data is submitted for inclusion into the national Information Management System for Mine Action (IMSMA) database.\textsuperscript{22}

Territory seized from Azerbaijan during the conflict is believed to be significantly contaminated by mines and ERW, including unexploded submunitions.\textsuperscript{23} However, the precise extent of contamination in those districts is unknown.

### Programme Management

In 2002, the ACHDE was established under the Ministry of Defence as a state agency for mine action activities.\textsuperscript{24} On 17 February 2011, the Government of Armenia adopted Decree 143, which changed the legal status of the ACHDE to a civilian, non-commercial state organisation responsible for conducting survey and clearance, and identifying contaminated areas. Under its new status, the ACHDE can negotiate with international demining organisations, accept international funding, sign contracts, and receive international assistance.\textsuperscript{25} The ACHDE has an advisory board, composed of representatives from the Ministries of Defence, Emergency Situations, Territorial Administration, and Justice.\textsuperscript{26} In 2013, a government decree made the ACHDE Armenia’s National Mine Action Centre [see below section, legislation and standards].\textsuperscript{27}

### Strategic Planning

Armenia does not yet have a formally constituted national mine action programme or strategy.\textsuperscript{28} In March 2013, a discussion was held at the Ministry of Defence on the 2012–13 survey.\textsuperscript{29} The chair of ACHDE’s council, Ara Nazaryan, stated that “the drafting of a national mine action programme, its approval and subsequent implementation are priority tasks for comprehensive demining activities in the territory of the Republic of Armenia.”\textsuperscript{30}
Based on the survey findings, the ACHDE was to develop a national mine action plan that it would implement following government approval. Alongside development of the draft mine action law (see below), and with the support of the Organization for Security and Co-operation in Europe (OSCE) in Yerevan, the ACHDE has been setting up a national mine action programme, which will benefit from national funding, guided by a national strategy for mine action and mine action plan. As at April 2017, the draft national strategic plan on mine action was in the final stages of editing, and reportedly includes strategic direction and coordination for mine action, guidance on principles and objectives, an outline of operations and planning, and allocation of financial means.

In 2014, the ACHDE launched an initiative to help improve efficiency in coordinating and directing mine action operations, and ensure a “realistic” land release policy. Criteria used to prioritise clearance tasks include the distance of hazardous areas from local communities, the intended use of land post-clearance, and the potential for development projects on cleared land. To optimise efficient deployment of resources, clearance plans are typically drawn up on a community-by-community basis.

Legislation and Standards

In 2013, in conformity with a government decree, the ACHDE began developing national mine action legislation. According to the decree, the ACHDE would draft the law and a mine action strategy for discussion among the government in the first half of 2016, in addition to proposing possible amendments to national mine action standards covering explosive ordnance disposal (EOD) and the use of MDDs. The ACHDE reported that it began drafting the law in 2015, and that the OSCE office in Yerevan supported the early stage of the draft law’s elaboration. As at April 2017, ACHDE reported that the draft law was in “being edited” prior to submission for government approval.

In 2013, with the assistance of FSD, the ACHDE developed the Armenian National Mine Action Standards (NMAS) and submitted them for government approval. The NMAS were approved by the government in April 2014. As at April 2017, amendments to the NMAS on the use of MDDs were being elaborated, which the ACHDE expected the amendments to be submitted for government approval in the second half of 2017.

The ACHDE will further develop its standing operating procedures (SOPs) once the draft law on mine action has been adopted.

Quality Management

In 2014, with technical support from FSD, a quality management (QM) system was developed to be implemented in accordance with IMAS and the NMAS. QA is conducted by dedicated officers who make regular field visits to inspect cleared land.

Information Management

With FSD’s support, the ACHDE set up and manages the national IMSMA database.

Operators

Since The HALO Trust’s departure from Armenia in October 2015, only a national capacity for technical survey and clearance remains. In 2016, the Armenian Peacekeeping Engineering Brigade (PKEB), under the Ministry of Defense, deployed two six-strong manual clearance teams from mid-July to October 2016. In addition, the ACHDE had one three-strong non-technical survey team. This represented a considerable decrease in capacity compared to 2015, as no international clearance organisation undertook demining operations in Armenia in 2016.

Six MDDs were also introduced in Armenia for the first time in 2016, for use in PKEB’s technical survey. The MDD project is funded by the US Department of State and private donations from US citizens with support from IFP Enhancing Human Security and the Marshall Legacy Institute. As part of the project, Bosnian Mine Detection Dog Center (MDDC) trainers were leading a dog-handler integration course with PKEB dog handlers. The MDDs were scheduled to undergo final tests and accreditation by ACHDE in the summer of 2017, and if successful, will join the PKEB manual teams in technical survey.

FSD had been present in Armenia since 2012, but withdrew at the end of January 2015 due to lack of funding. From August 2013 to January 2015, FSD implemented a capacity development programme, covering: basic EOD training; mentoring ACHDE in tasking, planning, quality assurance (QA)/quality control (QC); IMSMA; reporting systems and mechanisms; data collection; and support for the elaboration of SOPs and policy.

Although The HALO Trust no longer conducts mine clearance operations in Armenia, it continues to provide advice and training to ACHDE, as and when required. The HALO Trust had previously been operational in Armenia from mid-2012 to late 2015, initially undertaking mainly non-technical survey, and later technical survey and clearance, deploying both its own clearance teams and HALO Trust-led teams from the PKEB.

In September 2013, The HALO Trust opened an office in the Kapan region in order to initiate its new demining activities under a US$600,000 grant awarded by the US Department of State for a two-year period (August 2013–July 2015). It began clearance in April 2014 and continued in 2015, with funding secured until July. The HALO Trust’s US funding was subsequently extended to October 2015, but it took the decision to make its own manual and mechanical teams redundant at the end of July, in order to provide adequate resources for the continuation of PKEB’s operations until October. This decision was taken with a view to supporting the project’s end goal of a sustainable national mine clearance capacity. At the completion of HALO Trust’s US grant the PKEB teams successfully operated from August to October 2015 as an independent national clearance capacity.
The HALO Trust has also undertaken work to build national capacity in Armenia through a training programme, and supervised deminers from the PKEB to international standards. In 2016, as part of the capacity-building project, The HALO Trust provided refresher training for nine PKEB leaders on minefield marking, mapping, reporting, GPS coordinates, and minefield management, prior to deployment. In addition, The HALO Trust also provided geographic information system (GIS) training to ACHDE staff on polygon mapping and database management. The HALO Trust will continue to provide advice and refresher training in 2017, as required by the ACHDE, to ensure the national capacity’s long-term success.

In January 2014, the Foundation for Demining and Demolition (FDD) was established as a national, civilian, and non-commercial demining organisation in Armenia with support from the ACHDE, Geowulf LLC, FSD, and the Government of Armenia. Its main tasks are to conduct demining and destroy expired or obsolete arms and ammunition in Armenia. As at April 2017, however, FDD had not conducted any operations since its creation.

LAND RELEASE

Less than 0.02km² of mined area was released by clearance in 2016, compared with 0.07 km² cleared in 2015. In addition, just under 14.4km² was cancelled by non-technical survey.

Survey in 2016

Through survey in 2016, the ACHDE cancelled two huge SHAs totalling almost 13.5km², and partly cancelled a further two CHAs, totalling almost 0.9km².

ARTICLE 5 COMPLIANCE

Armenia is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible from any area under its jurisdiction or control.

According to the Ministry of Foreign Affairs, although Armenia has not acceded to the APMBC, it voluntarily provides information on anti-personnel mines to the United Nations and to the OSCE for transparency and confidence-building. Whatever information is provided, however, is not publicly available.

One of the objectives of the Armenian Mine Action Strategy 2007–11 was released through technical survey and clearance of 2.2% (7km²) of the SHAs identified by the LIS and 6.8% of the SHAs outside the restricted military zone. Scant progress was, though, made towards these targets. Armenia claims that challenges in its mine and ERW clearance include the low level of contamination and the random distribution of mines it is confronting.

Historically, Armenia has not reported systematically on its mine clearance operations, though detailed information was provided for 2014, 2015, and 2016. In the past, demining in Armenia has been slow and productivity rates correspondingly low, with the Ministry of Defence reporting only some 2km² of mined area cleared from 2002 to the end of 2008. During 2013, only non-technical survey was conducted (by FSD, with the support of ACHDE). In April 2014, clearance operations began again in Armenia, and continued in 2015 and 2016. Humanitarian demining was not carried out prior to this, due to lack of donor funding.

Clearance in 2016

In 2016, PKEB teams cleared one mined area totalling 17,310m², destroying two anti-personnel mines and three items of UXO.

Table 3: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
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<tbody>
<tr>
<td>2016</td>
<td>0.02</td>
</tr>
<tr>
<td>2015</td>
<td>0.07</td>
</tr>
<tr>
<td>2014</td>
<td>0.04</td>
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<tr>
<td>2013</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>0.13</td>
</tr>
</tbody>
</table>

In October 2015, The HALO Trust ceased mine clearance operations in Armenia, leaving only national capacity for survey and clearance provided by the Armed Force’s PKEB; and an overall reduction in operational capacity in 2016.

The ACHDE planned to increase the number of PKEB manual clearance teams from two to three in 2017. In addition, if MDDs gain accreditation, this will also facilitate progress in technical survey in Armenia.

National funding supports the budget expenses and capacity building of the ACHDE, but Armenia does not fund clearance operations. In April 2017, no donor support had been secured.

No target data has been set for the completion of mine clearance in Armenia, due to the uncertainty of future funding.
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<tbody>
<tr>
<td>1</td>
<td>Email from Ruben Arakelyan, Director, Armenian Center for Humanitarian Demining and Expertise (ACHDE), 28 April 2017.</td>
</tr>
<tr>
<td>2</td>
<td>Email from Ruben Arakelyan, ACHDE, 28 April 2017.</td>
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<tr>
<td>3</td>
<td>Ibid.</td>
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<td>4</td>
<td>Ibid.</td>
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<td>5</td>
<td>Ibid.</td>
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<tr>
<td>6</td>
<td>Ibid.</td>
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<tr>
<td>7</td>
<td>Email from Varsine Miskaryan, Operations Officer, ACHDE, 8 August 2016.</td>
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<tr>
<td>8</td>
<td>Email from Ruben Arakelyan, ACHDE, 28 April 2017.</td>
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<tr>
<td>9</td>
<td>Ibid.</td>
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<td>10</td>
<td>Ibid.</td>
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<td>11</td>
<td>Ibid.</td>
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<td>12</td>
<td>Ibid.</td>
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<tr>
<td>13</td>
<td>Emails from Ruben Arakelyan, ACHDE, 19 March 2014 and 28 April 2017, and interview in Geneva, 1 April 2014.</td>
</tr>
<tr>
<td>16</td>
<td>Emails from Andrew Moore, Caucasus and Balkans Desk Officer, HALO Trust, 17 February 2014; and Valeria Fabbroni, Head of Operations, FSD, 26 February 2014.</td>
</tr>
<tr>
<td>18</td>
<td>Ibid.</td>
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<tr>
<td>19</td>
<td>Email from Ruben Arakelyan, ACHDE, 21 February 2014.</td>
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<tr>
<td>21</td>
<td>Email from Ruben Arakelyan, ACHDE, 19 March 2014.</td>
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<tr>
<td>27</td>
<td>Email from Ruben Arakelyan, ACHDE, 8 June 2015.</td>
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<tr>
<td>28</td>
<td>Email from Ruben Arakelyan, ACHDE, 30 March 2015.</td>
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<td>30</td>
<td>Ibid.</td>
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<td>31</td>
<td>Ibid.</td>
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<tr>
<td>32</td>
<td>Email from Varsine Miskaryan, ACHDE, 8 August 2016.</td>
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<tr>
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<tr>
<td>36</td>
<td>Emails from Ruben Arakelyan, ACHDE, 30 March 2015; and Varsine Miskaryan, ACHDE, 3 September 2015.</td>
</tr>
<tr>
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<td>39</td>
<td>Ibid.</td>
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<td>40</td>
<td>Emails from Ruben Arakelyan, ACHDE, 19 March 2014 and 30 March 2015.</td>
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<td>41</td>
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<td>45</td>
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<td>46</td>
<td>Ibid.</td>
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<td>47</td>
<td>Email from Varsine Miskaryan, ACHDE, 8 August 2016.</td>
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<tr>
<td>48</td>
<td>Ibid.</td>
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<tr>
<td>49</td>
<td>Email from Ruben Arakelyan, ACHDE, 28 April 2017.</td>
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<tr>
<td>50</td>
<td>Email from Valeria Fabbroni, FSD, 26 February 2014.</td>
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<tr>
<td>51</td>
<td>Email from Matthew Wilson, Deputy Head of Operations, FSD, 11 May 2015.</td>
</tr>
<tr>
<td>52</td>
<td>Ibid.</td>
</tr>
<tr>
<td>53</td>
<td>Emails from Ruben Arakelyan, ACHDE, 28 April 2017; and Ash Boddy, Regional Director, HALO Trust, 31 March 2017.</td>
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<tr>
<td>54</td>
<td>Email from Andrew Moore, HALO Trust, 17 February 2014.</td>
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<td>55</td>
<td>Interview with Ruben Arakelyan, ACHDE, in Geneva, 1 April 2014; and email, 30 March 2015.</td>
</tr>
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<td>56</td>
<td>Emails from Ruben Arakelyan, ACHDE, 30 March 2015; and Andrew Moore, HALO Trust, 22 May 2015.</td>
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<tr>
<td>57</td>
<td>Email from Andrew Moore, HALO Trust, 28 September 2016.</td>
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<td>58</td>
<td>Interview with Ruben Arakelyan, ACHDE, in Geneva, 1 April 2014; and email from Andrew Moore, HALO Trust, 22 May 2015.</td>
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<tr>
<td>60</td>
<td>Ibid.</td>
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<tr>
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<td>Email from Ruben Arakelyan, ACHDE, 20 March 2014.</td>
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<td>62</td>
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<td>63</td>
<td>Email from Ruben Arakelyan, ACHDE, 28 April 2017.</td>
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<td>64</td>
<td>Ibid.</td>
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<td>65</td>
<td>Ibid.</td>
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<td>66</td>
<td>Ibid.</td>
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<tr>
<td>70</td>
<td>Ibid.; and email from Ruben Arakelyan, ACHDE, 28 April 2017.</td>
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<td>71</td>
<td>Mediamax, “Armenian Minister of Defence visited the Center for Humanitarian Demining and Expertise”, 5 April 2011.</td>
</tr>
<tr>
<td>72</td>
<td>Email from Valeria Fabbroni, FSD, 26 February 2014.</td>
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<td>76</td>
<td>Ibid.</td>
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<td>77</td>
<td>Ibid.</td>
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<td>78</td>
<td>Ibid.</td>
</tr>
<tr>
<td>MINE ACTION PROGRAMME PERFORMANCE</td>
<td>For 2016</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Problem understood</td>
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<tr>
<td>Target date for completion of mine clearance</td>
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<td>Targeted clearance</td>
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<td>Efficient clearance</td>
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<td>Land release system in place</td>
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<td>National mine action standards</td>
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<td>Reporting on progress</td>
<td>7</td>
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<td>Improving performance</td>
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<tr>
<td><strong>PERFORMANCE SCORE: AVERAGE</strong></td>
<td><strong>5.6</strong></td>
</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

There was a further decrease in the amount of land released by clearance and survey in 2016, compared to previous years. This was due to the fact that an increased proportion of clearance tasks in 2016 were of battle area clearance (BAC) of unexploded ordnance (UXO) contamination, rather than of mined area. These included the Jeyranchel clearance project, under the North Atlantic Treaty Organization (NATO) Partnership for Peace (PIP) project, and clearance of UXO from former military testing ranges in Ganja and Kirdagh. Furthermore, during the 0.8km² of manual mine clearance in 2016, only two anti-vehicle mines were destroyed, and two of the three operators did not find any mines on the land they cleared. This suggests an urgent need for enhanced use of evidence-based technical survey to confirm areas as mined, before undertaking full clearance.

RECOMMENDATIONS FOR ACTION

■ Azerbaijan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
■ Azerbaijan should report on its plans and timelines for clearance of all known or suspected mined areas under its effective control.

CONTAMINATION

The precise extent of contamination from anti-personnel mines in Azerbaijan is unknown, as Armenian forces currently occupy a significant area of the country where considerable contamination exists. The area suspected to contain anti-personnel mine contamination in Azerbaijan as at the end of 2016 has not been publicly reported. At the end of 2015, 69.9km² of area was suspected to contain anti-personnel mines.¹ The extent of contamination in areas occupied by Armenia is unknown, although the Azerbaijan National Agency for Mine Action (ANAMA) has suggested that contamination may cover between 350km² and 830km², and contain between 50,000 and 100,000 mines.²

Since 2001, survey and clearance have been reducing and better defining the extent of contamination within areas under the control of Azerbaijan. In 2003, the Landmine Impact Survey (LIS) identified 970 suspected hazardous areas (SHAs) covering 751km².³ In 2006, re-survey reduced the estimate of contamination to 306km².⁴ Further re-survey by ANAMA in 2008–09 combined with clearance operations reduced total SHA to 184km² across 280 areas, of which 89 were believed to contain mines and 191 only UXO.⁵

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 separate report on Nagorno-Karabakh). The adjoining districts of Gubadly, Jabrayil, Kelbajar, Lachin, and Zangilan, as well as parts of Aghdam, Fizuli, and Tartar, are under the control of Armenian forces, and are suspected to contain mines and UXO.⁶

In 2016, ANAMA recorded five mine incidents that killed two people and injured four others.⁷

PROGRAMME MANAGEMENT

A 1998 presidential decree established ANAMA, which reports to the Deputy Prime Minister as head of the State Commission for Reconstruction and Rehabilitation.⁸ In April 1999, ANAMA established the Azerbaijan Mine Action Programme, a joint project of the Government of Azerbaijan and the United Nations Development Programme (UNDP).⁹ A joint working group, established in December 1999 and consisting of representatives from various ministries, provides regular guidance to ANAMA.¹⁰

ANAMA is tasked with planning, coordinating, managing, and monitoring mine action in the country. It also conducts demining along with two national operators it contracts: Dayag-Relief Azerbaijan (RA) and the International Eurasia Press Fund (IEPF).¹¹ No commercial company is active in mine action in Azerbaijan.

ANAMA manages the mine action programme via its headquarters based in Baku, the regional office in Fizuli, and regional training centre in Goygol, and three operational centres located in Aghjabedi, Agstafa, and Terter.¹²

UNDP provides support to ANAMA, and will continue to do so until 2019, as part of a project to support the institutional capacity of ANAMA for mine/UXO clearance, risk education, and victim assistance.¹³

Strategic Planning

ANAMA is integrated into the State Social and Economic Development programme.¹⁴ The current mine action strategy is for 2013–18.¹⁵ ANAMA’s long-term strategy is to clear the occupied territories as and when they become released.¹⁶
**Legislation and Standards**

As at June 2017, Azerbaijan was still in the process of adopting a mine action law, with draft legislation under review by the Cabinet of Ministers. Once adopted, it will regulate mine action in Azerbaijan, governing issues such as licensing, accreditation, quality assurance (QA), and tender procedures.

Azerbaijan also has its own National Mine Action Standards (NMAS), which were adopted in 2001 and subsequently revised in 2003, 2004, and 2010.

**Quality Management**

ANAMA established a National Training Quality Assurance Team in 2004. In 2011, this transitioned into ANAMA’s training, survey, and QA division (TSQAD), which is responsible for training and QA. The TSQAD also conducts quality control (QC).

In 2016, 90 QA monitoring visits were undertaken. In addition, external QC inspections were conducted at 89 sites in 2016, with more than 3.46 km² of land physically checked. One battle area site required re-clearance (83,125 m²), with 29 items of UXO and 87 related components found to have been missed by the original clearance.

**Information Management**

ANAMA uses an older version of the Information Management System for Mine Action (IMSMA) database.

**Operators**

As at the end of 2016, ANAMA employed 619 operational and administrative staff and had 44 mine detection dogs (MDDs) and 6 demining machines. Included in this capacity are two national demining non-governmental organisations (NGOs), IEPF and RA, which are contracted for mine clearance. Together they employ 172 operational and administrative staff. ANAMA also has an MDD breeding and training centre, which was built in 2011.

**LAND RELEASE**

The total mined area released by clearance and technical survey in 2016 was almost 2.3 km², a huge reduction compared to the almost 5.36 km² of clearance and technical survey in 2015.

**Survey in 2016**

A total of almost 1.47 km² was reduced by technical survey in 2016, of which 0.93 km² was reduced by technical survey using mechanical assets, and 0.54 km² by technical survey using MDDs.

**Clearance in 2016**

Azerbaijan cleared almost 0.83 km² of mined area in 2016, comprising 0.65 km² of manual clearance and 0.18 km² of mine clearance with the support of MDDs. During clearance only two anti-vehicle mines were destroyed (see Table 1). This is a significant decrease in area cleared compared to 2015, when AMAMA cleared almost 1.5 km² of mined land; 1.04 km² through manual clearance and 0.45 km² with MDD support.

Besides the mined area along the confrontation line (in the accessible territories of the Nagorno-Karabakh region), ANAMA conducts manual mine clearance operations around former military facilities.

**Table 1: Mine clearance in 2016**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Mined areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed*</th>
<th>AV mines destroyed*</th>
<th>UXO destroyed*</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANAMA CT</td>
<td>3</td>
<td>148,115</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IEPF</td>
<td>4</td>
<td>342,134</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>RA</td>
<td>4</td>
<td>338,009</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>11</td>
<td>828,258</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*Table 1 includes the items destroyed only during mine clearance and not technical survey.

\[\text{AP} = \text{Anti-personnel} \quad \text{AV} = \text{Anti-vehicle mine}\]
In addition, AMAMA tasks its emergency response team (ERT) or the national NGOs — depending on the location of the call-out — to respond to explosive ordnance disposal (EOD) requests from the local community, government bodies, and international humanitarian organisations.\(^{34}\) ANAMA reported that EOD tasks were conducted daily following the short but intense fighting pitting Armenian and Nagorno-Karabakh forces against those of Azerbaijan in April 2016.\(^{35}\) ANAMA, IEPF, and RA responded to a total of 811 requests in 2016, during which they found 5,404 explosive items in 26 regions of Azerbaijan.\(^{36}\)

Furthermore, during 2016 ANAMA completed the second phase of the three-phase Azerbaijan National Action Plan (NAPI)/NATO PIP Trust project, at the former artillery shooting range in Jeyranchel, in the Agstafa region, along the Azerbaijan–Georgian border.\(^{37}\) ANAMA also continued implementation of the Ganja and Kirdagh UXO clearance projects of former military testing ranges. During ERW clearance in 2016, ANAMA cleared 100 sites, totalling 50.5 km\(^2\), during which it destroyed 17 anti-personnel mines, 1 anti-vehicle mine, and 30,201 items of ERW; IEPF cleared 22 sites, totalling nearly 12 km\(^2\), during which it destroyed 2,237 items of ERW; and RA cleared 24 sites, totalling nearly 3.2 km\(^2\) during which it destroyed 665 items of ERW.\(^{38}\)

### Article 5 Compliance

Azerbaijan is neither a state party nor signatory to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines as soon as possible.

Azerbaijan submitted voluntary APMBC Article 7 transparency reports in 2008 and 2009 but has not submitted an Article 7 report in the last seven years.

Over the last five years, 15.4 km\(^2\) of mined area has been cleared in Azerbaijan, but mine clearance output has decreased sharply over the last two years (see Table 2).

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.83</td>
</tr>
<tr>
<td>2015</td>
<td>1.49</td>
</tr>
<tr>
<td>2014</td>
<td>4.80</td>
</tr>
<tr>
<td>2013</td>
<td>4.63</td>
</tr>
<tr>
<td>2012</td>
<td>3.65</td>
</tr>
<tr>
<td>Total</td>
<td>15.4</td>
</tr>
</tbody>
</table>

Currently, 90% of mine action in Azerbaijan is state funded.\(^{39}\) ANAMA’s long-term strategy is to be ready to start clearance of the occupied territories as and when this is possible.\(^{40}\)

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**Table 2: Mine clearance in 2012–16**

1. Email from Tural Mammadov, Operations Officer, ANAMA, 19 October 2016.
3. Email from Tural Mammadov, Operations Officer, ANAMA, 19 October 2016.
7. Ibid.
10. Ibid.
11. Ibid.
14. Email from Tural Mammadov, ANAMA, 19 October 2016.
17. Email from Sabina Sarkarova, Public Relations Officer, ANAMA, 5 June 2017.
19. Email from Tural Mammadov, ANAMA, 19 October 2016.
22. Ibid., p. 25.
23. Ibid., p. 32.
27. “ANAMA Monthly Report for August 2016”, ANAMA.
29. Ibid., p. 14; and “ANAMA Monthly Report for January 2017”, ANAMA.
33. Ibid.
34. Ibid., pp. 9 and 16.
35. Ibid., p. 17.
36. Ibid., p. 18.
37. Ibid., p. 16.
38. Ibid.
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. China’s military estimated that around two million mines of a wide variety of types were emplaced on the Vietnam border alone. China conducted clearance operations along its border with Vietnam between 1992 and 1999, and between 2005 and 2009.

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.” However, casualties from landmines continued to be reported in parts of Yunnan bordering Vietnam where some areas were still marked as mine-affected and press reports said one or two people were injured in this region every year.

Moreover, in 2011, a Foreign Ministry official reported that China maintains a small number of minefields “for national defence”. 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”. At the Maputo Review Conference in 2014, China said it had “basically eradicated landmines on its own territory”. China has not reported on mine contamination along its borders with Russia and India or on operations to clear them.

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.

China should accede to the Anti-Personnel Mine Ban Convention (APMBC) and clear all mined areas as a matter of priority.
LAND RELEASE

Demining of the Vietnam border was conducted in three ‘campaigns’ in Yunnan province and Guangxi Zhuang Autonomous Region. The first was in 1992–94 and the second in 1997–99. Press reports cited claims by the Chinese military that this second clearance operation was the largest in world military history.\(^\text{10}\)

However, these two campaigns did not deal with minefields located in disputed areas of the border, where 500,000 mines covered an estimated 40km\(^2\). After a technical survey of mined areas, China embarked on a third clearance campaign in Guangxi Zhuang Autonomous Region and Yunnan province in 2005. China stated in 2009 that it had completed clearance of this border after clearing a total of 5.15km\(^2\.\)\(^\text{11}\)

In early November 2015, however, China embarked on a further demining operation along the border with Vietnam.\(^\text{12}\) According to media accounts, this phase of clearance on the border was set to be completed by the end of 2017, with the clearance of more than 50 minefields covering an area of more than 50km\(^2\) in six counties along the border, in areas home to over 50,000 people. It was claimed that more than 470,000 mines remained to be cleared, despite the two other clearance operations in 1992–94 and 1997–99.\(^\text{13}\)

In August 2016, China reported that it had made “positive progress” in the ongoing phase of the Government’s demining operations, and confirmed it was due to finish in 2017.\(^\text{14}\) According to a media report in December 2016, demining in the Red River autonomous prefecture in Yunnan province had been completed after eight months of operations, wherein soldiers cleared 18 minefields with a size of over 4.4km\(^2\) in the Red River section along the Vietnamese border.\(^\text{15}\)

In its latest Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 report submitted in March 2017, China reported that in November 2015–February 2017, the Chinese army cleared 18.4km\(^2\) of minefields on the Yunnan border.\(^\text{16}\)

ARTICLE 5 COMPLIANCE

China is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines as soon as possible.

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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 548 minefields covering a total area of more than 360km\(^2\).
4. Interview with Shen Jian, Ministry of Foreign Affairs, Beijing, 1 April 2008; and Huizi and Yun, "Chinese soldiers nearly done with landmine sweeping on the Sino-Vietnam border", Xinhua, 31 December 2008.
7. Email from Lai Haiyang, Attaché, Department of Arms Control & Disarmament, Ministry of Foreign Affairs, 7 September 2011.
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.

PROGRAMME MANAGEMENT

There is no mine action programme in Cuba.

LAND RELEASE

Cuba has not conducted clearance in its minefields around the US naval base at Guantánamo over the last ten years.

ARTICLE 5 COMPLIANCE

Cuba is not a state party or signatory to the APMBC but nonetheless has obligations under customary international human rights law to protect life, which requires clearance of mines as soon as possible.

RECOMMENDATION FOR ACTION

■ Cuba should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.

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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.
RECOMMENDATIONS FOR ACTION

- Egypt should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Egypt should commit to developing a functioning civilian mine action programme and seek international technical assistance to this end.

CONTAMINATION

Egypt is contaminated with mines in the Western Desert, which date from World War II, 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. It was reported in August 2016 that Islamic State had been digging up World War II-era landmines and reusing them. The precise extent of contamination across the country remains unknown and past estimates have been unreliable.

Most of the Western Desert contamination occurs around the location of World War II battles that took place between the Quattara depression and Alamein on the Mediterranean coast. 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. 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. The year 2017 saw the 75th anniversary of the Battle of El Alamein on 23 October–11 November 1942, which was a decisive battle of the Second World War. Other affected areas lie around the city of Marsa Matrouh and at Sallum near the Libyan border.

The government has claimed that some 17 million mines remained in the Western Desert and another 5.5 million in Sinai and the Eastern Desert. 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.

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. 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.8

In April 2013, the Landmines in Africa blog reported that even though the minefields of El Alamein are more famous, two mine incidents in Sinai and one on the Red Sea coast highlighted the fact that Egypt’s mine contamination “is more widespread”.9 Five soldiers were killed and seven more injured by a mine near the Red Sea resort town of Hurghada.10 In Sinai, seven police were killed and nine injured in one mine incident, and one Bedouin was killed and another injured in a second. The blog suggested that the Red Sea mine “likely dates to World War II and the first Sinai mine is from the conflicts with Israel in the 1950s and 1970s. The Bedouins were victims of a recently laid mine that detonated when struck by their tractor.”11

In August 2016, it was reported that Islamic State had been harvesting the explosives from World War II mines still uncleared in Egypt. According to Ambassador Fathy el-Shazly, formerly the head of Egypt’s Executive Secretariat for Mine Clearance, “We’ve had at least 10 reports from the military of terrorists using old mines. Even now, these things trouble us in different ways.”12 This should serve as a wake-up call to Egypt to pursue mine clearance with far greater vigour.

PROGRAMME MANAGEMENT

In 2016 as in previous year, the mine action programme in Egypt was not functioning effectively.

In November 2006, the Egyptian government and the United Nations Development Programme (UNDP) agreed a project: “Support the North West Coast Development Plan and Mine Action Programme: Mine Action”. The project provided for creation of an Executive Secretariat for Mine Clearance and the Development of the North West Coast within the Ministry of Planning to coordinate implementation of the North West Coast Development Plan through a partnership consisting of the Ministry of Planning, the Ministry of Defence, and UNDP. The project foresaw demining based on humanitarian and development needs, mine risk education, and assistance to mine victims.13

The project was to be conducted in two phases lasting about 18 months each. The first phase concluded in 2014. In October 2014, the European Union (EU) agreed to provide €4.7 million to finance the second phase of the project, targeting clearance of 332km².14 In May 2015, the Director of the Executive Secretariat acknowledged that past results had been disappointing. That month, however, the UNDP and the United States Agency for International Development (USAID) provided EGP13.8 million (approx. US$1.77 million) to support a second phase of the national demining and development programme in the North-West Coast area due to last until 2017.15

In January 2017, Egypt’s Minister of International Cooperation Sahar Nasr announced the establishment of the National Centre for Landmine Action and Sustainable Development. Minister Nasr said that the centre would begin clearing 600 square kilometres in the northern coast and would also establish infrastructure after clearance was completed.16

In May 2017, Kuwait granted Egypt an aid package of almost US$1 million for mine clearance in the North-West Coast area.17

Operators

Mine clearance in Egypt is conducted by the Egyptian Army Corps of Engineers, part of the Egyptian armed forces.

The Geneva International Centre for Humanitarian Demining (GICHD) provides support to the Executive Secretariat and the Army Corps of Engineers in information management and operations. This support includes revision and introduction of national standard operating procedures for mine action in 2014, advice on land release methodology and techniques, and assistance to UNDP in improving mechanical mine action.18

As noted above, UNDP is a partner in Egypt’s national demining and development programme.

LAND RELEASE

Egypt has not reported with any credibility on its release of mined areas in recent years.

ARTICLE 5 COMPLIANCE

Egypt is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.


6 UN Mine Action Team, "Egypt Mine Action Inter-agency Assessment”, 14–18 April 2009, p. 11.

7 "Egypt Mine Action Project Northwest Coast: Phase I Accomplishments”, Presentation by Amb. Fathy El Shazly, Director, Executive Secretariat, Cairo, August 2010.


14 UNDP, "EU and UNDP celebrate the launch of the second phase of the project to help develop the North West Coast and mine action”, Press release, 24 October 2014.


17 "Kuwait provides KWD 300,000 to help clear landmines from Egypt’s north coast”, Abmag ONline, 8 May 2017, at: http://english.ahram.org.eg/News/268345.aspx.

In 2016, Georgia commenced survey and clearance of the Chognari minefield – part of a former Soviet military base in the Imereti region. Unfortunately, however, re-commencement of technical survey of the Red Bridge minefield was not permitted in 2016. Survey began in July 2015, but was halted only one month later, due to a request by Azerbaijani military located on the other side of the border.

MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: POOR

4.7 | 4.5
RECOMMENDATIONS FOR ACTION

- Georgia should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Georgia should continue to engage in political dialogue with Azerbaijan, to enable full clearance of the Red Bridge border minefield.

CONTAMINATION

Georgia has almost 2km² of mined area across seven minefields, as set out in Table 1. This includes Osiauri village, in Kashuri district, which is in a military zone and Khojali mountain, in Mestia district, on the Administrative Boundary Line (ABL) with the Abkhazia Region, where the size of mined and battle areas is not known. Contamination comprises both anti-personnel and anti-vehicle mines. Georgia is also contaminated by cluster munition remnants (CMR) and other explosive remnants of war (ERW).

Table 1: Mine contamination (as at end-2016)²

<table>
<thead>
<tr>
<th>Region</th>
<th>District</th>
<th>Village</th>
<th>Contamination</th>
<th>Mined areas</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kvemo Kartli</td>
<td>Marneuli</td>
<td>Kachagani (Red Bridge)</td>
<td>AP and AV mines</td>
<td>1</td>
<td>1,863,813</td>
</tr>
<tr>
<td>Mtskheta-Mtianeti</td>
<td>Dusheti</td>
<td>Barisakho 1, Barisakho 2</td>
<td>AP mines</td>
<td>2</td>
<td>4,275</td>
</tr>
<tr>
<td>Mtskheta-Mtianeti</td>
<td>Dusheti</td>
<td>Kadoeti*</td>
<td>AP and AV mines</td>
<td>1</td>
<td>23,783</td>
</tr>
<tr>
<td>Imereti</td>
<td>Terjola</td>
<td>Chognari (former military base)</td>
<td>AP and AV mines, and UXO</td>
<td>1</td>
<td>62,034</td>
</tr>
<tr>
<td>Shida Kartli</td>
<td>Kashuri</td>
<td>Osiauri (Military zone)</td>
<td>AP mines</td>
<td>1</td>
<td>N/K</td>
</tr>
<tr>
<td>Samegrelo Zemo Svaneti</td>
<td>Mestia</td>
<td>Khojali**</td>
<td>AP mines</td>
<td>1</td>
<td>N/K</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>1,953,905</td>
</tr>
</tbody>
</table>

* AP = Anti-personnel  AV = Anti-vehicle  UXO = unexploded ordnance  N/K = Not known

Georgia has mined areas around former Soviet military bases, along its international borders, and as a result of conflict with the breakaway region of South Ossetia. Historically, the bulk of the mine problem in Georgia resulted from mines placed around former Russian military bases. The precise extent of the threat has not been reported publicly. According to the Georgian Ministry of Defence, in 2009 mined areas were suspected at Akhalqalaqi, Gonio Firing Range, Kopitnari, Mtskheta, Osiauri, Sagarejo, Telavi, and Vaziani.³

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).³ Between 2009 and the end of 2012, HALO Trust cleared five of the minefields that had a humanitarian impact and identified one additional small minefield in a military restricted area.³

As at the end of 2016, Georgia had some 1.95km² of mined area across seven minefields (see Table 1).³ This includes an unfenced 7km-long minefield at the ‘Red Bridge’ border crossing between Azerbaijan and Georgia.³ The Red Bridge minefield is Georgia’s largest minefield and the last major minefield not in the vicinity of a functioning military establishment. In 1993–2013, there were 17 reported incidents at the Red Bridge border, resulting in 13 fatalities.³

There may also be mined areas in South Ossetia as a result of the 1990–92 Georgian-Ossetian war, and the more recent 2008 conflict with Russia. The HALO Trust has planned to conduct non-technical survey in South Ossetia, but, to date, has not been granted access. South Ossetia is effectively subject to Russian control and is inaccessible to both the Georgian authorities and international non-governmental organisation (NGO) demining operators.

Anti-personnel mine contamination in Georgia has a social, economic, and humanitarian impact. Mined areas are accessible by local populations, and at the Red Bridge minefield, for example, territory is used for herding cattle.³
PROGRAMME MANAGEMENT

In 2008, a Memorandum of Understanding was signed between the Georgian Ministry of Defence and international NGO Information Management and Mine Action Programs (iMMAP) to establish the Explosive Remnants of War Coordination Center (ERWCC). On 30 December 2010, the Ministry of Defence issued a decree instructing that mine action be included as part of the State Military Scientific Technical Center – known as "DELTA" – an entity within the ministry. The agreement with iMMAP ended on 31 March 2012 and the ERWCC took ownership of the mine action programme.

Through the iMMAP project, ERWCC became the Georgian Mine Action Authority, under DELTA, tasked to coordinate and execute action to address the ERW threat. The primary task of the ERWCC is to coordinate mine action in Georgia, including quality assurance/quality control (QA/QC), and to facilitate the creation and implementation of Georgian National Mine Action Standards, in accordance with the International Mine Action Standards (IMAS).

Strategic Planning

Georgia has identified clearance of the Red Bridge minefield as one of its key strategic mine action priorities.

Standards

Georgian National Mine Action Standards and National Technical Standards and Guidelines (NTSGs) have been drafted in accordance with IMAS and as at September 2017 were awaiting completion in coordination with the Geneva International Centre for Humanitarian Demining (GICHD). Once finalised, the NTSGs will be translated and sent to Parliament for approval.

Quality Management

Under the control of DELTA, the ERWCC now conducts QA/QC. iMMAP has also conducted training on quality management for the QA/QC section of ERWCC, the Joint Staff of the Georgian Armed Forces, and DELTA.

Operators

The HALO Trust conducts clearance in Georgia, but NGOs are not permitted to clear land belonging to the military. HALO Trust employed three teams of seven deminers in 2016, trained in both mine clearance and battle area clearance (BAC), and deployed as required. While the number of demining teams increased due to the mine clearance task at Chognari, where HALO Trust also deployed three demining machines, BAC capacity decreased as the Udabno BAC task is due to be completed in 2017.

At the request of the Government of Georgia, the NATO Partnership for Peace (PIP) Trust Fund has supported Georgia in addressing its ERW problem from the August 2008 conflict. In 2010, a NATO Trust Fund project planned to provide support to establish long-term local capacity for the ERWCC in clearance and victim assistance. As part of the project, 66 members of the Georgian Army Engineers Brigade were trained in demining, BAC, and explosive ordnance disposal (EOD). Since March 2015, these engineers have been conducting EOD of abandoned explosive ordnance (AXO) and UXO at the former ammunition storage facility at Skra.

LAND RELEASE

In 2016, The HALO Trust cleared 7,288m² of mined area, and a further 70,052m² was reduced by technical survey. In 2015, no mine clearance took place.

Survey in 2016

The HALO Trust started operations at the Chognari minefield in March 2016, initially conducting non-technical survey, and then beginning technical survey in April. In total in 2016, 70,052m² was reduced through technical survey and 18,877m² was confirmed as mined.

The Chognari minefield is part of a former Soviet military base in the Imereti region. It was previously under military restriction, but has since been handed over by the government for clearance. Chognari was also the site of an uncontrolled explosion in the 1990s; in addition to the minefield around the perimeter of the base, the site is also contaminated by UXO.

The base threatens the lives and livelihoods of more than 4,500 villagers who live nearby and use the area for grazing their livestock. Once cleared, the Georgian government also plans to build a waste processing facility on the site, which is expected to employ more than 130 people. In addition, certain areas at Chognari will be used to build a water reservoir to supply drinking water to the city of Kutaisi, which has a population of 300,000.

Georgia previously reported plans to start clearance of the Red Bridge minefield in 2015. However, while Georgian and Azerbaijani representatives met in 2015 to discuss demining the minefield, only survey was permitted. HALO Trust conducted non-technical survey between 1 and 3 July, and then began technical survey on 4 July 2015. However, the Azerbaijani military located on the other side of the border subsequently demanded that technical survey operations be halted one month later, on 4 August 2015. At September 2017 survey had not been permitted to resume, and despite many requests to the Government of Georgia the HALO Trust had not been granted permission to the task.

Clearance in 2016

In 2016, HALO Trust cleared 7,288m² of mined area and destroyed 19 anti-personnel mines at the Chognari minefield – part of a former Soviet base. Clearance of the Chognari minefield was planned to be completed in 2017.
Although HALO Trust is not operating at Red Bridge, its operational staff periodically visit the site in order to help keep the local community and Border Police aware of the mine threat there. In October 2016, HALO Trust identified one cattle incident, which occurred in August of the same year. At the same time, based on information from a member of the local community, The HALO Trust identified a TM-62 anti-vehicle mine in the area adjacent to the minefield, located almost 700 metres from the border with Azerbaijan. The organisation expressed its readiness to destroy the mine, but the Border Police informed the Ministry of Internal Affairs, and on the following day, the Ministry’s EOD team destroyed the mine. The HALO Trust immediately asked permission to deploy its team, but permission was not granted.39

**Progress in 2017**

The HALO Trust started new mine clearance operations in April 2017, near the Administrative Boundary Line (ABL) in the Tskhinvali region, which will help ensure safe access to agricultural land.40

**ARTICLE 5 COMPLIANCE**

Georgia is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.

ERWCC operates under DELTA within the Ministry of Defence, and is financed from the state budget.41 The HALO Trust does not receive national funding from Georgia for its survey and clearance operations.42 Between 2009 and the end of 2012, using international funding HALO Trust cleared five minefields with humanitarian impact and identified a sixth.43 In 2013 and 2014, HALO Trust focused on clearing former firing ranges. In 2015, The HALO Trust briefly focused on technical survey of the Red Bridge minefield before the survey was forced to halt, and did not undertake any mine clearance. In 2016, in a positive development, The HALO Trust began survey and clearance of the Chognari minefield, which it expected to finish clearing in 2017. It is not known if any of the restricted military areas has been cleared of mines.

39 Email from Irakli Chitanava, Programme Manager, HALO Trust, 2 May 2017. There were differences between the data reported by HALO Trust and by DELTA for two areas; DELTA reported 2,579,593m² of mined area at Kirach Mughanlo (Red Bridge) and 8,169m² at Chognari. Email from Oleg Gochashvili, Head of Division, State Military Scientific Technical Centre – DELTA, 3 April 2017.

40 Email from Irakli Chitanava, HALO Trust, 2 May 2017. There were differences between the mine-contamination data reported by HALO Trust and the data provided by DELTA for two areas. DELTA reported 2,579,593m² of mined area at Kirach Mughanlo (Red Bridge) and 8,169m² at Chognari. Email from Oleg Gochashvili, DELTA, 3 April 2017.

41 Email from Irakli Chitanava, Deputy Head, International Relations and Euro-Atlantic Integration Department, Ministry of Defence, 6 September 2009.

42 Ibid.

43 Email from Andrew Moore, HALO Trust, 4 June 2015.


45 Email from Irakli Chitanava, HALO Trust, 2 May 2017.

46 Interview with George Dolidze, Director, Department of Security Policy and Euro-Atlantic Integration, Ministry of Foreign Affairs, in Geneva, 28 May 2009.


48 Email from Irakli Chitanava, HALO Trust, 2 May 2017.

49 Email to Andrew Moore, HALO Trust, 4 June 2015.


51 Ibid, Decree #897 issued by the Minister of Defense, 30 December 2010, and email from Oleg Gochashvili, DELTA, 20 June 2016.

52 NATO, “NATO/PfP Trust Fund Project in Georgia”, January 2012; and emails from Oleg Gochashvili, DELTA, 6 July 2015 and 20 June 2016.

53 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.

54 NATO, “NATO/PfP Trust Fund Project in Georgia”, January 2012; and emails from Oleg Gochashvili, DELTA, 6 July 2015 and 20 June 2016.


56 Interview with Oleg Gochashvili, DELTA, in Geneva, 19 February 2016; and, 3 April 2017.

57 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.

58 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.


60 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.


62 Interview with Andrey Moore, HALO Trust, Thornhill, 28 April 2016.


64 Ibid; and email from Oleg Gochashvili, DELTA, 3 April 2017.

65 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.

66 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.


68 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.

69 Ibid.

70 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.

71 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.

72 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.

73 Ibid.

74 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.

75 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.

76 Ibid.

77 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.

78 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.

79 Ibid.

80 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Oleg Gochashvili, DELTA, 3 April 2017.

81 Emails from Irakli Chitanava, HALO Trust, 2 May 2017; and Nick Smart, HALO Trust, 11 October 2017.

82 Email from Andrew Moore, HALO Trust, 1 October 2016.

83 Email from Andrew Moore, HALO Trust, 30 August 2012.
India is contaminated with mines, mainly as a result of large-scale mine-laying by government forces on and near the Line of Control (LoC) separating India and Pakistan during the 1971 war and the 2001–02 stand-off between the two states. Anti-personnel and anti-vehicle mines were laid on cultivated land and pasture, as well as around infrastructure and a number of villages.

Despite occasional official claims that all the mines laid were subsequently cleared, reports of contamination and casualties have persisted. A media report in 2013 cited a government statement that about 20km² of irrigated land was still mined in the Akhnoor sector of the LoC alone.1 Security forces also have reported extensive use of mines and improvised explosive devices (IEDs) by Maoist insurgents in the north-eastern states of Bihar, Chhattisgarh, and Jharkhand, although mine types usually are not specified and may include command-detonated as well as victim-activated explosive devices.2 A media report in October 2016 also alleged that the Indian military had threatened to lay mines along the Punjab border with Pakistan, after clashes and increasing tensions in the region.3

In July 2017, 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 of improving safety and decreasing the number of deminer casualties.4 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 2001.5

In 2016–17, a number of landmine incidents continued to be reported, primarily involving Indian army personnel, but also civilians, including an 18 year-old girl who was reportedly injured in a landmine explosion in north Kashmir’s Baramulla district which an official confirmed involved an “underground mine” close to the Uri army camp located near the village where she lived.6 In May 2016, a large forest fire which broke out on the Pakistani side of the LoC spread through Balakote sector of Poonch district was reported to have triggered mine detonations, with eight mine explosions reported, according to a senior police officer.7

**RECOMMENDATION FOR ACTION**

- India should accede to the Anti-Personnel Mine Ban Convention (APMBC) and clear all mined areas as a matter of priority.
In September 2017, three soldiers were reportedly injured in a mine explosion while on a routine patrol in Kashmir’s Kupwara district. In August 2017, it was reported that an Indian soldier was injured in a mine blast near the LoC in Keran sector of Jammu and Kashmir. In December 2016, another soldier was reportedly seriously injured in a mine incident along the LoC, in Poonch district. Similar incidents were reported in Kargil, Kupwara, and Poonch districts along the LoC.

In 2016–17, there were also numerous reports of Maoist rebels using “landmines” and IEDs, causing civilian and military casualties in Chhattisgarh state.

**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 2016. The Army Corps of Engineers is responsible for clearing mines, as well as IEDs, placed by non-state armed groups. Media reports have indicated police also play an active part in clearing mines and IEDs on an ad hoc basis in states dealing with insurgency.

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. In August 2016, India stated that “mines used for military operations were laid within fenced and marked perimeters and were cleared after operations”.

**ARTICLE 5 COMPLIANCE**

India is not a party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines as soon as possible.

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15. CCW Amended Protocol II Article 13 Report (for 2016), Form B.
IRAN

CONTAMINATION

Iran is contaminated by anti-personnel and anti-vehicle mines, mainly as a result of the 1980–88 war with Iraq. Mine contamination is concentrated in five western provinces bordering Iraq, although the true extent of the remaining threat is unknown.

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 contrast, Iran’s mine action authorities have consistently reported that the war left 4,200km². In February 2014, the Iran Mine Action Center (IRMAC) reported the five Western provinces had remaining contamination that totalled 250km². However, two anti-vehicle mine incidents in early 2014 confirmed reports of contamination in the Lut desert spanning central and eastern Iran where police reportedly placed mines as a measure against drug traffickers.²

RECOMMENDATIONS FOR ACTION

- Iran should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Iran should seek international assistance to develop a functioning civilian mine action programme.

PROGRAMME MANAGEMENT

In 2016, as in previous years, it appears that mine action in Iran was not functioning effectively.

IRMAC was established in 2005, taking the place of a Mine Action Committee in the Ministry of Defence, and serves as the national mine action centre, responsible for planning, data, managing survey, and procurement. 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.

²
IRMAC’s future appeared uncertain in 2014 amid debate on institutional reforms. IRMAC’s statement that 99% of contaminated land had been cleared led to proposals to transfer the mandate for the remaining work to the Ministry of Interior. As of March 2017, it was not clear if, to what extent, and when, these changes would materialise and IRMAC’s website was no longer functioning. According to a mine action source, clearance operations had slowed in 2015 due to these uncertainties.³

**Operators**

Mine clearance in Iran is conducted by the Iranian Army.

**LAND RELEASE**

Iran has not reported publicly on its release of mined areas in 2016 or on demining in the three previous years. The hope has been expressed that, with the removal of international sanctions, Iran will have more access to demining assets and materials.⁴ In early May 2017, Iranian President Hassan Rouhani said that countries that had provided Iraq with mines had not given Iran the technology to clear mines after the war between the two nations in the 1980s.⁵

**ARTICLE 5 COMPLIANCE**

Iran is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.

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1 Ministry of Defence, “Commander Dehghan in the ceremony of World Mine Awareness Day: In Iran 28,000 hectares of land are landmine-contaminated”, 8 April 2014.
2 “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.
3 Telephone interview with mine action sector operator, provided on condition of anonymity, 5 April 2015.
### MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

|               | 6.2 | 5.9 |

### PERFORMANCE COMMENTARY

In 2016, Israel’s mine action programme achieved a slightly higher clearance output than the previous year, but no land was released by survey. In a positive development, the Israeli National Mine Action Authority (INMAA) began a survey of West Bank minefields in the Jordan Valley in 2017.
CONTAMINATION

The exact extent of mine contamination in Israel is not known. Israel has reported 49 km² of confirmed mined area and a further 48.8 km² of suspected mined area, as at the end of 2016. But the combined 91 km² 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.

Table 1: Mine contamination (as at end-2016)

<table>
<thead>
<tr>
<th>Type of contamination</th>
<th>CHAs</th>
<th>Area (km²)</th>
<th>SHAs</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP mines only</td>
<td>209</td>
<td>20.3</td>
<td>3</td>
<td>41</td>
</tr>
<tr>
<td>AV mines only</td>
<td>29</td>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AP and AV mines</td>
<td>8</td>
<td>4.9</td>
<td>0</td>
<td>7.8</td>
</tr>
<tr>
<td>Totals</td>
<td>246</td>
<td>42.2</td>
<td>12</td>
<td>48.8</td>
</tr>
</tbody>
</table>

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

Israel’s mine problem dates back to World War II. Subsequently, Israel laid significant numbers of mines along its borders, near military camps and training areas, and near civilian infrastructure. In August 2011, Israel’s military reported planting new mines to reinforce minefields and other defences along its de facto border with Syria in the Golan Heights.

The 2016 estimate of 91 km² for mined areas that are not considered essential for Israel’s security is a small reduction on the 2015 estimate of 92 km². This is a result of 1 km² of mine clearance in 2016.

Mine contamination in Israel impacts progress in regional development, and poses a risk to local communities.

PROGRAMME MANAGEMENT

A March 2011 law on minefield clearance established the Israeli National Mine Action Authority (INMAA) to undertake a “comprehensive programme of mine clearing projects inside Israel.” 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.”

INMAA, which has 10 staff, was established in the Ministry of Defence, with ministry staff responsible for planning mine action. INMAA manages a “minefield information bank” that is open for public queries concerning demining plans and programmes.

Strategic Planning

INMAA has a multi-year clearance plan for 2017–20 that plans to focus on technical survey and clearance in northern Israel (the Golan Heights) in the spring/summer/autumn, and in southern Israel (the Jordan Valley and Arava Plain) in the winter.

In addition, INMAA continues to oversee HALO Trust clearance projects in Area C of the West Bank, funded by the Netherlands, New Zealand, the United Kingdom, and the United States. Furthermore, at the start of 2017, the INMAA began survey of the Jordan Valley minefields in the West Bank, using national budget and operating through Israeli companies. INMAA sees significant potential for cancellation and reduction of land in the Jordan Valley, and is using various technologies and scientific tools to measure mine drift possibilities. The INMAA planned to invest around NIS 900,000 (approximately US$250,000) in this project in 2017–19. (See also the report on Palestine.)
A number of development projects funded by local electricity, water, and infrastructure companies and authorities also pay for mine clearance. \(^\text{14}\)

Clearance tasks are assigned according to a classification formula laid down by INMAA: 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. \(^\text{15}\) INMAA has been conducting a study of the social and economic impacts of land released over the last four years, as well as on the potential impact for future clearance sites. \(^\text{16}\)

**Legislation and Standards**

The 2011 law on minefield clearance noted above is the main legislation governing mine action. INMAA sets national standards “taking into consideration the procedures of the Israel Defense Forces that will be as compatible as possible with the International Mine Action Standards.” \(^\text{17}\)

**Quality Management**

Every mine clearance project in Israel has an INMAA supervisor, a QA/QC contractor, and a clearance operator. There were five QA/QC contractors were formally registered, as at July 2017. Of these, Zeev Levanon Projects and 4CI Security were contracted to conduct QA and QC of clearance operations in 2016. \(^\text{18}\)

**Operators**

Commercial companies are contracted to conduct clearance as well as quality assurance (QA) and quality control (QC). In 2016, clearance was contracted to three national companies: the Israeli Mine Action Group (IMAG), NARSHA, and AMAN. \(^\text{19}\)

**LAND RELEASE**

In 2016, almost 1km² was released by clearance, compared to 0.7km² in 2015. No mined area was released by survey in 2016. \(^\text{30}\)

**Survey in 2016**

No area was reported as having been reduced by technical survey or cancelled by non-technical survey in 2016. \(^\text{31}\)

INMAA did, however, report that following 2016 operations in the Snir area of the Golan Heights, INMAA changed nine areas previously designated confirmed hazardous areas to suspected hazardous areas, and identified them for technical survey. These areas will be surveyed as part of the Golan Heights programme in 2017–20. \(^\text{32}\)

**Clearance in 2016**

More than 0.92km² of land was released by clearance in 2016 (excluding the West Bank), with the destruction of 4,313 anti-personnel mines, 361 anti-vehicle mines, and 25 items of unexploded ordnance (UXO). \(^\text{33}\)

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas released</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMAG</td>
<td>1</td>
<td>282,000</td>
<td>432</td>
<td>361</td>
<td>24</td>
</tr>
<tr>
<td>NARSHA</td>
<td>4</td>
<td>178,000</td>
<td>3,870</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>AMAN</td>
<td>1</td>
<td>464,000</td>
<td>11</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>6</td>
<td>924,000</td>
<td>4,313</td>
<td>361</td>
<td>25</td>
</tr>
</tbody>
</table>
In 2016, IMAG carried out clearance in the Snir [Golan Heights], NARSHA conducted clearance in Ein Yahav [Arava Plain], and AMAN cleared mined areas in the Dead Sea region.

IDF demining is implemented independently of INMAA, using military methods and techniques. The area cleared or otherwise released by the IDF is unknown. According to Israel’s Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency report for 2016, the IDF has made significant progress in “re-surveying mine affected areas, and in examining the possibility of area cancellation, following a completion of a fully detailed non-technical survey.”

INMAA typically plans for mine clearance at a targeted rate of 1.5km² per year. During 2016, however, INMAA decided to postpone operations in the Golan Heights until 2017, and because of this, the 2016 target was reduced to 1km², while the 2017 target was raised to 2km².

In addition, The HALO Trust continued its clearance of minefields in Area C of the West Bank in 2016, working under the auspices of both INMAA and PMAC, with international funding, [See the report on Palestine].

### ARTICLE 5 COMPLIANCE

Israel is not a party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.

In 2016, the annual mine action budget for Israel was NIS42.3 million (approx. US$12 million), of which NIS27 million was from INMAA’s budget and the NIS15.3 million from additional external funding by various infrastructure development companies and authorities. This represents an increase in funding compared to 2015, when there was no additional funding through international funding through infrastructure projects.

Based on the clearance rates of the last few years, and INMAA’s forecasted clearance rate of 1.5km² per year, it will take many years to clear remaining contamination. INMAA is seeking additional funding and assistance in order to speed up operations.

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.9</td>
</tr>
<tr>
<td>2015</td>
<td>0.7</td>
</tr>
<tr>
<td>2014</td>
<td>1.2</td>
</tr>
<tr>
<td>2013</td>
<td>2.2</td>
</tr>
<tr>
<td>2012</td>
<td>N/R</td>
</tr>
<tr>
<td>Total</td>
<td>5.0</td>
</tr>
</tbody>
</table>

N/R = Not reported

1 Email from Michael Heiman, Director of Technology and Knowledge Management, INMAA, 23 July 2017.
2 Email from Michael Heiman, INMAA, 23 July 2017.
4 Email from Michael Heiman, INMAA, 13 April 2015.
5 Email from Michael Heiman, INMAA, 23 July 2017.
6 Email from Michael Heiman, INMAA, 19 September 2016.
8 Minefield Clearance Law 2011 (MCL 5771-2011).
9 Email from Michael Heiman, INMAA, 23 July 2017.
10 CCW Amended Protocol II Article 13 Report [for 2016], Form A.
11 Email from Michael Heiman, INMAA, 23 July 2017.
12 Emails from Michael Heiman, INMAA, 19 September 2016; and Ronen Shimoni, Programme Manager, HALO Trust, 22 April 2017.
13 Email from Michael Heiman, INMAA, 23 July and 10 August 2017.
14 Email from Michael Heiman, INMAA, 19 September 2016.
15 Email from Michael Heiman, INMAA, 23 July 2017.
16 Email from Michael Heiman, INMAA, 19 September 2016.
17 Emails from Michael Heiman, INMAA; and Eran Yuvan, Ministry of Foreign Affairs, 6 May 2012.
18 Email from Michael Heiman, INMAA, 23 July 2017.
19 Email from Michael Heiman, INMAA, 23 July 2017.
20 Ibid.; and CCW Amended Protocol II Article 13 Report [for 2016], Form C.
21 CCW Amended Protocol II Article 13 Report [for 2016], Form E.
22 Email from Michael Heiman, INMAA, 23 July 2017.
23 Ibid.
24 Email from Michael Heiman, INMAA, 19 September 2016.
25 Ibid.
26 Email from Eran Yuvan, Ministry of Foreign Affairs, 29 April 2014; and CCW Amended Protocol II Article 13 Report [for 2016], Form B.
27 CCW Amended Protocol II Article 13 Report [for 2016], Form B.
28 Email from Michael Heiman, INMAA, 23 July 2017.
31 Email from Michael Heiman, INMAA, 23 July 2017.
32 Ibid.
33 Ibid.
34 Ibid. According to Israel’s CCW Amended Protocol II Article 13 Report [for 2016], Form B, 1,024,000m² was cleared in 2016, with the destruction of 11,081 mines.
35 Emails from Michael Heiman, INMAA, 13 April 2015; and Eran Yuvan, Ministry of Foreign Affairs, 29 April 2014.
36 CCW Amended Protocol II Article 13 Report [for 2016], Form B.
37 Email from Michael Heiman, INMAA, 23 July 2017.
38 Ibid.
39 Ibid.
40 Ibid.
41 Email from Michael Heiman, INMAA, 19 September 2016.
42 Email from Michael Heiman, INMAA, 23 July 2017.
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. It was reported, however, that rainfall and landslides had caused some mines to shift.

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.

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. In June 2011, a government official confirmed: “We do not have any minefields on the territory of Kyrgyzstan.”

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. 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.

**RECOMMENDATIONS FOR ACTION**

- Kyrgyzstan should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Kyrgyzstan should detail whether it has fully addressed mine contamination in areas under its jurisdiction or control and, if not, report on the extent and location of its remaining mined areas and clearance operations.
PROGRAMME MANAGEMENT

Kyrgyzstan has no functioning mine action programme.

In April 2013, an EOD military exchange reportedly took place at the Transit Centre at Manas, Kyrgyzstan, with the United States Armed Forces providing training in mine clearance to Kyrgyz Ministry of Defence EOD team members.8

In September 2015, Kyrgyzstan hosted a five-day regional workshop, supported by the OSCE, on responding to and reducing munitions in central Asia and Afghanistan. According to the OSCE, participants shared techniques and approaches in disposing of excess and obsolete ammunition and learnt about international and national mine action standards. It is reported that "OSCE-supported experts" from the Geneva International Centre for Humanitarian Demining (GICHD) and the Tajikistan national mine action sector also shared their experiences.9

LAND RELEASE

There are no reports of any land release occurring in 2016.

ARTICLE 5 COMPLIANCE

Kyrgyzstan is not a party or signatory to the APMBC, but nonetheless Kyrgyzstan has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.

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1 Fax from Abibilla Kudaiberdiev, Minister of Defence, 4 April 2011.
4 Statement of Kyrgyzstan, Intersessional meetings (Standing Committee on General Status and Operation of the Convention), Geneva, 8 May 2006; and Letter 011-14/809 from the Ministry of Foreign Affairs, 30 April 2010.
7 Ibid.
CONTAMINATION

Lao PDR is contaminated by anti-personnel and anti-vehicle mines left by the Indochina conflict of the 1960s and 1970s but the extent is not known. All sides in the war in the 1970s laid anti-personnel mines, particularly along borders and around military bases and airfields. A Handicap International survey in 1997 found mines in all 15 provinces it surveyed, contaminating 214 villages. In the past clearance operators have estimated Lao PDR may have 1,000 mined areas.

The remote location of many of these areas means that mines have little impact and are not a clearance priority. Of 133,349 items of explosive remnants of war (ERW) destroyed by operators in 2016, only 112 (0.08%) were mines. 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.”

The NRA said widely used “gravel mines” had all degraded but remaining mine types included United States-manufactured M14 blast anti-personnel mines, M16 bounding fragmentation mines, M18 claymore mines, and M15 and M19 anti-vehicle mines, and Soviet and Chinese anti-personnel mines, POMZ fragmentation mines, and Soviet-era TM41, TM46, and TMS7 anti-vehicle mines.

RECOMMENDATION FOR ACTION

■ Lao PDR should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
PROGRAMME MANAGEMENT

The NRA, created by government decree in 2004 and active since mid-2006, had an interministerial board chaired by the deputy prime minister and composed of representatives from 11 government ministries. A decree issued in February 2015 increased the size of the NRA board to 22 members, including, for the first time, a permanent deputy chairman expected to take care of the daily business of the board. The decree also specified that the NRA "has a government budget included in the general budget" of the Board’s president.

In November 2012, Bounheuang Douangphachanh, a minister in the Prime Minister’s Office and chairman of the National Committee for Rural Development and Poverty Eradication, was appointed chairman of the NRA Board. A parliamentary election in March 2016 led to leadership changes, including the retirement of Bounheuang Douangphachanh. A September 2016 decree placed the NRA under the control of the Ministry of Labour and Social Welfare.

The NRA has four sections: Administration and Finance; Planning and Cooperation; Quality and Standards; and Operations and Information. Capacity includes only a single quality management team.

LAND RELEASE

No systematic mine clearance was conducted during 2016, though operators destroyed a total of 112 anti-personnel and anti-vehicle mines. Of the total, 10 were destroyed during UXO clearance operations, 35 during roving tasks, 15 in the course of non-technical survey, and 7 in technical survey.

ARTICLE 5 COMPLIANCE

Lao PDR is not a state party to the Anti-Personnel Mine Ban Convention. Nonetheless, Lao PDR has obligations under international human rights law to protect life, which requires the clearance of anti-personnel mines as soon as possible.

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3 "Sector Achievements 2016", received from NRA, 19 May 2017.
5 Ibid.
7 Government Decree No. 43, "On the appointment of the NRA Board", [Unofficial translation], 3 February 2015, and interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 28 April 2015.
9 Interview with Allan Poston, Technical Adviser, UNDP, 26 April 2017; with Phoukhieou Chanthasomboune, NRA, 27 April 2017.
10 "Sector Achievements 2016", received from NRA, 19 May 2017.
### MINEL ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
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<th>For 2015</th>
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<td>5</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>5</td>
<td>5</td>
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<tr>
<td>National funding of programme</td>
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<td>7</td>
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<td>Timely clearance</td>
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<td>5</td>
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<tr>
<td>Land release system in place</td>
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<td>4</td>
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<tr>
<td>National mine action standards</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Reporting on progress</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

<table>
<thead>
<tr>
<th></th>
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<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.7</td>
<td>5.5</td>
</tr>
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PERFORMANCE COMMENTARY

In a positive development, mine clearance began along the Blue Line, in the far south of Lebanon, at the end of 2016. While clearance of the high-density mapped minefields in this region should aid progress towards completion, Lebanon is still falling behind its own targets for mine clearance. Ensuring and sustaining sufficient mine clearance capacity is a key factor impacting progress, but land release methodology in Lebanon could also be improved. The Lebanese Mine Action Centre (LMAC) is in the process of revising the national mine action standards (NMAS), in consultation with clearance operators and the Geneva International Centre for Humanitarian Demining (GICHD), and it is hoped that enhancements to strengthen the NMAS will result in gains in operational efficiency, such as with regards to the specified clearance depth.

RECOMMENDATIONS FOR ACTION

- Lebanon should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Where possible, non-technical survey and technical survey should be used to more accurately define areas of actual mine contamination, factoring in the required fadeout distance, especially with respect to militia minefields in northern Lebanon. This would also help to more accurately establish a national baseline of mine contamination.
- LMAC should improve its land release system to accord with international standards and best practice. Improvements should be reflected in the revised NMAS, and all mine action stakeholders should be consulted before their finalisation. As part of this process, LMAC should consider and reflect the views of humanitarian demining operators on issues such as the specified clearance depth and fadeout.
- Where appropriate, LMAC should use demining machinery and mine detection dogs (MDDs) as primary as well as secondary clearance assets.
- LMAC should also aim to engage with the clearance operators with regards to information management, and should provide regular IMSMA (Information Management System for Mine Action) reports to operators, as a means to help cross-checking and confirm data integrity.
- LMAC should report more accurately and consistently on the extent of mine contamination, in a manner consistent with the International Mine Action Standards (IMAS). It should also ensure that all land released through survey and clearance is entered and reflected in its database in a timely manner.
- The United Nations Interim Force in Lebanon (UNIFIL) should explore the possibility of resuming humanitarian demining operations.

CONTAMINATION

As at the end of 2016, Lebanon had 20km² of confirmed mined areas (including approximately 6.5km² of mined area on the Blue Line), across 1,431 confirmed hazardous areas (CHAs), as set out in Table 1.1

In its Annual Report for 2016, LMAC put total mine contamination, including the Blue Line, at almost 27.8km².2 However, this total included 7km² of mined area that had already been cleared by the Engineering Regiment of the Lebanese Armed Forces (LAF) in the Aqoura area in Mount Lebanon, over several years, but which had not been yet entered into the IMSMA database.3 A further 25 “dangerous areas” totalling more than 0.78km² are suspected to contain mines, and an additional 3 dangerous areas totalling more than 0.55km² are suspected to contain mines and unexploded ordnance (UXO).4 In addition, 95 dangerous areas totalling almost 2.8km² were suspected to contain “booby-traps”, some of which fall under the APMBC definition of an anti-personnel mine.5 The designated “dangerous areas” are mainly the result of incidents having been reported to LMAC by the local community, and for which further investigation/survey is required in order to confirm the type and extent of suspected contamination.6

Table 1: Mine contamination by province (as at 2016)7

<table>
<thead>
<tr>
<th>Province</th>
<th>CHAs</th>
<th>Area (m²)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Beqaa</td>
<td>38</td>
<td>1,104,893</td>
</tr>
<tr>
<td>Al Janoub (south Lebanon)</td>
<td>212</td>
<td>1,492,107</td>
</tr>
<tr>
<td>Al Nabatiyeh (south Lebanon)</td>
<td>790</td>
<td>6,719,065</td>
</tr>
<tr>
<td>Jabal Loubnan (Mount Lebanon)</td>
<td>330</td>
<td>10,556,483</td>
</tr>
<tr>
<td>Al Shimal (north Lebanon)</td>
<td>60</td>
<td>198,768</td>
</tr>
<tr>
<td>Beirut</td>
<td>1</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>1,431</td>
<td><strong>20,072,316</strong>*</td>
</tr>
</tbody>
</table>

* Including 6.5km² of mined area along the Blue Line.
The 20km² of contamination, including the Blue Line, represents a decrease in overall baseline contamination over the 29km² of contaminated area as at the end of 2015. The significant difference in the baseline mine contamination is for the most part explained by a delay in the reporting of several year’s of mine clearance data by the LAF Engineering Regiment, in the Aqoura Area in Mount Lebanon, totalling 7km² of cleared area. The corresponding completion forms were only delivered to LMAC at the end of 2016, and the clearance data had not been entered into IMSMA previously.

Lebanon’s mine problem is largely a legacy of 15 years of earlier civil conflict and Israeli invasions of south Lebanon (in 1978 and 1982) and subsequent occupations that ended in May 2000. Mines affect the north and south of the country, though the majority are in the south. The minefields in north Lebanon and Mount Lebanon are typically “militia” minefields (i.e. were laid without a pattern and for which minefield maps do not exist), and were laid by multiple actors during the civil war. The minefields in the south are typically conventional minefields, where the location of the mines is identified on minefield maps.

Previously unrecorded contamination, notified by members of the public, and typically investigated by rapid response units, is only recorded as a CHA after survey.

The mid-term review of Lebanon’s 2011–20 national strategy stated that as at end September 2013, of the total 44.5km² of mined area (excluding the Blue Line), almost 21.5km² (48%) had been cleared and 23km² (52%) remained. The review also reported that, as at 2013, one-quarter of the 9.5km² of Blue Line minefields had been cleared, leaving almost 7.3km² to release.

According to the mid-term review, clearance of Blue Line minefields was behind target, due to underfunding and political decisions. However, since late 2015, permission has been granted for clearance to be undertaken of some of the Blue Line minefields, and clearance of the Blue Line commenced in November 2016. According to LMAC, 98% of the Blue Line is still contaminated.

Mines hinder socio-economic development, restricting access to land and productive resources. Most contamination is on valuable agriculture land. According to LMAC, mines along the Blue Line negatively affect more than 200,000 people. It has been reported that people are crossing the Blue Line to harvest olive groves and graze livestock.

In 2016, one adult male civilian was injured by an anti-personnel mine in the north of Lebanon. In addition, a further five civilians were injured in 2016: three men by UXO, one by a submunition, and one by an unknown device.

**PROGRAMME MANAGEMENT**

Established in 1998 by the Council of Ministers, the Lebanon Mine Action Authority (LMAA) is the responsibility of the Ministry of Defence and is chaired by the Minister of Defence himself. The LMAA has overall responsibility for Lebanon’s mine action programme. In 2007, a national mine action policy outlined the structure, roles, and responsibilities within the programme, and LMAC was tasked to execute and coordinate the programme on behalf of the LMAA.

LMAC, part of the LAF, is based in Beirut. Since 2009, the RMAC, based in Nabatiyeh, which is a part of LMAC, has overseen operations in south Lebanon and western Bekaa, under LMAC supervision. The Director of LMAC is typically rotated every couple of years, and in recent years there has been a high turnover of the military personnel who have run the RMAC. Both factors have the potential to negatively affect the management of the two mine action centres. A new director of LMAC started in early 2017, while a new director of RMAC started in May.

There is said to be generally good coordination and collaboration between LMAC/RMAC and clearance operators. In south Lebanon, coordination meetings between RMAC and operators take place at least monthly, during which clearance operations, quality assurance (QA), and other operational issues are openly discussed. LMAC also manages risk education and victim assistance.

A donor support group meeting is convened annually, which brings together donors, operators, and the national authorities. UNDP personnel, funded by the European Union (EU), are also seconded to LMAC and RMAC, providing support towards capacity building, including transparency reporting, strategic reviews, and IMSMA database entry, community liaison officers, and QA. UNDP does not provide technical assistance on operational decisions.

In 2015, the Ministry of Defence, represented by LMAC, signed a Memorandum of Understanding with the GICHD to manage and coordinate the Arab Regional Cooperation Programme for Mine Action (formerly known as the Arabic-Language Outreach Programme for Mine Action). Planning, management, and coordination of the Programme were due to be handed over to LMAC at the beginning of 2017, and LMAC, through the Regional School for Humanitarian Demining in Lebanon (RSHDL), will serve as a regional centre for the Programme’s activities. As at April 2017, the buildings of the RSHDL in Hammana were being renovated. As at September 2017, the renovation was complete and LMAC was looking to secure funding for furniture and equipment for the RSHDL. Lebanon plans to offer explosive ordnance disposal (EOD) courses, among others, at the RSHDL.

**Strategic Planning**

In September 2011, LMAC adopted a strategic mine action plan for 2011–20. The plan called for clearance of all cluster munition remnants (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.

A first mid-term review to the strategy was conducted in January–March 2014 to assess progress towards the 2013 milestone, and to adjust the 2016 and 2020 milestones.
operators began in November 2016. A second mid-term assessment was being undertaken in 2016, which was due to be completed in early 2017. The assessment had not yet been completed as at June 2017, but LMAC expected it to be finished “very soon”. Prior to 2016, demining along the border with Israel was said to depend on “political developments”, but the Lebanese government subsequently took the decision to initiate larger-scale, planned clearance on the Blue Line, and clearance by humanitarian demining operators began in November 2016.

Lebanon has set three levels of priority for mine action operations, based on socio-economic impact. The first is to address areas close to villages, which impact housing and agricultural land, or land blocking access to agricultural land; the second is to release agricultural land that is difficult to access; and the third is to release rocky/bushy areas. Areas in which mine-related incidents occur are immediately designated high priority. LMAC aims to better monitor post-clearance activities and assess how clearance supports livelihood and socio-economic development. Systematic pre- and post-impact surveys by operators, using an agreed format, could support this.

In 2017, LMAC planned to focus landmine-survey on “dangerous areas” where the presence of mines is highly expected, and to conduct clearance across Lebanon, including the Blue Line, according to its plan.

In its 2016 Annual Report, LMAC reported that it will “work on optimization of non-technical (pre-clearance) surveys, so they will be completed and their general results will be accurately and periodically updated on IMSMA. The international demining best practices have shown that the effectiveness of non-technical and technical surveys will increase the efficiency of clearance operation, therefore, LMAC will pursue its duty to ensure that these surveys will be conducted for the entire countries, including the Blue Line, and that their results will be updated on IMSMA.”

Standards

Lebanon developed its first set of NMAS in 2010. Over the last two years, LMAC has been working with UNDP and other partners, under a project funded by the European Union, to revise the standards. The revision is taking place with a view to enhancing efficiency while respecting IMAS, as well as to “add new modules that were not present in our NMAS version one, as well as relevant modules that are not present in the IMAS such as mine victim assistance”. Once finalised, the revised NMAS will then need to be officially approved by the Ministry of Defence.

Humanitarian demining operators who were consulted submitted recommendations for the NMAS revision. In March 2017, LMAC distributed a revised draft NMAS to all partners, including clearance operators, for comment. LMAC’s consultative approach regarding the revision of the NMAS is welcome, and it is hoped that key recommendations concerning land release for both landmines and CMR are reflected in the final version. According to LMAC, the revised NMAS will include separate sections for landmine and CMR survey, and will permit and facilitate reporting of land release in accordance with IMAS (i.e. area cancelled by non-technical survey, area reduced by technical survey, and land released by clearance).

The revised NMAS will also include amendments in relation to the required depth of clearance, which operators had raised as an issue in the existing NMAS. Whereas the current IMAS requires clearance to 20cm, the clearance depth in the revised draft IMAS is reportedly based on the hazardous classification, i.e. whether an area is a high threat hazardous area (HTHA) or low threat hazardous area (LTHA). In general, the clearance depth will not be less than 15cm from the original surface in HTHA. As at September 2017, the new requirements for clearance depth had been reflected in the latest draft of the revised NMAS. The process for task prioritisation is also reported to be included in the revised NMAS.

In September 2017, LMAC shared the most recent draft of the revised NMAS with the GICHD, for consultation and feedback.

At present, clearance operators do have an opportunity to discuss with LMAC/RMAC specific land release considerations for assigned clearance tasks that arise during the pre-clearance assessment stage of operations. This may result in the refining of the task size or approved land release specifications. However, this approach is contingent on the decision of individual LMAC/RMAC officials and the process would benefit from a more systematic approach using objective land release principles, including prioritising use of non-technical and technical survey. This could usefully be set out in the revised NMAS.

Quality Management

Between 10% and 40% sampling is conducted during clearance operations by the organisation site supervisor and QA officer; 10% sampling is conducted by the LMAC QA/QC (quality control) officer during work. Up to 30% sampling is conducted by LMAC’s sampling team at the end of the task, but the decision to conduct sampling is decided on a case-by-case basis, and not all released areas are sampled.

Quality management incorporates weekly visits by the QA officers to field sites to ensure all quality requirements are being met, as per NMAS and the standing operating procedure (SOP) of each organisation. During mine clearance and BAC in 2016, 1,095 monitoring visits took place, of which 1,047 resulted in acceptable results, 19 led to required improvements, and 29 found unacceptable practices.

Information Management

IMSA is used by LMAC and RMAC to record land release in Lebanon. LMAC has reported that the system for database entry now more accurately reflects operational data, especially in instances where the task size/area of mine-contamination exceeds the original task size in the database. Previously, any area cleared in excess of the
original task size was entered into the database as a new task. Now, while the contaminated area and area cleared are both recorded, area in excess of the original task size is not recorded as additional tasks in the database.

Information management in Lebanon would arguably benefit from a comprehensive review of the existing baseline of mine contamination in Lebanon, in addition to objective cross-checking of new data entered into IMSMA, and the entry and extraction of land release data.

Operators

In 2016, mine clearance was conducted by international operators DanChurchAid (DCA), Handicap International (HI), and Mines Advisory Group (MAG), and by the Engineering Regiment of the LAF. Capacity was of a total of eleven mine clearance teams (nine working for international non-governmental organisations (NGOs) and the other two working for the LAF Engineering Regiment); five mechanical teams (four operated by the Engineering Regiment and one by MAG); and seven MDD teams operated by the Engineering Regiment. This represents a decrease of one MDD team over 2015. In addition, LMAC had two non-technical survey teams in 2016.

At the beginning of 2017, a fourth international operator, Norwegian People’s Aid (NPA), which was already operational in Lebanon for CMR clearance, started mine clearance operations in southern Lebanon along the Blue Line.

MDDs and machines are mostly used as secondary assets, and in some cases for technical survey, based on needs and the terrain of the area. Machines are used for ground preparation, including rubble removal and vegetation cutting. However, often the terrain is not suitable for MDDs or machines. LMAC has consistently raised concerns over lack of survey and clearance capacity to address mine and CMR contamination, which it ascribes to a lack of funding.

In 2016, DCA deployed two manual mine clearance teams. HI deployed 48 demining staff in north Lebanon in 2016, comprising four teams (each with one national site supervisor, a team leader, a deputy team leader, seven deminers, a paramedic, and an ambulance driver). This represents the same capacity as the previous year. HI’s mine clearance operations in north Lebanon and the Mount Lebanon area are determined by seasonal factors:

clearance of minefields below 1,000 metres occurs during winter (October to April), and then clearance tasks above 1,000 metres begin in April and continue through the summer, depending on snow. HI expected its demining capacity to remain the same in 2017.

In 2016, MAG deployed three manual clearance teams and one mechanical team. MAG’s staffing increased from 40 to 50, thanks to increased funding from Japan, and conversion of teams from BAC to multi-task teams. As at April 2017, MAG was the only humanitarian clearance operator in Lebanon with mechanical assets, to support manual clearance operations. MAG was expecting additional funding in 2017 for mine clearance on the Blue Line, which would enable it to further increase capacity.

The 2016 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.

UNIFIL was established in 1978 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. 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 generally 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. The UN Mine Action Service (UNMAS) continues to engage with UNIFIL regarding the possibility of UNIFIL re-engaging in humanitarian mine action, but as at September 2017, this had not yet occurred.

In 2016, operational assets were provided by two UNIFIL TCCs: Cambodia and China. These assets comprised four manual clearance teams (one Cambodian team and three Chinese teams), one Cambodian mechanical clearance team, and one Chinese EOD team. UNIFIL expected to maintain that capacity throughout 2017. This represents a decrease in capacity of one manual clearance team compared to the previous year.

UNMAS Lebanon, a project of UNMAS trains UNIFIL demining units and monitors and validates UNIFIL mine clearance along the Blue Line to ensure compliance with IMAS. UNMAS Lebanon operating funds come from UNIFIL’s assessed peacekeeping budget.

LAND RELEASE

Total mined area released by clearance in 2016 was almost 0.55km². No land was reported as reduced by technical survey, but a further 0.01m² was reported to have been cancelled by non-technical survey.

Survey in 2016

In 2016, 14,171m² in four suspected hazardous areas (SHAs) was cancelled by LMAC/RMAC non-technical survey teams. In addition, 195,139m² was confirmed as mined, in 32 SHAs.

Clearance in 2016

LMAC reported clearance of almost 0.55km² in 2016, across 31 mined areas, with the destruction of 417 anti-personnel mines, 53 anti-vehicle mines, 21 submunitions, and 62 other items of unexploded ordnance (UXO) (see Table 2). This is a significant decrease compared to the 0.92km² of mined area cleared in 2015.
Table 2: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>Submunitions destroyed</th>
<th>UXO destroyed</th>
<th>Comments</th>
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<tr>
<td>DCA</td>
<td>8</td>
<td>29,021</td>
<td>63</td>
<td>0</td>
<td>5</td>
<td>7</td>
<td>4 of the 5 UXO destroyed by LAF</td>
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<tr>
<td>HI</td>
<td>13</td>
<td>109,127</td>
<td>296</td>
<td>3</td>
<td>0</td>
<td>27</td>
<td>19 of the 25 UXO destroyed by LAF</td>
</tr>
<tr>
<td>MAG</td>
<td>5</td>
<td>24,384</td>
<td>57</td>
<td>49</td>
<td>0</td>
<td>19</td>
<td></td>
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<tr>
<td>LAF Emergency</td>
<td>5</td>
<td>401,474</td>
<td>1</td>
<td>1</td>
<td>16</td>
<td>9</td>
<td></td>
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<td>Totals</td>
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<td></td>
<td>31</td>
<td>566,006</td>
<td>417</td>
<td>53</td>
<td>21</td>
<td>62</td>
<td></td>
</tr>
</tbody>
</table>

AP = Anti-personnel  AV = Anti-vehicle

An additional 108,420m² was cleared by the LAF during rapid response call-outs in 2016, during which 59 anti-personnel mines, 28 anti-vehicle mines, 133 submunitions, and 794 other items of UXO were destroyed.

Furthermore, UNIFIL reported destruction of 25 anti-personnel mines during its 2016 operations on the Blue Line.

According to LMAC, mine clearance focuses on CHAs, and most of the tasks assigned for clearance were found to have mines. However, HI reported that in eight of the thirteen areas it cleared, representing 28% of the overall mined area cleared, it did not find mines. This was said to be largely due to the unconventional nature of the militia minefields being cleared by HI in North Lebanon and the fact that the CHAs of these minefield tasks are not always accurately defined. Some clearance tasks were created due to mine incidents having occurred, but subsequently no further contamination was discovered. There have also been incidences of clearance tasks created due to a fear of mines, rather than actual evidence of contamination.

HI’s clearance output increased by 12% in 2016, compared to the previous year, and the daily productivity of the deminers increased by 17%. HI attributed this increase to the experience of the HI teams; good collaboration with LMAC, especially with regards to the allocation and management of tasks; and to regular internal and external QC visits.

While some clearance task areas do not contain any contamination, others require clearance of a much larger area than recorded in the IMSMA database. HI reported that since its first mine clearance operation in Lebanon in 2011, it has cleared 71% more area than the CHA initially tasked and outlined in the task dossiers received from LMAC. Again, this is largely due to the lack of clearly defined CHAs for militia minefields. There have also been reports of mines being found completely outside the task area, and which were destroyed during clearance of access lanes.

In addition, the CHAs tasked by LMAC to clearance operators do not include obligatory fadeout distances, which can considerably increase the overall size of the task.

Accordingly, in certain areas, additional non-technical survey and technical survey could help to more accurately define areas of actual contamination in the militia minefields. 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.

Under the current NMAS, the search/clearance depth for mines in Lebanon is 20cm. While LMAC reports that the LAF have occasionally found mines at a depth of 20cm, humanitarian clearance operators have reported that based on empirical evidence from their own operations, mines are typically found much closer to the surface, and not below 15cm. As such, operators view clearance to 20cm as unnecessary, and have recommended that the mandated clearance depth could and should be reduced. Those mines that are found deeper than 15cm are much deeper than 20cm, and hence would not be detected based on a specified clearance depth of 20cm.

LMAC encourages clearance operators to prepare an accurate pre-clearance report, and as and when required LMAC/RMAC discusses the required clearance depth for specific tasks with the operator, which may be approved at 13cm instead of 20cm. However, this approach is contingent on the decision of individual officials and the process would benefit from a more systematic approach, which could usefully be set out in the revised NMAS. As at September 2017, the latest draft of the revised NMAS had been amended and the required clearance depth reduced from 20cm to 15cm.

Manual clearance is LMAC’s preferred primary asset for mine clearance in Lebanon, and a 10-metre fadeout is required for anti-personnel mines, and a 20-metre fadeout for anti-vehicle mines. In conventional minefields, the fadeout area is typically the responsibility of the LAF, which uses secondary assets to do so (MDDs and mechanical assets). MAG, however, believes that mechanical assets could also usefully be deployed as a primary asset.

Deminer Safety

One deminer from MAG was injured by an anti-personnel mine in southern Lebanon in November 2016.
ARTICLE 5 COMPLIANCE

Lebanon is not a party or signatory to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.

Clearance of mined areas was expected to be completed by the end of 2020, in accordance with the 2011–20 national strategy. Meeting this target, though, depends on deployment of considerable resources: an estimated 125 manual clearance teams, 2 mechanical teams, and 9 two-strong MDD teams. Current mine clearance capacity is far lower.

Lebanon has cleared 4.28km² of mined area in the last five years, as detailed in Table 3.

Table 3: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.55</td>
</tr>
<tr>
<td>2015</td>
<td>0.92</td>
</tr>
<tr>
<td>2014</td>
<td>1.28</td>
</tr>
<tr>
<td>2013</td>
<td>0.54</td>
</tr>
<tr>
<td>2012</td>
<td>0.99</td>
</tr>
<tr>
<td>Total</td>
<td>4.28</td>
</tr>
</tbody>
</table>

Lebanon has reported contributing US$9 million annually towards mine action in Lebanon, to support the activities of LMAC, including mine and CMR survey and clearance, and QA/QC staff who manage and monitor clearance activities. In addition, LAF provided companies for rapid response across Lebanon.

Lack of international funding continues to pose a challenge to demining operations. The EU has indicated that its funding for mine and CMR clearance, currently provided to DCA, HI, MAG, and NPA, will likely not be extended after the end of the current grant periods in 2018.

According to LMAC, in order for Lebanon to complete mine clearance by the end of 2020, and in line with 2011–20 strategy, it would need the 138 clearance team capacity as specified in the strategy. Current capacity is far below this level, and as such, Lebanon is well behind its targets for mine clearance. The impact of working in difficult terrain and weather conditions has also been identified as an obstacle to meeting this deadline. Based on the reported 20km² of total mined area as at the end of 2016 (excluding the Blue Line), and average clearance rates of less than 1km² per year, it could take many years for Lebanon to become mine-free.

While operators agree that lack of capacity is certainly holding back clearance, they also believe that swifter progress could come from improved land release methodology. This warrants further attention from LMAC as well as other mine action stakeholders in Lebanon.

LMAC has asserted that the results of the second mid-term review of the strategic mine action plan for 2011–20, conducted in 2016 and due to be completed in 2017, will help to reflect more accurately Lebanon’s expected landmine clearance completion date.
Ibid.

E-mail from Brig.-Gen. Elie Nassif, LMAC, 24 April 2017; Samuel Davaux, HI, 4 April 2017; and Dave Willey, MAG, 25 April 2017. The area of cleared land reported by MAG was different from that reported by LMAC. MAG recorded clearing 25,167m². Furthermore, there were some discrepancies between what was reported to Mine Action Review versus LMAC’s Annual Report for 2016, which stated that MAG destroyed 56 anti-personnel mines, 50 anti-vehicle mines, and 18 other items of UXO; that HI cleared 299 anti-personnel mines; and that the Engineering Regiment cleared 474,009m², and destroyed 60 anti-personnel mines, 29 anti-vehicle mines, and 2,382 other items of UXO. DCA declined to provide clearance data to Mine Action Review, so cross-verification was not possible.

Email from Brig.-Gen. Elie Nassif, LMAC, 24 April 2017.

Email from Henry Francois Morand, UNMAS, 18 September 2017.

Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.

Email from Samuel Davaux, HI, 4 April 2017.

Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016; and Chris Chenavier, HI, Toula, 14 April 2016, and email from Samuel Davaux, HI, 13 July 2017.

Email from Samuel Davaux, HI, 4 April 2017.

Interview with Chris Chenavier, HI, Toula, 18 April 2016.

Ibid.


Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016; and Chris Chenavier, HI, Toula, 18 April 2016, and email from Samuel Davaux, HI, 13 July 2017.

Email from Samuel Davaux, HI, 4 April 2017.

Interview with Chris Chenavier, HI, Toula, 18 April 2016.

Interview with Chris Chenavier, HI, Toula, 18 April 2016.


Interviews with Bekim Shala, then Programme Manager, MAG, Nabatiyeh, 14 April 2016; and Craig McDiamid, NPA, Tyre, 12 April 2016.

Email from Brig.-Gen. Elie Nassif, LMAC, 24 April 2017.

Ibid.


Email from Samuel Davaux, HI, 20 July 2017.


Email from Samuel Davaux, HI, 20 July 2017.


Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.


Email from Craig McDiamid, NPA, 30 March 2017.


Stations of Lebanon, CCM First Meeting of States Parties, Vientiane, September 2010; Fourth Meeting of States Parties, Luwaka, September 2013; Fifth Meeting of States Parties, Costa Rica, September 2014; Mine Action Support Group meeting, 18 October 2013; and CCM intersessional meetings, 9 April 2014; and CCM Article 7 Report (for 2013), Form F.


Emails from Samuel Davaux, HI, 4 April and 13 July 2017; and Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.

Email from Chris Chenavier, HI, 7 April 2016.

Emails from Samuel Davaux, HI, 4 April 2017.


Email from Dave Willey, MAG, 25 April 2017.

Ibid.

Länder
Mine contamination in Libya is a legacy of the Second World War as well as subsequent armed conflict with Egypt in 1977 and with Chad in 1980–87, which resulted in mines being laid on Libya’s borders with these two neighbours. The border with Tunisia is also believed to be affected. During Colonel Muammar Qaddafi’s four decades in power, mines were emplaced around a number of locations, including military facilities and key infrastructure.

Mines were used by both sides in the 2011 conflict leading to Colonel Qaddafi’s overthrow. The only confirmed instance of landmine use by rebels occurred in Ajdabiya, but other locations where pro-government elements laid mines included Brega, Khusha, Misrata, and the Nafusa Mountains. The escalation of conflict in Libya in 2014 brought new reports of mine use by armed groups fighting around Tripoli airport.

Table 1 lists national contamination data from the Libyan Mine Action Centre (LibMAC) Information Management System for Mine Action (IMSMA) database as at February 2017. However, this is believed to significantly underreport the total extent of contamination as most suspected areas have not been surveyed.

<table>
<thead>
<tr>
<th>District</th>
<th>City</th>
<th>SHAs</th>
<th>Area (m²)</th>
<th>CHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Misrata</td>
<td>Taminah</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>832,720</td>
</tr>
<tr>
<td>Sirte</td>
<td>Abu Grain</td>
<td>1</td>
<td>222,934,834</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sirte</td>
<td>Sirte</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>95,824</td>
</tr>
<tr>
<td>Sirte</td>
<td>Wadi Jarif</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7,698,699</td>
</tr>
<tr>
<td>Sirte</td>
<td>Wishka</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>40,557,456</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>1</td>
<td>222,934,834</td>
<td>7</td>
<td>48,984,699</td>
</tr>
</tbody>
</table>

SHAs = Suspected hazardous areas  CHAs = Confirmed hazardous areas
Six of the listed CHAs, totalling almost 41.5km², are contaminated by anti-personnel mines, while the seventh, of some 7.5km², is contaminated by anti-vehicle mines. The massive single SHA, of almost 223km², is suspected to contain only anti-vehicle mines. It is likely that further survey will drastically reduce these figures.

In addition, during non-technical survey in 2016, Danish Demining Group (DDG) identified a suspected mined area, not reflected in Table 1, in Tawargha.

New contamination was added to the problem in 2016, with locally produced mines suspected to have been laid during 2016 by Islamic State in areas that they controlled, such as in Sirte. In July 2017, the engineering divisions of Operation Dignity continued to clear landmines 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.

**PROGRAMME MANAGEMENT**

There is no national mine action authority, policy, or strategy for Libya. Mine action exists in a fragmented and violent political context. Following years of armed conflict, a new United Nations-backed “unity” government, the Government of National Accord, was formally installed in a naval base in Tripoli in early 2016. Through early 2017, however, it continued to face opposition from two rival governments and a host of militia forces.

LibMAC was mandated by the Minister of Defense to coordinate mine action in December 2011. As at March 2017, it was operating under the UN-backed Government of National Accord. Its headquarters are in Tripoli, in the west of the country. In 2015 and 2016, it did not have an office in the east, even though it coordinated with institutions in Benghazi, and in April 2016, a regional Operations Manager was appointed for the east. In July 2016, LibMAC also established a small office in Misrata. The operating costs and salaries for LibMAC are funded by the United States Department of State and administered by ITF Enhancing Human Security (ITF).

**Standards**

National standards in English and Arabic, developed with the support of UNMAS, were finalised in March 2017.

**Information Management**

LibMAC received technical support for IMSMA from the Geneva International Centre for Humanitarian Demining (GICHD) and UNMAS in 2016.

**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 Protection. These institutions liaise with LibMAC but are not tasked or accredited by them, nor do they provide clearance reports to the Centre. The deteriorating security situation resulted in the withdrawal of UNMAS and international mine action operators from Libya in mid-2014. UNMAS has been operating from Tunis since November 2014, from where it supports mine action in Libya, through training and advice to LibMAC and coordination of the international mine action response.

In 2016, DDG was newly accredited for non-technical survey, explosive ordnance disposal (EOD), and risk education, and went on to conduct operations in the south of Libya. By the end of 2016, it had three non-technical survey teams and one EOD team, mainly operating in Sabha, in the south-west of the country.

National NGO Free Fields Foundation (3F) has a formal partnership with DDG for organisational development and technical capacity building but has not yet attained the requisite standard to carry out non-technical survey and EOD independently. It has, however, been granted permission to operate under DDG’s accreditation and under its supervision. 3F, which is mentored and monitored by technical advisors remotely via Skype from Tunis, is operational in the west of Libya, with two EOD teams and two non-technical survey teams.

Handicap International (HI) trained two local partners in non-technical survey in 2016: Peace Organisation from Zintan, and World Without War (3W) from Misrata. Both organisations received accreditation for non-technical survey from LibMAC after the training. Following the training, Peace Organization conducted non-technical survey under remote management by HI from Tunis.

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

Non-technical survey of former confrontation areas was conducted in 2016 to identify suspected and confirmed mined areas, but no contaminated area is believed to have been released through clearance during the year.

Survey in 2016

In 2016, non-technical survey was conducted in Sirte municipality by LibMAC, army engineers, the police, and 3F; in Misrata municipality, including Tawargha town, by the army engineers, volunteers, and 3F; in Benghazi by the NSA and army engineers; in Sabha municipality by DDG; and in Al-Gwalish in the Nafusa mountains by HI’s national partners.19

In Benghazi, a total of 18 SHAs in areas earmarked for critical infrastructure development were surveyed by the police, NSA, and army non-technical survey teams.20 As at February 2017, however, no resulting data had been approved for entry into IMSMA.21 Peace Organisation, with HI supervision, conducted non-technical survey in Al-Gwalish over an area of 148km², confirming six hazardous areas (total size not specified).22 This data has also not been approved for entry into IMSMA.23 Other data, entered into the IMSMA database, is reported in Table 2.

Table 2: Non-technical survey of mined areas (January 2016–February 2017)24

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs identified</th>
<th>Total area (m²)</th>
<th>CHAs identified</th>
<th>Total area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDG/3F</td>
<td>1</td>
<td>222,934,835</td>
<td>4</td>
<td>41,390,175</td>
</tr>
<tr>
<td>LibMAC</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>7,608,573</td>
</tr>
<tr>
<td>Totals</td>
<td>1</td>
<td>222,934,835</td>
<td>7</td>
<td>48,998,748</td>
</tr>
</tbody>
</table>

Clearance in 2016

No mine clearance was reported for 2016. Battle area clearance (BAC) was reportedly conducted in 2016 by the national authorities and volunteer groups in several locations across the country. However, this clearance was not coordinated with LibMAC, and no land release certificates were issued.25 DDG started EOD operations at the end of 2016.26

ARTICLE 5 COMPLIANCE

Libya is not a state party to the APMBC. Nonetheless, 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.

3 Email from Abdulatif Abujarida, IMSMA Manager, LibMAC, 20 February 2017.
4 Emails from Abdulatif Abujarida, LibMAC, 20 February and 9 March 2017.
5 Email from Lutz Kosewsky, Operations Manager, Danish Demining Group (DDG), 23 February 2017.
6 Email from Lutz Kosewsky, DDG, 22 February 2017.
8 Landmines in Africa blog, July 2017, at: https://landminesinafrica.wordpress.com/tag/libiya/.
9 Skype interview with Ezzedine Ata Alia, Administration Manager, LibMAC, 20 March 2017.
10 Interview with Col. Turjoman, Director, LibMAC, in Geneva, 10 January 2017.
11 Email from Roman Turšič, Head of Implementation Office Libya/Afghanistan, ITF, 26 February 2017.
13 Email from Lyuba Guerassimova, Programme Officer, UNMAS, 28 February 2017.
14 Interview with Col. Turjoman, LibMAC, in Geneva, 10 January 2017.
16 Email from Lutz Kosewsky, DG, 22 February 2017.
17 Ibid.
18 Email from Catherine Smith, Mine Action Desk Officer, HI, 22 February 2017.
19 Interview with Col. Turjoman, LibMAC, in Geneva, 10 January 2017.
21 Email from Abdulatif Abujarida, LibMAC, 20 February 2017.
22 Email from Catherine Smith, HI, 22 February 2017.
23 Email from Abdulatif Abujarida, LibMAC, 20 February 2017.
24 Ibid.
25 Interview with Col. Turjoman, LibMAC, in Geneva, 10 January 2017; and Skype interview with Abdulatif Abujarida, LibMAC, 20 March 2017.
26 Email from Lutz Kosewsky, DG, 22 February 2017.
The exact extent of contamination of the area of Western Sahara controlled by Morocco, on the west side of the Berm, is not known. In the past, Morocco declared, highly improbably, that a total of 120,000km² of area was contaminated, 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.

In April 2013, Morocco had identified ten areas as having been mined by the Polisario Front since 1975: Bir Anzarane, Douiek, Gerret Auchfaght, Gor Lbard, Gor Zalagat, Hagounia, Idiriya, Imlili, Itgui, and Tarf Mhkinza. It repeated this list in a voluntary Article 7 report it submitted in November 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.

In its voluntary Article 7 report for 2016, Morocco reported that two people were killed and a further seventeen injured during the year.

**RECOMMENDATIONS FOR ACTION**

- Morocco should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Morocco should continue to submit voluntary APMBC Article 7 reports.
- Morocco should seek assistance to develop a functioning civilian mine action programme.
PROGRAMME MANAGEMENT

Morocco does not have a national mine action authority or a mine action centre.

Standards

Morocco has not adopted national mine action standards, but reported, most recently in April 2013, that "normal safety and environmental protection standard have been followed."8

Operators

Morocco initiated major demining efforts in 2007, following an increase in the number of incidents. All mine clearance in Morocco is conducted manually by the Royal Moroccan Army (RMA).

In March 2016, it was reported that United States (US) Marines were providing training to build the demining capacity of the RMA. US instructors covered ordnance identification, safety, basic demolition, and basic combat casualty care.9

The UN Mission for the Referendum in Western Sahara (MINURSO) has been coordinating mine action activities with both parties to the conflict. In March 2016, however, Morocco required that MINURSO international civilian personnel "leave the Kingdom of Morocco within three days".10 This included all international staff overseeing the UN Mine Action Service (UNMAS)-managed demining project within MINURSO, resulting in the suspension of all demining activities since 20 March 2016.11 Morocco demanded the staff leave because UN Secretary-General Ban Ki-moon had used the term "occupation" to describe the situation east of the Berm during a visit to the region.12

LAND RELEASE

Morocco has not reported with any detail on its release of mined areas in recent years. In its voluntary Article 7 report for 2016 Morocco reported release of 283km² with the destruction of 288 anti-personnel mines, 170 anti-vehicle mines, and 1,899 explosive remnants of war (ERW).13

In his April 2016 report to the UN Security Council, the UN Secretary-General noted that the RMA had reported "clearing" more than 220km² of land to the west of the berm with the destruction of 9,873 items, including "anti-tank" mines and anti-personnel mines, UXO, and small arms ammunition.14 No further details were provided.

In 2010, Morocco declared it had employed 10,000 deminers, though only 400 detectors were at their disposal at that time.15 This raised serious questions both about the procedures being used and the accuracy of clearance figures being reported.

In April 2016, Morocco was planning to launch a new effort to clear mines from the berm that divides Western Sahara into the Moroccan-controlled area and the Polisario-controlled area. The units to be deployed were reportedly those trained by the US Marines.16

ARTICLE 5 COMPLIANCE

Morocco is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.

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.
3 Voluntary Article 7 Report [for 2014], Form C.
4 Voluntary Article 7 Report, April 2013, Form C.
5 Voluntary Article 7 Report [for 2014], Form C.
6 Voluntary Article 7 Report, April 2011, Form C.
7 Voluntary Article 7 Report [for 2016], Form C.
8 Voluntary Article 7 Report, April 2013, Form C.
11 Ibid., §39.
13 Voluntary Article 7 Report [for 2016], Form C.
15 Statement of Morocco, intersessional meetings (Standing Committee on General Status and Operation of the Convention), Geneva, 23 June 2010.
MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Improving performance</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: VERY POOR 1.4 1.8

PERFORMANCE COMMENTARY

Myanmar has still not taken steps to create a functioning national mine action programme. It authorised the first non-technical survey in 2016, but does not permit marking of hazardous areas or clearance.
CONTAMINATION

Myanmar is heavily mine-affected as a result of conflicts between the Tatmadaw and numerous non-state armed groups affiliated with ethnic minorities which started after independence in 1948. Mined areas are located in areas of Myanmar adjacent to borders with Bangladesh, China, and Thailand, but are a particular threat in northern and eastern parts of the country.

Some 55 townships (out of a total of 325) in 10 states and regions are believed to suffer from some degree of mine contamination, primarily from anti-personnel mines. Karen (Kayin) state and Pegu (Bago) division are among those with the heaviest mine contamination and the highest number of recorded victims. Townships on the Indian border of Chin state and in the Sagaing region also reportedly have suspected hazardous areas.

Additional mine use occurred in 2017 when the Tatmadaw reportedly planted anti-personnel mines on the border between northern Rakhine State and Bangladesh and during a military campaign in August and September.

No estimate exists of the extent of contamination but suspected hazardous areas have been reported in the following states and townships:

- Kayah state: all seven townships
- Kayin state: all seven townships
- Kachin state: Chipwi, Hpakant, Mansi, Mogaung, Momauk, Myitkyina, Tsawlaw, and Wainmgaw
- Mon state: Bilin, Kyaikto, Mawlamyine, Thanbyuzayat, Thaton, and Ye
- Bago region: Kyaukkyi, Shwekyin, Tantabin, and Taungoo
- Rakhine state: Maungdaw
- Shan state: Hopong, Hsenwi, Hsihseng, Konkyan, Kyaukme, Langkho, Loilen, Mawkmai, Mngpan, Mngton, Monghpyak, Namhsan Tachileik, Namtu, Nanhkan, Yaksawk, and Ywangan
- Tanintharyi region: Bokpyin, Dawei, Tanintharyi, Thayetchaung, and Yebyu
- Chin state and Sagaing region.

Myanmar’s Mine Risks Working Group (MRWG) recorded 161 mine/explosive remnants of war (ERW) casualties in 2016: 41 killed and 120 injured. Half these casualties (20 dead, 79 injured) occurred in Shan State and another 55 casualties (18 dead, 37 injured) in Kachin State.

PROGRAMME MANAGEMENT

The government set up a Myanmar Mine Action Centre (MMAC) under the Myanmar Peace Centre (MPC) in 2013 but the centre was never fully staffed. The MPC was dissolved at the end of March 2016 and replaced by a National Reconciliation and Peace Centre which reports to the head of government. State Counsellor Aung San Suu Kyi, however, said concluding a National Ceasefire Agreement with non-state actors was a precondition for proceeding to survey and clearance and would be her administration’s priority. The government formed since March 2016 under her leadership had not, as at September 2017, formulated a clear direction for mine action or established a centre to coordinate it.

The Department of Social Work leads the MRWG, co-chaired with the United Nations Children’s Fund (UNICEF), which comprises 10 ministries and 41 international and national organisations. The group meets quarterly and focuses on risk education and victim assistance. In the process it has overseen the first steps to systematic survey of mine contamination.

Operators

International demining organisations, including DanChurchAid (DCA), Danish Demining Group (DDG), The HALO Trust, Handicap International, Mines Advisory Group (MAG), Norwegian People’s Aid (NPA), and the Swiss Foundation for Mine Action (FSD), have offices in Yangon and some provincial centres and through community liaison or risk education have been able to build up knowledge of the location of hazardous areas in some states.
LAND RELEASE

Operators have not received authorisation to conduct marking or clearance from either the government or ethnic minority authorities but the Department of Social Work approved full non-technical survey in specified government-controlled areas for the first time in 2016.

MAG, after two years of risk education and community safety mapping in Kayah State, received authorisation from the Department of Social Work for a pilot survey in government-controlled areas, which it conducted between July and October 2016 focusing on 16 villages of Loikaw township. Teams surveyed 30 of 47 hazardous areas covering 44,828m² identifying contamination by anti-personnel mines and ERW. In December, the Department authorised MAG to conduct non-technical survey in 74 villages across 6 townships. By the end of June 2017, MAG had surveyed 78 hazardous areas covering 77,782m². MAG found mines particularly in the vicinity of electricity pylons, even those outside conflict areas, underscoring the importance of investigating areas around other key infrastructure.

In 2017, MAG had five community liaison teams working full-time on non-technical survey in all seven of Kayah state’s townships. It had four survey teams in Shan state working out of Taunggyi and conducting full non-technical survey in three townships and community mapping in two others. It also had two teams undertaking initial community surveys in Kayin State as well as working with a local partner doing similar baseline surveys in non-government controlled areas, and three teams in the southern Tanintharyi region.

The HALO Trust had conducted risk education under an MoU with the Department of Social Work authorising it to work in all seven townships of Kayin state and some townships of Bago, Mon, Kachin, and Shan states. In 2016, it opened offices in Hpa-An in Kayin state, and in Lashio in northern Shan state. The MoU was amended in July 2017 expanding the approved operating area to include 18 townships of Shan state and authorising it to conduct non-technical survey. The HALO Trust was working in three townships of Kayin state (Hlaingbwe, Hpa-An, and Thandaungyi) and deployed three survey teams to map polygons. It planned to convert risk education teams to survey and to increase the number of survey teams to between six and eight. In Shan state, HALO Trust was conducting risk education and waiting for funding to begin non-technical survey.

DDG, which has six teams conducting risk education in Kachin, northern Shan, and Kayah states also received Department of Social Work authorisation to undertake non-technical survey in Kayah state’s Demoso township where it deployed two teams with three surveyors each starting in May 2017.

ARTICLE 5 COMPLIANCE

Myanmar is not a state party to the APMBC. However, it has obligations under customary international human rights law, particularly by virtue of its duty to protect life, to clear anti-personnel mines as soon as possible.

1 Myanmar is divided into states and regions. States are the “home area” of ethnic groups. Other areas, which are not identified with a specific ethnic group, are administrative regions. The former military junta changed the name from Burma to Myanmar in 1989 and also changed the names of some states. Many ethnic groups within the country still prefer to use the name Burma. Internal state and division names are given in their common form or with the name adopted by the ruling State Peace and Development Council (SPDC) in parentheses.

2 Research by Landmine Monitor. Data sources included casualty information, sightings of mine warnings, and reports by NGOs and other organisations of use, as well as interviews with field staff and armed forces personnel. The survey included casualty data from January 2007 through September 2015 and data from other informants from January 2008 through September 2015.


6 Interviews with Aksel Steen-Nilsen, Country Director, NPA; Greg Crowther, Regional Director, South and South East Asia, MAG, in Phnom Penh, 1 May 2017; and email from Melissa Andersson, Programme Manager, NPA, Yangon, 27 September 2017.


8 Email from Bekim Shala, Country Director, MAG, 27 September 2017.

9 Email from Melissa Andersson, Programme Manager, MAG, 25 September 2017.

10 Email from Pascal Simon, Programme Manager, DDG, 28 September 2017; Danish Refugee Council/DDG, “Deployment and activities in Myanmar,” July 2017.
The precise extent of the mine problem in North Korea is not known. North Korea admitted in 1998 that it had laid mines in the Demilitarised Zone (DMZ) between the north and south of the peninsula. The affected areas are reported to be marked and fenced. In early 2006, officials commented to the APMBC Implementation Support Unit (ISU) that North Korea had not laid mines elsewhere in the country, despite fears that, among others, sections of the east coast were also mined.

In April 2017, a British tabloid newspaper claimed that Kim Jong-un had buried more than one million mines along the border with South Korea to try and prevent United States (US) tanks from invading across the DMZ. It did not provide a credible source for this claim. However, in 2016 as in the previous year, there were reports of new use of mines by North Korea, in areas both on its side of the DMZ, and in those patrolled by South Korea.

On 23 August 2016, South Korean officials reported that North Korea had planted landmines near the village of Panmunjom, which is jointly administered by North Korea and the United Nations (UN) Command inside the DMZ. A South Korean official stated “the North Korean’s military was seen laying several landmines last week on the North’s side of the Bridge of No Return”, which spans the military demarcation line. The UN Command stated it “strongly condemns” any action by North Korea that jeopardises the safety of personnel in the DMZ, but indicated it would not speculate on the North’s actions.

**RECOMMENDATIONS FOR ACTION**

- The Democratic People’s Republic of Korea (North Korea) should cease all use of anti-personnel mines.
- North Korea should accede to the Anti-Personnel Mine Ban Convention (APMBC) and clear all mined areas as a matter of priority.
In August 2015, two South Korean soldiers were seriously wounded in a mine blast while conducting a routine patrol inside the DMZ near the town of Paju, 50km north of Seoul. The US-led UN Command Military Armistice Commission sent a multi-national Special Investigation Team to examine the incident, which concluded “the North Korean People’s Army violated paragraphs 6, 7 and 8 of the Armistice Agreement by emplacing wooden box land mines along a known Republic of Korea patrol route in the southern half of the Demilitarized Zone, injuring two Republic of Korea soldiers. Additionally, the investigation determined that the devices were recently emplaced, and ruled out the possibility that these were legacy landmines which had drifted from their original placements due to rain or shifting soil.” North Korea rejected the allegation, stating it would make “no sense” for it to use landmines south of the border and that it only used mines in self-defence.

In June 2015, it was also reported to the media by a South Korean official that North Korean forces had been using anti-personnel mines along the DMZ border “for the past couple of months”, ostensibly to prevent North Korean soldiers from fleeing to South Korea.

PROGRAMME MANAGEMENT
North Korea has no functioning mine action programme.

LAND RELEASE
No release of mined area is believed to have taken place in 2016, as in earlier years.

ARTICLE 5 COMPLIANCE
North Korea is not a state party or signatory to the APMBC but nonetheless has obligations under customary international human rights law to protect life, which requires the clearance of mines as soon as possible.

2 Email from Kerry Brinkert, Director, ISU, 1 February 2006.
3 J. Lockett, “KIM GO Boom: North Korea has planted more than ONE MILLION landmines along its border with the South to prevent a land invasion”, The Sun, 19 April 2017, at: https://www.thesun.co.uk/news/3362127/north-korea-landmines-border-south-land-invasion/.
9 “North Korea plants landmines in DMZ apparently to prevent soldiers fleeing”, Yonhap, 14 June 2015, at: http://english.yonhapnews.co.kr/national/2015/06/14/0301000000AEN201506140007000315.html.
Pakistan remains heavily affected by mines and other ordnance from the Soviet occupation of Afghanistan (1979–89) and three wars with India, as well as from more recent and continuing conflicts in areas bordering Afghanistan, including, in particular, the Federally Administered Tribal Areas (FATA).

In 2016, 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 the army has not laid any more since then. It has, though, continued to report improvised explosive device (IED) attacks, including locally produced anti-personnel mines and anti-vehicle mines in 2016. Pakistani non-governmental organisations (NGOs) have reported that, in earlier years, mines and other explosive devices caused hundreds of casualties every year, mostly among civilians.

**RECOMMENDATION FOR ACTION**

- Pakistan should accede to the Anti-Personnel Mine Ban Convention (APMBC) and clear mined areas as a matter of priority.
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.4

LAND RELEASE

There are no reports of formal land release in 2016. Pakistan reported attacks using IEDs and anti-personnel and anti-vehicle mines “all over the country” and said that in 2016 the Army destroyed 7,370 “unserviceable” anti-personnel mines.5

ARTICLE 5 COMPLIANCE

Pakistan is not a state party or signatory to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.

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2 CCW Article 13 Report (for 2016), Form B.
4 Interviews with Khalil Ur Rehman, Director, Disarmament Division, Ministry of Foreign Affairs, Islamabad, 9 April 2011; with Muhammad Kamran Akhtar, then-Director, Disarmament Division, Ministry of Foreign Affairs, Islamabad, 23 April 2009, and 10 April 2007; with Brig. Azmat Ali, Spokesman, Inter Services Public Relations, Peshawar, 22 March 2010; and with Sifat Ghayur, Inspector General, Frontier Constabulary, Peshawar, 19 March 2010.
5 CCW Amended Protocol II Article 13 Report (for 2016), Form F.
PALESTINE

PALESTINE

Palestine continued to make progress in demining in 2016, with the completion of clearance by The HALO Trust of the Husan minefield in the governorate of Bethlehem in January 2016, followed by the clearance of the Um Daraj minefield in the governorate of Hebron in November 2016. In addition, in another positive development the Israeli National Mine Action Authority (INMAA) began a survey of Israeli- and Jordanian-laid minefields in the Jordan Valley in early 2017.

MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: AVERAGE

|                  | 5.4  | 5.2  |

PERFORMANCE COMMENTARY

Palestine continued to make progress in demining in 2016, with the completion of clearance by The HALO Trust of the Husan minefield in the governorate of Bethlehem in January 2016, followed by the clearance of the Um Daraj minefield in the governorate of Hebron in November 2016. In addition, in another positive development the Israeli National Mine Action Authority (INMAA) began a survey of Israeli- and Jordanian-laid minefields in the Jordan Valley in early 2017.
RECOMMENDATION FOR ACTION
■ Palestine should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.

CONTAMINATION
In Palestine, hazards encompass minefields, military training zones, and areas of confrontation where many explosive devices remain. A 2013 survey by the Palestine Mine Action Centre (PMAC) found that Palestine has mined areas covering a total of 19.9 km², marginally less than its previous estimate of 20.4 km². 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.

According to The HALO Trust, as at August 2017, more than 0.4 km² of confirmed mined area exists (excluding the Jordan Valley) across seven minefields in Palestinian-controlled territory and two minefields are in no-man’s-land between the West Bank and Israel. All nine minefields [see Table 1] were laid by the Jordanian army.

Table 1: Confirmed mine contamination (as at August 2017) (excluding the Jordan Valley)*

<table>
<thead>
<tr>
<th>Governorate</th>
<th>Minefield Task Name</th>
<th>Contamination</th>
<th>CHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jenin</td>
<td>Araba</td>
<td>AV and AP mines</td>
<td>1</td>
<td>11,451</td>
</tr>
<tr>
<td>Qabatiya</td>
<td>AV and AP mines</td>
<td>1</td>
<td>11,300</td>
<td></td>
</tr>
<tr>
<td>Yabad</td>
<td>AV and AP mines</td>
<td>1</td>
<td>48,054</td>
<td></td>
</tr>
<tr>
<td>Deir Abu Daif</td>
<td>AV and AP mines</td>
<td>1</td>
<td>14,506</td>
<td></td>
</tr>
<tr>
<td>Tul Kareem</td>
<td>Nur a-Shams</td>
<td>AV and AP mines</td>
<td>1</td>
<td>37,810</td>
</tr>
<tr>
<td>Qalqiliya</td>
<td>Karne Shomron</td>
<td>AV and AP mines</td>
<td>1</td>
<td>66,726</td>
</tr>
<tr>
<td>Jinsafut</td>
<td>AP mines</td>
<td>1</td>
<td>37,810</td>
<td></td>
</tr>
<tr>
<td>Ramallah</td>
<td>No Man’s Land Yalo</td>
<td>AV and AP mines</td>
<td>1</td>
<td>104,226</td>
</tr>
<tr>
<td>No Man’s Land -Canada Park</td>
<td>AV and AP mines</td>
<td>1</td>
<td>85,708</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>9</td>
<td></td>
<td></td>
<td>417,591</td>
</tr>
</tbody>
</table>

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

Four of the twelve governorates in the West Bank still contain mined areas, as at August 2017. The governorates of Bethlehem and Hebron are no longer considered contaminated, after clearance of the Husan task, the sole remaining minefield in Bethlehem governorate, was completed on 19 January 2016, and clearance of the Um Daraj and Surif minefields in Hebron governorate was completed on 6 November 2016 and 1 June 2017 respectively.

Most mined areas are located in Area C of the West Bank (see below) along the border with Jordan, which covers approximately 60% of the West Bank and is under full Israeli control for security, planning, and construction.

According to the United Nations (UN), of the estimated total of 90 minefields in the West Bank, those in more “central areas” – the governorates of Jenin, Qalqiliya, and Tulkarm – are priorities for clearance. In addition to posing a risk to civilians, mines affect the socio-economic development of Palestinian communities. Mined areas are located in, or close to, populated areas, mostly on privately owned agricultural and grazing land or along roads used daily by communities; and are either poorly marked or not marked at all. They are accessible to the population, and in some cases are even under cultivation. These minefields were laid by the Jordanian military and are all located in areas under Israeli security control. Clearance operations must therefore be coordinated with the Israeli authorities, in addition to PMAC.
PROGRAMME MANAGEMENT

An authorisation from the Palestinian Authority’s prime minister on 25 March 2012 set up PMAC, appointed its 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

PMAC currently has ten employees15 and is staffed with personnel from the Palestinian National Security Forces, Civil Police, and Civil Defence. PMAC also has a team of 30 personnel who were trained by UNMAS for demining a few years ago, but to date, have not been authorised or equipped to do so, and no agreement has been reached with Israel on this matter.15 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.17

Mine action is subject to the 1995 Interim Agreement on the West Bank and the Gaza Strip, under which the West Bank is divided into three areas: Area A is under full Palestinian civilian 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 control of security, planning, and construction.18

Strategic Planning

According to PMAC, a three-year strategic mine action plan up to 2020 has been drafted for Palestine,19 but as at September 2017, the details of the plan had not yet been shared with mine action partners.20

Survey and clearance in the West Bank, which is conducted by The HALO Trust, is prioritised by HALO Trust’s donors, in conjunction with the INMAA and PMAC.21

Legislation and Standards

In November 2016, Palestine announced that it was seeking to adopt and enact a mine action law. Palestine was hopeful that it would complete the legal procedures within a year and present the draft law to the legislative council for endorsement, followed by signature by the President.22 As at May 2017, however, no further development had been made regarding the draft law.23

HALO Trust’s standing operating procedures (SOPs) are approved by INMAA and are based on national standards. Once a year, HALO Trust submits its SOPs, including any necessary amendments, to INMAAA for approval.24

Quality Management

The HALO Trust’s work in the West Bank complies with the Israeli Standard Institute for Standards, in particular ISOs 9001, 14001, and 18001. 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 SOPs.25 In addition, as required by INMAA, 4CI Security, an external INMAA-certified quality assurance (QA)/QC company, is contracted to monitor HALO Trust’s clearance in accordance with Israeli National Mine Action Standards.26

Operators

To date, Israel has not authorised demining operations by Palestinian deminers and no clearance operation has been conducted by PMAC.27 In September 2013, however, the INMAA gave formal authorisation for The HALO Trust to clear two of the eleven minefields deemed high priority by PMAC. Following INMAA authorisation, The HALO Trust began mine clearance in the West Bank in April 2014.28

The HALO Trust works under the auspices of both the INMAA and PMAC.29 In 2016, it employed 22 manual deminers for its operations in the West Bank, and deployed mechanical assets including three front-loading shovels, an armoured excavator, and a rock crusher.30
LAND RELEASE

The total mined area released by clearance in 2016 was 34,057m², compared to 63,411m² in 2015.

Survey in 2016

No land was reduced by technical survey in 2016 or cancelled by non-technical survey.

The HALO Trust performs survey as part of its clearance operations of the Jordanian-laid minefields in Area C of the West Bank, which includes joint site visits with PMAC and INMAA, but it is part of pre-clearance task preparation, and is of confirmed hazardous areas (CHAs) already recorded in PMAC’s database and on maps.31

Clearance in 2016

In 2016, The HALO Trust cleared 34,057m² of mined area in 2016.

This included completion of clearance of the Husan minefield, in the governorate of Bethlehem, which had been partially cleared by Quadro in 2013, before The HALO Trust commenced clearance on the remainder of the site in 2015. In January, HALO Trust’s mechanical team excavated the final 1,109m² and destroyed one anti-personnel mine, before completing the task.32

In addition, HALO Trust cleared 32,948m² of mined area in Um Daraj, in the governorate of Hebron in the West Bank, with the destruction of 23 anti-personnel mines and 14 items of UXO.33

Table 2: HALO Trust mine clearance in 201634

<table>
<thead>
<tr>
<th>Province</th>
<th>Governorate</th>
<th>Areas released</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husan</td>
<td>Bethlehem</td>
<td>1</td>
<td>1,109</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Um Daraj</td>
<td>Hebron</td>
<td>1</td>
<td>32,948</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>2</td>
<td>34,057</td>
<td>24</td>
<td>14</td>
</tr>
</tbody>
</table>

Following completion of clearance at Um Daraj minefield in November 2016, the start of clearance at Surif minefield (also in Hebron governorate), was delayed until January 2017. This was due to the external QA company’s need to recruit international QA inspectors for the Surif task, as longstanding security arrangements by the Israeli authorities preclude Israeli nationals working on site as QA inspectors.35

ARTICLE 5 COMPLIANCE

Palestine is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines as soon as possible.

In May 2017, PMAC’s director claimed that clearance of anti-personnel mines in Palestine would be completed in 2020.34 Clearance in the West Bank is however, largely constrained by political factors, including the lack of authorisation granted by Israel for Palestine to conduct mine clearance operations.

It is, however, a positive development that The HALO Trust was permitted to begin mine clearance operations in April 2014, and as at August 2017 HALO Trust had completed clearance of four minefields in Area C of the West Bank.37 The HALO Trust has now completed its survey of the Jordanian-laid minefields in the West Bank, and as at August 2017, five Jordanian-laid minefields in the governorates of Jenin and Tul Kareem, which fall within HALO Trust’s donor agreement, remained to be cleared. HALO Trust planned to complete clearance of the four minefields in Jenin governorate and the one minefield in Tul Kareem governorate by the end of 2018.38
Furthermore, the INMAA reported that at the start of 2017, it had begun survey of the Jordan Valley minefields in the West Bank, using 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 measure mine drift possibilities. The INMAA planned to invest around NIS 900,000 (approximately US$250,000) on this project in 2017–19.

The HALO Trust also reported that after completion of the five priority West Bank minefields it is working on, it would then look into clearance of minefields in the Jordan Valley, the majority of which are Israeli-laid.  

PMAC does not have its own budget, and the Palestinian authority only provides funding for the salary of PMAC employees and the PMAC office. New Zealand donor funding to PMAC ended in 2016. In 2017, UNMAS provided a grant of $20,000 to PMAC.

Neither PMAC nor INMAA provides direct funding for HALO Trust’s clearance operations. HALO Trust’s clearance programme in the West Bank is funded by the governments of the Netherlands, New Zealand, the United Kingdom, and the United States, and private donors.

Table 3: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>7,000</td>
</tr>
<tr>
<td>2014</td>
<td>21,832</td>
</tr>
<tr>
<td>2015</td>
<td>63,411</td>
</tr>
<tr>
<td>2016</td>
<td>34,057</td>
</tr>
<tr>
<td>Total</td>
<td>126,300</td>
</tr>
</tbody>
</table>

1 Email from Brig. Joma Mousa, Director, PMAC, 31 March 2014.  
3 Emails from Tom Meredith, then Desk Officer, HALO Trust, 24 June and 23 October 2015; and Sonia Pezier, then Junior Programme Officer, United Nations Mine Action Service (UNMAS), 14 April 2015.  
4 Emails from Ronen Shimon, Programme Manager, HALO Trust, 22 April and 3 August 2017.  
5 Ibid. Table 1 refers to Jordanian-laid minefields. The two minefields in no-man’s land are located west of the separation barrier in an Israel-controlled area. There were inconsistencies between PMAC and HALO Trust’s data on the number and location of mined areas. As at end-2016, PMAC reported three confirmed mined areas, totalling 0.12km², across the governorates of Bethlehem, Hebron, and Qalqiliya. Email from the Planning Department, PMAC, 24 May 2017. PMAC’s list, though, appears to contain inaccuracies.  
6 Emails from Ronen Shimon, HALO Trust, 22 April and 3 August 2017.  
7 Email from Ronen Shimon, HALO Trust, 3 August 2017.  
8 Email from Celine Francois, Programme Officer, UNMAS, Jerusalem, 5 July 2012; and “UNMAS 2013 Annual Report”.  
11 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.  
12 Emails from Celine Francois, UNMAS, Jerusalem, 19 July 2012; and Imad Mohareb, Planning Department, PMAC, 31 March 2013.  
14 Email from the Planning Department, PMAC, 9 May 2016.  
15 Email from the Planning Department, PMAC, 24 May 2017.  
16 Ibid.  
17 Ibid.  
18 Email from Celine Francois, UNMAS, Jerusalem, 5 July 2012.  
19 Emails from the Planning Department, PMAC, 28 September and 1 October 2017.  
20 Email from Sasha Logie, UNMAS, 28 September 2017.  
21 Email from Ronen Shimon, Programme Manager, HALO Trust, 22 April 2017.  
23 Email from the Planning Department, PMAC, 24 May 2017.  
24 Email from Ronen Shimon, HALO Trust, 22 April 2017.  
25 Ibid.  
26 Ibid.  
27 Email from the Planning Department, PMAC, 24 May 2017.  
28 Email from Tom Meredith, HALO Trust, 11 May 2015.  
30 Email from Ronen Shimon, HALO Trust, 22 April 2017.  
31 Email from the Planning Department, PMAC, 9 May 2016; and telephone interview with Ronen Shimon, HALO Trust, 3 August 2017.  
32 Emails from Tom Meredith, HALO Trust, 23 October 2015; and Ronen Shimon, HALO Trust, 22 April and 3 and 10 August 2017.  
33 Emails from Ronen Shimon, HALO Trust, 22 April and 10 August 2017.  
34 Emails from Ronen Shimon, Programme Manager, HALO Trust, 22 April and 3 and 10 August 2017; and Michael Heiman, Director of Technology and Knowledge Management, INMAA, 23 July and 10 August 2017. There were discrepancies between HALO Trust’s data, and that provided by PMAC. PMAC reported HALO Trust clearance of 30,000m² at Um–daraj, with the destruction of 23 anti-personnel mines and one item of UXO. Email from the Planning Department, PMAC, 24 May 2017.  
35 Email from Ronen Shimon, HALO Trust, 22 April 2017.  
36 Email from the Planning Department, PMAC, 24 May 2017.  
37 Email from Ronen Shimon, HALO Trust, 3 August 2017.  
38 Emails from Ronen Shimon, HALO Trust, 22 April, 3, 8 and 12 September 2017.  
40 Email from Ronen Shimon, HALO Trust, 22 April 2017, and telephone interview, 3 August 2017.  
41 See Landmine Monitor and Mine Action Review reports on Palestine in 2012–15. HALO Trust previously reported 12,226m² of clearance in 2014, but it was subsequently found that this only included manual clearance and excluded 9,606m² of mechanical clearance that also took place. The correct revised total for 2014 is 21,832m². Email from Ronen Shimon, HALO Trust, 18 October 2016.  
42 Email from the Planning Department, PMAC, 24 May 2017.  
43 Email from Sasha Logie, Programme Manager, UNMAS, 18 September 2017.  
44 Ibid.  
45 Email from Ronen Shimon, HALO Trust, 22 April 2017; and telephone interview, 3 August 2017.
Russia is continuing to demine in Chechnya and Ingushetia, but the extent of progress being made and the expected completion date are not known, as this information is not officially reported by Russia.
RECOMMENDATIONS FOR ACTION

- Russia should accede to and abide by the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority, including the prohibition on use of anti-personnel mines.
- Russia should take the necessary measures to identify the extent and impact of mine contamination (in particular in Chechnya and the North Caucasus) and complete clearance of mined areas to humanitarian standards as soon as possible.
- Russia should be more transparent in detailing the extent of its mine contamination and clearance operations.
- Russia should ensure the protection of civilians from munitions in areas it controls or occupies.

CONTAMINATION

Russia is heavily contaminated with mines and explosive remnants of war (ERW) as a result of World War II, the two Chechen wars (1994–96 and 1999–2009), and armed conflicts in the Caucasian republics of Dagestan, Ingushetia, and Kabardino-Balkaria.

Anti-personnel and anti-vehicle mines were used extensively in the two major conflicts in Chechnya. Estimates of the extent of contamination vary greatly because no systematic effort has been undertaken to assess the scope or impact of the problem. 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. 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.

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. 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.

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.

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.

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.” 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. 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’.

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. 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.

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. 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.”
PROGRAMME MANAGEMENT

There is no formal civilian mine action programme in Russia and no national mine action authority. Mine clearance is carried out by Federal Ministry of Defence engineers, demining brigades of the Ministry of Internal Affairs, and by the Ministry of Emergency Situations (MES), through its specialised demining units (EMERCOM Demining and the “Leader” Center for Special Tasks).16

Russia reported that its armed forces established an International Demining Action Centre in 2014. The Centre serves as a base for specialist training in detection and clearance of explosive devices, demining, and operation of mobile robotic tools, and does not function as a mine action centre (MAC) as the term is generally understood in mine action.17

Clearance of explosive ordnance in 2016 was reportedly undertaken by 7,264 military personnel, including 684 officers, 63 demining teams, 1,026 vehicles, and 34 pieces of demining machinery.17

LAND RELEASE

In its CCW Amended Protocol II and Protocol V transparency reports for 2016, Russia reported that its armed forces engineering units conducted demining and explosive ordnance disposal (EOD) in 80 regions of the country. In total, more than 306,616 explosive devices were destroyed, including 20,698 improvised explosive devices.18

In May 2010, a representative of the Chechen branch of Russia’s MES claimed that 2.47km² of land had been cleared during the past five years, and that 5,143 explosive devices and 21 air-dropped bombs had been “neutralised”.19 In 2012, the head of the Armed Forces’ engineers, Lieutenant-General Yuri Stavitsky, announced that the Federal Ministry of Defence had sent military engineers to Chechnya to clear about 0.5km² of farmland. He said a special battalion of deminers employing contract servicemen was undergoing training for deployment in Russia’s southern military district, including Chechnya.20

In March 2014, the engineering unit of the Russian Ministry of Defence was reported in an online article as having started a new phase of clearance in Chechnya. The engineering unit planned to clear 80km² of contaminated land in Achkhoy-Martan and Grozny districts, and in the highlands of Shatoy and Vedeno districts. In 2013, the same unit reportedly demined more than 20km² of agricultural lands, destroying more than 1,700 explosive items.21

Further online media reports in November 2014 reported that the demining battalion of the 11th Engineer Brigade of the Russian armed forces had been conducting mine clearance in Chechnya and Ingushetia. During clearance, mechanical assets were used first, followed by mine detectors, and in some instances mine detection dogs (MDDs). According to the article, demining has been conducted since spring 2012 and planned results for three years had been achieved in only two. In 2014, 32km² of land was verified with more than 3,500 explosive devices found and destroyed.22

Mine clearance operations by engineering units of the Russian armed forces have continued in Russia’s “Southern Military District”, including Chechnya and Ingushetia.23 In August 2015, engineers reported completing demining of 1.5km² in Chechnya and Ingushetia over a four-month period, with destruction of around 200 explosive items, including an unknown number of landmines. More than 33km² are said to have been cleared to date in Chechnya and Ingushetia.24 This includes completion of clearance of two districts of Chechnya, Itum-Kali and Achkhoy-Martan, where more than 20km² have been cleared. The land cleared included 7km² for the construction of the “Veduchi” ski resort in Itum-Kale district, and 0.3km² of land for the construction of a thermal power plant in Grozny.

The next stage of demining, in forests, was planned to start in March or April 2016 to clear mines and unexploded ordnance (UXO) from more than 70km².25 Both manual and mechanical assets were due to be deployed, including the new Uran-6 robotic demining system.26 The Deputy Chief Engineer of Russia’s armed forces, Colonel Ruslan Alahverdiev, has reportedly promised to complete clearance of Chechnya and Ingushetia by 2018.27 However, in the online media report, it was unclear whether Colonel Alahverdiev was referring only to clearing all roads and forests, or if roads and forests are the only remaining mined areas in Chechnya and Ingushetia.

In its CCW Protocol V transparency reports for 2016, Russia reported that the engineering battalion of Southern Military District of the Ministry of Defense are conducting demining of agriculture lands in Chechnya and Ingushetia,28 although the area cleared in these regions was not specified.

Online media, however, reported that between 1 April and 10 November 2016, engineering demining units of the Ministry of Defence demined an area of more than 3,600 hectares (36km²) in Chechnya, during which 450 explosive items were found and destroyed, including ERW. Demining was reportedly conducted in six districts of Chechnya: Achkhoy-Martan, Grozny, Kurchaloy, Vedeno, Shali, and Sunzha.29

In 2016, the Russian Armed Forces responded to 4,004 call-outs from the civilian population, destroying 51,764 items of ERW.30
Progress in 2017

In September 2017, online media reported that combat engineers had been working since April 2017 to clear forests in mountainous areas and foothills in Chechnya.\(^\text{21}\)

For 2017, Russia planned to clear 62.3 km\(^2\) of ERW: 12.4 km\(^2\) in the Western Military District, 24.1 km\(^2\) in the Southern Military District, 14.3 km\(^2\) in the Central Military District, 7.7 km\(^2\) in the Eastern Military District, and 3.8 km\(^2\) in the Northern Navy District.\(^\text{32}\)

**ARTICLE 5 COMPLIANCE**

Russia is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines as soon as possible.

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5. Ibid.
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.
10. Landmine Monitor, Mine Ban Policy Ukraine; and "email from George Henton to HRW", 10 March 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 2016), Form A.
28. CCW Protocol V Article 10 Report (for 2016), Form E.
30. CCW Protocol V Article 10 Report (for 2016), Form C.
32. CCW Protocol V Article 10 Report (for 2016), Form A.
The Korean War left mines and explosive remnants of war (ERW) in southern Korea, and because of a security threat, South Korea laid barrier minefields along the DMZ separating it from the Democratic People’s Republic of Korea in the north (North Korea).

The DMZ and the Civilian Control Zone (CCZ), immediately adjoining the southern boundary of the DMZ, remain among the most heavily mined areas in the world due to extensive mine-laying during the Korean War and in the 1960s, in 1978, and in 1988. In 2006, South Korea indicated that about 970,000 mines were emplaced in the southern part of the DMZ, about 30,000 mines in the CCZ, and about 8,000 mines in 25 military sites that cover an area of about 3km² in the northern parts of Gyeonggi-do and Gangwon provinces, below the CCZ. Previously, a report by the National Defence Committee in 2010 said that South Korea had about 1,100 “planned” mined areas covering 20km² and some 209 unconfirmed mined areas covering 97.82km².

South Korea has also had to contend periodically with wooden box mines carried by flood water from North Korea during the rainy season. An incident was reported in July 2017, when a wooden mine was found and destroyed on a small island along the maritime border by the South Korean navy during a sweep for displaced box mines after heavy rains. In June 2016, South Korean military officials reported that close to 260 North Korean wooden box mines had washed up along the border region in 2010–15.

In 2016, as in the previous year, South Korea made allegations of new anti-personnel mine use by North Korea. On 23 August 2016, South Korean officials reported that the North had planted mines near the village of Panmunjom inside the DMZ, which is jointly administered by North Korea and the United Nations (UN) Command. A South Korean official stated “the North Korean’s military was seen laying several landmines last week on the North’s side of the Bridge of No Return”, which spans the military demarcation line. The UN Command stated it “strongly condemns” any action by North Korea that jeopardises the safety of personnel in the DMZ, but would not speculate on the North’s actions.

RECOMMENDATIONS FOR ACTION

- The Republic of South Korea (South Korea) should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- South Korea should clear all anti-personnel mines from the Demilitarised Zone (DMZ) as soon as possible.

CONTAMINATION

The Korean War left mines and explosive remnants of war (ERW) in southern Korea, and because of a security threat, South Korea laid barrier minefields along the DMZ separating it from the Democratic People’s Republic of Korea in the north (North Korea).
Previously, in 2015, two South Korean soldiers were seriously wounded in a landmine blast while conducting a routine patrol inside the DMZ near the town of Paju, 50km north of Seoul. The US-led UN Command Military Armistice Commission sent a multi-national Special Investigation Team to examine the incident which concluded “the North Korean People’s Army violated paragraphs 6, 7 and 8 of the Armistice Agreement by emplacing wooden box land mines along a known Republic of Korea patrol route in the southern half of the Demilitarized Zone, injuring two Republic of Korea patrol soldiers. Additionally, the investigation determined that the devices were recently emplaced, and ruled out the possibility that these were legacy landmines which had drifted from their original placements due to rain or shifting soil.” North Korea rejected the allegation, stating it would make “no sense” for it to use landmines south of the border and that it only used mines in self-defence.

It was also reported in the media in 2016 and 2015 that North Korean forces had been using anti-personnel mines along the DMZ border, apparently to prevent North Korean soldiers from fleeing to South Korea.

**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 2013, the Ministry of Defence said it had submitted a bill on mines to the parliament to allow civilian organisations to remove mines laid during the Korean War, in order to facilitate ongoing military clearance. “The bill is aimed at making legal grounds and a process to allow both the military and civilians to remove mines so as to protect lives and the property of people,” the Ministry said in a press release. As at September 2017, South Korea’s National Assembly had not passed the bill.

**LAND RELEASE**

In its latest Convention on Certain Conventional Weapons (CCW) Amended Protocol II Article 13 transparency report for calendar year 2016, South Korea reported that 362 military deminers had cleared a total of 191,019m² and destroyed 134 mines, at a cost of US$1.12 million.

Previously, in 2015, South Korea reported clearing 62,471m² and removing “approx. 364 mines”.

**ARTICLE 5 COMPLIANCE**

South Korea is not a state party or signatory to the APMB and nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines as soon as possible.

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1. Response by the Permanent Mission of South Korea to the UN, New York, 9 May 2006.
11. CCW Amended Protocol II Article 13 Report (for 2016), Form B.
12. CCW Amended Protocol II Article 13 Report (for 2015), Form B.
### SRI LANKA

**MINE ACTION PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: GOOD**

<table>
<thead>
<tr>
<th>Score</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Score</td>
<td>7.2</td>
<td>6.8</td>
</tr>
</tbody>
</table>
PERFORMANCE COMMENTARY

The adoption in May 2016 of a new national mine action strategy for 2016–20, which sets for the first time a deadline for completion of clearance by 2020, was a major development for Sri Lanka’s national mine action programme. Further district-by-district re-survey during the year provided significantly greater clarity on the extent of confirmed contamination remaining, which The HALO Trust and Mines Advisory Group (MAG), the two international demining operators in Sri Lanka, reported increased operational and strategic efficiency. More than 36km² of suspected contamination was cancelled in 2016, and operators reported valuable progress in improving the accuracy of the national database, facilitating the path to achieving the 2020 clearance completion goal, provided increased funding can be secured.

RECOMMENDATIONS FOR ACTION

■ Sri Lanka should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
■ Continued efforts should be made to ensure the implementation of efficient land release methodology and to more accurately define the size of remaining contamination.
■ Greater resources should be allocated to the National Mine Action Centre (NMAC) to enable it to increase its capacity and effectiveness, and to ensure sufficient resources for mine action activities.
■ Sri Lanka should implement its resource mobilisation plan and seek increased funding to ensure mine action activities can meet the 2020 clearance target.

CONTAMINATION

Sri Lanka is extensively contaminated by mines and explosive remnants of war (ERW). Most contamination is in the north, the focus of three decades of armed conflict between the government and the Liberation Tigers of Tamil Eelam (LTTE), which ended in May 2009. However, estimates of total contamination have fallen sharply: from 506km² at the end of 2010, to 98km² at the end of 2012, to nearly 68.4km² in 2015, and down to just over 26.3km² as at February 2017. Contamination estimates across the ten affected districts across three provinces are set out in Table 1.1

Table 1: Mine/ERW contamination (as at February 2017)²

<table>
<thead>
<tr>
<th>Province</th>
<th>District</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern</td>
<td>Jaffna</td>
<td>821,555</td>
</tr>
<tr>
<td></td>
<td>Kilinochchi</td>
<td>10,787,756</td>
</tr>
<tr>
<td></td>
<td>Mullaitivu</td>
<td>7,391,741</td>
</tr>
<tr>
<td></td>
<td>Vavuniya</td>
<td>2,098,660</td>
</tr>
<tr>
<td></td>
<td>Mannar</td>
<td>4,160,512</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>25,260,224</td>
</tr>
<tr>
<td>Eastern</td>
<td>Trincomalee</td>
<td>403,823</td>
</tr>
<tr>
<td></td>
<td>Batticaloa</td>
<td>323,133</td>
</tr>
<tr>
<td></td>
<td>Ampara</td>
<td>9,839</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>736,795</td>
</tr>
<tr>
<td>North Central</td>
<td>Anuradhapura</td>
<td>344,437</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>344,437</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>26,341,456</td>
</tr>
</tbody>
</table>

Most remaining contamination is located in Sri Lanka’s five northern districts. Both sides made extensive use of mines, including belts of P4 MKI and II blast anti-personnel mines laid by the Sri Lanka Army (SLA), and long defensive lines with a mixture of mines and improvised explosive devices (IEDs) laid by the LTTE.3 Indian Peacekeeping Forces also used mines during their presence from July 1987 to January 1990.4

The SLA used both anti-personnel and anti-vehicle mines, with all use said to have been recorded. Minefield records were handed over to the national mine action programme and entered into the national database after the conflict, which greatly facilitated clearance.5 Operators have encountered a wide range of LTTE devices, including anti-personnel mines with anti-tilt and anti-lift mechanisms, most of which the group constructed itself, and often containing a larger explosive charge than the P4 MKI and II mines (up to 140g compared to 30g). 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 IED to act as fragmentation mines, bar mines, electrical and magnetically initiated explosive devices, and mines connected to detonating cord to mortar and artillery shells.6

Sri Lanka remains contaminated with a wide range of ERW, including unexploded air-dropped bombs, artillery shells and missiles, mortar bombs, handheld anti-tank projectiles, and rifle and hand grenades. Large caches of abandoned explosive ordnance also exist, particularly in the north.7
Since early 2009, resettlement of internally displaced persons (IDPs) has been the focus of survey and clearance activities, including in Jaffna, Kilinochchi, Mannar, Mullaitivu, and Vavuniya districts in the north, and Ampara, Batticaloa, and Trincomalee districts in the east. Clearance is focused on high-priority areas for resettlement, agricultural land, irrigation tank areas, and other infrastructure and development initiatives, as well as of heavily mined areas such as around Kilinochchi and the Muhmalalai Forward Defence Line. In addition, in 2016, the Government of Sri Lanka granted increased access to areas of the Jaffna High Security Zone allowing The HALO Trust to conduct clearance and MAG to clear previously restricted areas in Eastern province, further expanding the reach of mine action in the country.

In 2016, The HALO Trust reported that the impact of mines in its areas of operations is primarily socio-economic, with large areas of paddy field and agricultural land blocked for use. Highest priority for clearance is land designated for the resettlement and return of IDPs, mainly concentrated in areas around Muhmalalai, Nagarkovil, and the Jaffna High Security Zone, it said. In December 2016, two sectors of the Muhmalalai minefield cleared by HALO Trust were officially released which allowed for the resettlement of a portion of the Intherapuram village and the return of 13 displaced families.

In 2016, MAG reported that in one of its areas of operations, in Mannar district, thousands of IDPs have returned since 2010, though a further 1,300 families are still awaiting resettlement. According to MAG, more than 70% of the population in Mannar district rely on agriculture to get by, and land free of mines and ERW is therefore vital to support conflict-affected communities. Of note in 2016, MAG reported that it performed emergency clearance within the grounds of Mannar Technical College due to discovery of an anti-personnel mine during site preparation for the building of new classrooms. In addition, MAG also cleared three mined areas that were obstructing the installation of electricity pylons, enabling infrastructure to be built to supply communities in Mannar that were previously without electricity.

**PROGRAMME MANAGEMENT**

The Ministry of Prison Reforms, Rehabilitation, Resettlement, and Hindu Religious Affairs became the lead agency for mine action in 2016 as chair of the interministerial National Steering Committee for Mine Action (NSCMA), which sets policy and is mandated to "manage linkages within the government, mine action community and donors." Its policies and decisions are implemented by the NMAC, set up in 2010 to liaise with government ministries and development partners to determine mine action priorities; prepare a strategic plan; and set annual workplans to put it into effect. NMAC is also responsible for accrediting mine action operators, setting national standards, and acting as the secretariat of NSCMA.

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 authorities heading district administration.

Under its national mine action strategy for 2016–20, the Government of Sri Lanka intends to convene steering committee meetings for mine action up to twice per year at national level and at three regional levels, one for the East (Ampara, Batticaloa, and Trincomalee) and two for the North (Jaffna, Kilinochchi and Mullaitivu; and Anuradhapura, Mannar, Polonnaruwa, and Vavuniya, respectively).

A decision by the previous government had set a deadline of the end of 2014 for the withdrawal of international operators from the country, which was then extended until the end of 2016. This decision led to NMAC’s activities being severely curtailed due to a suspension in funding while it awaited reassignment to a new government ministry following January 2015 elections, and loss of some international funding for mine action operations as donors withdrew support in expectation of international operators being asked to leave the country.

Previous political issues appeared to be resolved during 2016, however, with renewed political commitment to mine action in Sri Lanka. NMAC reported it fully expected international operators to continue operations until the completion of clearance in 2020 under the new mine action strategy.

**Strategic Planning**

As noted above, in May 2016, a new national mine action strategy for 2016–20 was adopted, developed with support from the Geneva International Centre for Humanitarian Demining (GICHD), and in consultation with operators and the SLA. The strategy, which sets the goal of clearing all mines and ERW by 2020, contains the following strategic objectives:

- The scope of the mine/ERW problem is identified, confirmed, and addressed using appropriate methodologies and resources.
- Mine/ERW safe behaviour among women, girls, boys and men is promoted.
- The needs of mine/ERW victims are determined and met and victims are integrated into society.
- Sri Lanka accedes to the APMBC and complies with relevant obligations.
- Long-term residual contamination is effectively managed by appropriate and sustainable national capacities.
- The Sri Lanka mine action sector can access quality information for its strategic and operational decision-making.

An external mid-term review of the strategy will be requested by NMAC in mid-2018 to evaluate progress and ensure its continued relevance.
Standards

There were no changes to Sri Lanka’s National Mine Action Standards, which continued to be in effect in 2016, though operators reported a full review of the standards was planned to take place in the course of 2017.21

Quality Management

The HALO Trust and MAG confirmed that external quality assurance (QA) and quality control (QC) were conducted by NMAC in 2016 on clearance tasks and that completed handovers were sampled during post-clearance inspections prior to handover to local communities.21 According to HALO Trust, NMAC’s overall response time for QA improved during the year as it was able to hire additional QA officers. It noted a number of improvements in QA, including final checks of post-clearance inspections occurring within one month of submission of a completion report, quarterly QA of data submitted to IMSMA, and frequently same-day approval of minefield execution plans upon submission.23

Information Management

In 2015, an updated version of the software for the national Information Management System for Mine Action (IMSMA) database was installed and a process of data entry and ground verification was initiated.24 In 2016, operators reported that significant efforts were exerted by stakeholders to correct erroneous data entered into IMSMA, leading to a more accurate representation of remaining contamination. MAG reported that, following its re-survey of six districts, and data verification in two additional districts carried out by HALO Trust, the IMSMA database was completely overhauled in 2016. According to The HALO Trust, NMAC information management staff met with clearance organisations on a monthly basis to tackle database issues, particularly with respect to clearing duplicated tasks.25

Operators

In 2016, demining was conducted by the SLA; one national non-governmental organisation (NGO), Delvøn Assistance for Social Harmony (DASH); and the two international NGOs, HALO Trust and MAG. A national organisation, SHARP, became operational from January 2016 after securing funding and inheriting equipment and staff from international NGO Danish Demining Group, which closed operations in Sri Lanka in 2014.26 After a steep reduction in demining personnel in 2015 due to a cut in funding following the previous government’s announcement that all international demining organisations would have to leave the country by the end of the year (a decision subsequently reversed), in 2016, HALO Trust’s operational staff increased from 330 staff at the start of the year to 442, as a result of the re-engagement of a former donor. In December 2016, 39 manual teams were deployed as well as 2 survey teams and 7 mechanical teams with the assistance of 6 machines, including four CASE front-end loaders, one tracked Caterpillar, one JCB excavator, and one stone crusher.27 MAG’s capacity increased in 2016 to a total of 15 manual clearance teams, 8 mechanical teams, and 4 community liaison teams.28

NMAC reported in October 2016 that the SLA employed a total of 555 persons in demining operations, of whom 515 were deminers, along with 11 mechanical flails. DASH, and its subcontractor, SHARP, employed 274 deminers, and a total of 355 staff during the year and one mechanical asset.29

LAND RELEASE

A total of nearly 38.5km² was reported released in 2016, an increase from almost 36.2km² in 2015. However, the amount of land released through clearance and technical survey decreased to 6.5km² in 2016, from close to 9.8km² in 2015.29 Non-technical survey which began in June 2015 was completed in February 2017, with the cancellation of 42.4km² of suspected hazardous area (SHA), reducing the total contamination from just over 68.4km² to close to 26km².31

NMAC has reported that, cumulatively, a total of 133.4km² of mine contamination was reduced or cleared between 2002 and March 2017, and a total of 705,565 mines destroyed during that timeframe.22

Survey in 2016

A total of 32km² was reported cancelled by non-technical survey by MAG and The HALO Trust in 2016, while confirming nearly 22km² as mined.23 Just under 4.2km² was reportedly reduced through technical survey during the year.24 This compares to release by survey in 2015, when according to NMAC’s official data, a total of 26.4km² was cancelled by non-technical survey and a further 6.3km² reduced through technical survey.25

In 2016, in close cooperation with NMAC, MAG re-surveyed six of eight contaminated districts to reclassify and confirm that SHAs registered in the IMSMA database were in fact confirmed hazardous areas (CHAs). It reported cancelling a total of just over 27.6km² in 2016 through non-technical survey and reducing nearly 756,000m², while confirming over 6.5km² as mined.26

HALO Trust reported cancelling just over 41,600m² of CHA during non-technical survey and clearance, and reducing over 123,600m² by technical survey, along with confirming close to 10,200m² as mined by survey activities in 2016. Additionally, HALO Trust was tasked by NMAC to re-survey SHAs originally reported by other clearance operators, and in the process cancelled 49 SHAs with a size of over 4.4km² and confirmed a further 103 areas with a size of nearly 14.7km² as mined.27

Ultimately, according to MAG, re-survey from June 2015 to February 2017 led to the cancellation of over 42.4km² of land, reducing the total of confirmed contamination to nearly 26km², from the previously reported figure of 68km² in 2015.28 MAG emphasised the impact of the collaborative re-survey effort in fundamentally changing how Sri Lanka plans towards completion at both the strategic and operational levels.29
Table 2: Mined area survey in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs cancelled</th>
<th>Area cancelled (m²)</th>
<th>SHAs confirmed as mined</th>
<th>Area confirmed (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DASH</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>286,348</td>
</tr>
<tr>
<td>MAG</td>
<td>277</td>
<td>27,607,927</td>
<td>97</td>
<td>6,517,936</td>
<td>755,769</td>
</tr>
<tr>
<td>HALO</td>
<td></td>
<td>41,601</td>
<td>4</td>
<td>10,157</td>
<td>123,626</td>
</tr>
<tr>
<td>HALO</td>
<td>49</td>
<td>4,423,138</td>
<td>103</td>
<td>14,667,094</td>
<td>0</td>
</tr>
<tr>
<td>SHARP</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>0</td>
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<tr>
<td>SLA</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>3,014,006</td>
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<tr>
<td>Totals</td>
<td>326</td>
<td>32,072,666</td>
<td>204</td>
<td>21,195,997</td>
<td>4,179,749</td>
</tr>
</tbody>
</table>

Clearance in 2016

Nearly 2.3km² of mined area was reportedly cleared in 2016, with a total of 59,304 anti-personnel mines, 117 anti-vehicle mines, and 2,907 items of unexploded ordnance (UXO) destroyed. This compares to 2015, when NMAC reported 3.52km² of mined area cleared.

Table 3: Mine clearance in 2016

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DASH</td>
<td>N/R</td>
<td>770,110</td>
<td>12,630</td>
<td>65</td>
<td>875</td>
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<td>MAG</td>
<td>29</td>
<td>453,575</td>
<td>10,280</td>
<td>2</td>
<td>430</td>
</tr>
<tr>
<td>HALO</td>
<td>29</td>
<td>802,168</td>
<td>16,192</td>
<td>44</td>
<td>1,214</td>
</tr>
<tr>
<td>SHARP</td>
<td>N/R</td>
<td>27,264</td>
<td>69</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>SLA</td>
<td>N/R</td>
<td>296,304</td>
<td>20,133</td>
<td>6</td>
<td>383</td>
</tr>
<tr>
<td>Totals</td>
<td>58</td>
<td>2,349,421</td>
<td>59,304</td>
<td>117</td>
<td>2,907</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  AV = Anti-vehicle

In 2016, MAG released in total over 1.12km² through clearance and technical survey, destroying over 10,280 mines in the process. It stated that this significant increase in output was a result of an increase in funding, primarily from the Governments of Australia, Canada, Japan, and the United States. As a result of increasingly positive collaborative interaction with NMAC, MAG was able to conduct clearance in the Eastern province for the first time since 2009. Subsequently, MAG was able to project that all remaining confirmed hazardous areas in Eastern province could be completed by the end of 2017.

The HALO Trust cleared 802,168m² and reduced 123,626m² in 2016, which shows a decrease in the amount of area cleared in 2016, compared with 2015 due to a decrease in the use of flails and beach-tech teams in Nagarkovil, as areas appropriate for the deployment of these mechanical assets were largely cleared in 2015 and in previous years. The SLA released additional sections of the Jaffna High Security Zone (HSZ) in 2016, which allowed for HALO Trust to increase its pace of survey and clearance of former HSZ areas, from clearance of just under 40,500m² in 2016, compared with nearly 21,700m² in 2015.

Deminer Safety

HALO Trust reported that five deminers were injured in separate accidents during 2016. Three deminers involved in anti-personnel mine clearance accidents in March, May, and September sustained minor injuries and were able to return to work, it said. As a result of the accidents, HALO Trust reported that a revised risk assessment lead to a change in deployment and the increased use of mechanical support for demining. Two other accidents in August and November involving an anti-personnel mine and an unknown device resulted in more serious injuries to deminers. MAG reported no accidents involving demining personnel occurred in 2016.
ARTICLE 5 COMPLIANCE

Sri Lanka is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines as soon as possible.

Sri Lanka’s national mine action strategy for 2016–20 contains a specific strategic objective of accession to the APMBC and compliance with its obligations.51 In December 2015, at the Fourteenth Meeting of States Parties, Sri Lanka announced its commitment to accede to the Convention for the first time.52 At the intersessional meetings in June 2017, Sri Lanka reiterated that its Cabinet of Ministers had approved the country’s accession to the convention in March 2016, and that it was “presently working on domestic technical and other related processes required for Sri Lanka’s accession”.53

In line with Sri Lanka’s national mine action strategic plan’s completion deadline, both MAG and HALO Trust asserted in 2017 that clearance of all known contamination is possible by 2020, with increased support from donors and an expansion in clearance capacity. They emphasised that between their two international organisations, along with the SLA and DASH, the capacity, structures, and willingness to complete the job are in place, as well as the capacity to absorb additional resources and expand accordingly.54

In the last five years, Sri Lanka has reported clearing close to 32km² of mined area, though clearance dropped significantly in 2013 following a decline in capacity following closure of the operations of the Swiss Foundation for Mine Action (FSD) in 2013, and two Indian demining NGOs, Horizon and Sarvatra, in 2012 (see Table 4).

Table 4: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>2.35</td>
</tr>
<tr>
<td>2015</td>
<td>3.52</td>
</tr>
<tr>
<td>2014</td>
<td>3.75</td>
</tr>
<tr>
<td>2013</td>
<td>6.44</td>
</tr>
<tr>
<td>2012</td>
<td>15.58</td>
</tr>
<tr>
<td>Total</td>
<td>31.64</td>
</tr>
</tbody>
</table>

According to Sri Lanka’s national mine action strategy, 6.5km² is expected to be reduced or cleared annually with sustained resources. As noted above, NMAC is expected to request an external mid-term review of the strategy in 2018 to evaluate progress and to adapt the strategy if necessary.54 In 2016, a resource mobilisation action plan to accompany the strategy was developed by the Government of Sri Lanka, in collaboration with the GICHD, specifying, among other things, activities, tasks, responsibilities and time-lines.55

The government created a national budget line for mine action in 2015.56 NMAC reported that during the year, funding for its operational costs and the SLA’s demining unit had been provided by the government.57 NMAC expected to see increased funding in 2016–17.58

Encouragingly, HALO Trust reported that increased donor funding in 2017 had enabled it to hire 60% more national staff and it was expecting a corresponding increase in clearance output. It stated clearance priorities would remain unchanged and that a large portion of HALO Trust’s demining capacity would remain in Muhamalai and Nagarkovil for the purpose of clearing land for resettlement.59 It would focus on completing clearance of all mined areas in Jaffna, which it said will hopefully be completed in early 2018.60

In 2017, MAG intended to reduce its survey capacity due to the successful conclusion of re-survey activities in 2016. It planned to continue deploying significant demining capacity in Mannar district, where it remained the only clearance operator. Additionally, it was set to complete clearance of all remaining confirmed hazardous areas in Batticaloa and Trincomalee, in cooperation with the SLA, and then intended to re-focus capacity to Mullaitivu. MAG hoped that with the completion of national re-survey and the establishment of a definitive picture of remaining contamination levels, former donors would consider re-engaging in the final phases of mine action to enable the successful completion of clearance of mine and ERW contamination by 2020.61

On 21 June 2017, the first of Sri Lanka’s mine-affected districts was declared safe from landmines, after clearance of Batticaloa district was declared completed by MAG, with the support of the SLA and Government of Sri Lanka.62

Ibid., p. 7.

Email from Mahinda Bandara Wickramasingha, NMAC, 7 October 2016.

Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, Programme Support Officer, HALO Trust, 25 April and 28 September 2017.


Emails from Alistair Moir, MAG, 21 August and 27 September 2017.


The cabinet formally approved the creation of NMAC on 10 July 2010.

Email from Amanthi Wickramasinghe, Programme Officer – Peace and Recovery, UNDP, Colombo, 11 March 2011.

“Sri Lanka National Mine Action Strategy 2016–2020”, May 2016, p. 9. It states that: “Steering committees used to play an important role in providing guidance to the mine action programme and in promoting transparency and accountability. At the national level the Steering Committee fulfilled the role of a National Mine Action Authority. It used to convene key national stakeholders including the SLA and relevant Ministries, mine action NGOs and main development partners. At regional and district levels, steering committees were tasked to ensure priority-setting of survey, clearance and MRE activities”.


Interview with Mahinda Bandara Wickramasingha, NMAC, Colombo, 15 September 2016.


Ibid., p. 27.

Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017.

Ibid.

Email from Helaine Boyd, HALO Trust, 25 April 2017.

Email from Mahinda Bandara Wickramasingha, NMAC, 7 October 2016.

Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017.


Email from Alistair Moir, MAG, 21 August 2017.

Email from Mahinda Bandara Wickramasingha, NMAC, 7 October 2016.


Email from Alistair Moir, MAG, 27 September 2017.


Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017.

Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017; and presentation by Mahinda Bandara Wickramasingha, NMAC, “1st Quarter Meeting 2017”, undated.

Email from Mahinda Bandara Wickramasingha, NMAC, 14 October 2016.

Email from Alistair Moir, MAG, 21 August 2017.


Emails from Alistair Moir, MAG, 21 August and 27 September 2017.

Email from Alistair Moir, MAG, 21 August 2017.

Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017; and presentation by Mahinda Bandara Wickramasingha, NMAC, “1st Quarter Meeting 2017”, undated.

HALO Trust reported that this was cancellation of confirmed hazardous areas, not suspected hazardous areas. Email from Helaine Boyd, HALO Trust, 25 April 2017.

Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017; and presentation by Mahinda Bandara Wickramasingha, NMAC, “1st Quarter Meeting 2017”, undated.

Email from Mahinda Bandara Wickramasingha, NMAC, October 2016. Demining organisations are not permitted to destroy mines found using explosives. The SLA collects mines recovered on a daily basis which it transports to an army facility for destruction. Interviews with Ivica Stilin, MAG, in Vavuniya, 13 September 2016; and Rob Syfret, HALO Trust, in Kilinochchi, 12 September 2016.

Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017; and presentation by Mahinda Bandara Wickramasingha, NMAC, “1st Quarter Meeting 2017”, undated.

Email from Alistair Moir, MAG, 21 August 2017.

Ibid.

Email from Helaine Boyd, HALO Trust, 25 April 2017.

Emails from Helaine Boyd, HALO Trust, 25 April and 28 September 2017. HALO Trust reported that the accident in August involved an unknown device suspected to be a grenade and resulted in injuries to the deminer’s hand, leg, and eyes. In the second accident in November, a deminer was injured by an anti-personnel mine, resulting in the amputation of both hands.

Email from Alistair Moir, MAG, 21 August 2017.


Emails from Alistair Moir, MAG, 21 August 2017; and Helaine Boyd, HALO Trust, 25 April 2017.


Ibid., p. 22.

Email from Mahinda Bandara Wickramasingha, NMAC, 7 October 2016. NMAC reported the government also allowed all demining related equipment to be imported tax-free during the year.

Email from Mahinda Bandara Wickramasingha, NMAC, 7 October 2016.

Email from Helaine Boyd, HALO Trust, 25 April 2017.

Email from Helaine Boyd, HALO Trust, 28 September 2017.

Email from Alistair Moir, MAG, 21 August 2017.

SYRIA

CONTAMINATION

Mine contamination in Syria is a legacy of Arab-Israeli wars since 1948 and a consequence of the ongoing armed conflicts. No credible estimate of the extent of contamination across Syria exists, though it is believed to be very extensive.1

There has been continued use of mines by pro- and anti-government forces across the country. Turkish authorities have reportedly claimed that between 613,000 and 715,000 mines had been planted along the Turkish-Syrian border, making clear they were not emplaced by Turkish forces.2

At the end of January 2016, US Secretary of State John Kerry criticised the Syrian government for having laid mines around Madaya and other besieged towns in Syria.3 Soviet/Russian-made PMN-4 anti-personnel mines have been cleared from Madaya. Syrian government use of these mines was first reported in 2012.4

In Kobani and the surrounding villages, which were captured from Islamic State (IS) forces in 2015, humanitarian demining operators found a significant quantity of locally produced anti-personnel mines.5 To the east, IS are said to have surrounded government-controlled areas in the city of Deir ez-Zor with thousands of landmines. According to one witness from Deir ez-Zor’s besieged al-Jura neighbourhood who was cited in the media in March 2016, “After a year of living under siege, some inhabitants tried to flee driven by famine and disease. They were either killed by ISIS sharpshooters or exploding mines. Some torn corpses are still lying in the minefields.”6 Mine casualties are reported to have occurred in areas of Hassakeh province in the far north-east contested by Islamic State and Kurdish forces.7

RECOMMENDATIONS FOR ACTION

■ Syria should ensure that its armed forces do not use mines.
■ Other states engaged in the armed conflicts in Syria should ensure that their armed forces and any armed groups they support do not use mines.
■ Syria should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
■ Syria should initiate survey and clearance of mines as soon as possible and take other measures to protect civilians from explosive remnants of war (ERW).
Remotely delivered T-84 anti-vehicle mines were reportedly used in the Golan Heights in the south-west of Syria (already heavily contaminated with anti-personnel mines). There have also been reports that T-84s have been remotely deployed in Daraa governorate in the south-west of the country.

In March 2017, a report by the International Commission of Inquiry on Syria noted the indiscriminate presence of anti-personnel mines, improvised explosive devices, and booby-traps in civilian areas captured from IS by the Kurdish People’s Protection Units (YPG) or the Syrian Democratic Forces (SDF). Locally produced mines “continue to be laid” by IS “with devastating effect”. In late December 2016, IS fighters began laying mines on roads leading to villages surrounding the Tishreen Dam, as well as in neighbouring areas leading to Minbij. Witnesses detailed how IS used young boys as escorts to lay the mines, in an effort to camouflage their movements. Young boys were made to look like shepherds leading livestock, and at least one boy of 12 died as a result of a mine blast.

PROGRAMME MANAGEMENT

There is no national mine action programme in Syria, no national mine action authority, and no mine action centre.

On the basis of UN Security Council Resolution 2165 (2014), the United Nations Mine Action Service (UNMAS) was asked to provide assistance for mine action in Syria. UNMAS deployed a team to southern Turkey in August 2015. In addition to coordinating mine action operations, UNMAS has supported impact survey, risk education, and victim assistance. Although a “comprehensive clearance programme is not currently possible, UNMAS believes it is possible to train local capacity to survey and clear cluster munitions and other ERW.”

Operators

The main international NGO demining operator in Syria in 2016 was Mines Advisory Group. Handicap International did not conduct land release in 2016. Syria Civil Defence [also known as the White Helmets], all volunteers, have predominantly been engaged in search and rescue operations across parts of the country. They have been using thermite flares to destroy unexploded ordnance (UXO), mostly unexploded submunitions. Where volunteers have spotted mines, they have reported on the location. The efforts of Civil Defence have been supported by Mayday Rescue, an international not-for-profit organisation based in the Netherlands.

LAND RELEASE

Syria does not have a comprehensive civilian programme for survey or clearance of mines. UNMAS reported in early 2016 that conflict in many governorates has prevented access by mine action organisations. The extent and impact of contamination has resulted in Syrians without formal training conducting “ad hoc clearance without the technical ability to do so. The capacity of some local teams conducting clearance has been reduced by half as a result of casualties occurring during operations.” SDF forces began demining areas throughout Minbij, to the west of the Euphrates River, shortly after capturing the town in mid-August 2016.

Russian forces have been demining in areas recovered by the Government of Syria. Russia has reported that in March to June 2016 its forces cleared the historical complex of Palmira, destroying in the process 17,456 items of ERW, “including” 432 improvised explosive devices (IEDs). Subsequently, in December 2016, 157 military deminers, 29 machines, and 9 mine detection dogs (MDDs) were involved in demining in Aleppo city. During this process, 34,886 items of ERW were destroyed, “including 19,834 IEDs.”

ARTICLE 5 COMPLIANCE

Syria is not a state party or signatory to the APMBC. Nonetheless, 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.


Email from Dandan Xi, UNMAS, Associate Programme Management Officer, UNMAS, 10 October 2017.

Email from Catherine Smith, Mine Action Desk Officer, Handicap International, 14 March 2017.


Email from Lene Rasmussen, DGD Regional Manager MENA, 15 March 2017.


Uzbek forces have laid mines along its international borders at various times, including on its borders with Afghanistan in 1998, with Kyrgyzstan in 1999, and with Tajikistan in 2000. In 2010, United Nations (UN) Secretary-General Ban Ki-moon criticised as "unacceptable" Uzbekistan's emplacing of mines along parts of its border that have not been delineated.¹

Soviet troops also laid mines on the Uzbek-Afghan border. Survey on the Tajik side of the border over several years had identified a total of 57 suspected hazardous areas (SHAs) as at December 2008 (size unknown), which were subsequently deemed to be on Uzbekistan territory (see Tajikistan report). 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.²

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.³ 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 land release occurring in 2016.

**ARTICLE 5 COMPLIANCE**

Uzbekistan is not a state party or signatory to the APMBC but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines as soon as possible.

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² Email from Jonnahmad 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, at: www.spy.kz.

MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
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<tr>
<td>Target date for completion of mine clearance</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Targeted clearance</td>
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<td>5</td>
</tr>
<tr>
<td>Efficient clearance</td>
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<tr>
<td>National funding of programme</td>
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<td>5</td>
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<tr>
<td>Timely clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>5</td>
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<td>Reporting on progress</td>
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<tr>
<td>Improving performance</td>
<td>5</td>
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</tr>
</tbody>
</table>

PERFORMANCE SCORE: POOR 4.1 3.9

PERFORMANCE COMMENTARY
Vietnam has created additional structures to strengthen civilian oversight of mine action but has not demonstrated progress in defining the extent and location of its mine contamination or reporting the progress of action to address it.
RECOMMENDATIONS FOR ACTION

- Vietnam should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Vietnam should provide 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 mine clearance.

CONTAMINATION

Vietnam’s mine problem is small compared with its explosive remnants of war (ERW) contamination, but the extent is similarly unknown. Most mines were left by conflicts in the 1970s with neighbouring Cambodia and China, and affect areas close to its borders with those countries. Some mines have also been found around former United States (US) military installations.

Vietnam cleared an area up to 1km deep along its northern border in the 1990s under an agreement with China, but areas further inland from the border are believed to be still contaminated with mines emplaced by the military of both countries. Since 2004, military engineers have reportedly cleared around 95km² of contaminated land in the northern provinces of Cao Bang, Ha Giang, Lai Chau, Lang Son, and Quang Ninh bordering China under a project known as “Programme 120”, destroying mainly Type 72, KS8, and PPM-2 anti-personnel mines. Chinese troops launched a two-year operation to clear more than 50 minefields reportedly remaining on its side of the border in 2015 but Vietnam has made no disclosure on the extent of remaining contamination in recent years.

Cambodian border areas were affected by randomly placed mines reflecting the more irregular nature of the fighting there, but Engineering Command reported in 2013 that the problem had been eliminated. Many ports and river deltas were mined extensively during the war and were not completely cleared when it ended and some sea mines have been found on the coast.

PROGRAMME MANAGEMENT

Vietnam’s mine action programme has moved from military management to civilian oversight, but operations continue to depend largely on the armed forces. A Prime Minister’s Decision in 2006 assigned the Ministry of National Defence to oversee mine action at the national level with clearance undertaken by the Army Engineering Corps of the People’s Army of Vietnam (PAVN). BOMICEN, part of the Ministry of National Defence, has acted as a central coordinating body for clearance and survey by national operators.

In 2013, Vietnam announced a Prime Minister’s decision to establish a national mine action centre (VNMAC) to strengthen the direction of mine action and provide a focal point for mine action operations. A decree issued in 2014 gave VNMAC responsibility to propose policy, draw up plans, serve as the focal point for international cooperation, lead fundraising, and “preside over” mine action information management. It is also responsible for organising and implementing quality assurance. VNMAC has four departments (Planning, Coordination, Technical Affairs and Finance) and three subordinate centres (Training, National Database, and Consulting Centre for Quality Monitoring and Management). The centre became officially operational in February 2015.

Although VNMAC reports to the Prime Minister’s office, the decision assigned responsibility for managing and coordinating the national mine action programme to the Ministry of Defence. Provincial authorities also work with a high level of autonomy in managing local mine action activities. In 2016, VNMAC and government ministries worked on a decree intended to clarify its mandate and define the role of all state agencies involved in mine action to eliminate overlap. The decree was submitted to the Prime Minister’s Office for consideration in December 2016.

Strategic Planning

Decision 504 approved by the Prime Minister in April 2010 set out a National Mine Action Plan for 2010 to 2025 and called for clearance of 8,000km² of ERW contamination between 2016 and 2025 but did not lay out a detailed strategy for addressing landmines.

Operators

Most mine clearance in Vietnam is conducted by the PAVN Army Engineering Corps, whose officials have previously reported operating some 250 mine/unexploded ordnance (UXO) clearance teams, including the teams of around 50 military companies.

International humanitarian operators active in survey and clearance operations in 2016 included Danish Demining Group (DDG), Mines Advisory Group (MAG), Norwegian People’s Aid (NPA), which also managed clearance operations for Project Renew, and PeaceTrees Vietnam. International operators addressed all forms of ERW but focused mainly on clearing submunitions and other UXO.
LAND RELEASE

VNMAC reported that BOMICEN-managed demining teams continued to operate in Cao Bang and Lang Son provinces in 2015 and cleared 1km² but gave no details of what items were destroyed. The Ministry of Defence had announced a two-year VND74 billion (US$3.5 million) project to clear a 6.6km² area of mines and ERW in Cao Bang and Lang Son provinces, starting in November 2013. VNMAC said mine clearance operations in these provinces would continue in 2016 but has provided no further information.17

Among international operators, DDG reported destroying three anti-personnel mines in the course of conducting non-technical survey in two districts of Quang Nam province. MAG, working in Quang Binh and Quang Tri provinces, and NPA, conducting cluster munition remnants survey in Quang Tri and BAC in Thu Thien Hue province, did not report any clearance of landmines.18

ARTICLE 5 COMPLIANCE

Vietnam is not a state party to the APMBC. However, it has obligations under international human rights law, particularly by virtue of its duty to protect life, to clear anti-personnel mines as soon as possible.

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1 Interview with Sr. Col. Phan Duc Tuan, Deputy Commander, Military Engineering Command, People’s Army of Vietnam (PAVN), in Geneva, 30 June 2011.
3 Information provided by Sr. Col. Phan Duc Tuan, PAVN, in email received from Vietnam Veterans of America Foundation (VVAF), Hanoi, 24 September 2012; and in interview in Geneva, 30 June 2011.
6 Interview with Sr. Col. Nguyen Thanh Ban, Head of Bomb and Mine Department, Engineering Command, Hanoi, 18 June 2013.
8 Prime Minister’s Decision No. 96/QD-TTg, 4 May 2006.
9 Email from Col. Nguyen Trong Dac, Ministry of National Defense, 6 August 2006.
10 Interview with Maj.-Gen. Pham Quang Xuan, Director, VNMAC, in Geneva, 31 March 2014.
11 Prime Minister’s Decision 319/QD-TTg, 4 March 2014.
12 Information provided by Do Van Nhan, Deputy Director General, VNMAC, received by email from VVAF, 19 June 2015.
13 Interview with Dang Van Dong, Deputy Director General, VNMAC, in Geneva, 7 February 2017.
15 Interview with Sr. Col. Nguyen Thanh Ban, Engineering Command, Hanoi, 18 June 2013; and email from Executive Office of the National Steering Committee, 6 August 2012.
OTHER AREAS
## MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
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<td>Timely clearance</td>
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<td>Land release system in place</td>
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**PERFORMANCE SCORE: AVERAGE**

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<td></td>
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</tr>
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</table>
Kosovo’s mine action programme performance declined in 2016, due to a continued decrease in clearance output while clearing several areas that proved not to be mined.

It is hoped that the annual downward trend in clearance output is starting to be reversed, and will be reflected in 2017 land release data, in part due to the increased use of HSTAMIDS (Handheld Standoff Mine Detection System), increased funding, and a willingness of the Kosovo Mine Action Centre (KMAC) to explore the use of new land release methods, including the planned introduction of mine detection dogs (MDDs).

**RECOMMENDATIONS FOR ACTION**

- Kosovo cannot accede to the Anti-Personnel Mine Ban Convention (APMBC) due to its political status, but its government should nevertheless commit to respect and implement the Convention and to clear all mined areas as soon as possible. This could be done through submission of a voluntary Article 7 transparency report, as the authorities in Western Sahara have done.
- Kosovo should report more accurately and consistently on land release and contamination data, which will allow for satisfactory explanation of variance in baseline contamination between reporting periods.
- Kosovo should ensure implementation of efficient land release operations, including optimum use of high quality survey, to accurately identify the location of mined areas and avoid clearing areas not contaminated.

**CONTAMINATION**

Kosovo is contaminated by mines, cluster munition remnants (CMR), and explosive remnants of war (ERW), primarily as a result of the conflict between the Federal Republic of Yugoslavia (FRY) and the Kosovo Liberation Army (KLA) in the late 1990s, and between FRY and North Atlantic Treaty Organization (NATO) member states in 1999. At the end of 2016, 58 areas confirmed to contain mines remained covering a total of 1.9 km². This is down from 69 areas, covering 2.5 km², as at the end of 2015. The difference in total mine contamination between the end of 2015 and end of 2016, both in terms of the number of confirmed mined areas and the overall area of contamination, cannot be explained or reconciled by area released by clearance.

Both anti-personnel and anti-vehicle mines were used during the conflict, in fixed-pattern minefields as well as more randomly in “nuisance” minefields. Many anti-personnel mines had low metal content, making detection more difficult. Although the total number of mines emplaced during the conflict is not known, the United Nations Mine Action Coordination Centre (UNMACC) reported, as at 31 May 2000, a total of 7,232 mines cleared in the preceding year (3,448 anti-personnel mines and 3,784 anti-vehicle mines).

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”, but further investigation revealed considerably more contamination. In 2013, The HALO Trust and the KMAC conducted a joint non-technical survey of mined areas and cluster munition strikes across Kosovo, with the exception of four districts in the north. The survey confirmed 130 hazardous areas: 79 mined areas covering an estimated 2.76 km² and 51 cluster munition strikes covering an estimated 7.63 km². The total of 79 mined areas was a considerable increase on the 48 mined areas that had been identified at the end of 2012. By the end of 2014, KMAC reported the number of confirmed mined areas had fallen slightly, to 77 covering 2.75 km².

 Mines are found mainly on Kosovo’s borders with Albania and the former Yugoslav Republic of Macedonia, but also in the area of Dulie Pass in south-central Kosovo. Mines in Kosovo impede use of land for agriculture, pasture, tourism, the building of infrastructure, and firewood collection, and most directly affect the rural poor. Many of the minefields cleared by HALO Trust in Kosovo are only a few metres from occupied houses.

**PROGRAMME MANAGEMENT**

In January 2011, the EOD [explosive ordnance disposal] Coordination Management Section became KMAC under the Ministry of the Kosovo Security Force (KSF). KMAC is responsible for managing the clearance of mines and ERW. It prepares an annual workplan in cooperation with demining non-governmental organisations (NGOs) and coordinates operations of both NGOs and the Kosovo Protection Force (KFOR). It also coordinates survey, quality assurance (QA), risk education, public information, and victim assistance.

**Strategic Planning**

A 2015–18 multi-year strategic plan for the Kosovo mine action programme aims to reduce the social, economic, and environmental impact of mines, CMR, and UXO in Kosovo.
Legislation and Standards

Kosovo has a law on humanitarian demining, which was adopted on 11 April 2012, in addition to a number of other relevant regulations.16 Kosovo has mine action standards in place, which are said to conform to the International Mine Action Standards (IMAS).17

Quality Management

KMAC has two QA officers who conduct site visits to ensure work is conducted in accordance with IMAS and the approved Standing Operating Procedures (SOPs).18

Operators

The KSF provide clearance capacity in Kosovo, including around-the-clock EOD emergency response.19 NGOs have also been conducting land release of mined area in Kosovo, including The HALO Trust, the Bosnia-based Mine Detection Dog Centre (MDDC), and Mines Awareness Trust (MAT). However, neither MDDC nor MAT was operational in 2016, and no MDDs or mechanical assets were used in Kosovo during the year.20

KSF reported that its capacity in 2016 remained the same as in 2015: it operated three platoons with a total of 75 deminers who are also trained for battle area clearance (BAC), and a fourth, with 25 clearance personnel trained solely to conduct EOD rapid-response tasks.21

The HALO Trust expanded its mine clearance capacity in 2016 to 100 operational staff, of whom 80 were conducting mine clearance and the remaining 20 carried out BAC.22

In December 2014, Norwegian People’s Aid (NPA) received accreditation to conduct non-technical survey for BAC, and subsequently conducted non-technical survey for CMR contaminated areas in July 2015.23 NPA subsequently received accreditation for technical survey, BAC, and risk education in July 2016. It started technical survey for CMR in November 2016, with follow-on clearance beginning in February 2017.24 As at September 2017, NPA was seeking accreditation for clearance, NPA planned to focus its demining operations on technical survey, and to use MDDs for this purpose, in cooperation with the Kosovo Security Force (KSF).25

LAND RELEASE

A total of just over 0.15km² of mined area was released by clearance in 2016. No area was reported as reduced by technical survey or cancelled by non-technical survey.

Survey in 2016

No anti-personnel mine survey was conducted in 2016.26

Table 1: Mine clearance in Kosovo in 201628

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSF</td>
<td>1 suspended</td>
<td>4,935</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>HALO</td>
<td>10 cleared and 5 suspended</td>
<td>147,039</td>
<td>38</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>151,974</td>
<td>40</td>
<td>2</td>
<td>24</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  
AV = Anti-vehicle

KSF cleared one mined area in 2016, totalling 4,935m², destroying in the process two anti-personnel mines. Clearance of the mined area was suspended at the end of the year due to the onset of winter and the consequent end of the demining season.29

While the area of land cleared by HALO Trust in 2016 (147,039m²) was the same as reported by both KMAC and The HALO Trust, HALO Trust reported it had cleared 10 areas, and suspended 4, and that it had destroyed 37 anti-personnel mines and 25 items of UXO during clearance operations in 2016.30 Despite focusing on confirmed mined areas, six of the fourteen areas of land cleared by The HALO Trust were found to have no anti-personnel mines, though clearance was continuing in two of the suspended tasks in 2017.31 The HALO Trust reported that a degree of evidence is always found from prior incidents, or mines found during survey of mined areas, and that while no complete mines were found during clearance, the teams generally encounter craters or component parts of detonated mines during clearance.32

According to KMAC, confirmed mined areas with high impact are prioritised for clearance.33 Clearance tasks are selected from the high priority areas where people are prevented access to land for cultivation and grazing, but also where communities are prevented from safely accessing wooded areas to gather firewood.34
ARTICLE 5 COMPLIANCE

Kosovo is not a state party to the APMBC. Nonetheless, Kosovo has obligations under customary international human rights law to protect life, which requires the clearance of mines as soon as possible. KMAC expects to complete clearance of anti-personnel mines in Kosovo by 2021, but it reported in 2017 that funding for NGOs may pose an obstacle to this completion date.35

Table 2: Mine clearance in 2015–16 and mine clearance/BAC in 2012–1444

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.15</td>
</tr>
<tr>
<td>2015</td>
<td>0.22</td>
</tr>
<tr>
<td>2014</td>
<td>0.84*</td>
</tr>
<tr>
<td>2013</td>
<td>0.40*</td>
</tr>
<tr>
<td>2012</td>
<td>0.69*</td>
</tr>
<tr>
<td>Total</td>
<td>2.3</td>
</tr>
</tbody>
</table>

* Includes mine and battle area clearance.

The Kosovo government provides approximately €125,000 in annual financial support to KMAC and €960,000 to the KSF for mine and CMR clearance.37 KMAC expected that level of funding to increase in 2017.38 In 2015, HALO Trust reported securing a commitment from an anonymous donor, who pledged to fund mine clearance in Kosovo, and to offer matching funds for clearance of all remaining mined areas provided HALO Trust can raise the other half.39 HALO Trust secured funding in 2016 that allowed it to increase the number of clearance teams. HSTAMIDS (Handheld Standoff Mine Detection System) was introduced to its programme in 2015,40 which HALO Trust finds has increased clearance speed in almost all the minefields in which they have been deployed.41

Unfortunately, misinformation persists that mine and CMR clearance was completed in 2001, whereas the reality is that significant contamination remains to be cleared. Kosovo is a poor country, and needs economic assistance to help it complete mine clearance in a timely manner, otherwise completion risks being prolonged to decades after the end of the conflict.42

2 Email from Ahmet Sallova, Head, Kosovo Mine Action Centre (KMAC), 16 March 2017.
3 Email from Ahmet Sallova, KMAC, 12 April 2016.
5 Ibid.
9 Email from Ahmet Sallova, KMAC, 20 February 2014.
10 Email from Ahmet Sallova, KMAC, 18 March 2015.
11 Email from Ahmet Sallova, KMAC, 30 July 2013.
12 Emails from Ahmet Sallova, KMAC, 12 April 2016; and Andrew Moore, Caucasus and Balkans Desk Officer, HALO Trust, 1 October 2016.
13 Email from Ash Boddy, Regional Director, HALO Trust, 29 April 2017.
14 Email from Ahmet Sallova, KMAC, 1 August 2012.
15 Emails from Ahmet Sallova, KMAC, 12 April 2016; and Andrew Moore, HALO Trust, 2 June 2016.
16 Emails from Ahmet Sallova, KMAC, 16 June and 3 July 2017.
17 Emails from Ahmet Sallova, KMAC, 12 April 2016; and Andrew Moore, 2 June 2016.
18 Email from Ahmet Sallova, KMAC, 12 April 2016.
20 Emails from Ahmet Sallova, KMAC, 16 March 2017.
21 Emails from Ahmet Sallova, KMAC, 7 June 2016 and 16 March 2017.
22 Email from Ash Boddy, HALO Trust, 29 April 2017.
24 Emails from Terje Eldoen, NPA, 4 May and 5 May 2017.
25 Email from Terje Eldoen, NPA, 14 September 2017.
26 Emails from Ahmet Sallova, KMAC, 16 March 2017; and Ash Boddy, HALO Trust, 29 April 2017.
27 Emails from Andrew Moore, HALO Trust, 1 October 2016; and Ahmet Sallova, KMAC, 12 April 2016.
28 Email from Ahmet Sallova, KMAC, 16 March 2017. There is a slight discrepancy in the reported data, as HALO Trust reported that it conducted clearance on 16 minefields (10 cleared and 4 suspended), destroying 37 anti-personnel mines and 25 items of UXO. Email from Ash Boddy, HALO Trust, 29 April 2017.
29 Emails from Ahmet Sallova, KMAC, 16 March and 18 September 2017.
30 Emails from Ash Boddy, HALO Trust, 29 April and 30 July 2017.
31 Ibid.
32 Email from Ash Boddy, HALO Trust, 30 July 2017.
33 Email from Ahmet Sallova, KMAC, 16 March 2017.
34 Email from Ash Boddy, HALO Trust, 29 April 2017.
35 Emails from Ahmet Sallova, KMAC, 16 March and 18 October 2017.
37 Email from Ahmet Sallova, KMAC, 20 February 2017.
38 Emails from Ahmet Sallova, KMAC, 16 March 2017.
40 Email from Andrew Moore, HALO Trust, 1 October 2016.
41 Email from Ash Boddy, HALO Trust, 29 April 2017.
# MINE ACTION PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

|                                | 5.6    | 5.6    |
Nagorno-Karabakh’s overall performance in 2016 remained constant. Although clearance output in Nagorno-Karabakh decreased in 2016 compared to the previous year, more land was released by survey. Progress towards completion in Nagorno-Karabakh is impacted by the fact that bilateral funding is typically restricted to within the traditional Soviet-era boundaries of Nagorno-Karabakh, which represent 18% of the overall mined area still to be cleared. The remaining 82% of mine contamination is in “green areas”, between the traditional Soviet boundary of the autonomous oblast of Nagorno-Karabakh, the militarised line of contact with Azerbaijan, and other international borders, for which it is more difficult to secure international funding.

**RECOMMENDATIONS FOR ACTION**

- The Nagorno-Karabakh authorities should commit to not use anti-personnel mines and provide resources for mine survey and clearance.
- The Nagorno-Karabakh authorities should make a commitment to respect the Anti-Personnel Mine Ban Convention (APMBC) and set a deadline for the clearance all anti-personnel mines.

**CONTAMINATION**

In 1988, a decision by the parliament of the Nagorno-Karabakh Autonomous Province to secede from Azerbaijan and join Armenia resulted in armed conflict in 1988–94 between Armenia and Azerbaijan. Nagorno-Karabakh declared independence in 1991, but this has not been internationally recognised.

All regions of Nagorno-Karabakh have been affected by mines and submunitions as a result of the 1988–94 conflict between Armenia and Azerbaijan. Mines were laid by both the Azeri and pro-Karabakh forces during the war, with a relatively high proportion of anti-vehicle mines being used in some regions, as well as anti-personnel mines throughout. The mines were of Soviet design and manufacture, and due to the nature of the conflict certain areas were mined several times.

New contamination was added in 2013. In July 2013, Nagorno-Karabakh’s military chief, General Movses Hakobian, reportedly stated that “his forces have placed more anti-personnel landmines this year along the Armenian-Azerbaijani ‘line of contact’ east and north of the disputed territory.” General Hakobian said use was aimed at preventing “sabotage” attacks by Azerbaijani troops.

In a 4 September 2013 response to a letter by the International Campaign to Ban Landmines (ICBL) to authorities in Nagorno-Karabakh, the Minister for Foreign Affairs of Nagorno-Karabakh did not deny that mines had been used. He 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.”

As at the end of 2016, 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 4.41km² across 75 mined areas (see Table 1). This is down from 5.14km² across 82 mined areas as at the end of 2015.

<table>
<thead>
<tr>
<th>Region</th>
<th>Total CHAs containing mines</th>
<th>CHAs with AP mines</th>
<th>CHAs with AP and AV mines</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Askeran</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0.22</td>
</tr>
<tr>
<td>Hadrut</td>
<td>23</td>
<td>17</td>
<td>6</td>
<td>2.49</td>
</tr>
<tr>
<td>Lachin</td>
<td>22</td>
<td>20</td>
<td>2</td>
<td>0.72</td>
</tr>
<tr>
<td>Martakert</td>
<td>16</td>
<td>13</td>
<td>3</td>
<td>0.57</td>
</tr>
<tr>
<td>Martuni</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>0.32</td>
</tr>
<tr>
<td>Shaumyan</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0.09</td>
</tr>
<tr>
<td>Totals</td>
<td>75</td>
<td>59</td>
<td>16</td>
<td>4.41</td>
</tr>
</tbody>
</table>

AP = Anti-personnel  AV = Anti-vehicle  CHAs = Confirmed hazardous areas
To date, 88% of mined areas across the whole of Nagorno-Karabakh have been cleared, including 97% of all known minefields in Soviet-era Nagorno-Karabakh. Of the remaining mined area, 82% is in “green areas” (areas between the traditional Soviet boundary of the autonomous oblast of Nagorno-Karabakh, the militarised line of contact with Azerbaijan, and other international borders), and the remaining 18% is within the traditional Soviet-era boundaries.9 Mined areas remain along the line of contact with Azerbaijan, but are inaccessible for clearance as this remains a conflict zone.10

Minefields in Nagorno-Karabakh are prioritised by two main factors: the density and type of minelaying, and their impact (including proximity to population and economic impact). Where possible, The HALO Trust develops its operational strategy based on clearance of identified “high” priority minefields first, before addressing “medium” and “low” priority areas. The vast majority of designated high-priority minefields have now been cleared.11

No civilian mine incidents were recorded in 2016;12 this compares to two incidents involving anti-personnel mines in 2015.13

Most people living in mine-affected areas in Nagorno-Karabakh are dependent on the land for their livelihoods.14 Mines impede use of land, roads, and other areas, and affect the rural population in particular, whose main income is from herding animals and farming.15

Mineral areas cleared by HALO Trust in 2016 were all affecting grazing or agricultural land, and indirectly benefitted 793 people.16

PROGRAMME MANAGEMENT

A mine action coordination committee is responsible for liaising between the local authorities and The HALO Trust.17 Regular coordination committee meetings are held between the local authorities, The HALO Trust, and the International Committee of the Red Cross (ICRC).18

In 2000, The HALO Trust established the Nagorno-Karabakh Mine Action Centre (NKMAC), which consolidates all mine-action-related information and responds to requests from the government ministries, other non-governmental organisations (NGOs), and local communities.19 The NKMAC maintains maps and a database of all suspected hazardous areas surveyed, all areas cleared of mines and explosive remnants of war (ERW), locations of all mine- and ERW-related incidents, and a record of all risk education given.20

Standards and Quality Management

No national standards exist in Nagorno-Karabakh and The HALO Trust follows its own standard operating procedures (SOPs).

Similarly, The HALO Trust uses its own quality management systems, with quality assurance (QA) and quality control (QC) applied by four levels of management.21

Operators

In 1995 and 1996, The HALO Trust trained local Karabakhi personnel in demining and left national staff to manage operations. In 1999, HALO Trust returned to find the programme had suffered significant failures, including many accidents and a breakdown of management.22

Since 2000, The HALO Trust has been the sole organisation conducting land release in Nagorno-Karabakh. HALO Trust’s Nagorno-Karabakh operations cover both mine and cluster munition remnants (CMR) clearance, and HALO Trust does not field separate teams dedicated solely to either. Operational staff are trained and experienced for both.23

In 2016, The HALO Trust employed an average of 142 personnel, an increase compared to the 123 average over the previous year, but still an overall decrease in capacity compared to the 167 personnel employed in 2014.24 Between January and December 2016, its total capacity for mine and CMR operations grew from nine operational teams to fifteen.25 The HALO Trust increased its capacity in April and May 2017, from 15 manual teams to 20.26

The HALO Trust deployed two Volvo armoured front loaders in 2016, as it did in previous years. Machines are predominantly deployed in clearance of roads with a plastic TM62P anti-vehicle mine threat, and on ground where it is more cost effective for anti-personnel and anti-vehicle mine clearance due, in most cases, to high levels of metal contamination.27

329
LAND RELEASE

More than 0.12km² of mined area was cleared in 2016 and a further 0.28km² was reduced by technical survey. In 2015, 0.21 km² was cleared.

Survey in 2016

More than 0.28km² of mined area was reduced through technical survey, and a further 0.36km² was cancelled in two suspected hazardous areas (SHAs) through non-technical survey. Six areas were confirmed as mined, totalling almost 0.18km².

In 2016, HALO Trust trialled the use of special detection dogs, provided by Norwegian People’s Aid (NPA), for reduction of the size of SHAs and confirmed hazardous areas (CHAs) in Nagorno-Karabakh. As at September 2017, the trial was ongoing.

Clearance in 2016

In 2016, a total of 10 mined areas covering 122,448m² were released by clearance. Operations destroyed 27 anti-personnel mines, 1 anti-vehicle mine, and 150 items of UXO.

In addition to planned clearance, The HALO Trust was called out to 170 explosive ordnance disposal (EOD) tasks in 2016, during which 90 anti-personnel mines, 21 anti-vehicle mines, and 85 submunitions were destroyed along with 510 other items of UXO, stray ammunition, and air-dropped bombs.

Where possible, clearance is conducted only on CHAs, but areas remain that still require technical investigation, in addition to area where technical survey did not produce evidence of mines, but where mine-laying remains strongly suspected.

The ratio of mines found to area cleared is now relatively low, due in part to the absence of reliable mapping by former combatants; the sporadic nature of anti-vehicle mine-laying in low areas and on former road networks; and the fact that most heavily mined areas have been cleared.

Deminer Safety

The HALO Trust recorded one demining accident in December 2016, but no injuries were sustained.

ARTICLE 5 COMPLIANCE

Nagorno-Karabakh is neither a state party nor a signatory to the APMBC and therefore does not have a specific clearance deadline under Article 5. Nonetheless, it has obligations under customary international human rights law to protect life, which requires the clearance of mines as soon as possible.

Despite the clear humanitarian need to clear mines and ERW, Nagorno-Karabakh’s unrecognised status prevents many governments from funding humanitarian activities in the territory. The HALO Trust receives no funding from Armenia or the Nagorno-Karabakh authorities.

Progress in mine clearance has fluctuated over the last five years, as shown in Table 2, but with clearance output averaging below 0.5km² annually.

Table 2: Mine clearance in 2012–16

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.12</td>
</tr>
<tr>
<td>2015</td>
<td>0.21</td>
</tr>
<tr>
<td>2014</td>
<td>0.54</td>
</tr>
<tr>
<td>2013</td>
<td>0.31</td>
</tr>
<tr>
<td>2012</td>
<td>1.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2.18</strong></td>
</tr>
</tbody>
</table>

* Includes anti-vehicle and anti-personnel mines.
In 2014, HALO Trust reported that full clearance of minefields in Soviet-era Nagorno-Karabakh could be achieved within three years if sufficient funding were available.\textsuperscript{43} 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.\textsuperscript{44} In 2017, HALO Trust reported that full clearance of minefields in Soviet-era Nagorno-Karabakh could be achieved by 2019.\textsuperscript{45}

Furthermore, significant contamination remains in adjacent territories. Bilateral funding is often restricted to the traditional border of the Soviet oblast of Nagorno-Karabakh, leaving clearance of surrounding territories to private foundations.\textsuperscript{46} The HALO Trust increased its capacity in April and May 2017, principally as a result of an anonymous donor committing funding for manual clearance teams and matched-funding for clearance of “green areas” outside of the traditional Soviet oblast boundary.\textsuperscript{47}

The majority of remaining mined areas are only accessible during the dry summer months of May to October, and HALO Trust planned to expand its clearance capacity through training and to deploy more teams over this period. As at April 2017, clearance in the “green areas” was focused on high- and medium-priority tasks in the Lachin corridor and Martuni region, with private funding; with clearance of the remaining minefields within the traditional Soviet oblast boundary, conducted with USAID funding.\textsuperscript{48}

\begin{enumerate}
\item Ibid.
\item Email from Andrew Moore, Balkans and Caucasus Desk Officer, HALO Trust, 1 October 2016.
\item Email from Ash Boddy, Regional Director Nagorno-Karabakh, HALO Trust, 3 April 2017.
\item Ibid.
\item Ibid.
\item Email from Andrew Moore, HALO Trust, 1 October 2016.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Ibid.
\item Email from Andrew Moore, HALO Trust, 1 October 2016.
\item HALO Trust website, accessed 15 September 2017 at: http://www.halotrust.org/where-we-work/nagorno-karabakh.
\item USDAID, “De-mining Needs Assessment in Nagorno-Karabakh”, September 2013, p. 3.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Ibid.
\item Email from Andrew Moore, HALO Trust, 1 October 2016.
\item HALO Trust website, accessed 15 September 2017 at: http://www.halotrust.org/where-we-work/nagorno-karabakh.
\item USDAID, “De-mining Needs Assessment in Nagorno-Karabakh”, September 2013, p. 3.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Email from Andrew Moore, HALO Trust, 28 June 2013.
\item Email from Andrew Moore, HALO Trust, 26 May 2016.
\item Email from Andrew Moore, HALO Trust, 28 June 2013.
\item Email from Andrew Moore, HALO Trust, 25 May 2016.
\item Response to Mine Action Monitor questionnaire by Andrew Moore, HALO Trust, 22 May 2015.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Emails from Ash Boddy, HALO Trust, 27 and 29 April 2017.
\item Email from Ash Boddy, HALO Trust, 28 September 2017.
\item Ibid.
\item Ibid.
\item Email from Andrew Moore, HALO Trust, 1 October 2016.
\item Ibid.
\item Email from Andrew Moore, HALO Trust, 1 October 2016.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Ibid.
\item Email from Andrew Moore, HALO Trust, 1 October 2016.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Ibid.
\item Email from Andrew Moore, HALO Trust, 1 October 2016.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Ibid.
\item Ibid.
\item Email from Andrew Moore, HALO Trust, 28 June 2013.
\item Emails from Andrew Moore, HALO Trust, 22 May and 11 June 2015; and Ash Boddy, HALO Trust, 28 September 2017.
\item Email from Ash Boddy, HALO Trust, 28 September 2017.
\item Emails from Ash Boddy, HALO Trust, 3 April and 28 September 2017.
\item Emails from Ash Boddy, HALO Trust, 3 and 27 April 2017.
\item Emails from Andrew Moore, HALO Trust, 19 March 2014 and 11 June 2015.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Email from Ash Boddy, HALO Trust, 28 September 2017.
\item Email from Andrew Moore, HALO Trust, 1 October 2016.
\item Email from Ash Boddy, HALO Trust, 3 April 2017.
\item Ibid.
\item Ibid.
\end{enumerate}
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<thead>
<tr>
<th>Indicator</th>
<th>For 2016</th>
<th>For 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
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<td>7</td>
</tr>
<tr>
<td>Target date for completion of mine clearance</td>
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<td>3</td>
</tr>
<tr>
<td>Targeted clearance</td>
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<td>7</td>
</tr>
<tr>
<td>Efficient clearance</td>
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<td>7</td>
</tr>
<tr>
<td>National funding of programme</td>
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<td>3</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Land release system in place</td>
<td>8</td>
<td>8</td>
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<td>National mine action standards</td>
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<td>Reporting on progress</td>
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<td>Improving performance</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

5.2  5.6
PERFORMANCE COMMENTARY

Progress to address remaining mine contamination in Western Sahara was hindered in 2016 by a six-month shutdown of United Nations Mine Action Service (UNMAS)-contracted demining operations due to a political issue with Morocco. No areas containing anti-personnel mines were cleared in 2016. Overall land release of areas affected by anti-vehicle mines and explosive remnants of war (ERW) increased slightly, to just under 4.5km². The priority for mine action operations in Western Sahara east of the Berm, according to UNMAS, remained non-technical survey of all suspected hazardous areas (SHAs) in order to better define and reduce the inflated estimates of the size of hazardous areas recorded in a 2008 survey.1

RECOMMENDATIONS FOR ACTION

■ The Saharawi Arab Democratic Republic (SADR) should formally commit to respect and implement the Anti-Personnel Mine Ban Convention (APMBC), including to clear all mine contamination east of the Berm as soon as possible.

■ 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.

■ The draft mine action plan for Western Sahara should be finalised and made publicly available.

CONTAMINATION

The exact extent of mine contamination across Western Sahara is not known, although the areas along the Berm are thought to contain some of the densest mine contamination in the world. The contamination is a result of fighting in previous decades between the Royal Moroccan Army (RMA) and the Popular Front for the Liberation of Saguia el Hamra and Rio de Oro (Polisario Front) forces. According to UNMAS, the primary mine threat in Western Sahara east of the Berm, excluding both the Berm itself and the buffer strip, is from anti-vehicle rather than anti-personnel mines; cluster munition remnants are also a major hazard. It stated that, as at the end of 2016, only a limited number of areas suspected to contain anti-personnel mines remained to the east of the Berm, and the majority of mine contamination identified during ongoing and historical clearance efforts was from anti-vehicle mines.5

At the end of 2016, land in Western Sahara to the east of the Berm contained a total of 36 confirmed and suspected mined areas covering a total of more than 252km², as set out in Table 1. This is almost 4.5km² less than at the end of 2015, according to UNMAS’s estimate of contamination.7 Seven of the thirty-six areas, covering a total of 61.9km², 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 MINURSO mission agreements, which according to the UN, considerably limits the ability of MINURSO military observers to patrol and verify developments.9

Table 1: Mine contamination east of the Berm (as at end-2016)10

<table>
<thead>
<tr>
<th>Type of contamination</th>
<th>CHAs</th>
<th>Area (km²)</th>
<th>SHAs</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP mines</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>AV mines</td>
<td>13</td>
<td>3.3</td>
<td>13</td>
<td>94.2</td>
</tr>
<tr>
<td>AP/AV mines</td>
<td>2</td>
<td>0.5</td>
<td>8</td>
<td>153.9</td>
</tr>
<tr>
<td>Totals</td>
<td>15</td>
<td>3.8</td>
<td>22</td>
<td>248.2</td>
</tr>
</tbody>
</table>

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

Both the north and south of Western Sahara are known or suspected to contain anti-personnel mines, as set out in Table 2.11

Table 2: Areas containing anti-personnel mines by province east of the Berm (as at end-2016)12

<table>
<thead>
<tr>
<th>Province</th>
<th>CHAs</th>
<th>Area (km²)</th>
<th>SHAs</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Region</td>
<td>2</td>
<td>0.53</td>
<td>6</td>
<td>8.3</td>
</tr>
<tr>
<td>South Region</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>145.7</td>
</tr>
<tr>
<td>Totals</td>
<td>2</td>
<td>0.53</td>
<td>9</td>
<td>154.0</td>
</tr>
</tbody>
</table>
The figure of 154km² of remaining anti-personnel mine contamination is not consistent with the figure at the end of 2015, less reported release during the year. This figure would be just under 180km². UNMAS has sought to justify the huge difference by reference to the peculiarities of the Information Management System for Mine Action (IMSMA) database in Western Sahara. In 2016, UNMAS continued to prioritise non-technical survey of SHAs to obtain a more accurate picture of the remaining threat. In 2015, a number of confirmed mined areas were reclassified as SHAs in the IMSMA database prior to non-technical survey intended to better define the parameters and size of the areas.

A survey in 2006–08 by an international non-governmental organisation (NGO), Landmine Action, later renamed Action on Armed Violence (AOAV), initially identified 37 mined areas on the east of the Berm, nearly half of which were in Bir Lahou, followed by Tifariti, Mehaires, and Agwanit. According to UNMAS, five mined areas were addressed in 2012–16, but new mined areas continued to be identified. No new anti-personnel mine contamination was identified in 2016.

**PROGRAMME MANAGEMENT**

In Western Sahara, UNMAS contracts a survey/clearance capacity through implementing partners, with quality assurance performed externally by UNMAS staff in accordance with the International Mine Action Standards (IMAS). Survey and clearance were implemented by commercial contractor Dynasafe MineTech Limited (DML) and NGO Norwegian People’s Aid (NPA) in 2016.

In September 2013, the Polisario Front established a local mine action coordination centre (the Saharawi Mine Action Coordination Office, SMACO), which is responsible for coordinating mine action in Western Sahara east of the Berm and for land release activities. SMACO, which was established with UN support, started its activities in January 2014.

**Strategic Planning**

MINURSO’s mine action activities are conducted in accordance with the UN Mine Action Strategy for 2013–18. UNMAS planned to develop a mine action strategy specific to Western Sahara in the second half of 2015. As at September 2017, the strategy was still considered a draft and not publicly available. UNMAS reported that ongoing discussions with MINURSO and SMACO continued, with a target date of July 2018 for the strategy’s release, while a multi-year workplan remained in place. According to UNMAS, the strategy foresees completion of non-technical survey in 2017/2018; release of all recorded cluster munition strike areas east of the Berm by the end of 2019; and a 50% reduction in the total number of recorded SHAs and CHAs remaining in Western Sahara by the end of 2022.

UNMAS reported that the MINURSO mine action component identifies priorities for mine clearance to the east of the Berm in conjunction with SMACO. Priorities for mine clearance are areas that restrict MINURSO from carrying out its mandate and areas established with SMACO that hinder the safety of movement of local communities.

**Standards**

In 2016, UNMAS, together with SMACO, finalised the development of local mine action standards applicable east of the Berm, in coordination with mine action partners. In May 2017, UNMAS reported that the standards had been disseminated to all mine action stakeholders and that their implementation was jointly monitored by the MINURSO mine action component and SMACO, pending their official certification by SMACO. As at April 2017, the standards were said to be in the process of being translated into Arabic.

**Quality Management**

An external quality management system is in place and is implemented by the MINURSO mine action component, which consists of inspection visits for the accreditation of MTT teams as well as during clearance. UNMAS reported that, during 2016, a total of 25 quality assurance (QA) visits were conducted to assess mine clearance tasks.

According to NPA, SMACO also conducted external QA and quality control (QC) activities. In April–September 2016, however, no external QA/QC was carried out on demining activities owing to the expulsion of UNMAS and MINURSO staff from Western Sahara by Morocco.
Information Management

UNMAS claimed that significant improvements were made to the IMSMA database for Western Sahara in 2016 as a result of an ongoing data audit initiated at the end of 2015, which filtered out duplicate information. Revised standing operating procedures for data management were also introduced with a stronger emphasis on the verification of information, it said.31

UNMAS initiated a project, funded by Germany, to build SMACO’s capacity for information management, which included training a local Information Management Officer in 2016. NPA reported that the management of the IMSMA database by the MINURSO mine action component and SMACO had improved, with better access, coordination, and communication between the two entities following the relocation of UNMAS to Tindouf, Algeria, in September 2016.32

LAND RELEASE

No areas containing anti-personnel mines were cleared in 2016. An area thought to contain mixed anti-personnel and anti-vehicle mine contamination was cleared, but no anti-personnel mines were found.34

In 2016, DML was reported to have cancelled two SHAs where anti-personnel mines had been suspected, covering nearly 0.44km², and confirmed two SHAs with a size of 0.53km² as containing anti-personnel mines.35

According to UNMAS, in 2016, nearly 4.5km² of anti-vehicle mine contamination was released in 2016, of which 328,355m² was by clearance and 4,037,993m² cancellation by non-technical survey. This is a slight increase from 2015, when nearly 4.4km² of area containing anti-vehicle mines and ERW was released: 502,901m² by clearance and 3,881,967m² cancelled through non-technical survey. As was the case in 2016, all tasked areas were contaminated with anti-vehicle mines and no anti-personnel mines were located during clearance.34

In 2016, nearly 0.74km² of area containing anti-vehicle mines was released by DML, of which 195,862m² was cleared and 548,892m² was cancelled by non-technical survey, locating and destroying 17 anti-vehicle mines.39

By the end of the year, NPA had cleared a total of 132,493m² in two areas contaminated with anti-vehicle mines in Bir Lahlou, with the destruction of six anti-vehicle mines. It released a further 0.13km² through technical survey and cancelled a total of almost 3.5km² during the year.40 This compared to 2015, when NPA cancelled nearly 0.25km² by non-technical survey and reduced a further 0.1km² through technical survey, with DML confirming 0.29km² as mined.41

ARTICLE 5 COMPLIANCE

Western Sahara is not a state party to the APMBC. In June 2014, however, the SADR submitted a voluntary APMBC Article 7 transparency report to the UN “as a sign of the support of the Sahrawi State for the goals of the Treaty”.42 The SADR has obligations under international human rights law to clear mines as soon as possible, including by virtue of being a state party to the 1981 African Charter on Human and Peoples’ Rights.

As noted above, in 2016, the six-month suspension of operations negatively affected UNMAS’ yearly operational targets. NPA cited other challenges to operations, including working in a remote desert environment allied to serious difficulties in procuring certain equipment and materials.43 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.45

Following a visit by former UN Secretary-General Ban Ki-moon to Sahrawi refugee camps in southern Algeria in March 2016 and his use of the term “occupation” to describe the political status of Western Sahara, Morocco ordered the expulsion of 83 civilian staff members of MINURSO, including all UNMAS international staff. This resulted in the suspension of demining in Western Sahara east of the Berm from 20 March to 15 September 2016.46

On 29 April 2016, the UN Security Council voted to extend MINURSO’s mandate in Western Sahara for one year until 30 April 2017. In doing so, it emphasised strongly “the urgent need for the mission to return to full functionality”, noting that MINURSO had been unable to fully carry out its mandate as the majority of its civilian component had been prevented from performing their duties.47 The mandate was subsequently updated for an additional year until the end of April 2018.48

Operators

In January–November 2016, a total of five Multi-Task Teams (MTTs) were in Western Sahara. Two MTTs were deployed by NPA to conduct mine clearance, along with two of three teams contracted from DML. In November 2016, new funding from Germany allowed three additional DML teams to be deployed, making a total of eight operational MTTs. Of these three additional DML teams, two were assigned to mine survey and clearance tasks.33

In 2016, nearly 0.74km² of area containing anti-vehicle mines was released by DML, of which 195,862m² was cleared and 548,892m² was cancelled by non-technical survey, locating and destroying 17 anti-vehicle mines.39

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To the west of the Berm, according to a UN Secretary-General report, RMA reported, improbably in the view of Mine Action Review, that it had cleared more than 218km² in territory under its control between April 2016 and April 2017.42

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UNMAS reported that mine action operations returned to full capacity in September 2016, when it relocated to Tindouf, Algeria. In March 2017, it stated that there were no restrictions on movement in UNMAS’s areas of operations east of the Berm. However, that the events of 2016 could complicate access to the Berm and negatively affect donor interest in Western Sahara.

Under Western Sahara’s new draft mine action strategic plan, non-technical survey is to be completed in 2017/18 and the number of recorded SHAs and CHAs reduced by 50% by the end of 2022. MINURSO MACC reported that priorities in 2017 would be the completion of non-technical survey in five districts east of the Berm, with the survey of six SHAs. It predicted that the increase in demining capacity in November 2016 would be maintained throughout the year as operational funding for the additional teams had been secured for 24 months.

In 2017, NPA planned to deploy an additional MTT with the capacity to carry out battle area clearance (BAC), explosive ordnance disposal (EOD), and survey, alongside its mine clearance operations. It planned to complete survey and clearance of all SHAs and CHAs in Bir Lahlou province, including non-technical survey of three SHAs with a recorded size of more than 3.5km². It also intended to start operations in an area suspected to contain anti-personnel mines close to the buffer strip near the Berm.

In keeping with previous estimates, UNMAS estimated that all high and medium hazardous areas in Western Sahara east of the Berm, including mined areas, could be released by 2025.

1. Email from Virginie Auger, UNMAS, 29 March 2017.
2. 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.
4. Email from Graeme Abernethy, Programme Manager, UNMAS, 7 September 2017.
5. Email from Virginie Auger, Associate Programme Officer, UNMAS, 29 March 2017.
6. Ibid.
11. Ibid.
12. Ibid. This includes areas recorded as having mixed anti-personnel and anti-vehicle mines.
13. Email from Graeme Abernethy, UNMAS, 21 September 2016.
15. Email from Penelope Caswell, Field Programme and Geographic Information Manager, AOAV, 18 May 2010.
16. Email from Graeme Abernethy, UNMAS, 7 September 2017.
22. Response to questionnaire by Sarah Holland, UNMAS, 24 February 2014; and email, 25 February 2014.
23. Email from Sarah Holland, UNMAS, 5 June 2015.
24. Email from Graeme Abernethy, UNMAS, 7 September 2017.
25. Email from El Hadji Mamadou Kebe, Programme Manager, NPA, 8 April 2017.
27. Email from Virginie Auger, UNMAS, 17 May 2017.
30. Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.
32. Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.
33. Email from Virginie Auger, UNMAS, 10 May 2017.
34. Email from Virginie Auger, UNMAS, 29 March 2017.
35. Ibid.; and email from Graeme Abernethy, UNMAS, 7 September 2017.
36. Email from Graeme Abernethy, UNMAS, 24 August 2016.
37. Ibid.
38. Ibid.
39. Emails from Graeme Abernethy, UNMAS, 7 and 26 September 2017.
40. Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.
41. Emails from El Hadji Mamadou Kebe, NPA, 4 May 2016; and Sarah Holland, UNMAS, 26 April 2016; and response to questionnaire, 18 May 2015.
44. Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.
47. UN Security Council Resolution 2285, 29 April 2016.
49. Email from Virginie Auger, UNMAS, 29 March 2017.
50. Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.
51. Email from Virginie Auger, UNMAS, 29 March 2017.
52. Ibid.
53. Email from El Hadji Mamadou Kebe, NPA, 8 April 2017.
54. Emails from Virginie Auger, UNMAS, 10 May and 29 March 2017; and Sarah Holland, UNMAS, 21 April and 18 May 2016.
HALO Trust deminers carefully search for landmines, during clearance operations on a hillside in Afghanistan, 2017 © HALO Trust
ANNEX 1: ARTICLE 5 OF THE ANTI-PERSONNEL MINE BAN CONVENTION

ARTICLE 5: DESTRUCTION OF ANTI-PERSONNEL MINES IN MINED AREAS

1. Each State Party undertakes to destroy or ensure the destruction of all anti-personnel mines in mined areas under its jurisdiction or control, as soon as possible but not later than ten years after the entry into force of this Convention for that State Party.

2. Each State Party shall make every effort to identify all areas under its jurisdiction or control in which anti-personnel mines are known or suspected to be emplaced and shall ensure as soon as possible that all anti-personnel mines in mined areas under its jurisdiction or control are perimeter-marked, monitored and protected by fencing or other means, to ensure the effective exclusion of civilians, until all anti-personnel mines contained therein have been destroyed. The marking shall at least be to the standards set out in the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices, as amended on 3 May 1996, annexed to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects.

3. If a State Party believes that it will be unable to destroy or ensure the destruction of all anti-personnel mines referred to in paragraph 1 within that time period, it may submit a request to a Meeting of the States Parties or a Review Conference for an extension of the deadline for completing the destruction of such anti-personnel mines, for a period of up to ten years.

4. Each request shall contain:
   a) The duration of the proposed extension;
   b) A detailed explanation of the reasons for the proposed extension, including:
      (i) The preparation and status of work conducted under national demining programmes;
      (ii) The financial and technical means available to the State Party for the destruction of all the anti-personnel mines; and
      (iii) Circumstances which impede the ability of the State Party to destroy all the anti-personnel mines in mined areas;
   c) The humanitarian, social, economic, and environmental implications of the extension; and
   d) Any other information relevant to the request for the proposed extension.

5. The Meeting of the States Parties or the Review Conference shall, taking into consideration the factors contained in paragraph 4, assess the request and decide by a majority of votes of States Parties present and voting whether to grant the request for an extension period.

6. Such an extension may be renewed upon the submission of a new request in accordance with paragraphs 3, 4 and 5 of this Article. In requesting a further extension period a State Party shall submit relevant additional information on what has been undertaken in the previous extension period pursuant to this Article.
ANNEX 2: REPORTING TEMPLATES

Annex 2 provides templates for reporting accurately and meaningfully on landmine contamination and identification and release of land confirmed or suspected to contain mines.

Table 1: Mine contamination by province (as at end [2016])

<table>
<thead>
<tr>
<th>Province/Region</th>
<th>No. of CHAs with mines</th>
<th>Area (km²)</th>
<th>No. of SHAs with mines</th>
<th>Area (km²)</th>
</tr>
</thead>
</table>

Totals

CHAs = Confirmed hazardous areas  SHAs = Suspected hazardous areas

Table 2: Non-technical survey in [2016]

<table>
<thead>
<tr>
<th>Operator</th>
<th>No. of SHAs cancelled</th>
<th>Area cancelled (m²)</th>
<th>No. of SHAs confirmed as mined</th>
<th>Area confirmed (m²)</th>
</tr>
</thead>
</table>

Totals

Table 3: Technical survey of mined area in [2016]

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area covered (km²)</th>
<th>No. of CHAs identified</th>
<th>Area confirmed (km²)</th>
<th>Area reduced (km²)</th>
</tr>
</thead>
</table>

Totals

Table 4: Clearance of mined areas in [2016]

<table>
<thead>
<tr>
<th>Operator</th>
<th>No. of areas cleared</th>
<th>Area cleared (m²)</th>
<th>AP mines destroyed</th>
<th>AV mines destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
</table>

Totals

AP = Anti-personnel  AV = Anti-vehicle  UXO = Unexploded ordnance
# Glossary of Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP mine</td>
<td>Anti-personnel mine</td>
</tr>
<tr>
<td>APMBC</td>
<td>Anti-Personnel Mine Ban Convention</td>
</tr>
<tr>
<td>AV mine</td>
<td>Anti-vehicle mine</td>
</tr>
<tr>
<td>AXO</td>
<td>Abandoned explosive ordnance</td>
</tr>
<tr>
<td>BAC</td>
<td>Battle area clearance</td>
</tr>
<tr>
<td>CCM</td>
<td>Convention on Cluster Munitions</td>
</tr>
<tr>
<td>CHA</td>
<td>Confirmed hazardous area</td>
</tr>
<tr>
<td>CMR</td>
<td>Cluster munition remnants</td>
</tr>
<tr>
<td>DDG</td>
<td>Danish Demining Group</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>EOD</td>
<td>Explosive ordnance disposal</td>
</tr>
<tr>
<td>ERW</td>
<td>Explosive remnants of war</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FSD</td>
<td>Swiss Foundation for Mine Action</td>
</tr>
<tr>
<td>HALO</td>
<td>The HALO Trust</td>
</tr>
<tr>
<td>HI</td>
<td>Handicap International</td>
</tr>
<tr>
<td>ICC</td>
<td>Integrated Clearance Capacity (team)</td>
</tr>
<tr>
<td>IED</td>
<td>Improvised explosive device</td>
</tr>
<tr>
<td>IMAS</td>
<td>International Mine Action Standards</td>
</tr>
<tr>
<td>IMSMA</td>
<td>Information Management System for Mine Action</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>Lao People’s Democratic Republic</td>
</tr>
<tr>
<td>MAC</td>
<td>Mine action centre</td>
</tr>
<tr>
<td>MACCA</td>
<td>Mine Action Coordination Centre of Afghanistan</td>
</tr>
<tr>
<td>MAG</td>
<td>Mines Advisory Group</td>
</tr>
<tr>
<td>MAPA</td>
<td>Mine Action Programme of Afghanistan</td>
</tr>
<tr>
<td>MAT</td>
<td>Mine Action Team</td>
</tr>
<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>MTT</td>
<td>Multi-Task Team</td>
</tr>
<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
</tr>
<tr>
<td>NMAA</td>
<td>National Mine Action Authority</td>
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<td>NMAS</td>
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<tr>
<td>NTS</td>
<td>Non-technical survey</td>
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<td>QA</td>
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<tr>
<td>UXO</td>
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An NPA dog handler and his mine detection dog conduct technical survey in Bratunac municipality, in the Srebrenica region of eastern Bosnia and Herzegovina, July 2017. © Norwegian People’s Aid (NPA)