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

Mine Action Review collects data on behalf of Cluster Munition Monitor and provides all of its analysis and country reports to Cluster Munition Monitor.

Please send any comments to feedback@mineactionreview.org.
Mine action has come a long way since its origins almost 30 years ago amid the chaos of Afghanistan. It has taken far too many years to get here, but at last the international mine action community understands that high-quality survey followed by targeted clearance is at the heart of effective land release, and is the key to our collective success.

Unfortunately, it is not yet being universally applied. We therefore stress the critical importance of an evidence-based approach to survey to confirm areas that contain mines or cluster munition remnants (CMR), while allowing safe release of areas where only unfounded suspicion of contamination persists.

As a sector, we are collectively stronger than ever, and the lessons we learnt in implementing the Anti-Personnel Mine Ban Convention (APMBC) have been put to good effect in seeking to make the Convention on Cluster Munitions (CCM) a similar success. Mine action NGOs inevitably compete for funds, but today we are also working together as partners in an essential humanitarian and development endeavour, driven by a shared responsibility to learn from our experiences and our mistakes, and underpinned by our desire for ever-greater operational efficiencies.

Our collective ability to innovate and collaborate is clearly demonstrated in CMR survey and clearance in south-east Asia, a region which has suffered the heaviest CMR contamination of all time. Our programmes in the Lao People’s Democratic Republic and Vietnam are already demonstrating that, by working together, a threat that was once expected to last for a millennium could be removed in only a few decades. Case studies from both these countries help show what can be achieved when international demining NGOs, national clearance operators, national authorities, and international donors work together in a spirit of constructive endeavour and use an evidence- and risk-based approach to tackling CMR contamination.

Determining a realistic baseline of contamination is crucial. So too is developing a strategic plan that brings together our operational tools and expertise in a coordinated fashion, under national ownership, applying resources where they are needed, not merely where it is politically expedient or operationally convenient.

Several states parties affected by CMR have already used up more than half of their ten-year treaty deadlines. Indeed, for all but Colombia and Somalia, “CCM Article 4 deadlines to find and destroy all CMR under their jurisdiction or control fall between 2020 and 2023. Meeting their deadlines without the need to seek an extension should be our collective aim and our firm resolution. To do so, operators need the generous funding of donors and national commitment to be sustained, and states must continue to receive political, technical, and human support for their mine action programmes.

Our organisations are best known for their principled pragmatism. We will pursue a world without mines, cluster munitions, and other explosive remnants of war, and can demonstrate how lives and limbs are saved and livelihoods preserved through our work.

As a sector we have the operational tools and expertise needed to succeed. We also know what leads to success, as captured by the ten criteria against which Mine Action Review assesses each national mine action programme. For if we fail, it is not because we do not know how to succeed; it is only because the international mine action community lackt the collective will to succeed. The personal, familial, and societal misery wrought by mines and cluster munitions is not something we should ever be willing to accept, and if we do not accept it, then we must surely acknowledge that it is our solemn duty to address it.

We therefore call on all others who have a stake in the success of mine action to do whatever they can. To ensure that states live up to their duties, Mine Action Review must continue not only to collate and present mine action data independently, but also to serve as an arbiter of success and failure in mine action. The “Clearing Cluster Munition Remnants” and “Clearing the Mines” reports provide a critical, but constructive, look at the sector, and a strategic tool for every stakeholder engaged in mine action.

NICK ROSEVEARE
Chief Executive
Mines Advisory Group

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

JAMES COWAN CBE DSO
Chief Executive Officer
The HALO Trust
# Clearing Cluster Munition Remnants

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OVERVIEW

SUMMARY

Twenty-nine states and three territories are contaminated with cluster munition remnants (CMR). From this total, Mozambique, a state party to the Convention on Cluster Munitions (CCM), was expected to complete CMR clearance before the end of 2016. The Democratic Republic of Congo (DR Congo), a CCM signatory, could do likewise. Targeted survey in Colombia, a state party, Angola, a signatory, and Tajikistan, a state not party may enable fulfilment of Article 4 of the CCM without the need for large-scale battle area clearance.

Despite significant new use of cluster munitions in 2015, especially in Libya and Syria, by Saudi Arabia in Yemen, and in Ukraine, Mine Action Review has recorded substantial progress in the destruction of CMR in ten states and three territories. More than 120,000 submunitions were destroyed by clearance operations during 2015 from 70km² of contaminated area. Global clearance in 2015 destroyed almost double the number of submunitions compared to the previous year’s total even though the amount of area cleared was approximately 4km² lower than the results in 2014. This suggests CMR clearance operations have become better targeted.

The overwhelming majority of clearance in 2015 took place in the Lao People’s Democratic Republic (Lao PDR), the world’s most heavily contaminated state, as it had in 2014. While clearance in Nagorno-Karabakh decreased significantly in 2015, clearance of CMR by international operators in Vietnam was up dramatically on the previous year, increasing fivefold to almost 10km². Despite significant problems in its programme, Iraq also achieved much greater clearance of CMR-contaminated areas in 2015 than during the previous year.

GLOBAL CONTAMINATION

As at May 2016, 14 states parties to the CCM were confirmed or strongly suspected to contain CMR, as well as 2 signatories, 13 states not party, and 3 other areas (see Table 1). This is the same total as Mine Action Review reported last year, although two signatories (Colombia and Somalia) have since ratified the CCM and become states parties.

Table 1: Global CMR contamination

<table>
<thead>
<tr>
<th>States parties</th>
<th>Signatory states</th>
<th>States not party</th>
<th>Other areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>Angola*</td>
<td>Azerbaijan**</td>
<td>Kosovo</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>DR Congo*</td>
<td>Cambodia</td>
<td>Nagorno-Karabakh</td>
</tr>
<tr>
<td>Chad</td>
<td></td>
<td>Georgia**</td>
<td>Western Sahara</td>
</tr>
<tr>
<td>Chile</td>
<td></td>
<td>Iran</td>
<td></td>
</tr>
<tr>
<td>Colombia*</td>
<td></td>
<td>Libya</td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td></td>
<td>Serbia</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td></td>
<td>South Sudan</td>
<td></td>
</tr>
<tr>
<td>Iraq</td>
<td></td>
<td>Sudan</td>
<td></td>
</tr>
<tr>
<td>Lao PDR</td>
<td></td>
<td>Syria</td>
<td></td>
</tr>
<tr>
<td>Lebanon</td>
<td></td>
<td>Tajikistan*</td>
<td></td>
</tr>
<tr>
<td>Montenegro</td>
<td></td>
<td>Ukraine</td>
<td></td>
</tr>
<tr>
<td>Mozambique*</td>
<td></td>
<td>Vietnam</td>
<td></td>
</tr>
<tr>
<td>Somalia</td>
<td></td>
<td>Yemen</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 states parties</td>
<td>2 signatory states</td>
<td>13 states not party</td>
<td>3 other areas</td>
</tr>
</tbody>
</table>

* Survey and clearance could be completed in 2016. ** Clearance complete in areas under government control.

1 The text of Article 4 is included in Annex 1.
EXTENT OF CONTAMINATION

In many affected states, contamination is limited and the problem is manageable within a few months or years. Lao PDR and Vietnam, however, are massively contaminated (defined as covering more than 1,000km² of land), while heavy contamination exists in Cambodia and Iraq (covering more than 100km²). Clearance in all four states will take many years and possibly decades. Most other states are far less affected, although in several cases the extent is simply unknown or, as yet, unclear. Furthermore, inadequate earlier surveys in a number of contexts, notably Kosovo and Lebanon, mean that despite ongoing clearance estimated total contamination is not reducing, due to previously unknown contamination continuing to be identified.

Table 2 summarises what is known or reasonably believed about the actual extent of CMR 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, which are sometimes unsubstantiated or improbable. No reliable estimate yet exists (in terms of square kilometres) for the extent of land contaminated globally with CMR.

Table 2: Extent of contamination in affected states and other areas

<table>
<thead>
<tr>
<th>Massive (&gt;1,000km²)</th>
<th>Heavy (100–1,000km²)</th>
<th>Medium (5–99km²)</th>
<th>Light/Unclear (&lt;5km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lao PDR</td>
<td>Cambodia</td>
<td>Afghanistan</td>
<td>Angola</td>
</tr>
<tr>
<td>Vietnam</td>
<td>Iraq</td>
<td>Azerbaijan*</td>
<td>Chad</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bosnia and Herzegovina</td>
<td>Colombia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chile</td>
<td>Croatia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kosovo</td>
<td>DR Congo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lebanon</td>
<td>Georgia*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nagorno-Karabakh</td>
<td>Germany</td>
</tr>
<tr>
<td>South Sudan</td>
<td></td>
<td>Iran</td>
<td>Syria</td>
</tr>
<tr>
<td>Syria</td>
<td></td>
<td>Libya</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Ukraine</td>
<td></td>
<td>Montenegro</td>
<td>Western Sahara</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yemen</td>
<td>Serbia</td>
</tr>
<tr>
<td>Somalia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tajikistan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 states 2 states 9 states and 3 other areas 16 states

* Contamination exists or is suspected to exist in areas outside of government control.
Nine states are no longer suspected to be contaminated with CMR since the CCM was adopted in August 2008. Seven states parties have declared completion of their Article 4 obligations (Albania, Republic of Congo, Grenada, Guinea-Bissau, Mauritania, Norway, and Zambia), while signatory state Uganda and state not party Thailand are also believed to have completed clearance of CMR.

In 2015, a total of more than 120,000 submunitions were destroyed by clearance operations around the world from 70km² of contaminated area. This does not capture all global clearance because much is not publicly reported, for instance in Vietnam by national operators, or in Iran or Ukraine. Table 4 summarises the outputs of major CMR clearance in 2015.

As in the previous year, the overwhelming majority of clearance in 2015 took place in Lao PDR, the world’s most heavily contaminated state. But given the extent of contamination in Lao PDR, at current rates of clearance it could be 50 years until the country is free of the impact of unexploded submunitions despite substantial advances in land release approaches. In Vietnam, the world’s second most contaminated state, land released through clearance by international operators rose sharply in 2015 as a result of a nearly fivefold increase in clearance by Mines Advisory Group compared with the previous year.

### CLEARANCE IN 2015

Table 4: Major recorded CMR clearance in 2015

<table>
<thead>
<tr>
<th>State/area*</th>
<th>Area cleared (km²)**</th>
<th>Submunitions destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lao PDR</td>
<td>41.3</td>
<td>100,026</td>
</tr>
<tr>
<td>Vietnam</td>
<td>9.8</td>
<td>7,646</td>
</tr>
<tr>
<td>Iraq</td>
<td>8.8</td>
<td>3,408</td>
</tr>
<tr>
<td>Nagorno-Karabakh</td>
<td>2.9</td>
<td>284</td>
</tr>
<tr>
<td>Western Sahara</td>
<td>1.8</td>
<td>143</td>
</tr>
<tr>
<td>Lebanon</td>
<td>1.7</td>
<td>3,328</td>
</tr>
<tr>
<td>South Sudan</td>
<td>1.4</td>
<td>1,235</td>
</tr>
<tr>
<td>Cambodia</td>
<td>0.8</td>
<td>4,644</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>0.4</td>
<td>84</td>
</tr>
<tr>
<td>Croatia</td>
<td>0.4</td>
<td>101</td>
</tr>
<tr>
<td>Totals</td>
<td>69.3</td>
<td>120,899</td>
</tr>
</tbody>
</table>

* States parties to the CCM are in bold.
** Figures are rounded up or down.
TREATY DEADLINES FOR CLEARANCE

In accordance with Article 4, each state has a deadline of ten years to complete CMR survey and clearance upon becoming party to the CCM. Table 5 summarises progress towards these deadlines, the first of which expires in less than four years' time. While state party Mozambique and state not party Tajikistan were both expected to complete survey and clearance of all known areas containing CMR in the course of 2016, progress in several affected states parties has been sluggish at best. Signatory Angola and state party Colombia should be able to declare completion shortly once the requisite investigation (and any necessary clearance) has been carried out, as remaining contamination is likely to be minimal.

Table 5: Progress in implementing Article 4 of the CCM

<table>
<thead>
<tr>
<th>States party</th>
<th>CCM deadline</th>
<th>Status of progress</th>
<th>Urgent action required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>1 August 2020</td>
<td>On track to meet deadline</td>
<td>Strategic plan for completion of clearance</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>1 August 2020</td>
<td>Not on track; will need successive extensions given extent of contamination</td>
<td>National baseline survey of contamination</td>
</tr>
<tr>
<td>Germany</td>
<td>1 August 2020</td>
<td>Slow but should meet deadline</td>
<td>Clearance ASAP</td>
</tr>
<tr>
<td>Montenegro</td>
<td>1 August 2020</td>
<td>Slow but should meet deadline</td>
<td>Clearance ASAP</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1 November 2020</td>
<td>Not on track to meet deadline</td>
<td>Acknowledgement of obligations to survey and clear the Falklands</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>1 March 2021</td>
<td>On track to meet deadline</td>
<td>Strategic plan for completion of clearance</td>
</tr>
<tr>
<td>Lebanon</td>
<td>1 May 2021</td>
<td>Not on track to meet deadline</td>
<td>More effective use of survey during land release operations</td>
</tr>
<tr>
<td>Chile</td>
<td>1 June 2021</td>
<td>Not on track to meet deadline</td>
<td>Clearance ASAP</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1 September 2021</td>
<td>On track to meet deadline</td>
<td>Clearance ASAP</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>1 March 2022</td>
<td>Slow but should meet deadline, security permitting</td>
<td>Strategic plan for completion of clearance</td>
</tr>
<tr>
<td>Chad</td>
<td>1 September 2023</td>
<td>Not on track to meet deadline</td>
<td>Targeted survey of contamination</td>
</tr>
<tr>
<td>Iraq</td>
<td>1 November 2023</td>
<td>Not on track; will need extension given contamination and conflict</td>
<td>National baseline survey of contamination and strategic plan for completion of clearance</td>
</tr>
<tr>
<td>Colombia</td>
<td>1 March 2026</td>
<td>Contamination likely to be minimal; should be able to complete soon</td>
<td>National baseline survey of contamination</td>
</tr>
<tr>
<td>Somalia</td>
<td>1 March 2026</td>
<td>Too soon to say</td>
<td>Targeted survey of contamination</td>
</tr>
</tbody>
</table>

ASAP = As soon as possible
Several states parties even appear to be in breach of their international legal obligation to clear CMR “as soon as possible”, notably Chad, Chile, and Germany. None of these three states has yet conducted detailed survey, let alone full clearance, in the many years that have passed since the CCM entered into force for them. In addition, Montenegro should urgently secure the limited funding it requires to clear the remaining contamination, from national sources if international funding is not available. The United Kingdom still needs to conduct survey and clearance of hazardous areas in which submunitions are suspected to remain: to date, it has not acknowledged its legal obligations under Article 4 of the CCM.

While states not party to the CCM 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 CMR as soon as possible.²

QUALITY OF SURVEY AND CLEARANCE PROGRAMMES

The quality of programmes for the survey and clearance of CMR 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 CMR 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 above 8.0 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 following table.

---

² For instance, in the case of Albekov v. Russia, which concerned the failure to clear landmines, the European Court of Human Rights held that “having regard to the State’s failure to endeavour to locate and deactivate the mines, to mark and seal off the mined area so as to prevent anybody from freely entering it, and to provide the villagers with comprehensive warnings concerning the mines laid in the vicinity of their village, the Court finds that the State has failed to comply with its positive obligation under Article 2 of the Convention to protect [life].” European Court of Human Rights, Albekov and Others v. Russia, Judgment (Final), 6 April 2009, §90. See also Pasa and Erişen Errol v. Turkey, Judgment, 12 December 2006. Russia was not (and is still not) a party to the Anti-Personnel Mine Ban Convention. See also Human Rights Committee, “Draft general comment No. 36. Article 6. Right to life”, Draft prepared by Yuval Shany and Nigel Rodley, Rapporteurs, UN doc. CCPR/C/GC/R.36/Rev.2, 7 September 2015, §25.
<table>
<thead>
<tr>
<th>Criterion</th>
<th>Key factors affecting scoring</th>
</tr>
</thead>
</table>
| Understanding of the problem      | Has a national baseline of CMR contamination been established?  
Has the extent of the CMR threat been identified with a reasonable degree of accuracy?  
Does the estimate include CHAs as well as SHAs?  |
| Target date for completion        | 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 authority 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?  |
| Targeted clearance                | Is clearance focused on confirmed contamination?  
Are significant areas of land being cleared that prove to have no contamination?  
If clearance is ongoing for more than 10 days in an area without finding contamination, what happens?  |
| Efficient clearance               | How much does manual clearance cost per m²?  
Are costs increasing or decreasing?  
Are dogs integrated into demining operations (where appropriate)?  
Are machines integrated into demining operations (where appropriate)?  |
| National funding of programme     | 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?  |
| Timely clearance                  | 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?  |
| Land release system               | 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?  |
| National standards                | 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?  |
| Reporting on progress             | Does the state submit regular Article 7 transparency reports on progress in fulfilling its CCM Article 4 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?  |
| Improving performance             | Has the national programme, or have key parts of it, improved or deteriorated over the previous year?  |
Table 7 summarises the states and territories with the best CMR programme performances in 2015. Croatia, which had the highest score in 2014, again topped the list for 2015, increasing its performance score from the previous year. It was, once more, the only programme to receive a rating of “Good”. Mozambique, which is close to completing CMR clearance, had the second highest score.

Table 7: **States and territories with the best CMR programme performance in 2015**

<table>
<thead>
<tr>
<th>State/territory</th>
<th>Performance score</th>
<th>Performance rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>7.2</td>
<td>Good</td>
</tr>
<tr>
<td>Mozambique</td>
<td>6.8</td>
<td>Average</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>6.2</td>
<td>Average</td>
</tr>
<tr>
<td>Kosovo</td>
<td>6.1</td>
<td>Average</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>6.1</td>
<td>Average but improving</td>
</tr>
<tr>
<td>DR Congo</td>
<td>6.0</td>
<td>Average</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>5.9</td>
<td>Average</td>
</tr>
<tr>
<td>Western Sahara</td>
<td>5.9</td>
<td>Average</td>
</tr>
<tr>
<td>South Sudan</td>
<td>5.8</td>
<td>Average</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>5.5</td>
<td>Average</td>
</tr>
<tr>
<td>Lebanon</td>
<td>5.4</td>
<td>Average</td>
</tr>
<tr>
<td>Cambodia</td>
<td>5.2</td>
<td>Average</td>
</tr>
<tr>
<td>Germany</td>
<td>5.1</td>
<td>Average</td>
</tr>
<tr>
<td>Vietnam</td>
<td>5.1</td>
<td>Average</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>5.0</td>
<td>Average</td>
</tr>
<tr>
<td>Nagorno-Karabakh</td>
<td>5.0</td>
<td>Average</td>
</tr>
</tbody>
</table>

The states with the worst programme performance ratings for 2015 are reported in Table 8. Certain affected states are not given a performance scoring as they were not engaged in CMR operations in 2015. The table also does not include rankings for Libya or Syria, neither of which has a functioning CMR clearance programme, but whose ranking would undoubtedly be lowest of all.

Table 8: **States with the lowest CMR programme performance in 2015**

<table>
<thead>
<tr>
<th>State</th>
<th>Performance score</th>
<th>Performance rating</th>
</tr>
</thead>
<tbody>
<tr>
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<td>3.0</td>
<td>Very poor</td>
</tr>
<tr>
<td>Chile</td>
<td>3.2</td>
<td>Very poor</td>
</tr>
<tr>
<td>Chad</td>
<td>3.6</td>
<td>Very poor</td>
</tr>
<tr>
<td>Serbia</td>
<td>4.1</td>
<td>Poor</td>
</tr>
<tr>
<td>Somalia</td>
<td>4.6</td>
<td>Poor</td>
</tr>
<tr>
<td>Montenegro</td>
<td>4.8</td>
<td>Poor</td>
</tr>
<tr>
<td>Sudan</td>
<td>4.8</td>
<td>Poor</td>
</tr>
<tr>
<td>Iraq</td>
<td>4.9</td>
<td>Poor</td>
</tr>
<tr>
<td>Ukraine</td>
<td>4.9</td>
<td>Poor</td>
</tr>
</tbody>
</table>
REPORTING ON SURVEY AND CLEARANCE

It continues to be unacceptable how poorly states report on their efforts to tackle CMR. Some of these states are the recipients of significant amounts of international cooperation and assistance, while others complain about lack of funding, but far too many are 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 CCM, detailed reporting is a legal obligation. Under Article 7, each affected state party is required to report annually on:

- The size and location of all CMR-contaminated areas under its jurisdiction or control, with detail on the type and quantity of each type of remnant “to the extent possible”; and
- The status and progress during the previous calendar year of clearance and destruction of all CMR.3

Failure to comply with this reporting obligation is a violation of the CCM.

The 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, and are 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:

- Lack of understanding of what a suspected hazardous area (SHA) is compared to a confirmed hazardous area (CHA), and failure to distinguish between the two in reporting
- 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
- Reporting cancellation of an SHA as clearance, or claiming the land has been “released”
- An inability or refusal to distinguish mine clearance from battle area clearance, and
- Failure to disaggregate submunitions from other forms of UXO in clearance figures.

OUTLOOK

As the world’s largest international demining organisations highlight in the Foreword to this report, efficient release of CMR-contaminated or suspected areas depends on high-quality non-technical and technical survey. Each affected state that has not yet done so should conduct a national baseline survey and develop a strategic plan to release all identified areas of CMR contamination. Too many states parties have still to meet their legal obligations under Article 4 of the CCM. This is a challenge that all CCM states parties need to meet.

3 Art. 7(1)(h) and (i), CCM.
AFGHANISTAN

ARTICLE 4 DEADLINE: 1 MARCH 2022 (CAPABLE OF MEETING DEADLINE)

PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>6</td>
<td>6</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>5</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>5</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>6</td>
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<tr>
<td>Reporting on progress</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: AVERAGE

6.2     6.5

RECOMMENDATIONS FOR ACTION

- Afghanistan should amend reporting forms to disaggregate clearance of cluster munition remnants (CMR) from other unexploded ordnance (UXO) in line with the requirements of the Convention on Cluster Munitions (CCM).
- The Mine Action Coordination Centre of Afghanistan (MACCA) should set revised timelines for clearance of CMR.
CONTAMINATION

MACCA reported that by the end of 2015 it had 17 CMR-contaminated areas in four provinces covering a total area of 6.86km², a level unchanged since April 2015. Nearly half of the contamination is in one district of north-eastern Takhar province (see Table 1). These areas are affected by remnants of the 1,228 cluster munitions containing some 248,056 submunitions dropped by the United States between October 2001 and early 2002. CMR are said to block access to grazing and agricultural land. Contamination by CMR, however, appears more widespread. Soviet forces used cluster munitions during the decade-long war of resistance to the Soviet-backed government and demining operators have, in the past, continued to find occasional submunitions on demining tasks. The extent of those finds is unclear as operators’ standard reporting forms only provide for recording clearance of UXO.

PROGRAMME MANAGEMENT

The Mine Action Programme of Afghanistan (MAPA) is coordinated by MACCA with the support of a United Nations Mine Action Service (UNMAS) project office. Clearance of explosive contamination is conducted 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 (OMAR). The most active international NGOs are Danish Demining Group (DDG) and HALO Trust. Sterling International has been contracted to undertake clearance of ranges used by militaries serving with the NATO-led International Security Assistance Force.

Afghanistan said in 2014 that it planned to release 60% of its CMR hazards by the end of 2015. The remaining hazardous areas would be tackled “later” because they were located in areas of insecurity. In its CCM Article 7 transparency report for 2014, Afghanistan said it would clear CMR hazards in Nangahar and Takhar provinces totalling 5km² (nearly three-quarters of the remaining contamination) in the Afghan year 1395 (ending 20 March 2017). It planned to clear three hazards totalling 0.8km² in 1397 and the last hazard covering 0.16km² in Afghan year 1400 (ending March 2022).

LAND RELEASE

No release of CMR hazardous areas occurred in 2015, partly due to insecurity in affected areas and reflecting competing priorities at a time when the mine action programme is dealing with a sharp downturn in funding. HALO Trust reported destroying 152 submunitions in the course of mine clearance and battle area clearance and razing operations but did not tackle any CMR hazards. National operators did not respond to requests for information about their activities.

ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Afghanistan is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 March 2022. Afghanistan can meet this deadline.

Clearance of Afghanistan’s remaining CMR hazards by its Article 4 deadline is well within the MAPA’s capacity. Afghanistan’s Anti-Personnel Mine Ban Convention Article 5 deadline extension request provided for clearance of all ERW, including submunitions, by 2020. However, clearance of CMR hazards stalled in 2015 because they are located in areas that were too insecure for operators to access.

In 2015, Afghanistan said that it intended to complete CMR clearance in 2022. Whether it is achieved will depend mainly on factors outside the control of the mine action sector, notably the country’s long-running conflict. The extent of scattered CMR suggests operators will continue to encounter residual contamination beyond the Article 4 clearance deadline, even if Afghanistan meets it.

Table 1: CMR contamination at the end of 2015

<table>
<thead>
<tr>
<th>Province</th>
<th>Area affected (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wardak</td>
<td>658,124</td>
</tr>
<tr>
<td>Nangahar</td>
<td>1,717,200</td>
</tr>
<tr>
<td>Takhar</td>
<td>3,280,069</td>
</tr>
<tr>
<td>Paktia</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Total</td>
<td>6,855,393</td>
</tr>
</tbody>
</table>

Other ERW and Landmines

Afghanistan is also heavily contaminated by other explosive remnants of war (ERW) and landmines.

1 Emails from MACCA, 1 May 2016 and 30 April 2015; Article 7 Report (for 2015), Form F.
2 Article 7 Report (for 2015), Form F.
5 Interviews with MACCA implementing partners, Kabul, May 2013.
6 Email from MACCA, 10 May 2011.
7 Statement of Afghanistan, CCM Fifth Meeting of States Parties, San Jose, 2–5 September 2014.
8 CCM Article 7 Report (for 2014), Form F.
9 Email from Mohammed Wakil, Chief of Staff, MACCA, 1 May 2016.
10 Email from Farid Homayoun, Country Director, HALO Trust, 14 May 2016.
11 Article 5 deadline Extension Request, 29 March 2012, p. 194.
12 Email from Mohammed Wakil, MACCA, 1 May 2016, CCM Article 7 Report (for 2015), Form F.
13 CCM Article 7 Report (for 2014), Form F.
## PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
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<th>2014</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>4</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>7</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Land-release system in place</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>6</td>
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<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>
</tbody>
</table>

**PERFORMANCE SCORE: AVERAGE**

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.9</td>
<td>6.1</td>
</tr>
</tbody>
</table>

## PERFORMANCE COMMENTARY

While new mine action standards relating to mines were introduced in 2015 that encourage more efficient use of survey, including the introduction of targeted technical survey, corresponding standards relating to cluster munition remnants (CMR) were still being revised as at June 2016. Bosnia and Herzegovina (BiH) has yet to provide a strategic plan and timeframe for completion of CMR clearance.
RECOMMENDATIONS FOR ACTION

- BiH should accelerate clearance of CMR to fulfill its Convention on Cluster Munitions (CCM) Article 4 obligations in advance of the deadline.
- BiH should develop a strategic plan for the release of areas confirmed or suspected to contain CMR.
- The demining capabilities of the BiH Armed Forces and the Federal Administration of Civil Protection should be enhanced by provision of new equipment and training.
- BHMAC should complete the revision of its land release standards for CMR as soon as possible, including with regard to fade-out distances, following best international practice in order to avoid unnecessary clearance.

CONTAMINATION

At the end of 2015, BiH had 25 areas covering a total of 0.85km² confirmed to contain CMR, while a further 294 areas over 7.3km² are suspected to contain CMR (see Table 1). This compares to reported contamination as at the end of 2014, of 17 confirmed hazardous areas (CHAs) over a total of 0.78km², and 400 suspected hazardous areas (SHAs) over 8.76km².

The contamination figures in Table 1 differ from those reported in BiH’s latest CCM Article 7 transparency report, which claimed 7.3km² was the total of all contamination. No reference is made to the 0.85km² of confirmed area reported separately to Mine Action Review. Of the total suspected CMR contamination, 4.3km² is also suspected to be contaminated with anti-personnel mines.

Table 1: CMR contamination at the end of 2015

<table>
<thead>
<tr>
<th>Canton</th>
<th>SHAs</th>
<th>Suspected area [km²]</th>
<th>CHAs</th>
<th>Confirmed area [km²]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsko-Sanski</td>
<td>41</td>
<td>0.41</td>
<td>4</td>
<td>0.20</td>
</tr>
<tr>
<td>Tuzlanski</td>
<td>47</td>
<td>1.18</td>
<td>3</td>
<td>0.05</td>
</tr>
<tr>
<td>Zenicko-Dobojski</td>
<td>73</td>
<td>1.30</td>
<td>4</td>
<td>0.07</td>
</tr>
<tr>
<td>Srednje-Bosanski</td>
<td>50</td>
<td>2.79</td>
<td>4</td>
<td>0.10</td>
</tr>
<tr>
<td>Zapadno-Hercegovacki</td>
<td>6</td>
<td>0.09</td>
<td>2</td>
<td>0.08</td>
</tr>
<tr>
<td>Sarajevo</td>
<td>13</td>
<td>0.35</td>
<td>2</td>
<td>0.04</td>
</tr>
<tr>
<td>Canton 10</td>
<td>33</td>
<td>0.47</td>
<td>5</td>
<td>0.25</td>
</tr>
<tr>
<td><strong>Totals Federation BiH</strong></td>
<td>263</td>
<td>6.59</td>
<td>24</td>
<td>0.79</td>
</tr>
<tr>
<td><strong>Totals Republika Srpska</strong></td>
<td>31</td>
<td>0.71</td>
<td>1</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>294</td>
<td>7.30</td>
<td>25</td>
<td>0.85</td>
</tr>
</tbody>
</table>

1 Email from Tarik Serak, Head, Department for Mine Action Management, Bosnia and Herzegovina Mine Action Center (BHMAC), 26 May 2016. BiH’s CCM Article 7 Report (for 2015) reports the 7.3km² of suspected contamination, but not the 0.85km² of confirmed contamination BHMAC has reported to Mine Action Review.
3 Email from Tarik Serak, BHMAC, 26 May 2016.
4 CCM Article 7 Report (for 2015), Form F.
CMR contamination dates back to 1992–95, the result of the conflicts related to the break-up of the Socialist Federal Republic of Yugoslavia. A survey and initial general assessment of cluster munition contamination was jointly conducted by the Bosnia and Herzegovina Mine Action Centre (BHMAC) and Norwegian People’s Aid (NPA) in 2011. This estimated the total area suspected to contain CMR at almost 12.2km², scattered across 140 areas. This estimate was subsequently revised upwards to 14.6km² following the start of land release operations in 2012. Of this, around 5km² was deemed as contaminated and marked for clearance.

BiH claims to have released 6.92km² of hazardous area in 2012–15, of which approximately half (3.65km²) was released through technical survey or clearance in 44 separate tasks. In operational activities, 1,406 submunitions and 53 other explosive remnants of war (ERW) were found and destroyed. As at September 2015, BiH reported to have reduced suspected CMR contamination from 14.6km² to 7.69km², an overall reduction of 47%.

CMR contamination in BiH is a humanitarian risk, impeding access to natural resources and posing an obstacle to rehabilitation and development of infrastructure. Sixty communities have been identified as affected with CMR, of which 31 are also affected by mines. According to BHMAC’s records, the last submunition casualty was in 2009.

Other ERW and Landmines
BiH is also contaminated by other unexploded ordnance (UXO) and anti-personnel mines.

**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’s three members, representing BiH’s three majority ethnic groups (Bosniaks, Croats, and Serbs), propose the appointment of BHMAC senior staff for approval by the Council of Ministers. Three new members of the Demining Commission were appointed on 23 July 2015. Whereas the Minister for Civil Affairs remains ultimately responsible for mine action, the Demining Commission represents the strategic body responsible to set the mine action policies.

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, and through two main offices in Sarajevo and Banja Luka, and eight regional offices (Banja Luka, Bihać Břčko, Mostar, Pale, Sarajevo, Travnik, and Tuzla). A 2015 United Nations Development Programme (UNDP) evaluation concluded that BHMAC was “doing a good job in operational management and in introducing new and more efficient procedures”; and was carrying out its core activities “effectively, despite not being fully funded.” Prior to 2015, BHMAC’s governance and management had come under strong criticism (see “Clearing the Mines 2015” report on BiH), but major reforms are being implemented and an acting director of BHMAC was appointed on 22 September 2015 by the Council of Ministers of BiH, who will serve until the formal appointment of a new Director.

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6 Ibid.
9 Ibid.
10 Statement of BiH, First CCM Review Conference, Dubrovnik, 7 and 9 September 2015.
11 Email from Darvin Lisica, Programme Manager BiH, NPA, 5 May 2016.
12 Email from Tarik Serak, BHMAC, 26 May 2016.
15 The principle of organising BiH state-level bodies along ethnic lines has come under increasing scrutiny following the 2009 judgment by the European Court of Human Rights (ECtHR) 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 from one of the three major ethnic groups. ECtHR, Sejdic and Finci v. Bosnia and Herzegovina, Judgment, 22 December 2009.
18 Bosnia and Herzegovina Official Gazette, Sarajevo, 17 March 2002.
19 BHMAC Organisational chart.
Strategic Planning

The BiH Mine Action Strategy for 2009–19 guides mine action in BiH, but the original document does not mention CMR clearance. BHMAC conducted the first of three planned revisions of the strategy in 2012–13. The 2012 revision did refer to CMR clearance, but the revision was not formally adopted by the Council of Ministers, indicating a lack of political attention to mine action in BiH. The second revision of the strategy was conducted in 2015, in consultation with the Demining Commission and UNDP, and was adopted by the Demining Commission in BiH. The Demining Commission will report to the Council of Ministers regarding information from the analysis of the strategy. The third revision of the strategy is due to take place in 2017.

Legislation and Standards

In 2015, BHMAC adopted new national land release standards with regard to mines, which enable more efficient operations by introducing “targeted investigation” during technical survey. However, as at June 2016, revision of the corresponding land release standards for CMR was still ongoing. BHMAC also adopted a new standard operating procedure (SOP) for non-technical survey (NTS) of areas suspected to contain CMR, based on NPA’s own SOPs. In addition, rules and regulations were adopted for accreditation of organisations for technical survey and clearance of CMR.

Furthermore, a new draft demining law, which was first submitted to parliament in 2010, has still to be approved, and has not received approval from the Council of Ministers, after which it must be sent for parliamentary approval. It is thought unlikely that the new demining law will be adopted before the end of 2016, due to a lack of political will.

Operators

During 2015, three organisations conducted CMR survey and clearance: NPA, the Federal Administration of Civil Protection (FACP), and the BiH Armed Forces. NPA’s operational capacity reduced from two manual teams in January–April 2015 to one manual team from May onwards (with one team leader and six deminers per team). The reduction was due to the end of the project funded by a Norwegian TV fundraising effort (NRK Telethon). NPA expected its current capacity to remain unchanged during the remainder of 2016.

Quality Management

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

Cluster munition technical survey with special detection dogs (SDD), Livno, BiH. © NPA BiH
LAND RELEASE

In 2015, a total of 0.23km² of CMR-contaminated area was released by clearance while 0.76km² was reduced by technical survey. A further 0.47km² was cancelled by NTS. This represents a slight decrease compared to 2014, when 0.26km² was fully cleared, 1.07km² was reduced by technical survey, and 0.41km² was cancelled by NTS.

Survey in 2015

In 2015, NTS of areas suspected to contain CMR was conducted by BHMAC and NPA teams seconded to BHMAC regional offices.37 In addition, BHMAC, the Armed Forces, the FACP, and NPA all conducted technical survey.38

During survey operations, 82 SHAs totalling just under 0.47km² of land were cancelled by NTS while 0.76km² was reduced by technical survey. Eight SHAs were confirmed as contaminated, totalling 0.27km² (see Table 2).39

Table 2: CMR survey in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs Cancelled</th>
<th>Area cancelled (m²)</th>
<th>Areas confirmed</th>
<th>Confirmed area (m²)</th>
<th>Area reduced by TS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHMAC*</td>
<td>82</td>
<td>468,948</td>
<td>8</td>
<td>270,000</td>
<td>407,506</td>
</tr>
<tr>
<td>Armed Forces</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FACP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>82</td>
<td>468,948</td>
<td>8</td>
<td>270,000</td>
<td>760,465</td>
</tr>
</tbody>
</table>

* Includes survey support from NPA.       TS = Technical survey

Clearance in 2015

In 2015, three operators cleared a total of 0.23km² containing CMR, destroying 232 KB1 submunitions and 17 other items of UXO (see Table 3). During 2014, NPA implemented a pilot project using special detection dogs (SDDs) for technical survey and clearance of CMR-contaminated areas. According to NPA, the results of this project “gave important inputs for further definition of the process for using SDD in targeted TS in areas contaminated with CMR.”40 SOPs were subsequently drafted regarding use of dogs in targeted technical survey over CMR-contaminated areas, which were awaiting BHMAC approval as at May 2016.41 BHMAC was in the process of revising national standards to allow the use of dogs in targeted technical survey.42

From May 2015, the number of NPA teams engaged in technical survey and clearance of CMR-contaminated areas was decreased from two to one.43 This resulted in a 50% reduction in the amount of CMR-contaminated land released by NPA.44

Table 3: Clearance of CMR-contaminated area in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>Submunitions destroyed</th>
<th>Other UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armed Forces</td>
<td>6</td>
<td>31,153</td>
<td>168</td>
<td>13</td>
</tr>
<tr>
<td>FACP</td>
<td>1</td>
<td>20,221</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>NPA</td>
<td>4</td>
<td>179,213</td>
<td>61</td>
<td>4</td>
</tr>
<tr>
<td>Totals</td>
<td>11</td>
<td>230,587</td>
<td>232</td>
<td>17</td>
</tr>
</tbody>
</table>

37 Emails from Tarik Serak, BHMAC, 26 May 2016, and Darvin Lisica, NPA, 5 May 2016.
38 Email from Tarik Serak, BHMAC, 26 May 2016.
39 Ibid. In addition to the 258,980m² reduced by technical survey, NPA also reported supporting BHMAC to cancel three areas covering 180,359m² and confirm five areas covering 356,050m². Email from Darvin Lisica, NPA, 5 May 2016.
40 Email from Tarik Serak, BHMAC, 26 May 2016.
41 Ibid., and CCEM Article 7 Report (for 2015), Form F. However, the number of submunitions reported as having been destroyed in its Article 7 report was 354, which is 122 more than the total reported to Mine Action Review.
42 Email from Amela Balic, NPA Bosnia, 15 April 2015.
43 Email from Darvin Lisica, NPA, 5 May 2016.
44 Ibid.
45 Emails from Darvin Lisica, NPA, 15 April and 25 May 2015, and 5 May 2016.
46 Email from Darvin Lisica, NPA, 5 May 2016.
ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, BiH is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 March 2021. It is on track to meet this deadline.

BHMAC has stated that it does not expect any obstacles in meeting its Article 4 deadline.47 According to BHMAC, small-scale investments in equipment and training could significantly increase the capabilities of the FACP and the Armed Forces, and full use of available human and technical resources could enable BiH to meet its obligations under Article 4 by the end of 2017.48 However, based on the status of current CMR survey and clearance operations, BHMAC no longer expects to meet its Article 4 obligations by the end of 2017, as it had previously stated at the CCM First Review Conference in September 2015.49

The 2012 Mine Action Strategy Revision had expected that BiH would “completely eliminate” all CMR-contaminated areas by 201550 — a target that was missed — and the target risks being pushed back further. Given that less than 1km² of CMR-contaminated land has been cleared in the last five years (see Table 4), it is not certain that BiH will indeed meet its Article 4 deadline.

BiH national funding supports BHMAC, survey and clearance of CMR, and the operations of the Armed Forces, while the Government of the Federation of BiH (FBIH) finances the operations of FACP.51 In 2015, just over BAM35 million (approx. US$20 million) was allocated to mine action operations in BiH. Of this, BAM19.5 million (approx. US$11.1 million) came from national sources while BAM 15.6 million (approx. US$8.9 million) was from international donors.52 Funding for the implementation of the Mine Action Strategy 2009–2019 is significantly less than originally planned.54

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0.23</td>
</tr>
<tr>
<td>2014</td>
<td>0.26</td>
</tr>
<tr>
<td>2013</td>
<td>0.24</td>
</tr>
<tr>
<td>2012</td>
<td>0.16</td>
</tr>
<tr>
<td>2011</td>
<td>0*</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0.89</strong></td>
</tr>
</tbody>
</table>

* No CMR-contaminated area was cleared, but 59 submunitions from areas totalling 85,256m² were cleared during mine clearance operations.

47 Email from Tarik Serak, BHMAC, 26 May 2016.
49 Email from Tarik Serak, BHMAC, 26 May 2016.
52 Email from Tarik Serak, BHMAC, 26 May 2016.
54 BHMAC, “Five years since the entry into force of the Convention on Cluster Munitions”, 3 August 2015.
**PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Category</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>3</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>3</td>
<td>4</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>2</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>6</td>
<td>6</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Improving performance</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: VERY POOR**

<table>
<thead>
<tr>
<th>Score</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.6</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**PERFORMANCE COMMENTARY**

Chad’s mine action programme performance continued to decline in 2015 as another year passed without action to implement its obligations under the Convention on Cluster Munitions (CCM).
**RECOMMENDATION FOR ACTION**

Chad should conduct a cluster munition remnants (CMR) survey as soon as possible, particularly in the Borkou and Tibesti regions, to confirm the location and extent of CMR contamination and set out plans to address the threat accordingly.

**CONTAMINATION**

The extent of CMR contamination remaining in Chad is unknown. Following the end of armed conflict with Libya in 1987, unexploded submunitions and cluster munition containers were found in the three northern provinces; in the Biltine department in Wadi Fira region (north-eastern Chad); and east of the capital, N’Djamena.¹ Mines Advisory Group (MAG) found unexploded Soviet anti-tank PTAB-1.5 submunitions during a survey in an area close to Faya Largeau.²

Three CMR were reportedly discovered and destroyed in 2015, including two empty RBK-250-275 cluster bomb containers in the Tibesti region and an AO-1SCh submunition in the Borkou region.³ In its CCM Article 7 transparency report for 2015, Chad stated that four children (three girls and one boy) aged six and seven were injured in January 2015 after handling a submunition in Faya Largeau.⁴

At the CCM signing conference on 3 December 2008, Chad spoke of “vast swathes of territory” contaminated with “mines and unexploded ordnance (UXO) [munitions and submunitions]”.⁵ It has still to justify that claim. In September 2012, however, Chad stated that while the extent of CMR contamination was not precisely known, it was clear the weapons had been used in the Fada region and there was a strong likelihood of their use in other parts of the north. Chad said that the Tibesti region in the north-west was being surveyed to determine the extent of the contamination.⁶

In 2014, Chad reported that, after Libyan troops withdrew in 1987, members of the French Sixth Engineers Regiment discovered and subsequently destroyed CMR around Libyan positions, prior to the building of the national mine action centre. It reiterated its suspicion of additional contamination in the Tibesti region.⁷

**Other ERW and Landmines**

Chad has a significant mine and explosive remnants of war (ERW) problem as a result of the 1973 Libyan invasion and more than 30 years of internal conflict. Mines and ERW are obstacles to safe access to housing, roads, pastures, water points, and mining, especially in northern Chad. Contamination is an ongoing threat to local populations, impeding socio-economic development.⁸

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² Emails from Liebeschitz Rodolphe, UNDP, 21 February 2011; and Bruno Bouchardy, MAG Chad, 11 March 2011.

³ CCM Article 7 Report (for 2015), Form F; and email from Llewelyn Jones, Director of Programmes, MAG, 31 May 2016.

⁴ CCM Article 7 Report (for 2015), Form H.

⁵ Statement of Chad, CCM Signing Conference, Oslo, 3 December 2008.

⁶ Statement of Chad, CCM Third Meeting of States Parties, Oslo, 13 September 2012.

⁷ CCM Article 7 Report (for 2013), Form F.

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 the national mine action centre (Centre National de Déminage, CND).

MAG continued its demining activities in 2015 as part of a two-year European Union-funded project (Projet d’appui au secteur du démìnage au Tchad, PADEMIN) to conduct clearance, especially in the northern regions of Borkou, Ennedi, and Tibesti.9 As part of the PADEMIN project, Handicap International (HI) continued to support capacity building of the CND, in particular for information and quality management, and carried out non-technical survey (NTS) in three southern regions of the country, in areas thought to be contaminated by mines and ERW.10 Since 2008, Chad’s mine action programme has suffered from a lack of international funding, weak government oversight, and mismanagement issues within the CND, resulting in little or no demining until October 2012 when the EU provided funding to MAG.11 In 2012, management problems at the CND resulted in the dismissal of its director and hundreds of employees, resulting in a reduction in personnel from 720 to 320.12 A new director was appointed in 2013.13 CND demining operations have also been plagued by poor equipment and lack of funding. In 2014, Chad acknowledged difficulties faced by its national mine action centre and called for the resumption of technical and operational assistance.14

Strategic Planning

In May 2013, the Government of Chad approved a new strategic mine action plan for 2013–17. This was aimed, among other things, at developing and maintaining an effective data collection and management system, strengthening national mine action capacities, and clearing contaminated areas.15 Following the request of the Thirteenth Meeting of States Parties to the Anti-Personnel Mine Ban Convention (APMBC), the CND elaborated a national mine action plan for 2014–19, with technical support from United Nations Development Programme (UNDP). The plan notes that Chad adhered to the CCM but does not detail plans to clear CMR.16

Standards and Quality and Information Management

HI reviewed Chad’s national mine action standards on land release and quality management in the beginning of 2016, with a new version expected to be produced in June 2016.17 Both MAG and HI reported that internal quality assurance and quality control activities (QA/QC) were done on a regular basis in 2015, and that the CND carried out a number of external QA/QC visits, evaluations, and accreditations during the year.18

LAND RELEASE

In 2015, MAG was conducting mine survey and clearance in the Tibesti region. It reported that on 17 September 2015, one of its multi-task teams (MTTs) found and destroyed two empty RBK-250-275 cluster munition containers in Zouar.19 Chad stated in its 2015 Article 7 transparency report that an AO-15Ch submunition was found and destroyed by the CND in Faya Largeau in the Borkou region during the year.20 HI did not conduct mine or CMR clearance in 2015 and reported that it did not encounter any CMR in NTS activities in Chari Baguirmi, Mandoul, and Moyen Chari provinces.21

9 In late 2014, MAG, which had been Chad’s sole international demining operator in 2013, had to withdraw from the country due to lack of funding. It resumed its activities with new funds from the European Union in late 2014. MAG, “New Help for More Than 400,000 People in Chad”, 15 December 2014, at: http://www.maginternational.org/our-impact/news/new-project-will-help-more-than-400000-people-in-chad/.
10 Emails from Julien Kempeneers, Deputy Desk Officer, Mine Action Department, 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.
12 Third Article 5 deadline Extension Request, 2 May 2013; and interview with Emmanuel Sauvage, UNDP, in Geneva, 16 April 2013.
13 Interview with Emmanuel Sauvage, UNDP, in Geneva, 16 April 2013.
14 Statement of Chad, Third APMBC Review Conference, Maputo, June 2014.
17 Emails from Julien Kempeneers, HI, 2 May 2016; and Llewelyn Jones, MAG, 7 May 2016.
18 Ibid.
19 Email from Llewelyn Jones, MAG, 31 May 2016.
20 CCM Article 7 Report (for 2015), Form F.
21 Emails from Julien Kempeneers, HI, 2 and 18 May 2016.
ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Chad is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 September 2023. It is unclear whether Chad is on track to meet this deadline.

In its 2015 Article 7 report, Chad requested international cooperation and assistance in the form of two MTTs to carry out NTS, risk education, and explosive ordnance disposal in relation to CMR.22 HI and MAG have highlighted the critical need for continued international funding for mine action and capacity building in Chad to address the remaining threat from mines and ERW.23 MAG reported that the EU-funded PADEMIN project was set to expire in October 2016, and that, as at May, there were no indications of an international donor willing to provide future funding.24 HI cautioned that without continued support, capacity-building efforts would be lost and progress in clearance halted.25
CHILE

ARTICLE 4 DEADLINE: 1 JUNE 2021 (NOT ON TARGET TO MEET DEADLINE)

PERFORMANCE COMMENTARY

Chile has failed to initiate survey and clearance of contaminated areas, despite being a state party since 2011. This is a violation of the duty under Article 4 of the Convention on Cluster Munitions (CCM) to clear cluster munition remnants (CMR) “as soon as possible”. It has also not submitted an Article 7 report since 2013. This is also a violation of the CCM.

PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Targeted clearance</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Land-release system in place</td>
<td>7</td>
<td>7</td>
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<tr>
<td>National mine action standards</td>
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<td>Reporting on progress</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: VERY POOR

3.2 4.1
RECOMMENDATION FOR ACTION

Chile should submit an Article 7 report and, more importantly, begin survey and clearance of CMR-contaminated areas as soon as possible.

CONTAMINATION

Chile has reported almost 97 km² of CMR-contaminated area in three of its 15 regions (see Table 1). Contamination is the consequence of deployment of cluster munitions on military training ranges. Since the reported extent represents the total size of the areas where cluster munitions were used, the actual extent of contamination may be significantly smaller.

The impact of CMR contamination is believed to be minimal, and there have been no reports of any casualties.

Table 1: CMR contamination as at June 2015

<table>
<thead>
<tr>
<th>Province</th>
<th>CHAs</th>
<th>Area (km²)</th>
<th>Submunitions expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arica and Parinacota</td>
<td>1</td>
<td>33.71</td>
<td>608</td>
</tr>
<tr>
<td>Tarapacá</td>
<td>2</td>
<td>56.65</td>
<td>20</td>
</tr>
<tr>
<td>Magallanes and Antártica Chilena</td>
<td>1</td>
<td>6.52</td>
<td>20</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>4</strong></td>
<td><strong>96.88</strong></td>
<td><strong>648</strong></td>
</tr>
</tbody>
</table>

CHAs = Confirmed hazardous areas

Other ERW and Landmines

Chile is also affected, to a limited extent, by other unexploded ordnance (UXO), and has some 13 km² of mined areas to release.

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.

Chile has not reported on any steps taken to elaborate a workplan to address its four contaminated areas.

LAND RELEASE

As at the end of May 2016, Chile had not reported conducting any survey or clearance of its four CMR-contaminated areas.

ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Chile is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 June 2021. Its inaction means that it is not currently on target to meet its deadline.

Indeed, as reported in last year’s Mine Action Review, Chile should already have completed requisite survey and be conducting full clearance of hazardous areas. Its failure to do so is a violation of the Convention.

1 CCM Article 7 Report, Form F, September 2012.
RECOMMENDATIONS FOR ACTION

- Colombia should assess the extent of cluster munition remnants (CMR) contamination as soon as possible, including through the conduct of survey.
- Colombia should ensure its national mine action database disaggregates data on unexploded submunitions and other explosive remnants of war (ERW).

CONTAMINATION

The extent to which Colombia is affected by CMR is unclear. Colombia ratified the Convention on Cluster Munitions (CCM) on 10 September 2015. It made a formal declaration upon depositing its instrument of ratification whereby “it is possible that there remain, in national territory, cluster munitions or cluster munition remnants of whose location the State has no knowledge or suspicion. ... Regarding article 4, and in connection with the particular circumstances of its internal armed conflict, the Republic of Colombia understands ‘cluster munition remnants’ to mean those whose location is known or suspected by the State.” Its initial CCM Article 7 transparency report, which would help to clarify its status under Article 4 of the Convention, was due by 28 August 2016.

In May 2009, Colombia’s Minister of Defence, Juan Manuel Santos, acknowledged that the Colombian Armed Forces had used cluster munitions in the past “to destroy clandestine airstrips and camps held by illegal armed groups”, but noted the submunitions sometimes did not explode and “became a danger to the civilian population.” In 2010, the Ministry of National Defence said that the Colombian Air Force last used cluster munitions on 10 October 2006 “to destroy clandestine airstrips belonging to organizations dedicated to drug trafficking in remote areas of the country where the risk to civilians was minimal.”

In November 2012, the Inter-American Court of Human Rights found that Colombia had violated the rights to life and to physical, mental, and moral integrity by using a United States World War II “cluster adapter” to disperse fragmentation bombs during an attack on the village of Santo Domingo in December 1998. A helicopter dropped an AN-M1A2 cluster munition containing six submunitions, killing 17 civilians, including 6 children and injuring a further 27 civilians, including 9 children. The action also resulted in the displacement of the village’s inhabitants. Colombia sought to attribute the deaths to a bomb placed by Revolutionary Armed Forces of Colombia (FARC) guerrillas.

The impact of any residual CMR contamination is believed to be minimal. HALO Trust has not encountered or received any reports of unexploded submunitions, nor has Norwegian People’s Aid (NPA).

Other ERW and Landmines

Colombia is also affected by other unexploded ordnance (UXO) and landmines.
**PROGRAMME MANAGEMENT**

Established on 30 July 2002 under Law No. 759/2002, the National Interministerial Commission on Anti-personnel Mine Action (Comisión Intersectorial Nacional para la Acción contra Minas Antipersonal, CINAMAP) is the National Mine Action Authority responsible for implementing the Anti-Personnel Mine Ban Convention, including development of a national plan and policy decisions, and coordination of international assistance. This body is expected to be also responsible for CCM implementation.

The Presidential Programme for Comprehensive Mine Action (Programa Presidencial para la Acción Integral contra Minas Antipersonal, PAICMA) previously served as the technical secretary for CINAMAP, responsible for coordinating implementation of the 2009–2019 Integrated Mine Action Plan. In September 2014, however, Decree 1649 modified the structure of the Presidency’s Administrative Department, creating the Directorate for Comprehensive Mine Action (Dirección para la Acción Integral contra minas Antipersonal, DAICMA) to replace PAICMA. DAICMA has retained the same mandate and functions as PAICMA; the only change being that DAICMA is now supporting the Minister-Advisor for Post-Conflict, Human Rights, and Security and the Minister-Advisor’s office in the strategic management of the national mine action programme.

**LAND RELEASE**

As at the end of May 2016, Colombia had not reported conducting any survey or clearance of any CMR-contaminated areas. As noted above, its initial Article 7 transparency report was due by 28 August 2016.

**ARTICLE 4 COMPLIANCE**

Under Article 4 of the CCM, Colombia is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 March 2026. Colombia may be able to declare full completion of its Article 4 obligations once the requisite assessment and survey has been taken.

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2 C. Osorio, “Colombia destruye sus últimas bombas de tipo racimo” (“Colombia destroys its last cluster bombs”), Agence France-Presse, 7 May 2009.
4 Inter-American Court on Human Rights (IACtHR), Caso Masacre de Santo Domingo v. Colombia, Official Summary in Spanish, 30 November 2012; and Inter-American Commission on Human Rights, Masacre de Santo Domingo, Colombia, Case No. 12.416, 22 April 2011.
6 Email from Dan Haddow, Colombia Programme Support Officer, HALO Trust, 28 May 2016.
7 Email from Fredrik Holmegaard, Project Manager, Humanitarian Disarmament – Colombia, NPA, 13 June 2016.
8 Acta CINAMAP 02/2013, 18 December 2013, pp. 3–4.
9 Presidency of Colombia, Decree 2150 of 2007.
CROATIA

ARTICLE 4 DEADLINE: 1 AUGUST 2020 (ON TRACK TO MEET DEADLINE)

PERFORMANCE COMMENTARY

Croatia’s mine action programme strengthened in 2015. A new mine action law was adopted in October 2015, which incorporates the latest International Mine Action Standards (IMAS). This will enable more efficient land release through better use of survey to confirm contamination and to cancel or reduce areas not contaminated with cluster munition remnants (CMR).

<table>
<thead>
<tr>
<th>PROGRAMME PERFORMANCE</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>9</td>
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<td>Target date for completion of cluster munition clearance</td>
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<td>Targeted clearance</td>
<td>7</td>
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<tr>
<td>Efficient clearance</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>Reporting on progress</td>
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<td>6</td>
</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: GOOD 7.2 7.0
CROATIA

RECOMMENDATION FOR ACTION

Croatia should adopt and present a strategic plan for completion of its clearance obligations under the Convention on Cluster Munitions (CCM).

CONTAMINATION

At the end of 2015, Croatia had 2.64km² of area confirmed to contain CMR. Contamination, which is located across four counties, is estimated to total 4,675 unexploded KB-1 submunitions across 11 confirmed hazardous areas (CHAs) (see Table 1). The extent of contamination is a reduction of 0.18km² compared to the situation at the end of 2014. The decrease in contaminated area resulting from clearance in 2015 was partly offset by the discovery of 0.25km² of previously unrecorded CMR contamination.

Croatia was contaminated with unexploded KB-1 and MK-1 submunitions by the conflicts in the 1990s that followed the dissolution of the Socialist Federal Republic of Yugoslavia. While Croatia was affected by the 2014 Balkan floods, none of the CMR-affected areas was flooded. The Croatian Mine Action Centre (CROMAC) reports that CMR have more of a socio-economic than humanitarian impact, as many of the contaminated areas are in regions used for cattle breeding.

<table>
<thead>
<tr>
<th>County</th>
<th>CHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karlovac</td>
<td>0</td>
<td>0*</td>
</tr>
<tr>
<td>Lika-Senj</td>
<td>4</td>
<td>705,208</td>
</tr>
<tr>
<td>Žadar</td>
<td>4</td>
<td>937,619</td>
</tr>
<tr>
<td>Šibenik-Knin</td>
<td>2</td>
<td>232,611</td>
</tr>
<tr>
<td>Split-Dalmatia</td>
<td>1</td>
<td>765,490</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>11</strong></td>
<td><strong>2,640,928</strong></td>
</tr>
</tbody>
</table>

* CMR clearance in Karlovac county was completed in 2015.

Other ERW and Landmines

Croatia is heavily contaminated by other unexploded ordnance (UXO) and anti-personnel mines.

PROGRAMME MANAGEMENT

CROMAC was established on 19 February 1998 as the umbrella organisation for the coordination of mine action. The CROMAC Board (formerly called the CROMAC Council), an oversight and strategic planning body, which used to meet at least four times a year, has been meeting almost every month to discuss progress in implementing the annual workplan and other issues.

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, strengthening coordination among stakeholders and funding agencies, and raising public awareness about mine and cluster munition hazards. The OMA does not sit above CROMAC; it is the government institution dealing with the political aspects of mine action whereas CROMAC deals with operations.

Strategic Planning

CROMAC has a National Mine Action Strategy 2009–2019, which includes among its main goals the tackling of CMR in accordance with the obligations of the CCM. There is, though, no strategic plan for the release of all areas containing CMR. According to Miljenko Vahtaric, CROMAC’s Assistant Director for International Cooperation and Education, all CMR-contaminated areas are cleared in accordance with county and state priorities, taking into consideration obligations in treaties to which Croatia is a state party.
Standards

A new mine action law was drafted by a working group established by the Ministry of Interior, and consisting of representatives from key actors in the national mine action sector, including the OMA, the Ministry of Interior, the Ministry of Defense, CROMAC, and unions and employers’ associations active in demining. The Law on Mine Action was adopted by the Croatian Parliament on 21 October 2015, and incorporates developments in the latest IMAS, and specifically those relating to the use of technical survey to confirm the presence or absence of contamination. The 2015 law introduces a new procedure for “supplementary general survey” (i.e. non-technical survey (NTS)) and enables “exclusion” (i.e. reduction) of SHAs through technical survey. According to CROMAC, the new 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. National Mine Action Standards are also encompassed within the new Law.

It had been observed previously that Croatia’s land release system was more suited to addressing mined areas, and no specific land release system was in place for CMR. In particular, technical survey was not being used to release land efficiently. Subsequently, a working group under the Ministry of Interior developed a regulation that lays down distinct technical survey procedures for mines and for CMR. The regulation was also passed in 2015, and was being translated into English as at May 2016.

Quality Management

With the adoption of the new Law on Mine Action in late 2015, the required internal quality control (QC) for clearance operators has increased from a minimum of 1% to 5%, in order to increase safety and the quality of demining operations. In addition, CROMAC quality assurance (QA) officers review a minimum of 5% of control samples at least every three days, and final quality management is conducted by a commission with two representatives from CROMAC and one from the Ministry of Interior.

Operators

In January 2015, 40 commercial companies, with a total capacity of 650 deminers, 55 machines, and 30 mine detection dogs (MDDs), were accredited to conduct CMR and mine clearance. By the end of the year, capacity had increased to 46 accredited commercial companies with a total of 653 deminers, 55 demining machines, and 42 MDDs. The majority of assets were deployed in mine clearance. CMR clearance capacity has remained constant, and will continue to do so, as current capacity is deemed sufficient for planned activities.

Following the adoption of the new mine action law, CROMAC envisages that MUNGOS, a state-owned clearance operator, will be more involved in technical survey, in addition to clearance.

LAND RELEASE

Croatia released almost 0.43km² of CMR area by clearance in 2015. During 2015, clearance of CMR contamination in Karlovac county was completed.

Survey in 2015

CROMAC identified and confirmed 253,264m² as CMR-contaminated area in 2015 through NTS, following information received from the police about contamination discovered in the town of Šibenik in Šibenik-Knin county.

15 CCM Article 7 Report (for 2015), Form A.
16 Ibid.
17 Emails from Miljenko Vahtaric, CROMAC, 13 and 18 May 2016; and CCM Article 7 Report (for 2015), Form A.
18 Email from Miljenko Vahtaric, CROMAC, 13 May 2016; and CCM Article 7 Report (for 2015), Form A.
19 Email from Miljenko Vahtaric, CROMAC, 13 May 2016.
20 Email from Darvin Lisica, Programme Manager, Bosnia and Herzegovina, Norwegian People’s Aid, 3 March 2015.
21 Email from Miljenko Vahtaric, CROMAC, 18 May 2016.
22 Email from Miljenko Vahtaric, CROMAC, 13 May 2016.
23 Ibid.
24 Ibid.
25 Ibid.
26 Email from Miljenko Vahtaric, CROMAC, 13 May 2016; and CCM Article 7 report (for 2015).
27 Email from Miljenko Vahtaric, CROMAC, 18 May 2016. Croatia’s CCM Article 7 report (for 2015) states that the new contamination was found in Zadar and Split-Dalmatia counties, but CROMAC subsequently confirmed that in fact it was all found in Šibenik-Knin county.
Clearance in 2015

Croatia released 429,445m² of area containing CMR in 2015, all through clearance, and destroyed 101 submunitions (see Table 2). This is a significant decrease compared to the 0.66km² of CMR-contaminated area cleared in 2014. The majority of clearance was conducted by MUNGOS and the remainder by commercial demining companies.

The 101 CMR discovered during clearance in 2015 were destroyed in situ, comprising of 100 KB-1 submunitions and 1 MK-1 submunition.

Demining machines were deployed more frequently in 2015 than the year before, reflecting the agricultural nature of many of the project areas. MDDs were also used in CMR operations in 2015.

CROMAC’s priorities for 2016 were to reduce the extent of CMR contamination and to maintain the marking of all CHAs containing CMR. Croatia started many projects in 2015 with a view to releasing all agricultural land from contamination. At the end of 2015, 12.9% of the remaining CMR-contaminated land was defined as agricultural; 86.8% as forested, and 0.3% as “other area” (e.g. water, marshland, landslides, coast). Much of the contaminated forest is designated as national parkland, or Natura 2000 area, and is therefore protected land.

Table 2: Clearance of CMR-contaminated area in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>County</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>Submunitions destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUNGOS</td>
<td>Šibenik-Knin</td>
<td>1</td>
<td>299,233</td>
<td>48</td>
</tr>
<tr>
<td>Tetazen</td>
<td>Zadar</td>
<td>1</td>
<td>110,101</td>
<td>52</td>
</tr>
<tr>
<td>Zeleni Kvadrat</td>
<td>Karlovac</td>
<td>1</td>
<td>20,111</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>3</strong></td>
<td><strong>429,445</strong></td>
<td><strong>101</strong></td>
</tr>
</tbody>
</table>

ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Croatia is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 August 2020. It is on track to meet this deadline.

In 2015, Croatia contributed around €4 million (approximately US$4.5 million) in national funding towards the cost of CROMAC, and around €22 million to cover the cost of survey and clearance of mined areas. CROMAC expected to receive increased funding in 2016, especially from European Union (EU) funds. More resources for CMR clearance have already been provided by the European Fund for Rural Development (EUFRD). In September 2015, Croatia hosted the First CCM Review Conference in Dubrovnik.

Croatia has cleared a total of almost 3.6km² over the past five years, but annual clearance has decreased successively over the last three years, as illustrated in Table 3. Despite this, Croatia foresees no obstacles in meeting its CCM Article 4 obligations, and has predicted that clearance of CMR-contaminated areas will be completed by the end of 2018, well in advance of its August 2020 Article 4 deadline.

Table 3: Five-year summary of clearance

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0.43</td>
</tr>
<tr>
<td>2014</td>
<td>0.66</td>
</tr>
<tr>
<td>2013</td>
<td>1.15</td>
</tr>
<tr>
<td>2012</td>
<td>0.77</td>
</tr>
<tr>
<td>2011</td>
<td>0.58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3.59</strong></td>
</tr>
</tbody>
</table>
ARTICLE 4 DEADLINE: 1 AUGUST 2020
(UNCLEAR WHETHER ON TRACK TO MEET DEADLINE)

<table>
<thead>
<tr>
<th>PROGRAMME PERFORMANCE</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>8</td>
<td>8</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>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Improving performance</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: AVERAGE 5.1 5.4

PERFORMANCE COMMENTARY
Germany’s mine action programme performance declined in 2015. Despite initiation of technical survey, proposed land release methodology is resource-and time-intensive, and persistent delays have occurred in releasing cluster munition remnants (CMR) contamination.
CONTAMINATION

Germany has 11km² of area suspected to contain CMR at a former Soviet military training area at Wittstock, Brandenburg, in former East Germany. Soviet-era ShOAB-0.5 submunitions contaminating Wittstock result from testing of the weapon in 1952–93. The area is highly contaminated with various kinds of explosive ordnance, and “especially ordnance with considerable explosive power”, as well as deposited scrap metal.

In its initial CCM Article 7 transparency report, submitted in January 2011, Germany declared having no areas confirmed or suspected to contain CMR. In June 2011, however, at an Anti-Personnel Mine Ban Convention (APMBC) Standing Committee meeting, Germany declared that the area at Wittstock was suspected to contain CMR. Germany repeated the information at the CCM Intersessional Meetings a week later, noting that the remnants were “principally found within the confines of a target range” located at the south of the training area.

From 2011 to early 2014, suspected CMR contamination was reported to total 4km². In August 2014, however, Germany reported that the area suspected as contaminated was 11km², considerably higher than previously reported. The increased estimate of the size of the suspected hazardous area (SHA) was ascribed to discovery of submunitions during non-technical survey across a greater area than previously reported.

PROGRAMME MANAGEMENT

In early October 2011, ownership of the Wittstock former training range was transferred from the military to the federal government authority in charge of real estate, Bundesanstalt für Immobilienaufgaben (BImA).

Beginning in 2012, BImA implemented a risk education programme in collaboration with local authorities based on a “danger prevention plan”. The plan was described as a “crucial prerequisite” for further technical survey of the area. Activities included marking the perimeter and preventing civilian access to the area. It was planned to conduct an initial survey of access routes and areas of suspected UXO contamination in neighbouring locations, and, subsequently, technical survey. The cost of any clearance will be covered by BImA. Once safely released, the site is due to remain part of a “nature protection area” in the Kyritz-Ruppiner-Heide, managed by BImA as part of the Europa NATURA 2000 site, under the European Union (EU) Habitats Directive.

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2 Statement of Germany, First CCM Review Conference, Dubrovnik, 7 September 2015.
3 CCM Article 7 Report (for 2010), Form F.
4 Statement of Germany, APMBC intersessional meetings (Standing Committee on Mine Action), Geneva, 21 June 2011.
5 Statement of Germany, CCM Intersessional Meetings (Clearance and Risk Reduction Session), Geneva, 28 June 2011.
6 Ibid; Statement of Germany, CCM Third Meeting of States Parties, Oslo, 13 September 2012; CCM Article 7 Report (for 2012), Form F, and CCM Article 7 Report (for 2013), Form F.
7 Email from an official from the Desk for Conventional Arms Control, German Federal Foreign Office, 4 August 2014.
8 Statement of Germany, First CCM Review Conference, Dubrovnik, 7 September 2015.
9 Statement of Germany, APMBC intersessional meetings (Standing Committee on Mine Action), Geneva, 23 May 2012.
10 CCM Article 7 Report (for 2011), Form G.
12 APMBC Article 5 deadline Extension Request, 15 April 2013, p. 7, and CCM Article 7 Report (for 2015), Form F.
LAND RELEASE

Germany has claimed that non-technical and technical survey have released 46km of roads from the suspicion of contamination, in order to guarantee safe access to the area suspected to contain CMR.13

Survey in 2015

At the CCM intersessional meetings in April 2012, Germany announced plans to conduct technical survey and, if necessary, clearance during 2012 of a 40km-long, 50-metre-wide tract of land to ensure fire prevention and environment protection. During the same period, it would also clear a network of paths and tracks to enable emergency management.14 By August 2014, however, it was stated only that preparations for a “technical investigation” were “underway”.15

According to Germany, in order to start technical survey, an area of 100 hectares (1km²) of vegetation had first to be burnt to form a corridor around the targeted area. This was envisaged to take place in March 2015, followed by a technical survey pilot phase later in the year. The length of the survey would be dictated by what was found, and mechanical assets were not to be deployed because of the mixed nature of contamination.16

In April 2015, Germany again reported that a technical survey was scheduled for later in the year.17 In June 2015, Germany confirmed that technical survey was finally underway, but provided no further information on the expected timeframe for the survey or any clearance operations.18

In September 2015, Germany reported having carried out extensive non-technical and technical surveys.19 During preparation of the technical survey in 2015, four ShOAB-0.5 submunitions were cleared.20 Site and “geophysical investigation” revealed strong evidence that CMR contamination existed only on the surface.21

Clearance in 2015

In September 2015, Germany reported that following non-technical and technical surveys, 46km of affected roads had been “cleared” in order to guarantee safe access to the area.22 Despite a request for clarification from Mine Action Review, Germany did not confirm if the 46km of affected road was released by clearance, as reported, or was in fact released by survey, which seems more probable. In addition, Germany did not confirm the number and type of ERW discovered and destroyed during this process.

As at September 2015, Germany reported that it was in the process of planning the final steps to clear the area of CMRs, and was planning to commence clearance in the first quarter of 2016.23

Progress in 2016

Due to the dense vegetation in the contaminated area, Germany has planned to burn the area in sections, to ensure an unobstructed view of the natural ground surface, where submunitions will be detected by visual and “geophysical means”.24 Preparation of this “site-wide fire protection system” was due to be implemented by remote-controlled caterpillar machinery in the first half of 2016, after which clearance can take place. As at July 2016, Germany reported it was “making progress with the fire protection system and everything is so far working as planned”.25 The burning of vegetation and clearance of the remaining area is envisaged to start in early 2017.26

ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Germany is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 August 2020. If Germany conducts clearance in 2016 and 2017, as planned, it should still be able to complete the task well in advance of its deadline.

According to Germany’s Article 7 report for 2015, the cost of further site investigation; establishing the approach for clearance of the contaminated area; removal of pine trees along the fire preparation path; and the call for tenders for the preparation of a site-wide fire protection system by remote-controlled caterpillar machinery, stands at €100,000.27
**PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
<th>Metric</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>4</td>
<td>4</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>5</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>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>5</td>
</tr>
</tbody>
</table>

**PERFORMANCE SCORE: POOR**

<table>
<thead>
<tr>
<th>Score</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.9</td>
<td>4.3</td>
</tr>
</tbody>
</table>

**PERFORMANCE COMMENTARY**

Despite the armed conflict in Iraq, substantive progress in clearing cluster munition remnants (CMR) was recorded in 2015, with clearance by Civil Defence units of more than three times the amount reported in 2014.
RECOMMENDATIONS FOR ACTION

- Iraq should draw up a strategic plan for the clearance of CMR, setting out operational priorities, clarifying institutional responsibilities, identifying and allocating available resources, and setting timelines for implementation.
- Iraq should introduce national standards for CMR survey and clearance, and develop the capacity of national operators to meet them.
- The Directorate for Mine Action (DMA) should draw on international assistance to enable it to discharge its management responsibilities effectively and transparently.

CONTAMINATION

CMR contaminate significant areas of central and southern Iraq, a legacy of the 1991 Gulf War and the 2003 invasion of Iraq. Iraq reports that CMR in confirmed hazardous areas (CHAs) cover a total of 200km² across nine central and southern governorates: 95% is in just the three governorates of Basra, Muthanna, and Thi-Qar. A small amount of CMR contamination also remains in northern Iraq’s Kurdish region, the result of air strikes conducted under former President Saddam Hussein.

The highway between Kuwait and Basrah was heavily targeted by cluster bomb strikes in the 1991 Gulf War and cluster munitions were also used extensively during the 2003 invasion of Iraq, particularly around Basra, Nasiriya, and the approaches to Baghdad. CMR are a feature of many of the clearance tasks being undertaken to open up access to oilfields and develop infrastructure as well as for humanitarian clearance.

The Kurdistan Regional Government reported confirmed CMR contamination totalling 1.18km² in two areas: the northern district of Dohuk close to the border with Turkey and the Garmiyan area south of Sulimaniya.

Other ERW and Landmines

Iraq also has very heavy explosive remnants of war (ERW) and mine contamination across all three regions.

Table 1: CMR contamination in central and southern Iraq as at May 2016

<table>
<thead>
<tr>
<th>Governorate</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babylon</td>
<td>1</td>
<td>89,500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Basra</td>
<td>104</td>
<td>16,614,715</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Karbala</td>
<td>4</td>
<td>1,595,474</td>
<td>1</td>
<td>218,708</td>
</tr>
<tr>
<td>Missan</td>
<td>5</td>
<td>668,090</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Muthanna</td>
<td>30</td>
<td>128,646,307</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Najaf</td>
<td>4</td>
<td>4,012,033</td>
<td>1</td>
<td>1,309,596</td>
</tr>
<tr>
<td>Al-Qadisiyah</td>
<td>4</td>
<td>3,740,034</td>
<td>1</td>
<td>226,303</td>
</tr>
<tr>
<td>Thi-Qar</td>
<td>14</td>
<td>45,157,988</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wasit</td>
<td>2</td>
<td>299,143</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>168</td>
<td><strong>200,823,284</strong></td>
<td>3</td>
<td><strong>1,754,607</strong></td>
</tr>
</tbody>
</table>

Table 2: CMR contamination in the KRG as at May 2016

<table>
<thead>
<tr>
<th>Governorate</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dohuk</td>
<td>3</td>
<td>486,628</td>
<td>11</td>
<td>672,158</td>
</tr>
<tr>
<td>Garmiyan</td>
<td>7</td>
<td>689,500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>10</td>
<td><strong>1,176,128</strong></td>
<td>11</td>
<td><strong>672,158</strong></td>
</tr>
</tbody>
</table>

1 Email from Ahmed Al-Jasim, Head of Information Management Department, DMA, 30 May 2016.
3 Telephone interview with Kent Paulusson, Senior Mine Action Advisor for Iraq, UNDP, 28 July 2011.
4 Email from Ahmed Al-Jasim, DMA, 30 May 2016.
5 Email from Khatab Omer Ahmed, Planning Manager, Directorate General of Technical Affairs, Iraqi Kurdistan Mine Action Agency (IKMAA), 20 May 2016.
6 Email from Khatab Omer Ahmed, IKMAA, 20 May 2016.
PROGRAMME MANAGEMENT

The mine action programme in Iraq is managed along regional lines. Clearance of ERW, including CMR, was conducted in 2014 by a small number of international humanitarian operators and a larger group of national and international commercial operators.

In central and southern Iraq, responsibility for mine action was transferred in 2008 to the Ministry of Environment, which set up the DMA to coordinate and manage the sector. The DMA, however, implements policy set by a Higher Council for Mine Action (HCMA) 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, which serves as its secretariat.

The DMA oversees four Regional Mine Action Centres (RMACs): for the north (covering the governorates of Nineveh, Salaheddin, and Diyala); the south (covering the governorates of Basra, Diyal, and Wasit); a region identified as “ME” (covering the governorates of Babylon, Kirkuk, and Anbar); and the centre (Baghdad, Babil, and Sulimaniya). The DMA also manages a non-commercial company, the Iraqi Mine Action Authority (IMCO), engaged in survey and/or clearance of CMR in central and southern Iraq; other operators included civil defence and the army. IMCO ceased operating in the middle of 2015. The activities, if any, of international commercial companies were not reported.

The DMA data for 2015 shows two humanitarian operators, the Norwegian People’s Aid (NPA) and Iraq Mine Clearance Organization (IMCO), engaged in survey and/or clearance of CMR in central and southern Iraq; other operators included civil defence and the army. IMCO ceased operating in the middle of 2015. The activities, if any, of commercial companies were not reported.

In the KRG, IKMAA reported only Mines Advisory Group (MAG) as conducting CMR clearance.

Strategic Planning

Iraq does not have a strategic plan for clearance of CMR.

Operators

DMA data for 2015 shows two humanitarian operators, Norwegian People’s Aid (NPA) and Iraq Mine Clearance Organization (IMCO), engaged in survey and/or clearance of CMR in central and southern Iraq; other operators included civil defence and the army. IMCO ceased operating in the middle of 2015. The activities, if any, of commercial companies were not reported.

In the KRG, IKMAA reported only Mines Advisory Group (MAG) as conducting CMR clearance.

LAND RELEASE

Mine action sector operations were overshadowed by conflict, prevalent insecurity, and the urgent need to address extensive, dense contamination by improvised explosive devices which has emerged as a humanitarian priority. As a result, CMR contamination was not a priority, and survey and clearance slowed in 2015 compared to the previous year, although data deficiencies hinder an accurate determination of progress. Release of cleared land was also held back by lack of capacity to conduct quality control in the DMA and RMAC South.

Survey in 2015

Non-technical survey (NTS) and technical survey in parts of central and southern Iraq continued to define CMR contamination, but national survey standards have yet to be introduced and the quality of survey results is variable. Most of the survey and clearance was attributed to army and civil defence teams whose methodology and standards are unknown.

In central and southern Iraq, the DMA reported that NTS had identified 34 suspected hazardous areas (SHAs) totalling 4.5km² in three governorates: Basra (3.37km²), Karbala (0.22km²), and Missan (0.87km²). The DMA also reported that operators confirmed 101 hazardous areas affecting 42km², nearly three-quarters of which was accounted for by Iraq’s Civil Defence. Other data provided by the DMA indicated NTS had identified suspected or cleared areas in 2015.

Table 3: Survey CMR-contaminated areas in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas confirmed</th>
<th>Area confirmed (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Defence</td>
<td>43</td>
<td>30,882,887</td>
</tr>
<tr>
<td>IMCO</td>
<td>10</td>
<td>7,818,484</td>
</tr>
<tr>
<td>Iraqi Army</td>
<td>1</td>
<td>54,967</td>
</tr>
<tr>
<td>NPA</td>
<td>46</td>
<td>3,245,511</td>
</tr>
<tr>
<td>RMAC South</td>
<td>1</td>
<td>169,141</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>101</strong></td>
<td><strong>42,170,990</strong></td>
</tr>
</tbody>
</table>

confirmed hazardous areas covering 9.5km², close to 90% of it in Basra and al-Qadisiyah governorates, but with small SHAs in Missan and Karbala.

The DMA’s record of activities undertaken by international operators, as in the past, was significantly at variance from the operators’ own records, pointing to weaknesses in understanding or record-keeping systems. NPA said it confirmed 10 CMR hazards covering almost 7.4km², mostly in Missan governorate. NPA also reported cancelling 301km² of battle area by NTS in Missan governorate.

10 Emails from Ahmed Al-Jasim, DMA, 30 May 2016; and Per Breivik, Chief Operating Officer, IMCO, 5 May and 4 June 2015.
11 Email from Khabat Omer Ahmed, IKMAA, 20 May 2016.
12 Email from Ahmed Al-Jasim, DMA, 21 May 2016.
13 Email from Ahmed Al-Jasim, DMA, 30 May 2016.
14 Ibid.
15 Email from Bjørn Skodvin Hannisdal, Country Programme Director, NPA, 3 June 2016.
IKMAA did not record any survey of CMR-affected areas in the KRG in 2015.17

Clearance in 2015
IKMAA reported that CMR clearance in the KRG was conducted only by MAG, which cleared 0.5km².18 DDG relocated its Basra operation to the KRG in December 2014 and was able to mobilise funding to work in the north but as at April 2016 had still not received accreditation to conduct explosive ordnance disposal (EOD) or area clearance.19

In central and southern Iraq, humanitarian clearance slowed in 2015 because of funding problems for national operators who on occasion reportedly had difficulty in meeting payroll commitments. Additionally IMCO, the biggest humanitarian NGO, closed operations at the end of June 2015 after failing to resolve long-running issues with the DMA over registration and accreditation requirements.20

Most clearance in central and southern Iraq was undertaken by Civil Defence units which the DMA said cleared more 6.3km² of CMR-affected area in 2015, more than three times the amount reported in 2014 although mine action sources said Civil Defence struggled with financial constraints and equipment shortages. Following DDG’s relocation to KRG, NPA was the only international humanitarian operator outside the KRG, accelerating the pace of clearance with the arrival of long-awaited large-loop detectors and the addition of two battle area clearance (BAC) and two survey teams in October 2015, bringing its operations staff to 52. NPA planned to complete work in Missan in 2016 and focus resources on Basra.21

<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>NPA</td>
<td>9</td>
<td>301,442,478</td>
<td>10</td>
<td>7,388,122</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4: NTS and Cluster Munition Remnant Survey in 201521

Table 5: Clearance of CMR-contaminated areas in 201522

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>Submunitions destroyed</th>
<th>AVM destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre &amp; South</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Defence</td>
<td>11</td>
<td>6,387,984</td>
<td>2,017</td>
<td>4</td>
<td>1,514</td>
</tr>
<tr>
<td>NPA</td>
<td>6</td>
<td>1,847,110</td>
<td>616</td>
<td>0</td>
<td>162</td>
</tr>
<tr>
<td>Subtotals</td>
<td>17</td>
<td>8,235,094</td>
<td>2,633</td>
<td>4</td>
<td>1,676</td>
</tr>
<tr>
<td>KRG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAG</td>
<td>12</td>
<td>546,371</td>
<td>234</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>TOTALS</td>
<td>29</td>
<td>8,781,465</td>
<td>2,867</td>
<td>4</td>
<td>1,680</td>
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ARTICLE 4 COMPLIANCE
Under Article 4 of the Convention on Cluster Munitions, Iraq is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 November 2023.

The likelihood of Iraq meeting its deadline looks remote in view of military conflict, political instability, financial constraints, and competing security and humanitarian priorities. In this already challenging environment, operators also reported obstacles ranging from slow and complex bureaucracy to an overall lack of transparency and corruption on a scale that damages efficiency, raises costs, and calls into question the extent of authorities’ commitment to meeting their treaty obligations.

16 Ibid.
17 Email from Khatab Omer Ahmed, IKMAA, 20 May 2016.
18 Emails from Ahmed Al-Jasim, DMA, 30 May and 10 June 2016.
19 Email from Bazz Jolly, Programme/Operations Manager, DDG (KRG), 26 April 2016.
20 Emails from Per Breivik, IMCO, 5 May, 4 June, and 22 October 2015.
21 Email from Bjørn Skodvin Hannisdal, NPA, 3 June 2016.
22 Emails from Ahmed Al-Jasim, DMA, 30 May and 10 June 2016; and Khatab Omer Ahmed, IKMAA, 20 May 2016. NPA reported to Mine Action Review that it had actually cleared seven areas containing CMR totalling 2,276,588m², destroying 1,157 submunitions, 79 anti-personnel mines, 22 anti-vehicle mines, and 183 items of UXO. Email from Bjørn Skodvin Hannisdal, NPA, 3 June 2016.
LAO PEOPLE’S DEMOCRATIC REPUBLIC

ARTICLE 4 DEADLINE: 1 AUGUST 2020 (NOT ON TRACK TO MEET DEADLINE)

<table>
<thead>
<tr>
<th>PROGRAMME PERFORMANCE</th>
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<th>2014</th>
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<tr>
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<td>5</td>
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<tr>
<td>Target date for completion of cluster munition clearance</td>
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<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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<td>Timely clearance</td>
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<tr>
<td>Land-release system in place</td>
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<td>6</td>
</tr>
<tr>
<td>National mine action standards</td>
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<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 BUT IMPROVING          6.1  5.9

PERFORMANCE COMMENTARY
The Lao People’s Democratic Republic (Lao PDR) made concrete progress in 2015 towards establishing a credible and reliable estimate for national contamination from cluster munition remnants (CMR). The CMR survey methodology pioneered by Norwegian People’s Aid (NPA) combined with follow-on clearance has set a new and more positive course for land release.
RECOMMENDATIONS FOR ACTION

- Lao PDR should expedite implementation of nationwide non-technical survey (NTS) and technical survey to reach an evidence-based estimate of the extent of CMR contamination.
- National authorities should establish clear standards for the conduct of NTS and technical survey.
- The authorities should streamline Memoranda of Understanding (MoUs) procedures to facilitate timely use of donor funds and efficient deployment of operator’s survey and clearance assets.
- Lao PDR should establish a budget line for sustained national funding of the sector.

CONTAMINATION

Lao PDR has the world’s highest level of contamination by unexploded submunitions as a result of the Indochina War of the 1960s and 1970s. The United States (US) conducted one of the heaviest aerial bombardments in history, dropping more than two million tonnes of bombs between 1964 and 1973, including more than 270 million submunitions (known locally as bombies). Clearance teams have found 29 types of submunition, including most commonly BLU 26, 24/66, and 63.

There is no reliable estimate of contamination in Lao PDR. The government has reported that CMR contaminate approximately 8,470km² and overall contamination from unexploded ordnance (UXO) covers up to 87,000km² (around 35% of Laotian territory). Such estimates, however, are based on bomb targeting data that bears little relation to actual contamination, do not reflect results of clearance, and clearly overstate contamination by a high order of magnitude.

The National Regulatory Authority (NRA) reports that 14 of Lao PDR’s 18 provinces are contaminated by UXO, 9 of which are heavily affected. In 2016, the NRA set out plans for a nationwide survey that should produce an evidence-based assessment of the extent of contamination (see below, section on Survey in 2015). International operators believe CMR contamination is likely to amount to less than 2,000km². The NRA has identified submunitions as responsible for close to 30% of all incidents. Submunitions are also said to be the type of ERW most feared by the population. United Nations Development Programme (UNDP) has reported that as a result of submunition contamination, “economic opportunities in tourism, hydroelectric power, mining, forestry and many other areas of activity considered main engines of growth for the Lao PDR are restricted, complicated and made more expensive.” The extent of their impact has spurred calls for a survey and clearance strategy that gives priority to tackling CMR.

Bombies (the local name for unexploded submunitions) accounted for three-quarters of all items cleared in 2015, a sharp increase that coincided with growing development of survey and evidence-based clearance. In 2014, bombies had made up about two-thirds of all items cleared, while UXO Lao, much the biggest operator, reported in 2011 that bombies had accounted for almost half the items cleared in the previous 15 years.

Other ERW and Landmines

Extensive contamination from other ERW includes both air-dropped and ground-fired UXO, though the extent of residual contamination from ERW is not known. Clearance operators have reported the presence of at least 186 types of munitions in Lao PDR. These reportedly range from 20lb fragmentation bombs to 2,000lb general-purpose bombs and sometimes larger items. Other major causes of incidents are shells, grenades, mortars, and rockets.

3 Presentation by Phoukhieo Chanthasomboune, Director, National Regulatory Authority, CCM intersessional meetings (Clearance and Risk Reduction session), Geneva, 7 April 2014, and CCM Article 7 Report (for 2013), Form F.
5 Interviews with international operators, Vientiane, 3–7 May 2016.
7 Interview with Jo Durham, author of “Post-Clearance Impact Assessment”, Vientiane, 10 November 2011.
PROGRAMME MANAGEMENT

The NRA, created by government decree in 2004 and active since mid-2006, has an interministerial board chaired by the deputy prime minister and composed of 22 representatives from government ministries. Until 2011, the NRA came under the supervision of the Ministry of Labour and Social Welfare. A decree issued in June 2011 appointed a minister in the Prime Minister’s Office responsible for rural development and poverty reduction as Vice-Chair of the Board, together with the Vice-Minister of Foreign Affairs.

A February 2015 decree expanded the NRA board to 22, chaired by the Minister in the Prime Minister’s Office responsible for rural development, Bounheuang Douangphachanh, and with ministers of defence, foreign affairs, and labour and social welfare as vice-chairmen. 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. As at May 2016, it was not clear who would succeed him as NRA chairman.

Further change had occurred with a new decree issued in February 2015 increasing 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 specifies that the NRA “has a government budget included in the general budget” of the Board’s president.

The NRA’s structure and role was set out in an “agreement” released in November 2012, defining it as the “secretariat for the Party Politburo and the Lao government for the overall management and consideration of policy matters, planning, projects and coordination of the implementation of the Lao PDR National Strategy for the UXO sector for the entire country.” Its role includes setting policy, coordinating, and regulating the sector, accrediting operators, setting standards, and conducting quality management. It also has the mandate to serve as the technical focal point for matters relating to international weapons treaties.

The NRA has four sections: Administration and Finance, Planning and Cooperation, Quality and Standards, and Operations and Information. This includes a single quality management team. Until 2014, UNDP supported technical advisors to the NRA and UXO Lao, and a programme and finance advisor. In 2015, UNDP appointed one technical advisor to serve both the national regulator and the national operator. Sterling International, funded by the US Department of State, provided a technical advisor supporting quality management and operations at the NRA, a second adviser supporting national operator UXO Lao, and a third adviser providing support to both organisations as required.

Strategic Planning

Lao PDR embarked in 2010 on a plan for 2011–20 known as “Safe Path Forward 2” (SPF), a revised version of which was approved by the government on 22 June 2012. The strategy identified six general goals, including reducing the number of casualties each year from 300 to less than 75, and the release of an average of 200km² a year, which was more than triple the 2013 rate of clearance and land release. It called for release of priority land through data analysis, general survey, technical survey, roving response, “and/or, finally, full clearance”.

14 Prime Minister’s Decree No. 164, 9 June 2011; and NRA, “National Regulatory Authority for UXO/Mine Action Sector in Lao PDR Switches Ministries”, October 2011.
15 Prime Minister’s Decree 043/PM, 3 February 2015.
19 NRA website, “About the NRA”, 17 August 2012.
20 Interview with Allan Poston, Chief Technical Adviser, UXO Mine Action Sector; and Nils Christensen, UXO Portfolio Manager, UNDP, Vientiane, 6 May 2016.
The Lao government later added other targets. It adopted UXO clearance as a ninth Millennium Development Goal in 2010, targeting removal of all UXO from priority agricultural land by 2020.23 In 2013, the government identified 64 priority areas planned to become small rural townships, 167 focal sites to consolidate and "stabilise" remote rural communities, and more than 1,680 priority projects.24 No details were available on progress towards those targets as at June 2016.

After a review of SPF2 in June 2015, the NRA set a number of specific targets for the remaining five years up to 2020, including NTS of 3,860 villages, pursuing technical survey, keeping clearance as a priority of the government’s poverty eradication programme, bringing down the number of casualties to less than 40 a year, and providing medical care, vocational training, and economic support to 1,500 UXO victims.25

More significantly, in March 2016 the NRA issued a paper committing to time-bound nationwide non-technical and technical survey with a view to producing Lao PDR’s first baseline estimate of cluster munitions contamination.26 After years of debate and uncertainty, UXO sector actors regarded the paper as a milestone that will provide guidance on the time and cost required to complete clearance of known hazards. The planned survey underscored the focus on tackling the threat of cluster munitions rather than general battle area clearance.27

The paper calls for completing NTS of all villages in the 14 CMR-affected provinces in four years at an estimated cost of $6.84 million and technical survey of all evidence points in five years (by the end of 2021) at a projected cost of at least $20 million. Once technical survey is 30% complete, the government would be able to provide an estimate of total CMR contamination. Survey will be conducted mostly by international non-governmental organisations (NGOs) and UXO Lao, possibly with some involvement of the Lao PDR Army in NTS. The paper also states without explanation that the government expects international humanitarian operators, who account for about half the capacity of the humanitarian UXO sector, will cease conducting clearance after technical survey has been completed.28

In the meantime, progress continues to be slowed by cumbersome, multi-layered, and long bureaucratic procedures for international organisations to conclude MoUs through the Ministry of Foreign Affairs which take many months of negotiation. These procedures have, on occasion, resulted in the loss of donor funding and stalled the import of equipment.

**Operators**

UXO Lao, working in nine provinces, laid off some 200 deminers as a result of funding shortfalls in 2014, but in 2015, with financial support from the US, brought employment back to around 1,200 personnel by the end of 2015, roughly equivalent to the combined staffing of international NGOs. In 2015, these included HALO Trust, Handicap International (HI), Mines Advisory Group (MAG), and NPA, which had a total workforce of 1,199. The Lao armed forces started work in Xaisomboun province and were expected to start operating in Bolikhamxay, Vientiane and Khammouan provinces in 2016.29

International commercial operators include Auslao UXO Clearance, BACTEC (Battle Area Clearance, Training, Equipment and Consultancy), Milsearch, and Munitions Management Group (MMG). National commercial operators include ASA Power Engineering, Lao BSL UXO Clearance, Lao Uneod Cooper, OUMMA UXO Clearance, PSD, Sengphet UXO Clearance, SBH, and XTD UXO Clearance. In 2015, the NRA accredited another commercial company, GREAT Company.30

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23 “Laos: new MDG to tackle UXOs”, IRIN, 12 November 2010.
24 Interviews with Phoukhieo Chanthasomboune, NRA, Vientiane, 13 June 2013, and Phil Bean, NRA, Vientiane, 12 June 2013.
25 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 4 May 2016.
27 Interview with Allan Poston, UNDP, Vientiane, 6 May 2016.
29 Email from the NRA, 4 July 2016.
30 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 4 May 2016.
LAND RELEASE

Since the start of 2015, priority in the UXO sector has shifted to survey to provide a basis for evidence-based clearance and to make a credible determination of the extent of Lao PDR’s contamination. As a result, the amount of land cleared fell in 2015, but the amount of land identified as confirmed hazardous area (CHA) rose sharply and items destroyed in the course of survey and clearance similarly rose significantly.

Survey in 2015

After trials of a CMR-specific survey methodology in 2014, the NRA approved national survey standards in January 2015. Although some operators had already started to apply a form of survey suited to submunitions, the NRA’s standard shifted the UXO sector as a whole to CMR-focused survey together with evidence-based clearance for the first time. The NRA reported operators recorded 101.5km² of CHA established in 2015, a near 50% increase on the previous year.31

UXO Lao operated with one survey team in each of the provinces in which it worked, and in 2015 the organisation trained personnel to apply the new methodology. Sizeable discrepancies between UXO Lao’s reported NTS results and NRA data (see Table 1) hamper assessment of its progress in 2015 but it also reported identifying 36km² of CHA in the nine provinces where it works, similar to its 2014 results.32

Among the humanitarian operators, NPA and HALO Trust concentrated their programmes on survey, although both also increased the amount of land they cleared in 2015. HALO Trust, working in the southern province of Savannakhet, received additional funding allowing it to add two teams in 2015, conducting technical survey of a total of almost 28.7km² of land, confirming 404 hazardous areas covering 9km². HALO Trust also cleared 1km² but destroyed more bombies in the course of technical survey (2,679) than in clearance operations (1,157).33 A total of 27,163 submunitions were destroyed during technical survey according to the NRA.34

NPA, which worked with 11 NTS teams and 18 teams on technical survey and clearance, reported completing NTS in all villages in the three southern provinces where it works, Saravane, Sekong and Attapeu, and said it had conducted technical survey in 65% of the villages in those provinces. In 2015, it reported identifying 641 CHAs covering a total of almost 37.2km². That was marginally less than the area confirmed the previous year, but NPA also cleared 19 CHAs covering a total of 1km², up from 0.26km² the previous year. NPA also started working with MAG in one district of Khamouane province in October 2015 and with UXO Lao in Xieng Khouang province.35 MAG conducted technical survey over 20km² enhancing CMRS with evidence points collected over many years of EOD and achieving a high ratio of area confirmed to area surveyed.37

Table 1: Technical survey of CMR-suspected area in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area covered (km²)</th>
<th>Areas confirmed</th>
<th>Area confirmed (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HALO Trust</td>
<td>28.69</td>
<td>404</td>
<td>9.00</td>
</tr>
<tr>
<td>HI</td>
<td>12.77</td>
<td>570</td>
<td>3.82</td>
</tr>
<tr>
<td>MAG</td>
<td>20.44</td>
<td>109</td>
<td>15.79</td>
</tr>
<tr>
<td>NPA</td>
<td>96.41</td>
<td>631</td>
<td>37.16</td>
</tr>
<tr>
<td>UXO Lao</td>
<td>N/A</td>
<td>1,091</td>
<td>36.34</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>158.31</strong></td>
<td><strong>2,805</strong></td>
<td><strong>102.11</strong></td>
</tr>
</tbody>
</table>

N/A = Not available

31 Ibid.; and "2015 Sector Achievements" (data as of 29 April 2016), provided by NRA on 4 May 2016.
32 Interview with Thipasone Soukhathammavong, National Programme Director and Saomany Manivong, Chief of Programme Office and Public Information, UXO Lao, Vientiane, 5 May 2016; and "UXO Lao Progress Summary Report, 2015", received from UXO Lao on 6 May 2016.
33 Email from Nick Torbet, Programme Manager, HALO Trust, 29 March 2016.
34 "Sector Achievements", interim figures (as at 29 April 2016), received by email from NRA, 4 May 2016.
35 Email from Jonas Zachrisson, Country Director, NPA, 21 April 2016.
36 Data provided by Nick Torbet, HALO Trust, 29 March 2016; Kim Warren, Head of Mission, HI, 5 May 2016; Simon Rea, Country Director, MAG, 3 May 2016.
Key issues facing the sector in 2016 included providing clearer ground rules for investigation of historical data during NTS, a clearer definition of fade-out in the conduct of technical survey, and setting clear criteria for achieving completion. HALO Trust, as at May 2016, said it had finished technical survey in all but 10 of the villages in the operating area assigned to it, but was awaiting additional allocation of villages. NPA expected to conclude technical survey of the three southern provinces in which it has been working by the end of 2016, but the NRA said it did not accept NPA had completed NTS in its southern area of operations and was not satisfied that it had sufficiently investigated all village areas and historical evidence.

In 2016, NPA re-started NTS of a sample of 12 villages in the three southern provinces where it had already completed technical survey to test the quality of the work conducted. Meantime, the NRA was preparing plans for a “joint observation team” to review NTS and technical survey results, sampling sites in different provinces surveyed at different times in the last few years as the cluster munition survey methodology was developed. As at May, the NRA had not finalised the assessment’s terms of reference or the composition of the team that would conduct it and had not set a timeline for implementing it.

The NRA’s commitment to a nationwide baseline survey also highlighted the need for additional capacity to enhance performance in a number of areas, including quality management, provincial coordination by the NRA between operators and local authorities, support for analysis, and developing sector policy and information management. Significant discrepancies persisted between the data recorded by operators and the NRA’s Information Management System for Mine Action (IMSMA) database, partly attributable to a backlog of entries, particularly relating to UXO Lao operations.

Clearance in 2015

With the growing emphasis on survey, the amount of land confirmed as hazardous in 2015 far outstripped the area released by clearance. The total amount of land cleared in 2015 amounted to 41.3km², 40% less than in the previous year, but the number of bombies destroyed in clearance operations nearly doubled, underscoring the greater effectiveness of operations as a result of the sector’s shift to evidence-based clearance. A further 49,938 bombies were destroyed in the course of technical survey and roving operations.

The fall in area clearance resulted mainly from a 40% drop in land cleared by commercial companies, which worked largely on tasks related to hydropower and mineral sector or power lines and have little impact on Lao PDR’s progress towards fulfilling its treaty obligations. Humanitarian operators cleared 29.6km² in 2015 compared with 35.6km² the previous year, a drop of 17%, but they also accounted for 99% of the bombies destroyed in the course of clearance.

The lower overall rate of area clearance resulted from less clearance by UXO Lao, much the biggest of the five humanitarian organisations. Its productivity was affected by the laying-off of 19 teams in the last quarter of 2014 as a result of funding constraints, even though US funding enabled it to replace those teams in the course of 2015. Area clearance rates also dropped as teams converted from request-based operations clearing designated tasks regardless of the likelihood of finding contamination, to evidence-based survey focused on CHAs. Although UXO Lao continued to clear some tasks on request in 2015, it said the average number of items its teams destroyed rose from under six items per hectare two years ago to more than 20 per hectare in 2015. In 2016, it said it planned to work exclusively on CHAs. It was conducting...
technical survey jointly with NPA in Xieng Khouang province.45

With NPA and HALO Trust focused primarily on technical survey, the main other operator engaging in large-scale clearance was MAG, operating in three districts of Xieng Khouang and one district of Khamouane province. It more than doubled the amount of land it cleared in 2015 compared with the previous year after deploying additional clearance teams. It also attributed the increase in part to working with locally hired teams and two machines to cut vegetation which was previously undertaken by mine action teams.46

HI, operating with 82 operations personnel in Savannakhet province, focused on area clearance for most of 2015 and also substantially increased items destroyed in roving tasks. From October, HI switched the emphasis to technical survey but without additional donor support it appeared likely to have to lay off a number of teams.47

Preliminary data for 2015 showed a more than 27% drop in the number of bombies destroyed in roving operations in 2015 from the previous year but did not appear to capture all the operators’ results. MAG reported destroying 3,528 bombies in 2015, more than in 2014, in addition to 799 other UXO items.48 The main drop occurred in operations by UXO Lao, which previously worked with dedicated roving teams, but in 2015 kept a roving team only in Xieng Khouang province and switched to using clearance teams to carry out spot explosive ordnance disposal (EOD) in other provinces.50

Table 2: Battle area clearance in 201548

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area covered (km²)</th>
<th>Submunitions destroyed</th>
<th>Large bombs destroyed</th>
<th>UXO destroyed</th>
<th>Mines destroyed</th>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>HALO Trust</td>
<td>1.05</td>
<td>1,157</td>
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<td>404</td>
<td>0</td>
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<tr>
<td>HI</td>
<td>0.54</td>
<td>491</td>
<td>15</td>
<td>804</td>
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<tr>
<td>MAG</td>
<td>7.26</td>
<td>6,424</td>
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<td>259</td>
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<td>NPA</td>
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<td>2,034</td>
<td>2</td>
<td>63</td>
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<td>11,632</td>
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<td><strong>55</strong></td>
<td><strong>13,162</strong></td>
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<tr>
<td>AUSLAO</td>
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<td>0</td>
<td>2</td>
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<td>BACTEC</td>
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<td>11</td>
<td>0</td>
<td>17</td>
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<td>Lao BSL</td>
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<td>Milsearch</td>
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<td><strong>Subtotals</strong></td>
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<td><strong>52</strong></td>
<td><strong>2,182</strong></td>
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<td>TOTALS</td>
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<td><strong>50,084</strong></td>
<td><strong>107</strong></td>
<td><strong>15,344</strong></td>
<td><strong>108</strong></td>
</tr>
</tbody>
</table>

45 Interview with Thipasone Soukhathammavong, National Programme Director, and Saomany Manivong, Chief of Programme Office and Public Information, UXO Lao, Vientiane, 5 May 2016.
46 Interview with Simon Rea, MAG, Vientiane 4 May 2016.
47 Interview with Kim Warren, HI, Vientiane, 5 May 2016.
48 “Sector Achievements”, interim figures (29 April 2016), received from NRA, 4 May 2016.
49 Email from Simon Rea, MAG, 3 May 2016.
50 Interview with Thipasone Soukhathammavong and Saomany Manivong, UXO Lao, Vientiane, 5 May 2016.
CLUSTER MUNITION REMNANTS - STATES PARTIES

LAO PEOPLE’S DEMOCRATIC REPUBLIC

ARTICLE 4 COMPLIANCE

Under Article 4 of the Convention on Cluster Munitions, Lao PDR is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 August 2020.

Lao PDR will not complete clearance by its Article 4 deadline given the extent of its contamination but plans to provide what will be the first credible estimate of CMR contamination when its nationwide technical survey is one-third complete, a position that should be reached well ahead of the 2020 deadline. This will provide a solid basis for assessing the time and resources required to complete cluster munition clearance.

Although the focus on survey has slowed clearance the rapid accumulation of CHA data will enable faster, more efficient clearance ahead, providing resources are available to finance it. The NRA reported that Lao PDR received $35.47 million in donor funding for the UXO sector in 2015, close to the $36 million received in 2014, and was seeking close to $38 million for the sector in 2016.52

Despite waning enthusiasm on the part of some donors, Lao PDR’s sector has been buoyed by a big increase in funding from the US as part of a broader regional initiative to clean up the legacy of its Vietnam War-era bombing in South East Asia. US funding for UXO clearance in Laos rose from $9 million in 2013 to $15 million in 2015 and President Obama’s planned September 2016 visit to Lao PDR would be an opportunity for the US to pledge substantial additional support.53

The government reported providing $4.82 million for the UXO sector in 2015, nearly identical to the figure reported the previous year, and including rent for UXO Lao and the NRA, tax exemption on operator equipment imports, and costs associated with UXO sector activities of the Lao PDR armed forces. The government would contribute $380,000 to the sector in 2016.54

Table 3: Roving clearance operations in 201551

<table>
<thead>
<tr>
<th>Operator</th>
<th>Submunitions destroyed</th>
<th>Bombs destroyed</th>
<th>Other UXO destroyed</th>
<th>Mines destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>HALO Trust</td>
<td>2,398</td>
<td>23</td>
<td>684</td>
<td>0</td>
</tr>
<tr>
<td>HI</td>
<td>2,432</td>
<td>21</td>
<td>1,256</td>
<td>2</td>
</tr>
<tr>
<td>MAG</td>
<td>830</td>
<td>6</td>
<td>749</td>
<td>0</td>
</tr>
<tr>
<td>NPA</td>
<td>1,666</td>
<td>39</td>
<td>817</td>
<td>0</td>
</tr>
<tr>
<td>UXO Lao</td>
<td>15,449</td>
<td>126</td>
<td>8,855</td>
<td>34</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>22,775</strong></td>
<td><strong>215</strong></td>
<td><strong>12,361</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

Table 4: Five-year summary of clearance

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>41.30</td>
</tr>
<tr>
<td>2014</td>
<td>67.78</td>
</tr>
<tr>
<td>2013</td>
<td>64.86</td>
</tr>
<tr>
<td>2012</td>
<td>54.42</td>
</tr>
<tr>
<td>2011</td>
<td>38.74</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>267.10</strong></td>
</tr>
</tbody>
</table>

51 “Sector Achievements”, interim figures (29 April 2016), received from NRA, 4 May 2016.
52 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 4 May 2016; and email from the NRA, 4 July 2016.
54 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 4 May 2016.
PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>6</td>
<td>6</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>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>4</td>
<td>5</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>4</td>
<td>5</td>
</tr>
<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

5.4

PERFORMANCE COMMENTARY

Lebanon's mine action programme performance declined in 2015, due to its lack of progress in determining a more accurate baseline of cluster munition remnant (CMR) contamination. This is in part due to the continuing discovery of previously unrecorded CMR contamination and recording of each hazardous area as a standardized size, instead of deploying survey teams to more accurately determine the extent of the area. Proposed strengthening of land release methodology is still to be embodied in the national mine action standards, which are currently undergoing revision.
RECOMMENDATIONS FOR ACTION

- The Lebanese Mine Action Centre (LMAC) should determine more accurately the baseline contamination from CMR.
- LMAC should improve its land release system to accord with international standards. Improvements should be reflected in the revised National Mine Action Standards (NMAS), and all mine action stakeholders should be consulted before their finalisation.
- Newly discovered cluster strikes should not automatically be recorded in the LMAC database as covering 33,000m². Instead, a more accurate assessment of the size of each contaminated area should be determined through non-technical and technical survey.
- Prioritisation of technical survey over full clearance should be applied when releasing land from the perimeter of the task area to the first CMR evidence point.
- LMAC should ensure objective quality assurance (QA) and cross-checking of information entered into the Information Management System for Mine Action (IMSMA) database, to ensure CMR contamination and land release data are being assessed, recorded, and extracted accurately. LMAC should also aim to be more transparent and provide regular IMSMA reports to clearance operators, as a means to help cross-check and confirm the integrity of the data.
- Lebanon should mobilise the necessary resources to finish CMR clearance as soon as possible, but not later than 1 May 2021.

CONTAMINATION

At the end of 2015, Lebanon had 773 areas confirmed to contain CMR, totalling more than 16.3km². Four regions still contain CMR contamination, as set out in Table 1.

<table>
<thead>
<tr>
<th>Province</th>
<th>Areas</th>
<th>Area cleared (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beqaa</td>
<td>36</td>
<td>1,160,692</td>
</tr>
<tr>
<td>Jabal Loubnan</td>
<td>8</td>
<td>264,000</td>
</tr>
<tr>
<td>Janoub</td>
<td>246</td>
<td>5,544,253</td>
</tr>
<tr>
<td>Nabatiyeh</td>
<td>483</td>
<td>9,349,855</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>773</strong></td>
<td><strong>16,318,800</strong></td>
</tr>
</tbody>
</table>

Table 1: CMR contamination at the end of 2015

CMR contamination is largely the result of the conflict with Israel in July–August 2006. During the conflict Israel fired an estimated four million submunitions on south Lebanon, 90% of which were dispersed in the last 72 hours of the conflict. In addition, some CMR still remain from earlier conflicts with Israel in 1978 and 1982.

After the 2006 war, contamination was initially estimated to cover 55km². This estimate was later increased, based on surveys conducted, to almost 58km² across 1,484 areas, over the three regions of Beqaa, Mount Lebanon, and south Lebanon. In 2016, LMAC claimed original contamination had been more than 60km², with almost 44km² having been cleared to date, leaving 16.3km² of contamination to release at the beginning of 2016.

1. Email from Brig.-Gen. Elie Nassif, Director, LMAC, 14 May 2016; presentation by LMAC at the 19th International Meeting of National Mine Action Programme Directors and UN Advisers, Geneva, 18 February 2016; and Article 7 Report (for 2015), Form F.
7. Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016; and Article 7 Report (for 2015), Form F.
10. Article 7 Report (for 2013) Form F; and Statement of Lebanon, CCM Fourth Meeting of States Parties, Lusaka, September 2013.
The baseline estimate of overall contamination continues to be revised (and increased), in part because previously unrecorded contamination is still being discovered; and also because the 33,000m² (per strike) area automatically assigned to CMR tasks by LMAC has been proven in many instances to underestimate the actual task size. For example, based on empirical field data, Mines Advisory Group (MAG) has calculated the average CMR clearance task to be approximately 60,000m², while Norwegian People’s Aid (NPA) previously calculated it to be 65,000m² per task.

The accuracy of the baseline of CMR contamination is also further complicated by clearance undertaken in the immediate aftermath of the 2006 cluster munition strikes, during which emergency clearance of visual submunitions in and around infrastructure, schools, and roads was carried out by the Lebanese Armed Forces (LAF) as well as individual Lebanese.

The United Nations (UN) Mine Action Coordination Centre – south Lebanon (MACC-SL) assumed the role of coordinating CMR clearance in 2007, in cooperation with the National Demining Office (now known as LMAC), and contracted out CMR clearance to non-governmental organisations (NGOs), commercial operators, and government groups. However, not all clearance undertaken in the years immediately following 2006 was in accordance with International Mine Action Standards (IMAS). Some Israeli bombing data has been provided — most recently through the UN Interim Force in Lebanon (UNIFIL) — but has proved to be very inaccurate.

Additional CMR may also exist in the Blue Line minefields in the far south of Lebanon, along the border with Israel. Since late 2015, permission has been granted for clearance to be undertaken of some of the Blue Line minefields. Only when clearance begins will the extent to which these mined areas are also contaminated with CMR be revealed.

MAG undertook a pre-clearance non-technical survey (NTS) of 443 CMR clearance tasks between September 2013 and April 2014, with the aims of confirming areas of CMR as accurately as possible, informing LMAC’s operational planning and prioritisation, and identifying the socio-economic impact of remaining clearance.

A national NGO, Peace Generation Organization for Demining (PODI), supported MAG in carrying out the survey. The survey resulted in MAG recommending 96 tasks for cancellation, covering an estimated 2.8km². The remaining 347 tasks surveyed by MAG were recommended for clearance.

In September 2014, at the Fifth Meeting of States Parties to the CCM, Lebanon stated it was reviewing MAG’s recommendations for task cancellation and that it hoped to use the survey findings to focus clearance on areas with strong evidence of contamination. Lebanon further stated that, as a result of the survey, almost 1.5km² of land had been released and formally handed over to the owners.

After reviewing the 96 tasks recommended by MAG for cancellation, LMAC decided to cancel 51 tasks, totalling an area of 1.7km². LMAC decided not to cancel the remaining 45 tasks recommended for cancellation, as following a review it believed these areas still contained CMR contamination. These tasks therefore remain in the database, and will be tasked for clearance, depending on their assigned priority. While LMAC has chosen not to cancel these tasks, information from MAG’s NTS will be used to inform pre-clearance plans.

Furthermore, MAG’s pre-clearance NTS revealed contaminated areas ranging from between 10,000m² to 50,000m², and it is believed that LMAC is planning to review this data, which could help to more accurately record the baseline CMR contamination in the surveyed areas, and also assist in the tasking of more accurately delineated areas for clearance.

New, previously unrecorded CMR contamination continues to be discovered in south Lebanon, and during 2015, 13 new CMR-contaminated areas were discovered, totalling 429,000m² according to LMAC. These new areas are automatically recorded in the database as 33,000m² per area, but the actual CMR contaminated area may prove to be larger or smaller, and can only be more accurately determined after survey/investigation. The size of CMR contamination depends on a variety of factors, including the type of cluster munition used.

12 Interview with Bekim Shala, Programme Manager, MAG, Nabatiyeh, 14 April 2016.
13 Email from Eva Veble, Lebanon Programme Manager, NPA, 8 July 2016.
16 Ibid.
17 Ibid.
19 Email from Bekim Shala, MAG, 14 June 2016.
20 Ibid. Of the 96 tasks, three were recommended for cancellation due to their proximity to others, with a recommendation that multiple tasks be merged in the contamination database. One additional task was recommended for cancellation because of duplication in database coordinates. The remaining 347 tasks surveyed by MAG were recommended for clearance.
21 Email from Bekim Shala, MAG, 14 June 2016.
22 Statement of Lebanon, CCM Fifth Meeting of States Parties, San José, 2–5 September 2014.
23 Ibid.
24 Email from Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.
26 Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.
27 Email from Bekim Shala, MAG, 21 June 2016.
Complicate the picture. Some areas contain contamination resulting from both ground-launched and air-dropped cluster munitions, which can further complicate the picture. 

LMAC has also recorded historical CMR tasks in south Lebanon as 33,000m² in size. In the Mount Lebanon region, though, cluster strikes have been recorded as 10,000m² per task, as the 1982 cluster munition strikes were not as intense as the 2006 strikes in the south. At present, clearance tasks assigned to clearance operators by LMAC are deemed to already include survey data, and LMAC does not permit additional survey to be conducted by operators other than during pre-clearance assessments. That said, in June 2016, MAG reported having been recently tasked by RMAC to conduct pre-clearance NTS on some CMR-contaminated areas, which can be viewed as a positive development.

Lebanon has set three levels of priority regarding mine action. The first is to address infrastructure to allow those displaced by the 2006 conflict to return home; the second is to release agricultural land; and the third is to release land for activities other than agriculture. The first priority goal was met in 2009, and clearance of agricultural areas and development areas are now the priority targets. Indeed, CMR continue to affect the agricultural community, particularly in Beqaa and south Lebanon. The pre-clearance NTS by MAG of the 347 tasks recommended for clearance revealed that in four-fifths, contamination had made access to resources unsafe or had blocked access altogether. Nonetheless, many landowners and workers still enter CMR-contaminated areas, declaring they have no choice.

LMAC has reported that around 85% of cleared land has been used for socio-economic purposes, such as by farmers to generate a source of income. Post-clearance surveys concerning cluster strike areas, carried out by LMAC in collaboration with clearance operators, have revealed that 78% of cleared land was used for agriculture, 15% for pasture, and the remainder for residential and infrastructure development. LMAC aims to enhance monitoring of post-clearance activities, and of how clearance affects livelihood and socio-economic development. Comprehensive implementation of pre- and post-impact surveys by operators, using an agreed format, could support to achieve this aim.

In 2015, 12 people were injured by CMR (all male, 11 of whom were 18 years old or under), and 1 man was killed.

**Other ERW and Landmines**

Lebanon is also contaminated by other unexploded ordnance (UXO), booby-traps, and anti-personnel mines.

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**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 also manages risk education and victim assistance.

LMAC, part of the LAF, is based in Beirut. Since 2009, the Regional Mine Action Centre (RMAC), based in Nabatiye, and a part of LMAC, has overseen operations in south Lebanon and western Beqaa, 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 colonels who have run the RMAC. Both factors have negatively affected the management of the two mine action centres. There is said to be generally good coordination and collaboration between the 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.

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29 Interview with Oussama Merhi, UNDP, LMAC, in Geneva, 26 June 2015, and CCM Article 7 Report (for 2015), Form F.
30 Interview with Oussama Merhi, UNDP, LMAC, in Geneva, 26 June 2015.
32 Email from Bekim Shala, MAG, 21 June 2016.
35 Ibid.
37 Statement of Lebanon, CCM Fifth Meeting of States Parties, San José, September 2014.
38 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.
39 Email from Craig McDiarmid, Programme Manager, NPA, 8 June 2016.
40 CCM Article 7 Report (for 2015), Form F; and email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.
45 Interview with Lt.-Col. Henry Edde, Director, RMAC, Nabatiyeh, 12 April 2016.
A donor support group meeting is convened annually, which brings together donors, operators, and the national authorities.46 UN Development Programme (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, IMSMA database entry, community liaison officers, and QA. UNDP does not provide technical assistance on operational decisions.47

Strategic Planning
In September 2011, LMAC adopted a strategic mine action plan for 2011–20.48 The plan called for clearance of all CMR by 2016, and for completion of mine clearance outside the Blue Line by 2020. Both goals are dependent on capacity, but progress has fallen well short of planning targets.49

A first mid-term review to the strategy was conducted in January–March 2014 to assess progress towards the 2013 milestone, and to adjust the 2016 and 2020 milestones accordingly. The review revealed that in 2011–13 CMR clearance was slow, suffered from underfunding (with consequently fewer operating teams), while previously unreported contaminated areas were also identified.50 A second mid-term assessment was being undertaken in 2016, with the results due to be published in 2017.51

Operators
In 2015, CMR clearance was conducted by international operators DanChurchAid (DCAI), MAG, and NPA; national operator POD; and the Engineering Regiment of the LAF.52

In 2015, the capacity of the LAF Engineering Regiment (for combined mine and CMR operations) was said to comprise two sampling teams, three NTS teams, two mine clearance teams, two battle area clearance (BAC) teams, four mechanical demining teams, and eight mine detection dog (MDD) teams, in addition to the operations and QA/QC staff who manage and monitor clearance activities.53

In 2015, MAG deployed five BAC clearance teams, down from six teams in 2014. The decrease was due to decreased funding, mainly as a result of currency depreciation. In addition, MAG deployed eight machines for mine clearance. In 2016, MAG expected to be able to increase its BAC capacity through additional funding. MAG is the only international operator in Lebanon with mechanical assets to support manual clearance operations, and these assets can be used by other organisations upon request of LMAC.54

NPA deployed seven teams in 2015, the same capacity as in 2014. NPA’s output, though, increased in the latter part of 2015 due to changes in clearance planning and the training of team members on how to use all demining equipment. In 2016, NPA’s BAC capacity decreased to five teams due to reduced funding.55

Lebanon’s overall BAC capacity dropped from 28 teams at the start of 2013 to 23 teams in 2014.56 During 2015, overall BAC capacity fluctuated between 21 and 25 teams, including 14 to 15 teams operated by international NGOs, and 7 to 10 teams operated by the national NGO, POD, in addition to MAG’s mechanical assets.57

LMAC has consistently raised concerns over lack of survey and clearance capacity to address mine and CMR contamination, which it ascribes to inadequate funding.58

Standards
Lebanon developed its NMAS in 2010.59 LMAC has been working with the UNDP, under a project funded by the European Union, and other partners to revise the standards.60 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 MVA”.61 LMAC originally expected to finish the revision of NMAS by the end of 2015,62 but as at May 2016 the revision was in the process of being proof-read.63 The NMAS will then need to be officially approved by the Ministry of Defence.64

While clearance operators have been consulted and have submitted recommendations for the NMAS revision,65 there are concerns that some key recommendations concerning land release for both CMR and landmines may not be adequately reflected in the final revision. It is hoped that LMAC will consult on the revised NMAS draft with all relevant stakeholders before the standards are finalised.
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. This could usefully be set out in the revised NMAS. In addition, the new standards should permit and facilitate clear reporting of land release as per the IMAS: area cancelled by NTS, area reduced by technical survey, and land released by clearance.

It should be noted that in Lebanon it is not permitted for anyone other than a BAC team with personnel wearing personal protective equipment (PPE) to enter a cluster strike footprint, largely due to the presence and threat posed by the potential explosive volatility of M-series submunitions. This, combined with the lack of flexibility for clearance operators to conduct survey on assigned tasks prior to clearance, means that operators sometimes find themselves clearing access lanes from perimeters of tasks, at distances which are sometimes a long way out from the actual CMR.

### 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; and 30% sampling is conducted by LMAC’s sampling team at the end of the task. Sampling was conducted on all areas released during 2015.

### Information Management

IMSMA 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 CMR-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. However, as discussed further below, newly discovered CMR-contaminated areas in the south of Lebanon continue to be entered into the IMSMA database as a standardised 33,000m² for each new area/task. This is thought to be impacting the accuracy of the baseline of CMR contamination in Lebanon.

Furthermore, during clearance, a single task may not always be completed in a single assignment, as clearance of separate sections of the task, such as the “fade-out” area or the “disclaimed” area (area for which permission is not granted for clearance, and which requires signed release papers), may be postponed in favour of higher priority/high-impact tasks elsewhere, and returned to at a later date. In such instances, the fade-out, disclaimed, and/or uncleared areas are marked as separate subtasks in the database, although they are linked through numerical labelling to the original task. This explains, in part, the changing number of hazardous areas between reporting periods. It should be noted that from 2016 disclaimed areas can be cleared without the landowner’s permission.

Information management in Lebanon would arguably benefit from objective QA and cross-checking of data entered into IMSMA, in terms of how the size of new CMR contamination is determined and entered, and the entry and extraction of land release data.

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67 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.
69 Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.
71 Email from Brig.-Gen. Elie Nassif, LMAC, 5 July 2016.
LAND RELEASE

The total amount of CMR-contaminated areas released by clearance in 2015 was just under 1.69km² according to information provided to Mine Action Review by LMAC, compared to 2.1km² in 2014. This information differs from the figures provided by Lebanon in its Article 7 report for 2015, as discussed below.

No area was reported as reduced by technical survey in 2015, but 92,614m² was reported as having been cancelled through NTS in 2015.

Survey in 2015

In 2015, Lebanon’s Article 7 report recorded 17 areas totalling 92,614m² released through NTS. This compared to 51 areas totalling 1.7km² cancelled in 2014, following MAG’s pre-clearance NTS project.

Furthermore, in 2015, LMAC confirmed 13 previously unrecorded areas, totalling 429,000m², as CMR-contaminated [i.e. a standardized 33,000m² allocated per each new area/task in the database]. New CMR-contaminated areas are typically the result of call-outs from the public, alerting LMAC to previously undiscovered explosive remnants of war (ERW). LMAC community liaison officers visit each call-out, followed by LMAC’s chief of operations when necessary. New hazardous areas are recorded for those call-outs where CMR contamination is confirmed.

Clearance in 2015

Lebanon reported clearing almost 1.69km² of CMR-contaminated land in 2015, destroying in the process 3,328 submunitions, 131 other items of UXO, and 12 anti-personnel mines and 39 anti-vehicle mines (see Table 2). LMAC did not specify over how many CHAs CMR clearance was conducted, or how many were fully released.

Manual clearance is the primary method of clearing CMR in Lebanon, but machines are sometimes deployed to make access lanes and remove rubble. MDDs are sometimes deployed as a secondary asset for mine clearance operations, but are not used for CMR clearance.

Clearance figures include items destroyed during rapid response call-outs. The clearance figures reported in Table 2 vary from those reported in Lebanon’s latest CCM Article 7 report, in which it is claimed that 1,637,492m² was cleared in 2015, and a further 189,649m² re-cleared. The number of submunitions reportedly destroyed also differs. This inconsistency in the data is said to be because the Article 7 report does not include clearance data from the Engineering Regiment of the LAF.

In June 2016, NPA reported a recent improvement in the tasking process, with tasks being assigned sufficiently in advance to enable pre-impact assessments to be conducted. Often, this had not been possible due to time limitations caused by a “last minute” allocation of tasks and subsequent deployment of teams.

Table 2: Clearance of CMR-contaminated area in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area cleared (km²)</th>
<th>Submunitions destroyed</th>
<th>APM destroyed</th>
<th>AVM destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAG</td>
<td>391,345</td>
<td>359</td>
<td>12</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>DCA</td>
<td>256,037</td>
<td>870</td>
<td>0</td>
<td>0</td>
<td>38</td>
</tr>
<tr>
<td>NPA</td>
<td>409,600</td>
<td>271</td>
<td>0</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>POD</td>
<td>580,610</td>
<td>1,788</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>LAF/Engineering Regiment</td>
<td>50,241</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1,687,733</strong></td>
<td><strong>3,328</strong></td>
<td><strong>12</strong></td>
<td><strong>39</strong></td>
<td><strong>131</strong></td>
</tr>
</tbody>
</table>

APM = Anti-personnel mines   AVM = Anti-vehicle mines

72 Email from Brig.-Gen. Elie Nassif, LMAC, 12 May 2015.
73 Ibid.
74 CCM Article 7 Report (for 2015), Form F; and email from Brig.-Gen. Elie Nassif, LMAC, 5 July 2016.
75 Emails from Brig.-Gen. Elie Nassif, LMAC, 12 May and 2 July 2015.
76 CCM Article 7 Report (for 2015), Form F; and email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.
77 Ibid.
78 Interview with Lt.-Col. Henry Edde, RMAC, Nabatiyeh, 12 April 2016.
79 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016. Clearance data provided by MAG and NPA was inconsistent with LMAC data. MAG reported clearing 15 areas in 2015 totalling 1,120,324m², destroying 317 submunitions and 21 items of UXO while NPA reported clearing 12 areas totalling 570,605m², and destroying 275 submunitions and 58 items of UXO. DCA does not provide data to Mine Action Review so the accuracy or quality of their clearance output is unclear.
80 Interview with Lt.-Col. Henry Edde, RMAC, Nabatiyeh, 12 April 2016.
81 CCM Article 7 Report (for 2015), Form F.
82 Email from Brig.-Gen. Elie Nassif, LMAC, 5 July 2016.
83 Email from Craig McDiarmand, NPA, 8 June 2016.
ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Lebanon is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 May 2021. Lebanon is not on track to meet this deadline.

The Director of LMAC asserts that Lebanon is committed to complete CMR clearance by 2020, if clearance capacity does not decrease. However, fewer BAC teams, discovery of previously unrecorded CMR-contaminated areas, and the impact of working in difficult terrain, have all been identified as obstacles to meeting this deadline. Lebanon is in the process of implementing a second mid-term review of the National Mine Action Strategy, and has pledged to report on the findings in 2017.

Clearance of CMR-contaminated land was expected to be completed by the end of 2016, in accordance with the 2011-20 national strategy. However, meeting this target was contingent on maintaining the number of BAC teams needed. In May 2012, stakeholders believed the 2016 target date was reasonable if both funding and the number of teams stabilised or increased, and if contamination estimates proved accurate. A review of the 2011-20 strategy in early 2014 confirmed that with existing capacity it will not be possible to finish CMR clearance before 2020 at the earliest.

Lebanon’s most recent CCM Article 7 report (for 2015) estimates that 40 BAC teams would be needed in order to complete CMR clearance by 2020. This equates to an additional 15 to 19 BAC teams that would be required, based on capacity as at the end of 2015. A more accurate estimate of the required capacity will be made during the second mid-term assessment of the strategic plan that is currently under way.

With the exception of 2012, annual clearance of CMR-contaminated land has decreased over the last five years, as illustrated in Table 3.

Lebanon has reported contributing US$9 million annually towards mine action in Lebanon, including CMR and mine clearance, which covers administrative staff, two sampling teams, three NTS teams, two mine clearance teams, two BAC teams, four mechanical demining teams, and eight MDD teams, in addition to the operations and QA/QC staff who manage and monitor clearance activities.

Lebanon received US$13.5 million in international cooperation and assistance for its mine action work, including mine and CMR clearance, risk education, victim assistance, and capacity building. There are concerns that the refugee crisis, resulting from the conflict in neighbouring Syria, may negatively impact on mine action funding in Lebanon. The EU has indicated that its funding for CMR and mine clearance, currently provided to DCA, Handicap International, MAG, and NPA, will likely not be extended after the end of the current grant period of August 2018.

While operators agree that lack of capacity is certainly holding back CMR clearance, it is also believed that swifter progress could come from improved land release. This warrants further attention from LMAC as well as other mine action stakeholders in Lebanon.

Table 3: Five-year summary of clearance

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
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<tbody>
<tr>
<td>2015</td>
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</tr>
<tr>
<td>2014</td>
<td>2.10</td>
</tr>
<tr>
<td>2013</td>
<td>2.47</td>
</tr>
<tr>
<td>2012</td>
<td>2.98</td>
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<tr>
<td>2011</td>
<td>2.51</td>
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<tr>
<td>Total</td>
<td>11.75</td>
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</table>

84 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.
85 Ibid; and CCM Article 7 Report (for 2015), Form F.
90 CCM Article 7 Report (for 2015), Form F.
91 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.
92 CCM Article 7 Report (for 2015), Form F.
94 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016, and CCM Article 7 Report (for 2015), Form F.
95 CCM Article 7 Report (for 2015), Form F.
96 Feedback from clearance operators, during research field visit to Lebanon, May 2016.
97 Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016, and Craig McDiarmid, NPA, Tyre, 12 April 2016.
**PROGRAMME PERFORMANCE**

<table>
<thead>
<tr>
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<td>5</td>
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<tr>
<td>Efficient clearance</td>
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<td>National funding of programme</td>
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<td>4</td>
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<tr>
<td>Land-release system in place</td>
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<td>National mine action standards</td>
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**PERFORMANCE SCORE: POOR**

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<thead>
<tr>
<th></th>
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<td></td>
<td>4.8</td>
<td>5.0</td>
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**PERFORMANCE COMMENTARY**

Montenegro’s mine action performance declined in 2015 given the lack of any progress towards releasing the relatively small amount of remaining cluster munition remnant (CMR) contamination.
RECOMMENDATIONS FOR ACTION

- Montenegro should clarify the location and extent of suspected and confirmed CMR.
- Montenegro should identify and apply as soon as possible the resources necessary to fulfil its Convention on Cluster Munitions (CCM) Article 4 clearance obligations.
- Montenegro should submit its CCM Article 7 transparency reports in a timely manner.

CONTAMINATION

Montenegro has estimated that 1.7km² of land contains CMR. Contaminated areas are located in two municipalities and one urban municipality (a total of 23 municipalities). According to Montenegro’s most recent CCM Article 7 transparency report (for 2014), contaminated areas are located at: Golubovci airport and a suburb of Podgorica in the urban municipality of Golubovci; the villages of Besnik, Jablanica, and Njeguši in the municipality of Rožaje; and Cakor mountain and the village of Bješlaje in the municipality of Plav.

However, there are differences between this list and the list of areas that Norwegian People’s Aid (NPA) identified as suspected or confirmed to contain CMR in its detailed non-technical survey (NTS) conducted in December 2012 to April 2013. During the survey, NPA made 87 polygons of suspected or confirmed hazardous areas over 11 locations across three municipalities. Contamination was found to affect five communities. The results of the survey are summarised in Table 1.

In addition, the NPA survey indicated that CMR might also be present in two areas of Plav municipality: Bogajice and Murino. Due to snow, however, NPA was unable to survey these areas.

The differences between Montenegro’s CCM Article 7 report data and NPA’s survey data are due largely to the fact that the Article 7 report (for 2014) includes the additional villages of Besnik (in the municipality of Rožaje), and Cakor mountain and Bješlaje (in the municipality of Plav), which are suspected of CMR contamination, but where NTS has yet to be conducted due to bad weather conditions. In addition, Sipacanik, in the municipality of Tuži, was unintentionally missed in the Article 7 report.

The NPA survey found a total of 1.72km² suspected or confirmed to contain CMR as at 30 April 2013. Montenegro reported a slightly lower figure of 1.7km² in its CCM Article 7 report for 2013, which was subsequently reduced by 6,500m² in 2014 following a small amount of clearance resulting from discovery of two unspecified items of unexploded ordnance (UXO) during construction work.

Montenegro became contaminated with explosive remnants of war (ERW), mainly UXO, as a result of conflicts during the break-up of the former Socialist Federal Republic of Yugoslavia in the 1990s. North Atlantic Treaty Organization (NATO) air strikes in Montenegro between March and June 1999 saw the use of 22 cluster bombs of four different types: AGM-154A JSOW guided missiles, BL755s, CBU-87/Bs, and Mk-20 Rockeyes. These scattered a total of some 4,000 submunitions of three different types: BLU-97A/B, BL755, MK-1, and MK118. Some unexploded submunitions were collected by units of

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Table 1: Contamination by municipality as at April 2013

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Community</th>
<th>Area (km²)</th>
</tr>
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<tr>
<td>Golubovci</td>
<td>Matagužl (suburb of Podgorica)</td>
<td>0.295</td>
</tr>
<tr>
<td></td>
<td>Aerodrom (suburb of Podgorica)</td>
<td>1.083</td>
</tr>
<tr>
<td>Rožaje</td>
<td>Jablanica</td>
<td>0.045</td>
</tr>
<tr>
<td></td>
<td>Njeguši</td>
<td>0.062</td>
</tr>
<tr>
<td>Tuzi</td>
<td>Sipacanik</td>
<td>0.230</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1.715</strong></td>
</tr>
</tbody>
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1. CCM Article 7 Report (for 2014), Form F; and email from Veselin Mijajlovic, Director, Regional Centre for Divers’ Training and Underwater Demining (RCUD), 13 May 2016.
2. CCM Article 7 Report (for 2014), Form F.
4. Ibid.
5. Email from Veselin Mijajlovic, RCUD, 16 June 2015.
8. CCM Article 7 Report (for 2013), Form F.
9. CCM Article 7 Report (for 2014), Form F.
the Yugoslav army immediately after the air strikes. This initial clearance was carried out in haste, without applying international standards for ERW clearance, and for the most part only visible submunitions were destroyed.12 Following Montenegro’s independence, CMR removal was conducted by the Ministry of Internal Affairs in response to notifications from the general public.13

To date, CMR clearance according to international standards has only been carried out in one of the three affected municipalities in Montenegro. In 2007, UXB Balkans conducted clearance operations in two locations within the communities of Besnik and Njeguši [in the municipality of Rožaje]. In total, some 378,000m² was cleared with the destruction of 16 MK-1 submunitions.14

Montenegro’s initial Article 7 report had claimed that, as at 27 January 2011, “there are no contaminated areas in Montenegro.”15 In July 2011, however, the director of the Regional Centre for Divers’ Training and Underwater Demining (RCUD) confirmed that unexploded submunitions had been found in 2007.16 Montenegro informed a CCM intersessional meeting in 2012 that clearance by military units after the air strikes in 1999, during which more than 1,800 submunitions were collected, had not been conducted “fully according to humanitarian mine action standards” and that it planned to conduct a survey.17 This led to the 2012–13 NPA survey described above.18

PROGRAMME MANAGEMENT

In 2006, the Ministry of Internal Affairs and Public Administration established a Department for Emergency Situations and Civilian Safety. However, it lacks human resources and equipment. Due to a shortage of funds, responsibility for explosive ordnance disposal (EOD) has remained with the police19 who set up an EOD team of three.20

RCUD performs the role of national mine action centre.21 This was set up in 2002 by the government, which tasked the Ministry of Internal Affairs and Public Administration to “develop [the centre’s] organization and its specification.”22

RCUD and NPA signed a Memorandum of Understanding in December 2012 under which NPA agreed to fund and implement a two-phase project — the “Cluster Munition Convention Completion Initiative for Montenegro” — involving first, NTS, and then, technical survey and clearance of areas where the presence of CMR was confirmed. NPA agreed to set up a database and to develop capacity for NTS and quality management.23 The NTS was completed but funding for the second phase of the project involving technical survey and clearance, originally expected to start in 2013 and continue throughout 2014,24 was not secured and as at mid-2016 this phase had yet to commence.25
LAND RELEASE

No planned land release operations took place in 2015.26

Survey in 2015
No survey has taken place since NPA’s NTS was completed in April 2013.27

Clearance in 2015
No planned CMR clearance took place in either 201528 or 2014, although in 2014, 6,500m² of land was cleared after two unspecified items of UXO were found in Golubovci during construction work.29

Previously, in 2013, NPA, in cooperation with RCUD, had prepared 10 TS and clearance projects covering 834,630m² to be undertaken during the second phase of the “Cluster Munition Convention Completion Initiative for Montenegro” in 2014, and one additional project for underwater clearance covering 24,150m².30 As noted above, however, lack of funding has meant the work has not yet begun.31

ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Montenegro is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 August 2020. Montenegro should complete the remaining clearance well before this deadline if it secures funding for the remaining survey and clearance.

With funding from the Norwegian Ministry of Foreign Affairs, the NTS completed in April 2013 resulted in an almost complete baseline of remaining CMR contamination in Montenegro. In April 2013, Montenegro said it planned to complete clearance of all contaminated areas in 2014 if the funds were provided.31 In early 2014, Montenegro indicated that clearance would be complete by the end of 2016, subject to funds.33 In June 2015, RCUD reported that if sufficient funding was secured in 2015, CMR clearance in Montenegro would be completed by the end of 2017.34

As at May 2016, however, neither national nor international funding had been secured for CMR clearance in Montenegro.35 NPA and RCUD jointly applied for a Norwegian Ministry of Foreign Affairs fund for 2015, through a bilateral agreement between Norway and Montenegro, but the government of Montenegro did not prioritise the CMR clearance project.36 The refugee crisis is impacting the Balkans, and risks diverting funds away from mine action.37

Montenegro continues to seek international cooperation and assistance to fulfil its survey and clearance obligations under the CCM.38

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26 Ibid.
27 Emails from Darvin Lisica, Programme Manager, Bosnia and Herzegovina, NPA, 3 March 2015; and Veselin Mijajlovic, RCUD, 13 May 2016.
28 Email from Veselin Mijajlovic, RCUD, 13 May 2016.
29 CCM Article 7 Report [for 2014], Form F.
31 Email from Veselin Mijajlovic, RCUD, 13 May 2016; and email from Darvin Lisica, NPA, 1 April 2016.
32 CCM Article 7 Report [for 30 April 2012 to 31 March 2013], Form F.
33 CCM Article 7 Report [for 2013], Form F.
34 Email from Veselin Mijajlovic, RCUD, 16 June 2015.
35 Email from Veselin Mijajlovic, RCUD, 13 May 2016.
36 Email from Darvin Lisica, NPA, 1 April 2016.
37 Ibid.
38 Statement of Montenegro, CCM Fifth Meeting of States Parties, San José, 2–5 September 2014; and email from Veselin Mijajlovic, RCUD, 13 May 2016.
**MOZAMBIQUE**

**ARTICLE 4 DEADLINE: 1 SEPTEMBER 2021 (ON TRACK TO MEET DEADLINE)**

**PROGRAMME PERFORMANCE**

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<td>Land-release system in place</td>
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<td>Reporting on progress</td>
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<td>Improving performance</td>
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<td>7</td>
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**PERFORMANCE SCORE: AVERAGE**

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<th>Score</th>
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<tr>
<td>6.8</td>
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<tr>
<td>6.0</td>
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</tbody>
</table>

**PERFORMANCE COMMENTARY**

Mozambique moved to fulfil its obligations under Article 4 of the Convention on Cluster Munitions (CCM) in 2015 by conducting survey of areas of suspected cluster munition remnants (CMR) contamination.
RECOMMENDATIONS FOR ACTION

- Mozambique should complete clearance of CMR in order to declare fulfilment of CCM Article 4 by the end of 2016.
- Mozambique should ensure that national capacity exists to address residual contamination from mines, CMR, and other explosive remnants of war (ERW).
- 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 had six areas with a total size of nearly 0.74km² of confirmed CMR contamination at the end of 2015. Norwegian People’s Aid (NPA) identified the areas during a targeted CMR survey undertaken in September–December 2015. Five areas with a total size of close to 0.67km² were found in Manica province and one area with a size of nearly 0.07km² was found in Tete province.¹

At the end of 2014, Mozambique had no known areas confirmed to contain CMR. However, Mozambique’s National Demining Institute (Instituto Nacional de Desminagem, IND) asked NPA to undertake a CMR survey in the second half of 2015 in Gaza, Manica, and Tete provinces, targeting specific communities. According to the IND, this was intended as a mix of additional non-technical and technical survey to confirm that areas where clearance had already been carried out did not contain any CMR and with a view to ensuring completion of CMR clearance “by no later than 2016”.²

Cluster munitions are reported to have been used on “a limited scale” during the 1977–92 war in Mozambique.³ In 2013, Mozambique reported that the extent of areas contaminated by CMR was not known, though it noted that cluster munitions had been used in seven provinces: Gaza, Manica, Maputo, Niassa, Sofala, Tete, and Zambezia.⁴ A small number of RBK-250 cluster munition containers and unexploded submunitions, notably Rhodesian-manufactured Alpha bomblets, were found in Maputo, Gaza, Manica, and Tete provinces in 2005–14.⁵

In 2014, Mozambique asserted that most of the resultant CMR had already been destroyed by mine and ERW clearance.⁶ According to the IND, the risk posed by CMR to the civilian population is limited and no reports had been received of accidents from submunitions.⁷ NPA, however, noted that since the CMR it identified in 2015 were close to populated areas and in former agricultural areas, their humanitarian impact was potentially significant.⁸

Other ERW and Landmines

Mozambique also has residual contamination from mines and unexploded ordnance (UXO) and other ERW. Incidents have occurred in rural areas in the course of everyday community activities.⁹ One of the objectives of the IND’s 2015 workplan was to “establish and implement mechanisms for the management of risks from residual UXO and other ERW”.¹⁰

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¹ Skype interview with Afedra Robert Iga, Programme Manager Mozambique, NPA, 7 June 2016.
² Response to questionnaire by the IND, 30 April 2015; and statement by Alberto Maverengue Augusto, Director, IND, CCM Fifth Meeting of States Parties, San José, 4 September 2014.
³ Statement by Alberto Maverengue Augusto, IND, CCM Fifth Meeting of States Parties, San José, 4 September 2014.
⁴ CCM Article 7 Report (for 1 September 2011–31 May 2012), Form F.
⁵ In 2014, for instance, international mine clearance NGO, APOPO, destroyed 12 Alpha submunitions in CMR clearance operations in Tete province. CCM Article 7 Report (for 1 September 2011–31 May 2012), Form F; statement by Alberto Maverengue Augusto, IND, CCM Fifth Meeting of States Parties, San José, 4 September 2014; CCM Article 7 Report (for 1 January 2013–31 July 2014), Form F; and responses to questionnaire by the IND, 30 April 2015, and APOPO, 15 May 2015.
⁶ Statement by Alberto Maverengue Augusto, IND, CCM Fifth Meeting of States Parties, San José, 4 September 2014.
⁷ Response to questionnaire by the IND, 30 April 2015.
⁸ Email from Afedra Robert Iga, NPA, 7 June 2016.
¹⁰ Mozambique, “Progress Report on completing the destruction of anti-personnel mines in mined areas in accordance with Article 5(1) of the Anti-Personnel Mine Ban Convention [from 1 March to December 2014]” submitted to the Article 5 Analysis Group, 13 February 2015, p. 19.
PROGRAMME MANAGEMENT

The IND serves as the national mine action centre in Mozambique, reporting to the Ministry of Foreign Affairs. Provincial demining commissions have also been created to assist in planning mine action operations. Since 1999, the United Nations Development Programme (UNDP) has provided technical assistance to the IND, most recently under a three-year programme that ended in 2015.11 As at June 2016, the UNDP no longer had a budget for mine action-related activities in Mozambique.12 Without external support and following a sharp drop in funding, along with a growing national economic crisis, NPA expressed concerns over the IND’s lack of resources and its ability to maintain a capacity to address residual mine and ERW contamination.13

Legislation and Standards

In 2013–15, the IND sought to revise its national mine action standards (NMAS) to include specific guidance on clearance of CMR, with assistance from NPA.14 Revised NMAS were not ultimately adopted, however, and the IND explicitly allowed NPA, the only body carrying out CMR survey and clearance in 2015–16, to operate under the organisation’s own standing operating procedures, which include provisions on battle area clearance (BAC) specific to CMR.15

Operators

In 2015, Mozambique had two international demining operators in country: Belgian non-governmental organisation (NGO) APOPO and NPA. As noted above, though, NPA was the only operator conducting CMR survey and clearance in 2015–16. NPA’s survey team comprised eight staff in 2015, which increased to 20 CMR-clearance personnel in January–June 2016.16

Quality Management

NPA reported that an internal quality management system was in place and that quality assurance (QA) and quality control (QC) activities were carried out on a regular basis in 2015.17 Once NPA began CMR clearance operations in January 2016, the IND did not have the resources to undertake external QA/QC visits. NPA provided funding for two IND QA officers to conduct a QA field visit to its operations.18

Information Management

In June 2016, two IND information management staff continued to manage the Information Management System for Mine Action (IMMSMA) database in Mozambique. Funding for their salaries, provided by UNDP, was set to expire at the end of June, and it was not clear, without a working budget from the government, if capacity could be retained to manage the database within the IND. The IND had reported plans to shift responsibility of the IMMSMA database to a government ministry. As at June 2016, however, this had not been formalised, and the future of the database remained uncertain.19

LAND RELEASE

No CMR-contaminated land was released in 2015. As stated above, in September–December 2015, NPA’s survey teams confirmed six areas with a total size of 737,454m² as CMR-contaminated on the basis of a targeted survey of communities in Gaza, Manica, and Tete provinces. Of these, five areas were located in Manica province with a total size of 667,958m² and a sixth (69,496m²) was identified in Tete province.20 No CMR contamination was identified in Gaza province.21 Total CMR-contaminated area released by clearance and technical survey in 2014 was approximately 350,000m².22

12 Skype interview with Afredra Robert Iga, NPA, 7 June 2016.
13 Ibid.
14 Statement of Mozambique, CCM Fourth Meeting of States Parties, Lusaka, 12 September 2013. In April 2015, the IND stated it was requesting assistance from NPA to revise its NMAS, information management, and quality management system specific to CMR survey and clearance.
15 Skype interview with Afredra Robert Iga, NPA, 7 June 2016.
16 Email from Afredra Robert Iga, 7 June 2016.
17 Skype interview with Afredra Robert Iga, NPA, 7 June 2016.
18 Ibid.
19 Ibid.
20 Email from Afredra Robert Iga, NPA, 7 June 2016.
22 Statement by Alberto Maverengue Augusto, IND, CCM Fifth Meeting of States Parties, San José, 4 September 2014; and responses to questionnaires by the IND, 30 April 2015; and APOPO, 15 May 2015.
ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Mozambique is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 September 2021. Mozambique should fulfill its Article 4 obligations well in advance of its treaty deadline. Indeed, since 2013, Mozambique has reported on several occasions that it would complete CMR clearance and ensure compliance with Article 4 of the CCM by “no later than the end of 2016.”23

NPA began clearing the six areas confirmed to contain CMR in January 2016. It subsequently identified two additional areas of CMR contamination in Manica province. As at June 2016, clearance of two areas with a size of 215,471m² in Manica province had been completed, and a total of 21 Alpha submunitions destroyed.24 NPA had expected to complete clearance of the six original areas confirmed in the 2015 survey by July 2016; however, the newly discovered areas extended operational plans until December 2016.25

In June 2016, NPA expressed its belief that it was still possible for Mozambique to meet its end 2016 target and complete clearance of all eight identified CMR-contaminated areas by the end of the year with current capacity. It cautioned, though, that if additional CMR contamination were found it might be necessary to extend clearance plans for a few months into 2017.26

24 Skype interview and email from Afedra Robert Iga, NPA, 7 June 2016.
25 Skype interview with Afedra Robert Iga, NPA, 7 June 2016.
26 Ibid.
Somalia has made little progress so far in implementing its obligations under Article 4 of the Convention on Cluster Munitions (CCM). No survey specific to CMR was conducted in 2015 and no CMR clearance occurred in Somalia in 2015.

### PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
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**PERFORMANCE SCORE: POOR**

4.6 \[4.9\]
### SOMALIA

#### RECOMMENDATIONS FOR ACTION

- Somalia should ensure the timely survey and clearance of cluster munition remnants (CMR) in accordance with its CCM obligations, alongside efforts to address wider explosive remnants of war (ERW).
- The Information Management System for Mine Action (IMSMA) database should be transferred to full national ownership under the Somalia Explosive Management Authority (SEMA) and efforts should be made to ensure complete transparency and accessibility of all mine action data for operators and relevant stakeholders. Information management and coordination of mine action activities could also be improved through more effective dissemination of information electronically.
- Continued efforts should be made to ensure recording of and reporting on mine action according to International Mine Action Standards (IMAS) terminology.
- Somalia should develop a resource mobilisation strategy and initiate dialogue with development partners on long-term support for mine action, including to address CMR.

#### CONTAMINATION

The extent of CMR contamination in Somalia is unknown. In 2013, dozens of PTAB-2.5M submunitions and several AO-15Ch submunitions were found within a 30km radius of the town of Dolow on the Somali-Ethiopian border, in the southern Gedo region of south-central Somalia.1 CMR were also identified around the town of Galdogob in the north-central Mudug province of Puntland, further north on the border with Ethiopia.2 More contamination was expected to be found in south-central Somalia’s Lower and Upper Juba regions.3 In June 2016, SEMA reported that two areas of an unknown size were suspected to contain CMR in the Bakool region of south-west Somalia.4

According to the United Nations Mine Action Service (UNMAS), the Ethiopian National Defence Forces used cluster munitions in clashes with Somali armed forces along the Somali-Ethiopian border during the 1977–78 Ogaden War.5 The Soviet Union supplied both Ethiopia and Somalia with weapons during the conflict. PTAB-2.5 and AO-15Ch submunitions were produced by the Soviet Union on a large scale.6

While the extent of CMR contamination along the Somali border with Ethiopia is not known, in 2014, Somalia claimed it posed an ongoing threat to the lives of nomadic people and their animals.7

#### Other ERW and Landmines

Somalia is heavily contaminated with ERW other than CMR, a result of conflict in 1990–2012. Contamination exists across its three major regions: south-central Somalia (including the capital Mogadishu), Puntland (a semi-autonomous administration in the north-east), and Somaliland (a self-proclaimed, though unrecognised, state that operates autonomously in the north-west). Insecure and poorly managed stockpiles of weapons and ammunition, as well as use of improvised explosive devices (IEDs) 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 2015, UNMAS reported that explosive hazards, including residual ERW, explosive stockpiles and ammunition caches, were a daily threat to communities along the main supply routes across south-central Somalia and the Ethiopian border.9 In 2015, the vast majority (94%) of deaths and injuries from explosive hazards in south-central Somalia were caused by IEDs, while the number of ERW victims fell from 170 in 2010 to 50 in 2015 (a decrease from 86 in 2014). Few mine victims were recorded.10

Landmines along the border with Ethiopia, mainly as a result of legacy minefields, also continued to affect civilians in south-central Somalia.11

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1 Email from Mohammed Abdulkadir Ahmed, Director, SEMA, 14 June 2016.
2 Response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
4 Email from Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
6 Email from Mohammed Abdulkadir Ahmed, SNMAA, 17 April 2013.
7 Statement of Somalia, CCM Fifth Meeting of States Parties, San José, 2–5 September 2014.
10 Ibid.
PROGRAMME MANAGEMENT

The UN supports mine action activities in Somalia according to the three geographical regions: south-central Somalia, Puntland, and Somaliland. The respective centres responsible for mine action in each of these areas are SEMA, the Puntland Mine Action Centre (PMAC), and the Somaliland Mine Action Centre (SMAC). In 2015, UNMAS continued to support SEMA, as well as to train and equip national police in explosive ordnance disposal (EOD) in south-central Somalia, Puntland, and Somaliland.12 In 2016, UNMAS reported it was developing a four-year plan for comprehensive police EOD support.13

South-central Somalia

SEMA was established in 2013 as the mine action centre for south-central Somalia, replacing the Somalia National Mine Action Authority (SNMCA) created two years earlier.14 SEMA’s goal was to assume full responsibility for all explosive hazard coordination, regulation, and management by December 2015.15 UNMAS reported that “significant steps” were made in late 2015 towards “the full 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 explosive hazards in Somalia.16 SEMA developed a national plan in 2015, aiming to develop state-level coordination mechanisms to support SEMA’s work and to create employment in local communities.17 In June 2016, SEMA reported that its legislative framework, which had been endorsed by the Council of Ministers, was awaiting the approval of the Federal Parliament.18

In 2015, the African Union Mission in Somalia (AMISOM) deployed 11 EOD teams. UNMAS deployed four multi-task teams (MTT) in support of AMISOM to conduct survey, clearance, and risk awareness on three main supply routes connecting out of Mogadishu, along with nine community liaison officers to support AMISOM projects in nine regions in Somalia. Ten government police EOD teams were also deployed in south-central Somalia.19

Puntland

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 HALO Trust, Danish Demining Group (DDG), and Mines Advisory Group (MAG).20 PMAC runs the only police EOD team in Puntland, which is responsible for collecting and destroying explosive ordnance. In June 2015, Puntland requested assistance to increase its capacity and deploy three EOD teams in Bosaso, Galkayo, and Garowe.21

Somaliland

In 1997, UNDP assisted the government of Somaliland to establish SMAC, which is responsible for coordinating and managing demining in Somaliland.22 Officially, SMAC is under the authority of the Vice-President of Somaliland, who heads the interministerial Mine Action Steering Committee.23 UNMAS reported that coordination meetings were held twice monthly by the SMAC in 2015.24

Strategic Planning

Mine action in Somalia since 2013 has been increasingly tied to implementation of the Somali Compact, and its priorities for government stabilisation and development, infrastructure initiatives, and humanitarian assistance.25 Focus is placed on national ownership of mine action and training of national police EOD capacity, as a source of employment for local people and former fighters, and to contribute to stabilisation.26

In 2015, the Federal Government of Somalia’s Ministry of Internal Security and SEMA developed 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 over the next “two to three years” is to support the Federal Government in fulfilling its obligations under the Anti-Personnel Mine Ban Convention and the CCM, 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

13 Ibid.
14 Interview with Mohamed Abdulkadir Ahmed, SEMA, in Geneva, 9 April 2014; and email from Kjell Ivar Breili, UNMAS, 12 July 2015.
16 UNMAS, “2016 Portfolio of Mine Action Projects, Somalia”.
17 Ibid.
18 Email from Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
19 Ibid.
23 Ibid.

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for local Somalis, including from at-risk groups such as youths and former combatants, to undertake clearance operations in their own communities.27 According to SEMA, the Badbaado Plan’s objectives for nationwide mine and ERW clearance in south-central Somalia include areas “reported with cluster munition presence”.28 A separate plan was developed for explosive hazard management by the police.29

UNMAS’ Explosive Hazard Management Strategic Framework for Somalia for 2015–19 (including Somaliland and Puntland), was also approved by SEMA and the Federal Government of Somalia in 2015.30 The Framework specifically includes addressing the threat from CMR through survey and clearance in its strategic objectives, alongside capacity building for SEMA.31

Somaliland has a five-year strategic plan for mine action for 2011–16, with goals focusing on strengthened national coordination capacity, an operational IMSMA database, clearance of high-priority minefields, and systematic victim support.32

Standards

UNMAS has developed National Technical Standards and Guidelines (NTSGs) for Somalia, including Puntland, which were used by implementers in 2015.33 SEMA reported that there were no significant developments with regards to the NTSGs in 2015 and that the present version in use was developed by UNMAS in 2012–13 and had not been updated since.34 The NTSGs do not include specific guidance for CMR survey or clearance and SEMA stated in June 2016 that it did not have the capacity to revise the existing NTSG to include provisions specific to CMR.35

Quality Management

SEMA reported that it lacked the capacity to carry out external quality assurance (QA) or quality control (QC) activities in 2015. It stated that UNMAS’s QA/QC capacity was limited to ERW clearance activities and did not extend to mine clearance. It underlined as a matter of concern, that as of June 2016, mine clearance activities had been initiated under the Badbaado Plan but without a capacity for external quality management control for ongoing activities.36

Information Management

SEMA has claimed a number of improvements in mine action information management in 2015, including in staff training, data entry QA, and standardisation of reporting forms. An upgraded version of IMSMA was installed, providing the opportunity for a review of historical data in the database and integrity and consistency checks.37 As at June 2016, however, full responsibility for the management of the database had yet to be transferred from UNMAS to SEMA.38

NGO operators have noted that uncertainty as to who “owns” the IMSMA database is a significant concern. Despite plans to transfer data to SEMA for more than two years, SEMA and mine action operators still had only limited access to the database in 2015. A primary reason for this was the lack of clarity in SEMA’s status and its capacity to be able to take ownership of the database, leading to caution in the planned transfer. Questions have also been raised in connection with the fact that, despite being a civilian asset, the IMSMA database was being used to record security-related data on IEDs; information that was deemed classified by AMISOM.39

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28 Email from Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
30 Ibid. and UNMAS, “UNMAS in Somalia”.
33 Email from Terje Eldøen, Programme Manager, NPA, 5 June 2016; and response to questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
34 Email from Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
36 Email from Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
37 Ibid.
38 Ibid.
39 Emails from Tom Griffiths, Regional Director North Africa, HALO Trust, 17 and 26 June 2016; Tammy Hall, Head, DDG, 17 June 2016; and Terje Eldøen, NPA, 5 June 2016.
Operators

DDG began operations in the country in 1999 with mine and ERW clearance in Somaliland and has since undertaken mine action programmes in Mogadishu, Puntland, and Somaliland.40 In 2015, DDG did not conduct any mine or battle area clearance (BAC) operations, focusing instead on EOD and risk education.41

HALO Trust’s mine clearance programme in Somaliland was established in 1999. In 2015, HALO Trust was the only operator conducting mine action there, employing 434 demining personnel, 90 support staff, and 50 temporary local staff.42 It deployed three mechanical teams and in 2015 it introduced a Road Threat Reduction (RTR) mechanical verification of road tasks, carrying out spot tasks.43 In the first half of 2015, HALO Trust opened a new programme in south-central Somalia and began surveying along the Somali border with Ethiopia.44

In 2015, MAG continued its arms management and destruction (AMD) programme across south-central Somalia, Puntland, and Somaliland. It also carried out risk education in Puntland.45 MAG previously conducted non-technical survey (NTS) and EOD in Puntland, along with training and support to police EOD teams, but halted its mine action programme in August 2013 due to a change of strategy and worsening security.46

In 2014, NPA initiated a programme in south-central Somalia for survey, BAC, and capacity-building assistance to SEMA.47 In 2015, NPA was operating in Mogadishu and its outskirts, within Banaadir. It deployed three eight-strong MTTs.48

In 2015, UNMAS continued to contract the Ukrainian commercial operator Ukrorobonservice to undertake mine action-related tasks in south-central Somalia. It deployed four survey teams in 2015 and in the first half of 2016.49

LAND RELEASE

Survey in 2015

No overview of areas suspected to contain CMR exists in south-central Somalia, and, as at June 2016, no national survey had been conducted, mainly due to the security situation.50 No survey specific to CMR was conducted in 2015.

Clearance in 2015

No CMR clearance occurred in Somalia in 2015. SEMA reported that no major mine action operations were conducted in south-central Somalia and that no CMR were found during survey, spot tasks, and BAC carried out during the year.51 No formal land release occurred in Puntland in 2015; operations consisted only of risk education and EOD spot tasks. HALO Trust continued mine clearance, NTS and technical survey, and EOD spot tasks in Somaliland.52

Approximately 42.4km² of BAC was carried out by NPA in south-central Somalia, a dramatic increase from the 5.25km² in south-central Somalia and Somaliland in 2014.53 In Somaliland, HALO Trust did not conduct BAC in 2015. It did not encounter any CMR in its operations.54 MAG did not find any CMR in its operations across south-central Somalia in 2015.55 Likewise, DDG did not report finding any CMR in its EOD spot task activities in south-central Somalia, Puntland, or Somaliland in 2015.56
ARTICLE 4 COMPLIANCE

On 30 September 2015, Somalia deposited its instrument of ratification of the CCM, becoming the 97th state party. Under Article 4 of the CCM, Somalia is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 March 2026. It is too soon to say whether Somalia is on track to meet this deadline.

In June 2016, SEMA reported that it was optimistic that with adequate resources, Somalia could meet its CCM Article 4 clearance deadline by March 2026.\(^5^7\) It 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.\(^5^8\)

In 2015, following the approval of SEMA’s legislative framework by the Council of Ministers, funding for SEMA was included in the Federal Government of Somalia’s annual budget through the Ministry of Internal Security.\(^5^9\) According to NPA, however, the Federal Government of Somalia did not provide any funding for mine action activities in Somalia prior to this during the year. NPA stated this was a significant limitation for the training of SEMA personnel, and that its staff had not received salary payments since the ending of a seven-month grant from UNMAS in December 2015.\(^6^0\)

In June 2016, SEMA stated that it was not receiving any external support and that the national government lacked the resources to provide support.\(^6^1\) NPA reported that UNMAS had stopped funding SEMA, in the expectation that its legislative framework was due to be approved by the Federal Parliament and that funding for SEMA would be allocated from the national budget. NPA expressed concern, however, that the process of adopting the law had stalled and that it would not be passed prior to elections planned for the second half of 2016. This, in turn, would mean that government funds for SEMA would also not be approved.\(^6^2\)

There were no plans to conduct a national survey of CMR contamination as at June 2016.

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\(^{57}\) Email from Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
\(^{58}\) Ibid.
\(^{60}\) Email from Terje Eldoen, NPA, 5 June 2016.
\(^{61}\) Email from Mohammed Abdulkadir Ahmed, SEMA, 14 June 2016.
\(^{62}\) Emails from Terje Eldoen, NPA, 5 June and 14 June 2016.
### PROGRAMME PERFORMANCE

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**NOTE:** Not on track to meet the Article 4 deadline of 1 November 2020.
RECOMMENDATIONS FOR ACTION

The UK should acknowledge it has outstanding Article 4 obligations to survey and, where contamination is found, to clear CMR in the Falkland Islands.

The UK should present detailed plans and timelines for clearance of all known or suspected cluster strike areas in mined and other suspected hazardous areas (SHAs) in the Falkland Islands in accordance with its international legal obligations.

CONTAMINATION

An unknown number of CMR remain on the Falkland Islands\(^1\) as a result of use of BL755 cluster bombs by the UK against Argentine positions during the 1982 armed conflict.

In February 2009, the Ministry of Defence (MoD) stated that: "According to historical records either 106 or 107 Cluster Bomb Units (CBU) were dropped by British Harriers and Sea Harriers during the conflict. Each CBU contains 147 BL755 submunitions and using the higher CBU figure (107), a total of 15,729 submunitions were dropped. Using a 6.4% failure rate assessed during in-service surveillance over 15 years, we would estimate that 1,006 would not explode. Given that 1,378 BL 755s were cleared in the first year after the conflict and that a further 120 have been found and disposed of since (totalling 1,498), clearly there was a slightly higher failure rate. Even if the rate had been closer to 10% and 1,573 had failed, we can only estimate that some 70 remain but that due to the very soft nature of the peat found on the islands, many of these will have been buried well below the surface. We believe that the majority of those remaining are now contained within existing minefields and these will be cleared in due course."\(^2\)

In 2015, the UK affirmed that no known areas of CMR contamination exist outside SHAs on the islands, in particular mined areas, all of which are fenced and marked.\(^3\) In 1982–84, battle area clearance (BAC) was undertaken over large areas looking for CMR and other unexploded ordnance (UXO). Based on bombing data, areas where unexploded submunitions were expected to be found were targeted very quickly, and a large number were located and destroyed. Clearance operations involved both surface and subsurface clearance, using the British 4C metal detector.\(^4\)

The UK has stated that potential CMR contamination has, in part, been taken into account during mine clearance operations in the Falkland Islands, with two areas, Fox Bay 8W and Goose Green 11, selected for clearance partly based on records indicating that cluster munitions had been dropped there. No CMR were found in these two areas.\(^5\)

In 2010, the UK reported destruction of two submunitions in Stanley Area 3, during clearance operations across four mined areas in 2009–10.\(^6\) In June 2015, the UK reported destruction of 19 submunitions during Phase 4(a) clearance operations, in January to April 2015, also in Stanley Area 3.\(^7\) UK records suggest that four cluster bombs were dropped in this area.\(^8\) No further CMR were encountered during Phase 4(b) clearance operations in September 2015 to March 2016 in Stanley Area 2 and Stanley Area 3.\(^9\)

The UK conducted CMR clearance in the aftermath of the Falklands conflict, along with comprehensive perimeter marking of mined areas potentially containing remaining CMR. No civilians are believed to have been killed or injured by CMR on the islands.\(^10\)

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\(^1\) There is a sovereignty dispute with Argentina, which also claims jurisdiction over the islands.


\(^3\) Email from an official in the Arms Export Policy Department of the FCO, 1 July 2015.

\(^4\) Ibid.

\(^5\) Ibid.


\(^7\) Email from an official in the Arms Export Policy Department of the FCO, 11 June 2015.

\(^8\) Email from an official in the Arms Export Policy Department of the FCO, 1 July 2015.

\(^9\) Email from an official in the Arms Export Policy Department, FCO, 4 May 2016.

Other ERW and Landmines

As referenced previously, the Falkland Islands is also contaminated by anti-personnel mines, (see annual “Clearing the Mines” reports on the UK), and other explosive remnants of war (ERW). These are the explosive threat against which the majority of the UK’s demining efforts are directed.

Since 2010, mine clearance and Battle Area Clearance (BAC) in the Falkland Islands has 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 2015 to April 2015; and Phase 4(b) from September 2015 to March 2016.

Mine clearance operations in the Falkland Islands during Phases 1, 3, and 4(a) and (b) resulted in the release of 35 mined areas totalling just over 2km², with the destruction of 4,372 anti-personnel mines, 975 anti-vehicle mines, 53 items of UXO, and 21 submunitions. Of the 21 submunitions destroyed, two were discovered during Phase 1 of mine clearance operations and the other nineteen were found during Phase 4(a). None was encountered during Phase 4(b) clearance operations.11

BAC operations conducted during Phases 2, 3, and 4b, resulted in just over 5km² of suspected hazardous area being cleared, with the destruction of 87 items of UXO and no submunitions. This comprised 3.49km² cleared in Phase 2, with 85 UXO items destroyed; 0.18km² in Phase 3 with no UXO destroyed, and 1.32km² in Phase 4b, with 2 UXO items destroyed.12

PROGRAMME MANAGEMENT

A National Mine Action Authority (NMAA) was established in 2009 to oversee clearance of mined areas.13 The Foreign and Commonwealth Office (FCO) chairs the NMAA, and the Falkland Islands government and project contractors are also represented.14

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 Ltd. (BACTEC) was awarded the land release contract, while Fenix Insight was responsible for the Demining Project Office, which ensures quality management of demining operations. While the announcement by the Governor’s Office asserted that 108 minefields existed at the start of Phase 4,15 the FCO subsequently confirmed that the correct figure was 107.16 Over the course of Phases 4a and 4b), 25 suspected mined areas were released,17 as well as one hazardous area suspected to contain ERW.18

To implement Phase 4, which began in January 2015, BACTEC had a team of 46 deminers.19 BACTEC deployed three demining machines during the project: two flails and a tiller.20

LAND RELEASE

Nineteen submunitions were destroyed in Phase 4(a) of clearance operations in January to April 2015, during clearance of a 47,027m² minefield in Stanley Area 3.21

Progress in 2016

During Phase 4(b) of clearance operations in September 2015 to March 2016, a further 15 mined areas were cleared, in addition to BAC of an SHA behind the Stanley Common fence to the west of Eliza Cove Road, totalling more than 1.3km².22 Furthermore, as part of Phase 4(b), a limited technical survey was completed of areas MF45, MF46, and MF007 (the latter is located in the sand-duned Yorke Bay area.23 No further CMR contamination was encountered during Phase 4(b).24

Phase 4(b) had been expected to conclude in December 2015, but was extended by an additional three months as one minefield proved especially difficult to clear due to the entirely unexpected inaccuracy of the relevant minefield records. The UK allocated additional funding to the project which allowed contractors to complete, at the same time, more tasks than originally planned.25

As at June 2016, the UK was continuing to review how it might address the many challenges posed by Falkland Islands demining, as it prepared plans for a new phase of demining. No details of plans were available as at July 2016.26
ARTICLE 4 COMPLIANCE

Under Article 4 of the Convention on Cluster Munitions (CCM), the UK is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 November 2020. The UK is not on track to meet this deadline.

The UK does not consider itself to have an obligation under Article 4 of the CCM, and considers any remaining CMR, if found to exist, to be “residual”. The UK also asserts that it has addressed the humanitarian and developmental effects of CMR on the Falkland Islands.

However, Article 4(2)(a) of the CCM stipulates that each state party shall, “as soon as possible...survey, assess and record the threat posed by cluster munition remnants, making every effort to identify all cluster munition contaminated areas under its jurisdiction or control”. Mine Action Review believes that the UK has still to fulfil this obligation, in particular by conducting survey and clearance in mined areas in which cluster munitions are known or suspected to have been used. The decision to discontinue clearance of mined areas in the 1980s means that several cluster strike areas located within these mined areas have not been surveyed. Accordingly, an assertion that the remaining threat from CMR is only residual is purely speculative.
SIGNATORY STATES
RECOMMENDATIONS FOR ACTION

→ Angola should confirm as soon as possible whether it believes that cluster munition remnants (CMR) remain to be cleared.
→ Angola should ratify the Convention on Cluster Munitions (CCM) as a priority.
→ Angola should develop a resource mobilisation strategy and initiate policy dialogue with development partners on long-term support for mine action, including to address any residual CMR contamination.

CONTAMINATION

The extent to which Angola is affected by CMR remains unclear. There is no confirmed contamination, but a small residual threat may exist from either abandoned cluster munitions or unexploded submunitions. CMR contamination was a result of the decades of armed conflict that ended in 2002, although it is unclear when, or by whom, cluster munitions were used in Angola.

As at May 2016, clearance operators had not found CMR in more than eight years, apart from HALO Trust, which reported finding and destroying 12 unexploded submunitions in 2012. In 2011, HALO Trust and the National Institute for Demining (Instituto Nacional de Desminagem, INAD) affirmed that unexploded submunitions remained in Cuando Cubango. In June 2016, however HALO Trust reported that it had found only a very few submunitions in more than 20 years of clearance operations across Angola. Menschen gegen Minen (MgM) also reported that it had not encountered CMR in nearly ten years of operations in six Angolan provinces, including near Jamba an area in south-east Cuando Cubango province where contamination might have been expected.

More typical of CMR destruction is the disposal of old or unserviceable cluster munitions identified by HALO Trust’s Weapons and Ammunition Disposal (WAD) teams in military storage areas, some of which were earmarked for destruction by the Angolan Armed Forces. Between 2005 and 2012, HALO Trust WAD teams reported destroying a total of 7,284 submunitions. In May 2016, HALO Trust indicated that it had not been asked by the military to do any further destruction of cluster munition stockpiles since 2012.

Other ERW and Landmines

Angola is heavily contaminated with landmines and explosive remnants of war (ERW) other than CMR.
PROGRAMME MANAGEMENT

Angola’s national mine action programme is managed by two mine action structures. The National Intersectoral Commission for Demining and Humanitarian Assistance (Comissão Nacional Intersectorial de Desminagem e Assistência Humanitária, CNIDAH) serves as the national mine action authority. It reports to the Council of Ministers or, in effect, to the President of Angola.

The other mine action coordination body, the Executive Commission for Demining (Comissão Executiva de Desminagem, CED), was established and is chaired by the Minister of Social Assistance and Reintegration (MINARS). In 2002, in order to separate coordination and operational responsibilities, Angola established INAD, which is responsible for demining operations and training under the auspices of MINARS.

Operators

Four international non-governmental organisations (NGOs) conduct demining for humanitarian purposes in Angola: HALO Trust, MgM, Mines Advisory Group (MAG), and Norwegian People’s Aid (NPA). DanChurchAid (DCA) was forced to close their operations in early 2015 due to lack of funding.8 A number of national commercial companies, accredited by CNIDAH and mostly employed by the state or other private companies, also operate in Angola.

LAND RELEASE

No land containing CMR was reported to have been released by clearance or survey in 2015.

ARTICLE 4 COMPLIANCE

As at May 2016, Angola was a signatory but not a state party to the CCM. Nonetheless, Angola has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.9

Angola is facing a critical decline in international support for mine action. Collectively, the resources of the three largest operators, HALO Trust, MAG, and NPA have decreased by more than 70% in 2008 to end 2015. This sharp reduction, combined with the 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.10

1 According to reports from NGO operators in the national database at the Intersectoral Commission for Demining and Humanitarian Assistance (CNIDAH), CMR ceased to be found in significant numbers after 2008. Prior to this, as of February 2008, Norwegian People’s Aid (NPA) reported clearing 13 submunitions in Kwanza Sul province; Mines Advisory Group (MAG) reported clearing 142 submunitions in Moxico province; and HALO Trust reported clearing 230 submunitions in Bié province. Email from Mohammad Qasim, United Nations Development Programme (UNDP)/CNIDAH, 22 February 2008. In May 2016, NPA reported finding no CMR during its operations in northern Angola, with the exception of a small number of submunitions found in 2008. Menschen gegen Minen (MgM) reported that no CMR had been discovered in its areas of operations in south-east Angola from 1997 through to May 2016. HALO Trust also confirmed that it had not encountered any cluster munitions since 2012 and MAG’s Technical Operations Manager reported that the programme had not found any CMR since his arrival in 2013. Emails from Vanja Sikirica, Country Director, NPA, 11 May 2016; Kenneth O’Connell, Technical Director, MgM, 5 May and 15 June 2016; Gerhard Zank, Programme Manager, HALO Trust, 17 May 2016; and Bill Marsden, Regional Director, East and Southern Africa, MAG, 18 May 2016.

2 Response to questionnaire by Gerhard Zank, HALO Trust, 19 March 2013.

3 Interviews with Jose Antonio, Site Manager, Cuando Cubango, HALO Trust; and with Coxe Sucama, Director, INAD, in Menongue, 24 June 2011.

4 Email from Gerhard Zank, HALO Trust, 13 June 2016.

5 Email from Kenneth O’Connell, MgM, 15 June 2016.

6 Response to questionnaire by Gerhard Zank, HALO Trust, 19 March 2013.

7 Emails from Gerhard Zank, HALO Trust, 17 May 2016; and Bill Marsden, MAG, 18 May 2016.


9 Angola is a state party to the 1966 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that “Every human being has the inherent right to life”. It is also a state party to the 1966 African Charter on Human and Peoples’ Rights, Article 4 of which provides that “Every human being shall be entitled to respect for his life and the integrity of his person”.

10 Emails from Vanja Sikirica, NPA, 11 May 2016; Gerhard Zank, HALO Trust, 17 May 2016; and Bill Marsden, MAG, 2 May 2016.
The Democratic Republic of Congo (DRC) continued to move towards completing clearance of all areas contaminated by cluster munition remnants (CMR) in 2015, although the operational progress was not matched by a corresponding sense of urgency by the national mine action authorities.

<table>
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<tr>
<th>PROGRAMME PERFORMANCE</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Target date for completion of cluster munition 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>3</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>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Improving performance</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>PERFORMANCE SCORE: AVERAGE</td>
<td>6.0</td>
<td>6.2</td>
</tr>
</tbody>
</table>
RECOMMENDATIONS FOR ACTION

- The DRC should complete clearance of all CMR-contaminated areas by the end of 2016, the deadline it set in its strategic mine action plan.
- The DRC should ratify the Convention on Cluster Munitions (CCM) as a matter of priority.
- Greater efforts should be made to ensure the national mine action database is accurate, up to date, and effectively managed by the national authorities.
- Mine action data should be recorded and reported according to International Mine Action Standards (IMAS) land release terminology.

CONTAMINATION

At the end of 2015, the DRC had four remaining areas with a total size of 3,840m² confirmed to contain CMR. Contamination is in Equateur province in the north-east of the country. The DRC identified the areas, all of which are believed to contain BL755 submunitions, in a national survey conducted in 2013.

According to Mines Advisory Group (MAG), CMR contamination has impeded agriculture and limited freedom of movement. MAG reported that its clearance of CMR and other unexploded ordnance (UXO) in areas of former Equateur and Katanga provinces in 2015 had increased access to firewood, enabled use of previously restricted land and new agricultural areas, and facilitated access to remote villages. MAG also completed clearance of a CMR strike very near to the only hospital in Moba, in what was Katanga province [renamed Tanganyika province as at July 2015].

Other ERW and Landmines

The DRC is also affected by other explosive remnants of war (ERW) and a small number of landmines, as a result of years of conflict involving neighbouring states, militias, and rebel groups. Successive conflicts have left the DRC with UXO as well as significant quantities of abandoned explosive ordnance.

PROGRAMME MANAGEMENT

The Congolese Mine Action Centre (Centre Congolais de Lutte Antimines, CCLAM) was established in 2012 with support from the United Nations Mine Action Coordination Centre (UNMACC) and the UN Mine Action Service (UNMAS). Since that time, UNMAS has provided capacity building support to CCLAM for its operations with a goal of full transition of all coordination activities to the Centre by the end of 2016. UNMAS has reported that the transfer of responsibility to CCLAM for coordinating mine action activities was completed in early 2016.

Previously, UNMACC, established in 2002 by UNMAS, coordinated mine action operations through offices in the capital, Kinshasa, and in Goma, Kalemie, Kananga, Kisangani, and Mbandaka. UNMACC was part of the UN Stabilization Mission in the 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 March 2013, Security Council Resolution 2098 called for demining activities to be transferred to the UN Country Team and the Congolese authorities. As a consequence, UNMAS operated two separate projects after splitting its activities between, on the one hand, support for the government of the DRC and its in-country team, and, on the other, its activities in support of MONUSCO. In accordance with Resolution 2147 of March 2014, demining is no longer included in MONUSCO’s mandate.
Strategic Planning

The DRC’s national mine action strategic plan for 2012–16 set the goal of completing clearance of all areas contaminated with anti-personnel mines or unexploded submunitions by the end of 2016.13

Operators

Five international operators are accredited for mine action in the DRC: DanChurchAid (DCA), Handicap International (HI), MAG, Mechem, and Norwegian People’s Aid (INPA), along with a national demining organisation, AFRILAM.14 MAG was the only operator to conduct detailed CMR survey and clearance activities in the DRC in 2015. Throughout the year, it deployed between two and four ten-strong technical teams, depending on funding, as well as two community liaison teams.15

Standards

No developments were reported regarding mine action standards or guidelines specific to CMR survey or clearance in 2015. As at May 2016, National Technical Standards and Guidelines for mine action had been developed, but still not finalised. The draft version does not contain CMR-specific provisions.16

Quality Management

UNMAS and MAG reported that no external quality assurance (QA)/quality control (QC) activities were carried out on any CMR tasks in 2015, due to an inability to travel to remote areas.17 MAG stated, however, that in 2015 an internal QA/QC process was carried out twice a week.18

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 2015, data from the national mine action database in response to research queries showed limited signs of improvement, but continued to vary significantly from operators’ records, and in some cases was partial or even unusable.

14 Email from Julien Kempeneers, Deputy Desk Officer, Mine Action Department, HI, 14 April 2016.
15 Email from Colin Williams, UNMAS, 3 June 2015.
16 Responses to questionnaire by Pehr Lodhammar, NPA, 18 May 2015; Julia Wittig, Programme Officer, MAG, 29 May 2015; and Johan Strydom, Project Manager DRC, Mechem, 13 May 2015.
17 Emails from Colin Williams, UNMAS, 6 May 2016; and Fabienne Chassagneux, MAG, 15 July 2016.
18 Email from Llewelyn Jones, MAG, 7 May 2016.
LAND RELEASE

The total amount of CMR-contaminated area released in 2015 was 0.075 km², compared to 0.065 km² in 2014.19

Survey in 2015

MAG reported cancelling 65 suspected hazardous areas (SHAs) through non-technical survey in 2015 and confirming as hazardous two SHAs with a total size of 75,845 m² in Katanga (Tanganyika) and Equateur provinces (see Table 1).20

Table 1: CMR survey in 201521

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs cancelled</th>
<th>Areas confirmed</th>
<th>Area confirmed (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAG (Katanga/Tanganyika)</td>
<td>4</td>
<td>1</td>
<td>7,772</td>
</tr>
<tr>
<td>MAG (Equateur)</td>
<td>61</td>
<td>1</td>
<td>68,073</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>65</strong></td>
<td><strong>2</strong></td>
<td><strong>75,845</strong></td>
</tr>
</tbody>
</table>

Clearance in 2015

MAG cleared a total of 75,845 m² of CMR-contaminated area in 2015, the majority of which — 68,073 m² — was in Equateur province, with a further 7,772 m² in Katanga (Tanganyika) province, and destroyed a total of 65 submunitions (see Table 2).22 In 2014, MAG cleared 65,510 m² of CMR-contaminated area, destroying 38 submunitions.23

In September 2015, NPA destroyed one BL755 submunition as part of an explosive ordnance disposal (EOD) spot task in Tanganyika province.24 According to UNMAS, Mechem also destroyed two submunitions during EOD spot tasks in 2015.25 NPA reported destroying a further two BL755 submunitions in Tanganyika province in February 2016.26

Table 2: Clearance of CMR-contaminated areas in 201527

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Areas cleared (m²)</th>
<th>Submunitions destroyed</th>
<th>APM destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAG (Katanga/Tanganyika)</td>
<td>1</td>
<td>7,772</td>
<td>4</td>
<td>1</td>
<td>226</td>
</tr>
<tr>
<td>MAG (Equateur)</td>
<td>1</td>
<td>68,073</td>
<td>61</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>2</strong></td>
<td><strong>75,845</strong></td>
<td><strong>65</strong></td>
<td><strong>1</strong></td>
<td><strong>244</strong></td>
</tr>
</tbody>
</table>

APM = Anti-personnel mines

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20 Email from Llewelyn Jones, MAG, 7 May 2016.
21 Ibid. UNMAS did not report any data for CMR survey in DRC in 2015. UNMAS informed Mine Action Review and Cluster Munition Monitor “information is taken from our data base following weekly reports received from MAG so may not be completely accurate or complete”, and indicated data provided by MAG should be reported instead. Emails from Colin Williams, UNMAS, 6 and 26 May 2016.
22 Email from Llewelyn Jones, MAG, 7 May 2016.
23 Response to questionnaire by Johan Petrus Botha, Technical Operations Manager, MAG, 1 June 2015.
24 Email from Pehr Lodhammar, NPA, 12 April 2016.
25 Email from Colin Williams, UNMAS, 6 May 2016.
26 Email from Pehr Lodhammar, NPA, 12 April 2016.
27 Email from Llewelyn Jones, MAG, 7 May 2016. UNMAS reported that MAG cleared one CMR-contaminated area with a total size of 58,685 m², destroying in the process 55 submunitions, one anti-personnel mine, and 24 items of UXO. Emails from Colin Williams, UNMAS, 6 and 26 May 2016.
ARTICLE 4 COMPLIANCE

As at 1 June 2016, the DRC was a signatory but not a state party to the CCM. As such, it does not have a treaty-mandated deadline for clearance. Nonetheless, the DRC has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.  

The DRC’s national mine action strategic plan for 2012–16 set the goal of clearing all areas contaminated with anti-personnel mines or unexploded submunitions by the end of 2016. The Government of the DRC, through CCLAM, which operates under the Ministry of Interior, is seconding members of the armed forces to MAG for CMR survey and clearance. MAG stated that its priorities in 2016 would be to locate and confirm all remaining SHAs where CMR are suspected within North Ubangi and South Ubangi provinces (formerly Equateur province). It did not expect its funding to change in 2016.

UNMAS has asserted that the DRC was on track to meet its national mine action strategic plan goal of completing clearance of CMR contamination by the end of 2016. UNMAS reported that the contribution represented 40% of the DRC programme’s 2016 budgetary needs and would allow UNMAS to deploy two MTTs in five selected provinces where no explosive clearance capacity currently exists. In May 2016, UNMAS reported that a total of US$2.45 million had been secured for demining activities in 2016, with additional support from the Netherlands and Sweden, and in-kind support from Switzerland. UNMAS pledged to continue to engage with donors to secure additional funding.

28 The DRC is a state party to the 1966 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: “Every human being has the inherent right to life”. It is also a state party to the 1981 African Charter on Human and Peoples’ Rights, Article 4 of which provides that “Every human being shall be entitled to respect for his life and the integrity of his person”.


30 Response to questionnaire by Julia Wittig, MAG, 29 May 2015.

31 Email from Llewelyn Jones, MAG, 7 May 2016.

32 Ibid.

33 Email from Colin Williams, UNMAS, 6 May 2016.

34 Email from Llewelyn Jones, MAG, 7 May 2016.


STATES NOT PARTY
RECOMMENDATION FOR ACTION

Azerbaijan should accede to, and abide by, the Convention on Cluster Munitions (CCM) as a matter of priority.
The precise extent of contamination from cluster munition remnants (CMR) in Azerbaijan is unknown, as Armenian forces currently occupy a significant area of the country where the contamination exists. There may also be some residual contamination in territory under government control.

On 1 April 2016, intense fighting broke out in Nagorno-Karabakh along the front line pitting Armenian and Nagorno-Karabakh forces against those of Azerbaijan. While ground fighting was confined to areas close to the Line of Contact (LOC), artillery fire penetrated more than 10km into Nagorno-Karabakh, and included the use of cluster munitions, which resulted in an estimated 2km² of new CMR contamination in Nagorno-Karabakh. No CMR contamination has been reported on the Azerbaijan-controlled side of the LOC. A ceasefire was agreed on 5 April 2016 (see the separate report on Nagorno-Karabakh).

In 1988, a decision by the parliament of the Nagorno-Karabakh Autonomous Province to secede from Azerbaijan and join Armenia resulted in armed conflict from 1988 to 1994 between Armenia and Azerbaijan. Large quantities of cluster munitions were dropped from the air during the conflict, which led to Armenia occupying around one-fifth of Azerbaijani territory.

In 2007, the Azerbaijan Campaign to Ban Landmines (AzCBL) surveyed CMR contamination in the non-occupied border regions of Azerbaijan. It concluded that cluster munitions (among other ordnance) had been used in the Aghdam and Fizuli regions. In addition, significant CMR have been identified in and around Nagorno-Karabakh. In 2006 and 2007, remnants were found in and around warehouses at a former Soviet ammunition storage area located at Saloglu in Agstafa district, where clearance was completed in July 2011.

Other ERW and Landmines

Other areas are confirmed or suspected to contain explosive remnants of war (ERW), which include both unexploded ordnance (UXO) and abandoned explosive ordnance (AXO). These include former soviet military testing areas, including Khandjan, in the Absheron peninsula, where land is being used by locals for pasture; the Jeyranchel area of the Agstafa region; and also areas in the vicinity of Baku city and a former internal troops shooting range in Ganja city.

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1 Email from Samir Poladov, Operations Manager, Azerbaijan National Agency for Mine Action (ANAMA), 17 June 2015.
2 Email from Andrew Moore, Caucasus and Balkans Desk Officer, HALO Trust, 26 May 2016; and HALO Trust, “HALO Trust begins emergency clearance in Karabakh”, 19 April 2016, at: https://www.halotrust.org/media-centre/news/halo-begins-emergency-clearance-in-karabakh/.
4 Interview with Nazim Ismayilov, Director, ANAMA, Baku, 2 April 2010; see also Human Rights Watch and Landmine Action, Banning Cluster Munitions: Government Policy and Practice, Mines Action Canada, Ottawa, 2009, p. 188.
PROGRAMME MANAGEMENT

A 1998 presidential decree established the Azerbaijan National Agency for Mine Action (ANAMA), which reports to the Deputy Prime Minister as head of the State Commission for Reconstruction and Rehabilitation. 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). A joint working group, established in December 1999 and consisting of representatives from various ministries, provides regular guidance to ANAMA. ANAMA is tasked with planning, coordinating, managing, and monitoring mine action in the country. It also conducts demining operations, along with two national operators it contracts: Dayag-Relief Azerbaijan (RA) and the International Eurasia Press Fund (IEPF). 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, regional training centre in Goygol, and three operational centres located in Aghjabedi, Agstafa, and Terter.

Strategic Planning

ANAMA is integrated into the national social and economic development programme. The current mine action strategy is for 2014–18. ANAMA’s long-term strategy is to clear the occupied territories as and when they become released.

Legislation and Standards

Azerbaijan is in the process of adopting a mine action law, with draft legislation currently under revision by other state institutions. Once adopted, it will regulate and determine the conditions of mine action in Azerbaijan, such as licensing, accreditation, quality assurance (QA), and tender procedures.

Operators

As at the end of 2015, ANAMA employed 463 operational and administrative staff and had 44 mine detection dogs (MDDs) and six demining machines. ANAMA also has a MDD breeding and training centre, which was built in 2011.

In addition, two national demining non-governmental organisations (NGOs), IEPF and RA, are contracted for mine clearance. These two operators jointly employ 169 operational and administrative staff.

Quality Management

Established in 2011, ANAMA’s training, survey, and QA division is responsible for training and QA and also conducts quality control (QC).

In 2015, 111 QA monitoring visits were undertaken. In addition, external quality control inspections were conducted at 81 sites in 2015, with more than 2.5km² of land physically checked. Five battlefields (surface) were rejected and slated for re-clearance, and 57 items were missed.

Information Management

ANAMA uses the Information Management System for Mine Action (IMSMA) database.
LAND RELEASE

No land containing CMR was reported to have been released by clearance or survey in territory under government control in 2015.

Battle Area Clearance in 2015

In February–September 2015, ANAMA conducted battle area clearance (BAC) at Khandjan, a former soviet military testing range in the Absheron peninsula. Just over 1.5km² of contaminated land was cleared, in the course of which 155 items of UXO were discovered.22

In addition, in March 2015 ANAMA was tasked with commencing BAC operations in Ganja city in a former firing range of internal security forces. Survey of the area resulted in an estimated 13.27km² recorded as UXO contaminated. Of this, 11km² was cleared in 2015, and the remainder was planned to be cleared in 2016.23

The second phase of the Azerbaijan National Action Plan (NAP)/NATO Partnership for Peace (PfP) Trust fund project was undertaken in 2015, at the former soviet artillery shooting range in Jeyranchel, in the Agstafa region, along the Azerbaijani-Georgian border. BAC in 2015 resulted in release of over 12.2km², and destruction of 612 items of UXO.24 As at April 2016, total BAC in the second stage was 18.3km² released, with the destruction of 1,212 items of UXO. The second phase was expected to be completed in July 2016.25

ARTICLE 4 COMPLIANCE

Azerbaijan is not a state party or signatory to the CCM, but nonetheless has obligations under international human rights law to protect life, which require clearance of CMR as soon as possible.26 Currently, 90% of mine action in Azerbaijan is state funded.27 ANAMA’s long-term strategy is to be ready to start clearance of the occupied territories as and when this is possible.28

22 Ibid., p. 17.
23 Ibid., p. 18.
24 Ibid.
26 Azerbaijan is a state party to the 1966 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: “Every human being has the inherent right to life”. It is also a state party to the 1950 European Convention on Human Rights, Article 2 of which protects the right to life.
**RECOMMENDATIONS FOR ACTION**

- Cambodia should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- The Cambodian Mine Action and Victim Assistance Authority (CMAA) should adopt standards for survey and clearance appropriate for dealing with cluster munitions.
- The CMAA should set strategic goals for clearance of explosive remnants of war (ERW), giving priority to cluster munition remnants (CMR) in the most affected provinces.
CONTAMINATION

Cambodia has extensive contamination from CMR but the extent is not known. Contamination resulted from intensive bombing by the United States (US) during the Vietnam War, concentrated in north-eastern provinces along the borders with Lao PDR and Vietnam. The US air force dropped at least 26 million explosive submunitions, between 1.9 million and 5.8 million of which are estimated to have not exploded.1

On the basis of a baseline survey (BLS) of eight eastern provinces conducted between 2012 and 2015, the CMAA estimated the area affected by CMR as at May 2016 at 334km², almost 70% of total ERW contamination amounting to more than 482km². It also showed 60% of the CMR problem is located in the provinces of Kratie and Stung Treng (see Table 1).2

Much of Cambodia’s CMR contamination lies in areas that are heavily forested and have been sparsely populated. CMAA data identifies five CMR casualties since the start of 2013, including one fatality. Population growth and demand for land, however, have resulted in large numbers of people moving into these areas generating increasing evidence of the scale of contamination and increasing the threat posed.4

Table 1: ERW survey of eight eastern provinces3

<table>
<thead>
<tr>
<th>Province</th>
<th>CMR-contaminated area (m²)</th>
<th>Total ERW contaminated (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kampong Cham</td>
<td>27,295,691</td>
<td>54,169,282</td>
</tr>
<tr>
<td>Kratie</td>
<td>102,216,147</td>
<td>152,370,918</td>
</tr>
<tr>
<td>Mondolkiri</td>
<td>18,648,581</td>
<td>37,223,450</td>
</tr>
<tr>
<td>Prey Veng</td>
<td>16,585,017</td>
<td>18,217,222</td>
</tr>
<tr>
<td>Rattanakiri</td>
<td>35,689,634</td>
<td>38,104,182</td>
</tr>
<tr>
<td>Stung Treng</td>
<td>98,503,248</td>
<td>124,886,799</td>
</tr>
<tr>
<td>Svay Rieng</td>
<td>17,044,341</td>
<td>32,809,678</td>
</tr>
<tr>
<td>Tboung Khmum</td>
<td>18,247,617</td>
<td>24,997,166</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>334,230,276</strong></td>
<td><strong>482,758,697</strong></td>
</tr>
</tbody>
</table>

PROGRAMME MANAGEMENT

The CMAA, set up in September 2000, regulates and coordinates all activities relating to survey and clearance of ERW, including CMR, responsibilities previously assigned to the Cambodian Mine Action Centre (CMAC).5 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.6

Prime Minister Hun Sen is the CMAA President, and in April 2016 he appointed a senior official, Serei Kosal, as first vice president, replacing a senior government minister, Prak Sokhonn, who became foreign minister. In May 2016, he also replaced the CMAA’s secretary general, Prum Sophakmonkol, with another senior minister, Ly Thuch.7

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2 Data received from CMAA, 30 May 2016.
3 Ibid.
4 Data as of 3 March 2016, received by email from CMAA, 18 May 2016.
5 CMAC is the leading national demining operator, but does not exercise the wider responsibilities associated with the term “centre.” Set up in 1992, CMAC was assigned the role of coordinator in the mid-1990s. It surrendered this function in a restructuring of mine action in 2000 that separated the roles of regulator and implementing agency and led to the creation of the CMAA.
7 Interview with Prum Sophakmonkol, Secretary General, CMAA, Phnom Penh, 11 May 2016; interviews with operators, Phnom Penh, 9–11 May 2016.
Strategic Planning
Cambodia does not have a strategic plan for tackling cluster munition clearance, but survey and clearance over the past two years has drawn attention to the issue and the need for operating standards. CMAA’s outgoing Secretary-General had agreed to incorporate Norwegian People’s Aid (NPA)’s Cluster Munition Remnant Survey (CMRS) procedures as the standard survey methodology and had concluded ERW clearance operations in eastern Cambodia should focus on CMR, recognising other types of UXO as a long-term explosive ordnance disposal (EOD) challenge. It was unclear if CMAA’s incoming management would adopt the same approach.8

Operators
Survey and clearance of CMR in eastern Cambodia are undertaken mainly by CMAC, NPA, and the Mines Advisory Group (MAG). The Royal Cambodian Armed Forces and its National Centre for Peace Keeping Forces, Mine and ERW Clearance (NPMEC) have conducted clearance in cluster munition-affected areas but they have not reported the extent and results of their operations.9

LAND RELEASE
Cambodia released 0.77km² of CMR-contaminated area by clearance and reduced a further 3.34km² by technical survey in 2015.

Survey in 2015
Cambodia is still in the process of scaling up its survey and clearance of CMR. CMAC’s survey of ERW identified substantial areas of submunition contamination but was conducted using the mine survey methodology of the BLS and not best suited to capturing cluster munition strikes. Operators report the survey produced some large polygons that have few cluster remnants, and different survey methods and roving tasks have identified confirmed hazardous areas (CHAs) outside the ERW survey polygons. Moreover, the influx of new settlers to the province continues to generate additional information on the location of CMR.10

NPA focused operations on survey using the methodology tailored to cluster munitions that it developed in Lao PDR. In 2015, it surveyed 4.8km² in the north-eastern province of Rattanakiri and identified 20 CHAs covering a total of 1.5km². NPA planned to complete survey of Rattanakiri by the end of 2016 but new information emerging on contamination and its small capacity may prolong operations. In addition to survey, NPA also cleared 0.2km² of area, destroying 220 submunitions.11

Clearance in 2015
CMAC conducted clearance in Kompong Cham and Kratie under a project funded by the US and partnering NPA. CMAC reported clearing 22.86km² of battle area in 2015 but its data does not identify if any of this represented CMR contamination, nor does it disaggregate submunitions from other items destroyed. Data made available by NPA indicated CMAC cleared 2.3km² of Kampong Cham and destroyed 190 submunitions in operations conducted between August and the end of December.

The other operator tackling CMR in 2015 was MAG, which had one team working in 2014 and added capacity in the course of 2015 to finish the year with three clearance teams, two EOD teams, and 60 personnel in Rattanakiri. As in Lao PDR and Vietnam, MAG worked in cooperation with NPA, clearing polygons prioritised by Mine Action Planning Units (MAPUs).14

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8 Ibid.
9 Interviews with CMAA and operators, Phnom Penh, 9–12 May 2016.
10 Interviews with Greg Crowther, Regional Director, South and South East Asia, MAG, Phnom Penh, 9 May 2016, and Aksel Steen-Nilsen, Country Director, NPA, Phnom Penh, 11 May 2016.
11 Email from Aksel Steen-Nilsen, NPA, 27 April 2016, and interview, Phnom Penh, 11 May 2016.
12 Email from Aksel Steen-Nilsen, NPA, 27 April 2016.
**Table 2: Technical survey in 2015**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Area surveyed (m²)</th>
<th>Area confirmed</th>
<th>Area confirmed (m²)</th>
<th>Area reduced from BLS (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPA</td>
<td>4,796,761</td>
<td>20</td>
<td>1,459,261</td>
<td>3,337,500</td>
</tr>
</tbody>
</table>

**Table 3: Clearance of CMR-contaminated areas in 2015**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>Submunitions destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAG</td>
<td>5</td>
<td>534,758</td>
<td>213</td>
<td>29</td>
</tr>
<tr>
<td>NPA</td>
<td>3</td>
<td>234,332</td>
<td>220</td>
<td>10</td>
</tr>
<tr>
<td>Totals</td>
<td>8</td>
<td>769,090</td>
<td>433</td>
<td>39</td>
</tr>
</tbody>
</table>

MAG also continued field evaluation for the US Department of Defense of an advanced detector, known as Scorpion, which allows for sub-surface metal signals to be mapped and identified as clutter or possible UXO/CMR contamination. MAG reported that initial results suggested the system is significantly more productive than a traditional large-loop detector and able to operate in a range of environments similar to Cambodia.

MAG and NPA also undertook increasing numbers of spot/roving tasks, partly reflecting growing understanding and confidence in their work on the part of local communities (see Table 4). Both operators reported that many items were found outside the baseline survey polygons.

**Table 4: Spot/roving clearance and EOD in 2015**

<table>
<thead>
<tr>
<th>Operator</th>
<th>Roving tasks</th>
<th>Submunitions destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAG</td>
<td>1,218</td>
<td>3,699</td>
<td>2,826</td>
</tr>
<tr>
<td>NPA</td>
<td>82</td>
<td>512</td>
<td>74</td>
</tr>
<tr>
<td>Totals</td>
<td>1,300</td>
<td>4,211</td>
<td>2,900</td>
</tr>
</tbody>
</table>

**ARTICLE 4 COMPLIANCE**

Cambodia is not a state party or signatory to the CCM. Nonetheless, Cambodia has international human rights law obligations to protect life, which requires that CMR be cleared as soon as possible.

Mine action stakeholders say there is better official understanding of the CCM but the Cambodian military has remained opposed to joining it as long as neighbouring Thailand, with which it has longstanding border disputes, remains outside.

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13 Email from Aksel Steen-Nilsen, NPA, 31 May 2016.
14 Interview with Greg Crowther, MAG, Phnom Penh 9 May 2016, and email, 10 May 2016.
15 Emails from Greg Crowther, MAG, 10 May 2016, and Aksel Steen-Nilsen, NPA, 27 April 2016.
16 Email from Greg Crowther, MAG, 10 May 2016.
18 Email from Greg Crowther, MAG, 10 May 2016, and Aksel Steen-Nilsen, NPA, 27 April 2016.
19 Cambodia is a state party to the 1996 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: “Every human being has the inherent right to life.”
RECOMMENDATION FOR ACTION

Georgia should accede to the Convention on Cluster Munitions (CCM) as soon as possible.

CONTAMINATION

Georgia, including Abkhazia, is now believed to be free of contamination from cluster munition remnants (CMR), with the possible exception of South Ossetia, which is occupied by Russia and inaccessible to both the Georgian authorities and international non-governmental organisation (NGO) clearance operators.1

CMR contamination resulted from the conflict over South Ossetia in August 2008, in which Georgian and Russian forces both used cluster munitions. After the conflict, by December 2009, HALO Trust had cleared some 37km² in Georgian-controlled territory contaminated with submunitions and other explosive remnants of war (ERW).2 In May 2010, Norwegian People’s Aid (NPA) completed clearance of its tasked areas.3

HALO Trust believes that the August 2008 conflict was likely to have resulted in some CMR contamination in South Ossetia, but it has no way of determining the level of possible contamination, or what, if any, clearance may have been conducted.4

Other ERW and Landmines

Georgia remains contaminated by other unexploded ordnance (UXO) and anti-personnel mines. Following the 2008 conflict with Russia, there was evidence of a problem with UXO in South Ossetia, although the precise extent of this remains unclear. In addition, UXO contamination in Georgia persists in former firing ranges.5

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1 Email from Andrew Moore, Caucasus & Balkans Desk Officer, HALO Trust, 11 March 2016; and email from Oleg Gochashvili, Head of Division, DELTA, 23 May 2016.
3 Email from Jonathon “Gus” Guthrie, Programme Manager, Norwegian People’s Aid (NPA), 27 May 2010.
4 Email from Andrew Moore, HALO Trust, 11 March 2016.
5 Email from Andrew Moore, HALO Trust, 23 June 2015; and interview with Oleg Gochashvili, DELTA, in Geneva, 19 February 2016.
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).

Standards

Georgian National Mine Action Standards and National Technical Standards and Guidelines (NTSG) have been drafted in accordance with IMAS and are awaiting completion in coordination with the Geneva International Centre for Humanitarian Demining (GICHD). Once finalised, the NTSG will be translated and sent to Parliament for approval.

Operators

HALO Trust conducts clearance operations in Georgia, but no CMR clearance was undertaken in 2015 as Georgia, including Abkhazia, is now believed to be free of contamination from CMR, with the possible exception of South Ossetia.

At the request of the Government of Georgia, the NATO Partnership for Peace (PfP) Trust Fund has supported Georgia in addressing its ERW problem from the August 2008 conflict. In 2010, a NATO Trust Fund project planned to provide support to establish long-term local capability and 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, battle area clearance (BAC), and explosive ordnance disposal (EOD). As from March 2015, these deminers have been conducting EOD of abandoned explosive ordnance (AXO) and UXO at the former ammunition storage facility at Skra.

Quality Management

Under the control of DELTA, the ERWCC now conducts QA/QC. iMMAP has also conducted training on QA/QC for the QA/QC section of the ERWCC, the Joint Staff of the Georgian Armed Forces, and DELTA.

LAND RELEASE

Georgia, including Abkhazia, is now believed to be free of contamination from CMR, with the possible exception of South Ossetia. No new cluster munition contamination was identified in 2015, and therefore no survey or clearance was required.

Previously, in 2014, HALO Trust cleared 1.3km² of CMR-contaminated area, which had been discovered as a result of improved security along the administrative borderline (ABL) with South Ossetia, enabling farmers to use previously inaccessible areas within Georgian-controlled territory.

ARTICLE 4 COMPLIANCE

Georgia is not a signatory or party to the CCM, but nonetheless has human rights obligations to protect life, which demand clearance of CMR. With the possible exception of South Ossetia, Georgia is now believed to be free from CMR contamination, and very limited clearance of CMR took place in the five years prior to 2014 as contamination was thought to be only residual.

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7 Ibid.; Decree #897 issued by the Minister of Defense, 30 December 2010; and email from Oleg Gochashvili, DELTA, 20 June 2016.
9 Email from Oleg Gochashvili, DELTA, 6 July 2015.
10 Emails from Oleg Gochashvili, DELTA, 3 June and 6 July 2015.
11 Interview with Oleg Gochashvili, DELTA, in Geneva, 19 February 2016; and email, 15 June 2016.
12 Email from Andrew Moore, HALO Trust, 11 March 2016.
13 NATO, “NATO/PfP Trust Fund Project in Georgia”, January 2012; and emails from Oleg Gochashvili, DELTA, 6 July 2015 and 20 June 2016.
15 Interview with Oleg Gochashvili, DELTA, in Geneva, 19 February 2016; and email 20 June 2016.
16 Response to Cluster Munition Monitor questionnaire by Tom Meredith, Desk Officer, HALO Trust, 21 August 2012.
17 Emails from Andrew Moore, HALO Trust, 11 March 2016; and Oleg Gochashvili, DELTA, 23 May 2016.
18 Email from Andrew Moore, HALO Trust, 9 July 2015.
RECOMMENDATIONS FOR ACTION

- Iran should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Iran should report on the threat from cluster munition remnants (CMR) and prepare a plan for their clearance and destruction.

CONTAMINATION

The exact extent of contamination from CMR in Iran is not known. Some contamination is believed to remain from the Iran-Iraq war when cluster munitions were widely used in Khuzestan and to a lesser extent in Kermanshah. Iraqi forces used mostly French- and Russian-made submunitions in attacks on oil facilities at Abadan and Mah-Shahr, and Spanish munitions in attacks on troop positions at Dasht-e-Azadegan. Air Force explosive ordnance disposal (EOD) teams cleared many unexploded submunitions after attacks but contamination remains around Mah-Shahr and the port of Bandar Imam Khomeini, according to a retired Iranian Air Force colonel.

Other ERW and Landmines

Other explosive remnants of war (ERW) continue to inflict casualties, particularly as a result of scavenging for scrap metal, though the extent of the problem is not clear. Unexploded ordnance (UXO) includes grenades, mortar, and artillery shells, and air-dropped bombs. In 2014, Cluster Munition Monitor registered seven ERW incidents that caused 28 casualties. An explosion of UXO that became mixed up with scrap metal killed one man and injured five at a scrap metal factory in Mahmood-Abad (Mazandaran).
PROGRAMME MANAGEMENT

Taking the place of a Mine Action Committee in the Ministry of Defense, the Iran Mine Action Centre (IRMAC) was established in 2005 and made responsible for planning, data, managing survey, and procurement. It also sets standards, provides training for clearance operators, concludes contracts with demining operators (military or private), and ensures monitoring of their operations. It coordinates mine action with the General Staff of the Armed Forces, the Ministry of Interior, the Management and Planning Organisation of Iran, and other relevant ministries and organisations, and handles international relations.

IRMAC also oversees victim assistance and risk education but has partly delegated these roles to entities such as the Social Welfare Organisation and the Iranian Red Crescent Society.3

IRMAC’s future appeared uncertain in 2014 amid debate on institutional reforms. IRMAC’s statement that 99% of contaminated lands had been cleared led to proposals to transfer the mandate for remaining work to the Ministry of Interior. At the time of drafting this report, it was not clear if, to what extent, and when these changes would materialise. According to reports from mine action sources, clearance operations had slowed down due to these uncertainties.4

LAND RELEASE

No data was available on any CMR clearance in 2015.

ARTICLE 4 COMPLIANCE

Iran is not a state party or signatory to the CCM. Nonetheless, Iran has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.5

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1 Interview with Air Force Colonel (ret.) Ali Alizadeh, Tehran, 8 February 2014.
3 IRMAC PowerPoint Presentation, Tehran, 9 February 2014; and IRMAC, "Presentation of IRMAC", at: http://www.irmac.ir/sites/default/files/.
4 Telephone interview with mine action sector operator, provided on condition of anonymity, 5 April 2015.
5 Iran is a state party to the 1966 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: "Every human being has the inherent right to life."
RECOMMENDATIONS FOR ACTION

- Libya’s Government of National Accord should ensure that forces loyal to it do not use cluster munitions.
- Libya should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Libya should enact legislation and assign one institution a clear mandate to manage mine action.
- Libya should initiate survey and clearance of cluster munition remnants (CMR) as soon as possible and take other measures to protect civilians from explosive remnants of war (ERW).

CONTAMINATION

Contamination in Libya is the consequence of armed conflict in 2011 and in 2015 but the extent is unknown. In 2011, armed forces used at least three types of cluster munition, including the Chinese dual-purpose Type 84, which also functions as an anti-vehicle mine, and the Spanish MAT-120, which holds 21 submunitions. In 2012, Mines Advisory Group (MAG) reported tackling Russian PTAB cluster bombs, while international media reported the presence of a fourth type of cluster munition that has remained unidentified. Additional contamination by CMR occurred as a result of kick-outs from ammunition storage areas bombed by NATO forces in 2011.

In 2015, fighting between Libya’s rival governments saw reported use of cluster munitions, including RBK-250 PTAB-2.5M bombs, in attacks on Bin Jawad near the port of Es-Sidr in February, and in the vicinity ofSirte in March. The Libyan Air Force, controlled by the internationally recognised government of the time, had bombed both locations but denied using cluster bombs.

The impact of CMR contamination is unknown.

Other ERW and Landmines

According to the UN Mine Action Service (UNMAS), ongoing conflict has resulted in significant ERW contamination in numerous cities across Libya, impacting on public infrastructure such as schools, universities, and hospitals. Vast amounts of unsecured weapons and ammunition contaminate Libya. In addition, the ERW threat is exacerbated by the mines and ERW left from previous conflicts.
PROGRAMME MANAGEMENT

After the downfall of the Gaddafi regime, mine action came under the jurisdiction of competing authorities located in the Office of the Army Chief of the General Staff and the Libyan Mine Action Centre (LibMAC), which was mandated by the Ministry of Defence and became active after opening an office in Tripoli in 2012, but possessed little authority outside the city. A new director, Colonel Mohammad Turjoman, was appointed in December 2013 and took up his post early in 2014.

UNMAS is part of the UN Support Mission to Libya (UNSMIL). Known as the Arms and Ammunition Advisory Section (AAAS), UNMAS is the UN lead on management of weapons and ammunition in Libya. Since November 2014, it has been operating from Tunisia.5

LAND RELEASE

Libya does not have an active programme for survey or clearance of CMR as a result of generalised violence and ongoing armed conflict.

MAG had been planning a major expansion of its clearance work in 2015 but was forced instead to close down its programme.

ARTICLE 4 COMPLIANCE

Libya is not a state party of signatory to the CCM. Nonetheless, it has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.6

1 Email from Nina Seecharan, Desk Officer for Iraq, Lebanon and Libya, MAG, 5 March 2012.
5 Ibid.
6 Libya is a state party to the 1966 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: “Every human being has the inherent right to life”. It is also a state party to the 1981 African Charter on Human and Peoples’ Rights, Article 4 of which provides that “Every human being shall be entitled to respect for his life and the integrity of his person”.

SERBIA

RECOMMENDATIONS FOR ACTION

- Serbia should identify funding, including from national sources, for clearance of cluster munition remnants (CMR) and then clear all remaining contamination as soon as possible.
- The Serbian Mine Action Centre (SMAC) should reconsider its decision to conduct full clearance in areas where technical survey would be far more efficient in accurately defining the actual hazardous area.
- Serbia should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.

PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>5</td>
</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>4</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>4</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>4</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>4</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>4</td>
</tr>
<tr>
<td>Land-release system in place</td>
<td>4</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>4</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>4</td>
</tr>
<tr>
<td>Improving performance</td>
<td>4</td>
</tr>
</tbody>
</table>

PERFORMANCE SCORE: POOR  4.1
CONTAMINATION

SMAC has not made public its estimate of CMR contamination remaining at the end of 2015, but this was said to cover approximately 3 km². At the end of 2014, Serbia had less than 0.5 km² confirmed to contain CMR and a further 5.3 km² suspected to contain CMR, across seven municipalities (see Table 1).

CMR contamination results from North Atlantic Treaty Organization (NATO) air strikes in 1999. According to Serbia, NATO cluster munitions struck 16 municipalities: Brus, Bujanovac, Cacak, Gadžin Han, Knic, Kraljevo, Kuršumlija, Leposavić, Niš city-Crveni Krst, Niš city-Medijana, Preševo, Raška, Sjenica, Sopot, Stara Pazova, and Vladimirci. In late 2014, a suspected area was newly identified in Tutin, a municipality not previously reported to be contaminated by CMR.

Remaining contamination is mostly in less developed regions of Serbia, typically on mountains and in woods. These areas are of importance to local communities for access to forest products, crop cultivation, cattle grazing, and mushroom picking. Remnants are also found in debris of erstwhile infrastructure impeding reconstruction as well as the development of tourism.

Other ERW and Landmines

Serbia is also contaminated by other unexploded ordnance (UXO) both on land and in its waterways, and by anti-personnel mines.

Table 1: CMR contamination by municipality as at the end of 2014

<table>
<thead>
<tr>
<th>Municipality</th>
<th>CHAs</th>
<th>Area (m²)</th>
<th>SHAs</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stara Pazova</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>249,832</td>
</tr>
<tr>
<td>Brus/Raška</td>
<td>1</td>
<td>69,912</td>
<td>1</td>
<td>190,359</td>
</tr>
<tr>
<td>Užice</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>585,268</td>
</tr>
<tr>
<td>Sjenica</td>
<td>1</td>
<td>129,915</td>
<td>3</td>
<td>3,256,935</td>
</tr>
<tr>
<td>Niš (Crveni krst)</td>
<td>2</td>
<td>58,922</td>
<td>2</td>
<td>236,439</td>
</tr>
<tr>
<td>Bujanovac</td>
<td>1</td>
<td>210,929</td>
<td>1</td>
<td>303,823</td>
</tr>
<tr>
<td>Tutin</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>514,682</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>5</strong></td>
<td><strong>469,678</strong></td>
<td><strong>10</strong></td>
<td><strong>5,337,338</strong></td>
</tr>
</tbody>
</table>

PROGRAMME MANAGEMENT

According to the Decree on Protection against Unexploded Ordnance (“Official Gazette of RS”, No. 70/13), the Sector for Emergency Management, under the Ministry of Interior, acts as the mine action authority, and is responsible for the development of national standard operating procedures, accreditation of clearance 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 survey of suspected hazardous areas (SHAs). It also has a mandate to plan demining projects, conduct quality control (QC) and monitor operations, ensure implementation of international standards, license demining organisations, and conduct risk education. A new director of SMAC, Jovica Simonovic, was appointed by the Serbian government in autumn 2015.

2 Email from Branislav Jovanovic, Director, SMAC, 23 March 2015.
4 Email from Branislav Jovanovic, SMAC, 4 May 2015.
5 Email from Branislav Jovanovic, SMAC, 23 March 2015.
7 Emails from Darvin Lisica, NPA Regional Programme Manager, 6 May and 12 June 2016.
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. However, in February 2016 the new director of SMAC reported that the NMAS were being developed, and due to more pressing priorities within SMAC, the standards were not expected to be finalised until 2017.

As at September 2015, SMAC and Norwegian People’s Aid (NPA) were jointly developing separate standing operating procedures (SOPs) for land release of both mined and cluster munition–contaminated areas. However, in 2016, under new directorship, SMAC had halted this process.

Under new directorship, SMAC has reassessed its land release methodology to prioritise clearance over survey. This does not correspond to international best practice, and is a waste of valuable clearance assets, which should be used only to clear areas confirmed as contaminated. The new director of SMAC reported to Mine Action Review that while SMAC is in support of the use of high quality non-technical survey (NTS) to identify areas suspected of containing CMR, it will fully clear these areas, rather than using technical survey to more accurately identify the boundaries of these confirmed hazardous areas (CHAs).

Operators
SMAC does not itself carry out clearance or employ deminers but does conduct survey of areas suspected to contain mines, CMR, or other explosive remnants of war (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. NPA personnel seconded to SMAC have previously conducted all surveys in Serbia.

NPA conducted both NTS and technical survey in 2015, but did not conduct CMR clearance. During technical survey operations from March to September 2015, NPA employed a total of 19 demining personnel. During the remainder of 2015, NPA’s NTS capacity comprised of either one NPA team leader (seconded to SMAC) or one NPA team leader and one surveyor from NPA’s Bosnia and Herzegovina programme, depending on SMAC’s monthly plans.

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 the possibility of the system’s future installation with the Geneva International Centre for Humanitarian Demining (GICHD).
**LAND RELEASE**

Total CMR-contaminated area released by clearance in 2015 is not known as SMAC has declined to provide the requested data to Mine Action Review. What is known, as reported by NPA, is that 1.41km² was reduced by technical survey in 2015, and a further 1km² was cancelled by NTS.

**Survey in 2015**

NTS, which was conducted by an NPA survey team seconded to SMAC, resulted in the cancellation of three SHAs in 2015, totalling just over 1km². In addition, technical survey resulted in more than 1.4km² of land being reduced, and 0.6km² of land in three areas being confirmed as CMR-contaminated.

During technical survey, 233 BLU-97 submunitions were detected by NPA, which were removed by the Sector for Emergency Management of the Ministry of Interior of Serbia.

**Table 2: Survey of CMR-contaminated area in 2015**

<table>
<thead>
<tr>
<th>Village</th>
<th>Municipality</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>Popovac</td>
<td>Crventi Krst</td>
<td>1</td>
<td>126,460</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sjenica</td>
<td>Sjenica</td>
<td>1</td>
<td>869,346</td>
<td>1</td>
<td>177,120</td>
<td>519,874</td>
</tr>
<tr>
<td>Vojka</td>
<td>Stara Pazova</td>
<td>1</td>
<td>9,222</td>
<td>0</td>
<td>0</td>
<td>240,724</td>
</tr>
<tr>
<td>Cedovo</td>
<td>Sjenica</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>89,450</td>
</tr>
<tr>
<td></td>
<td>Sjenica</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>89,450</td>
<td>216,250</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>3</td>
<td>1,005,028</td>
<td>3</td>
<td>604,961</td>
<td>1,407,827</td>
</tr>
</tbody>
</table>

**Clearance in 2015**

It is not known how much CMR-contaminated area was released by clearance in 2015, as SMAC has elected not to make available the requested data to Mine Action Review. Information on the SMAC website, though, suggests that two CMR clearance projects were completed in 2015: 129,843m² of contamination was cleared in the municipality of Sjenica by the clearance contractor Saturnia d.o.o. Belgrade, and a further 50,312m² were cleared in the city of Nis, by the clearance contractor "Stop Mines".

SMAC had planned to clear CMR on some 0.26km² in Niš, Raška, and Sjenica municipalities in 2015. This was to be achieved through two tasks funded by the United States (0.18km²); one Serbia-Montenegro Air Traffic Control-funded task (70,000m²); and one project funded by the Russian Federation (8,600m²). Russia has been funding a three-year demining programme in Serbia, which was due to end in 2015. The programme, which is implemented by Emercom, involves a joint Russian-Serbian team conducting CMR and other UXO clearance in Serbia. It is not certain whether, or to what extent, these clearance projects were completed in 2015.

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23 Email from Jovica Simonovic, SMAC, 18 May 2016.
24 Email from Darvin Lisica, NPA, 13 April 2016.
25 Ibid., and responses to questionnaire by Miroslav Pisarevic, Project Manager, Humanitarian Disarmament Programme, NPA, Serbia, 19 March and 30 June 2015.
26 Emails from Darvin Lisica, NPA, 13 April and 12 June 2016.
27 Email from Darvin Lisica, NPA, 13 April 2016.
28 Email from Jovica Simonovic, SMAC, 18 May 2016.
30 Emails from Branislav Jovanovic, SMAC, 23 March and 18 June 2015.
31 Email from Branislav Jovanovic, SMAC, 23 March 2015.
In 2014, three operators (two Croatian companies, DOK-ING Razminiranje and PIPER, and a Russian state agency) cleared just under 0.29km² of CMR-contaminated area.\(^{32}\)

**Progress in 2016**

In 2016, NPA had planned to support SMAC with NTS, through the secondment of one NTS team, and to continue with technical survey operations, over 1.34km² of SHA.\(^{33}\) However, as at the beginning of May 2016, despite donor funding having been granted, NPA had still not been assigned any survey tasks by SMAC, and as far as NPA was aware, neither had other clearance operators in Serbia.\(^{34}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>0.29</td>
</tr>
<tr>
<td>2013</td>
<td>2.40</td>
</tr>
<tr>
<td>2012</td>
<td>1.42</td>
</tr>
<tr>
<td>2011</td>
<td>1.15</td>
</tr>
<tr>
<td>2010</td>
<td>0.81</td>
</tr>
<tr>
<td>Total</td>
<td>6.07</td>
</tr>
</tbody>
</table>

**ARTICLE 4 COMPLIANCE**

Serbia is not a party or signatory to the CCM and therefore does not have a specific clearance deadline under Article 4. Nonetheless, Serbia has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.\(^{35}\)

In 2010–13, significant progress was made in clearing CMR-contaminated areas. In 2014, however, progress stalled and the small area cleared during the year marked the lowest annual figure for CMR in the last five years. As Table 3 indicates, Serbia is not respecting its duty to clear CMR-contaminated areas “as soon as possible”.

According to the SMAC website, only 0.18km² of CMR-contaminated land appears to have been cleared in 2015, but total clearance figures for the year have not been reported by SMAC. Furthermore, in 2016, CMR survey and clearance operators were awaiting tasking orders from SMAC. As at May 2016 it was unclear if any CMR survey or clearance had commenced.\(^{37}\)

SMAC is funded by Serbia.\(^{38}\) In 2015, SMAC provided equipment to NPA, including metal detectors, radios, GPS handsets, vegetation removal equipment, and office equipment, to support NPA’s technical survey work.\(^{39}\)

According to SMAC, clearance progress is contingent on funding. In March 2015, Serbia predicted that if adequate funds for implementation of survey and clearance projects were secured, CMR clearance could be finished in three years.\(^{40}\) However, in February 2016, SMAC’s new director declined to predict when CMR clearance would be completed.\(^{41}\)

\(^{32}\) Ibid.
\(^{33}\) Email from Darvin Lisica, NPA, 13 April 2016.
\(^{34}\) Email from Darvin Lisica, NPA, 6 May 2016.
\(^{35}\) Serbia is a state party to the 1996 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: “Every human being has the inherent right to life.”
\(^{37}\) Email from Darvin Lisica, NPA, 6 May 2016.
\(^{39}\) Email from Darvin Lisica, NPA, 13 April 2016.
\(^{40}\) Email from Branislav Jovanovic, SMAC, 23 March 2015.
\(^{41}\) Interview with Jovica Simonovic, SMAC, in Geneva, 18 February 2016.
SOUTH SUDAN

RECOMMENDATIONS FOR ACTION

- South Sudan should ensure that every effort is made to identify and address all cluster munition remnants (CMR) on its territory as soon as possible.
- South Sudan should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Operator and national reporting formats should disaggregate submunitions from other unexploded ordnance (UXO). Mine action data should be recorded and reported according to International Mine Action Standards (IMAS) land release terminology.

PROGRAMME PERFORMANCE 2015

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

PERFORMANCE SCORE: AVERAGE 5.8
At the end of 2015, South Sudan had a total of 116 areas suspected to contain CMR, with a total size estimated at more than 6.5 km². Areas of CMR contamination from decades of pre-independence conflict continued to be identified in 2015, and the threat was compounded by the fighting which broke out in December 2013.

Despite the signature of the Agreement on the Resolution of the Conflict in the Republic of South Sudan in August 2015, the UN Mine Action Service (UNMAS) reported that sporadic fighting continued across the country in 2016, which it said “continues to litter vast swathes of land, roads and buildings with Explosive Remnants of War (ERW)”. Ongoing insecurity, particularly in Greater Upper Nile region (Jonglei, Unity, and Upper Nile states), persisted in preventing access to confirm or address CMR contamination.

Eight of the ten states in South Sudan have areas suspected to contain CMR (see Table 1); Central, Eastern, and Western Equatoria remain the most heavily contaminated. CMR have been found in residential areas, farmland, pastures, rivers and streams, on hillsides, in desert areas, in and around former military barracks, on roads, in minefields, and in ammunition storage areas.

From 1995 to 2000, prior to South Sudan’s independence, Sudanese government forces are believed to have air dropped cluster munitions sporadically in southern Sudan. Many types of submunitions have been found, including Spanish-manufactured HESPIN 21, US-manufactured M42 and Mk118 (Rockeyes), Chilean-made PM-1, and Soviet-manufactured PTAB-1.5 and AO-1SCh submunitions.

Since 2006, more than 770 sites containing CMR have been identified across all 10 states in South Sudan, including new contamination as a result of renewed conflict since December 2013. As at the end of 2014, UNMAS reported that 108 known dangerous areas containing CMR remained. In 2015, an additional 70 CMR-contaminated areas were identified in seven states. Of these, 26 were cleared during the year.

UNMAS discovered evidence of new CMR contamination in February 2014, south of Bor in Jonglei state. Evidence indicated the cluster munitions had been used in previous weeks during the conflict between opposition forces supporting South Sudan’s former Vice President Riek Machar and the Sudan People’s Liberation Army (SPLA) government forces, which received air support from Uganda. In September 2014, South Sudan reported that a joint government-UNMAS team had investigated the allegations and established that cluster munitions had been used, but could not determine the user.

CMR 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. In May 2016, Mines Advisory Group (MAG), which conducted CMR survey and clearance in South Sudan in 2015, reported that clearance in and around Juba county, as well as in parts of Eastern Equatoria state, had begun to address some of the humanitarian impacts of CMR contamination, and allowed for the delivery of food aid by the World Food Programme and the release of land for agriculture and cattle farming.

Other ERW and Landmines

South Sudan has a significant problem with mines and especially ERW, resulting from large-scale use of explosive weapons during armed conflicts in 1955–72 and 1983–2005. The legacy of protracted conflict has meant that nearly eight million people in South Sudan live in areas where the presence of mines and ERW threatens their safety. In 2016, UNMAS 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 was “incalculable.”

Table 1: CMR contamination by province as at the end of 2015

<table>
<thead>
<tr>
<th>Province</th>
<th>SHAs with CMR</th>
<th>Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Equatoria</td>
<td>44</td>
<td>2,527,992</td>
</tr>
<tr>
<td>East Equatoria</td>
<td>45</td>
<td>2,411,127</td>
</tr>
<tr>
<td>Jonglei</td>
<td>5</td>
<td>121,917</td>
</tr>
<tr>
<td>Lakes</td>
<td>3</td>
<td>920,186</td>
</tr>
<tr>
<td>Unity</td>
<td>1</td>
<td>40,000</td>
</tr>
<tr>
<td>Upper Nile</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>West Bahr El Ghazal</td>
<td>2</td>
<td>55,962</td>
</tr>
<tr>
<td>West Equatoria</td>
<td>14</td>
<td>462,210</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>116</strong></td>
<td><strong>6,539,394</strong></td>
</tr>
</tbody>
</table>

South Sudan should develop a resource mobilisation strategy and initiate dialogue with development partners on long-term support for mine action, including a specific focus on CMR contamination.

South Sudan should increase its financial support for mine action operations. Greater assistance from the government and international partners should be provided to the National Mine Action Authority (NMAA) to strengthen its capacity to develop effective policies to address explosive hazards.
PROGRAMME MANAGEMENT

The South Sudan Demining Authority (SSDA) — now named the National Mine Action Authority (NMAA) — was established by presidential decree in 2006 to act as the national agency for coordination, planning, and monitoring of mine action in South Sudan.18

UN Security Council Resolution 1996 of 2011 tasked UNMAS with supporting South Sudan in demining and strengthening the capacity of the NMAA. UNMAS (with the NMAA) has been overseeing mine action across the country through its main office in Juba, and sub-offices in Bentiu, Bor, Malakal, and Wau. UNMAS is responsible for accrediting mine action organisations, drafting national mine action standards, establishing a quality management system, managing the national database, and tasking operators.21 The NMAA takes the lead on victim assistance and risk education.21

While it is planned that eventually the NMAA will assume full responsibility for all mine action activities, South Sudan’s national strategic plan for mine action for 2012–16 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”.22 UN Security Council Resolution 1996 authorised the UN Mission in South Sudan (UNMISS) to support mine action through assessed peacekeeping funds.23

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.

Strategic Planning

UNMAS reported that there were no significant changes in 2015 to the current national mine action strategic plan for 2012–16, which was developed by the NMAA with assistance from the UN and the Geneva International Centre for Humanitarian Demining (GICHD).24 The main objectives of the plan are 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 reducing poverty and increasing socio-economic development by being mainstreamed into development programmes.25

In June 2016, UNMAS reported that a new national mine action strategic plan was under development and would be presented in January 2017.26

1 Email from Robert Thompson, Chief of Operations, UN Mine Action Service (UNMAS), 21 April 2016.
4 Ibid.
5 Email from Robert Thompson, UNMAS, 21 April 2016.
8 Email from Robert Thompson, UNMAS, 12 May 2014.
9 Response to questionnaire by Robert Thompson, UNMAS, 30 March 2015.
10 Email from Robert Thompson, UNMAS, 14 June 2016.
12 Email from Robert Thompson, UNMAS, 21 April 2016. This is a discrepancy of two SHAs from the total number of SHAs UNMAS reported remaining as of end 2014, following the identification of 70 new CMR-contaminated areas and the clearance of a total of 64 SHAs, which UNMAS reported for 2015 (116 compared to 114).
13 On 7 February 2014, UNMAS UXO survey teams discovered remnants of RBK-250–275 cluster bombs and unexploded AO-15Ch submunitions on the Juba–Bor road, south of Bor in Jonglei state. The RBK-type cluster munitions are air-delivered weapons, dropped by fixed-wing aircraft or helicopters. Both Uganda and the South Sudanese government forces are believed to possess aircraft that can deliver these weapons, whereas opposition forces do not. UNMAS, “Conflict in South Sudan: A Human Rights Report”, 8 May 2016, pp. 26–27, and Cluster Munition Monitor, “Country Profile: South Sudan: Cluster Munition Ban Policy”, updated 16 August 2014.
14 Statement by South Sudan, CCM Fifth Meeting of States Parties, San José, 3 September 2014.
15 Emails from Robert Thompson, UNMAS, 21 April 2016, and Hilde Jørgensen, Desk Officer for Horn of Africa, NPA, 19 May 2016.
16 Email from Bill Marsden, Regional Director East and Southern Africa, MAG, 12 May 2016.
17 Email from Robert Thompson, UNMAS, 21 April 2016.
19 “South Sudan De-Mining Authority”, undated, at: http://www.goss-online.org/.
21 Response to questionnaire by Robert Thompson, UNMAS, 24 May 2013.
26 Email from Robert Thompson, UNMAS, 14 June 2016.
Standards
The National Technical Standards and Guidelines (NTSG) for mine action in South Sudan were updated in October 2015.27 According to UNMAS, the NTSGs cover CMR survey and clearance.28 The new NTSGs are monitored by UNMAS and the NMAA.29

Operators
Four international demining non-governmental organisations (NGOs) operated in South Sudan in 2015: DanChurchAid (DCA), Danish Demining Group (DDG), MAG, and Norwegian People’s Aid (NPA). Four commercial companies also conducted demining: G4S Ordnance Management (G4S), Mechem, Dynasafe MineTech Limited (DML) (formerly MineTech International, MTI), and The Development Initiative (TDI). No national demining organisations were involved in clearance in 2015.30

LAND RELEASE
In 2015, just over 1.4km² of CMR-contaminated area was released, of which almost all was released by clearance.31 In 2014, 1.4km² was similarly released, of which 1.28km² was released through clearance and 0.12km² cancelled through non-technical survey (NTS).32

Survey in 2015
The UNMAS database indicates that just over 1.35km² of land was confirmed as contaminated with CMR and 500m² was cancelled by NTS for 2015 (see Table 2).33 This is a slight decrease from 2014, when a total of 1.4km² of land was confirmed CMR contaminated and 0.12km² was cancelled by NTS.34 UNMAS reported that of the 70 areas confirmed by survey to contain CMR in 2015, 26 were cleared during the year.35

Table 2: CMR survey in 201540

<table>
<thead>
<tr>
<th>Operator</th>
<th>SHAs cancelled</th>
<th>Area cancelled (m²)</th>
<th>SHAs confirmed</th>
<th>Area confirmed (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNMAS</td>
<td>1</td>
<td>500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>G4S</td>
<td>0</td>
<td>0</td>
<td>29</td>
<td>428,825</td>
</tr>
<tr>
<td>MAG</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>58,492</td>
</tr>
<tr>
<td>SIMAS</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>101</td>
</tr>
<tr>
<td>DML (MTI)</td>
<td>0</td>
<td>0</td>
<td>13</td>
<td>43,009</td>
</tr>
<tr>
<td>NPA</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>275,214</td>
</tr>
<tr>
<td>TDI</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>548,602</td>
</tr>
<tr>
<td>Totals</td>
<td>1</td>
<td>500</td>
<td>70</td>
<td>1,354,243</td>
</tr>
</tbody>
</table>

Table 3: Clearance of CMR-contaminated areas in 201541

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>Submunitions destroyed</th>
<th>APM destroyed</th>
<th>AVM destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCA53</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>DDG</td>
<td>3</td>
<td>13,704</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>G4S</td>
<td>14</td>
<td>1,144,459</td>
<td>558</td>
<td>0</td>
<td>1</td>
<td>46</td>
</tr>
<tr>
<td>MAG</td>
<td>1</td>
<td>10,545</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mechem</td>
<td>1</td>
<td>9,544</td>
<td>58</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>DML (MTI)34</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>NPA</td>
<td>2</td>
<td>154,186</td>
<td>592</td>
<td>1</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>TDI</td>
<td>3</td>
<td>75,655</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Totals</td>
<td>38</td>
<td>1,408,093</td>
<td>1,235</td>
<td>2</td>
<td>1</td>
<td>88</td>
</tr>
</tbody>
</table>

APM = anti-personnel mine  AVM = anti-vehicle mine
Clearance in 2015

Just over 1.4km² of CMR-contaminated area was cleared in 2015, with the destruction of more than 1,200 submunitions, as shown in Table 3. This is an increase from 2014 when almost 1.28km² was cleared with 254 submunitions destroyed. In addition, in 2015 eight operators (DCA, DDG, G4S, MAG, Mechem, DML, NPA, and TDI) conducted battle area clearance (BAC) of almost 4.5km² and closed a total of 1,784 spot tasks, destroying nearly 27,400 items of UXO in the process. This is a slight decrease from the 5.57km² of BAC in 2014.

ARTICLE 4 COMPLIANCE

South Sudan is not a state party or signatory to the CCM. Nonetheless, South Sudan has obligations under customary international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect those under its jurisdiction. Due to the ongoing conflict, it is not possible to predict when South Sudan might complete clearance of CMR on its territory, nor estimate the true extent of contamination. The National Mine Action Strategic Plan 2012–2016 includes as a specific objective that South Sudan become a state party to the CCM, approve national implementing legislation, and develop policy dialogue with partners to mobilise resources.

UNMAS reported in April 2016 that it did not foresee major changes, and pledged to continue to support UNMISS’s mandate. NPA expected an increase in funding in 2016, which would enable it to add two NTS/technical survey teams. It planned to focus on releasing CMR-contaminated land needed for settlement and agriculture in Greater and Eastern Equatoria states, noting that survey would be conducted in the northern regions once the security situation improved. Due to ongoing conflict and security challenges in the northern states of South Sudan, MAG planned to concentrate operations in Central and Eastern Equatoria states in 2016, with the aim of these areas becoming free from ERW within five years. New donors would enable it to conduct more NTS in 2016, with five community liaison teams and five technical teams deployed to ensure all hazardous areas have been recorded. It expected survey to identify more SHAs and CHAs with CMR.

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28 Email from Robert Thompson, UNMAS, 21 April 2016; and responses to questionnaires by Robert Thompson, UNMAS, 30 March 2015; and Augustino Seja, NPA, 11 May 2015.
29 Email from Hilde Jørgensen, NPA, 19 May 2016.
30 Email from Robert Thompson, UNMAS, 21 April 2016. MIT changed its name to DML on 3 August 2015. Dynasafe, “History of MineTech”, at: http://www.minetech.co.uk/who-we-are/history-of-minetech/.
31 Emails from Hilde Jørgensen, NPA, 19 May 2016.
32 Email from Bill Marsden, MAG, 12 May 2016.
33 Emails from William Maina, DDG, 6 and 19 May 2016.
34 Email from Stephen Saffin, Chief Operating Officer, TDI, 30 May 2016.
35 Email from Robert Thompson, UNMAS, 14 June 2016.
36 Email from Robert Thompson, UNMAS, 21 April 2016.
37 Response to questionnaire by Robert Thompson, UNMAS, 30 March 2015.
38 Email from Robert Thompson, UNMAS, 21 April 2016.
39 Response to questionnaire by Robert Thompson, UNMAS, 30 March 2015.
40 Email from Robert Thompson, UNMAS, 14 June 2016.
41 Emails from Robert Thompson, UNMAS, 14 June 2016; Bill Marsden, MAG, 12 May 2016; Hilde Jørgensen, NPA, 19 May 2016; and Damir Paradzik, Operations/QA Manager, DML, 2 June 2016. MAG reported confirming 10 SHAs with a total size of 166,877m² in 2015. NPA reported confirming three SHAs with a total size of 314,116m² through survey in 2015.
42 Emails from Robert Thompson, UNMAS, 21 April 2016; Bill Marsden, MAG, 12 May 2016, Hilde Jørgensen, NPA, 19 May 2016, William Maina, DDG, 19 May 2016, and Damir Paradzik, DML, 2 June 2016. MAG reported clearing one area of CMR contamination with a size of 9,255m² and the destruction of 64 submunitions and 97 other items of UXO in 2015. NPA reported clearing six areas with a total size of 596,070m² and destroying 386 submunitions and 15 other items of UXO.
43 DCA did not conduct area clearance in 2015. According to UNMAS, in the 11 areas reported as cleared by DCA no contamination was found. Email from Robert Thompson, UNMAS, 14 June 2016.
44 No area is reported as cleared as these were CMR destroyed in spot tasks. Email from Robert Thompson, UNMAS, 14 June 2016.
45 Email from Robert Thompson, UNMAS, 21 April 2016.
46 Response to questionnaire by Robert Thompson, UNMAS, 30 March 2015.
47 Email from Robert Thompson, UNMAS, 21 April 2016.
48 Response to questionnaire by Robert Thompson, UNMAS, 30 March 2015.
50 Email from Robert Thompson, UNMAS, 21 April 2016.
51 Emails from Hilde Jørgensen, NPA, 19 May 2016.
52 Email from Bill Marsden, MAG, 12 May 2016.
RECOMMENDATIONS FOR ACTION

- Sudan should ensure its armed forces do not use cluster munitions and should urgently address the humanitarian threat from any new cluster munition remnants (CMR). Sudan should investigate and publicly report on the allegations of cluster munition use in 2012 and 2015.
- Sudan should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.

PROGRAMME PERFORMANCE 2015

- Problem understood: 3
- Target date for completion of cluster munition clearance: 3
- Targeted clearance: 4
- Efficient clearance: 5
- National funding of programme: 5
- Timely clearance: 4
- Land-release system in place: 7
- National mine action standards: 7
- Reporting on progress: 4
- Improving performance: 6

PERFORMANCE SCORE: POOR 4.8
SUDAN

CONTAMINATION

The exact extent of contamination from CMR in Sudan is not known. There have been reports of new use of cluster munitions as recently as 2015, as well as in 2012. The most current estimate of contamination dates back to June 2011, when the United Nations Mine Action Office (UNMAO) reported nine areas suspected to be contaminated with unexploded submunitions. UNMAO asserted that 81 areas had been released (see Table 1). In June 2016, however, NMAC claimed that no CMR-contaminated areas were “recorded as remaining hazards to be cleared.” It reported that no separate survey or clearance operations for CMR occurred in 2015 and stated that no cluster munitions had been found in all mine actions “to date.”

The UN Mine Action Service (UNMAS), which resumed lead responsibility within the UN system for mine action coordination in Sudan in 2015, confirmed that no CMR survey or clearance had occurred during that year and stated that no new reports of CMR contamination had been recorded in the national database.

The Sudanese National Mine Action Centre (NMAC), which assumed full national ownership for implementing mine action activities upon UNMAO’s closure in June 2011, has not provided updated information on the reported nine open areas contaminated with CMR. NMAC has been unable to confirm how much land was cleared of CMR from 2011 to 2016, or how many submunitions were destroyed. In 2016, though, it did respond to requests for information by Mine Action Review for the first time.

Table 1: CMR-contaminated areas as at June 2011

<table>
<thead>
<tr>
<th>State</th>
<th>Open</th>
<th>Closed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kassala</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>South Kordofan</td>
<td>2</td>
<td>68</td>
<td>70</td>
</tr>
<tr>
<td>Blue Nile</td>
<td>0</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Northern Darfur</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Southern Darfur</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>9</strong></td>
<td><strong>81</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

In the 1990s, Sudanese government forces are believed to have sporadically air dropped cluster munitions in its civil war with the Sudan People’s Liberation Movement/Army (SPLM/A). Government forces were reported as having used several types of cluster munitions, including Spanish-manufactured HESPIN 21; US-manufactured M42 and Mk118 (Rockeye), and a Brazilian cop; Chinese Type-81 dual-purpose improved conventional munitions (DPCM); Chilean-made PM-1; and Soviet-manufactured PTAB-1.5 and AO-15Ch submunitions.

In 2012 and 2015, use of cluster munitions was recorded in five separate attacks on villages in South Kordofan state. Each attack involved air-dropped RBK-500 cluster munitions containing AO-2.5RT submunitions. In 2013–15, the UN published reports of evidence of previous use of cluster munitions in Darfur, the stockpiling of RBK-500 cluster munitions and AO-2.5RT submunitions by the Sudanese Air Force, and fluctuating stock levels indicative of use for operations or for training.

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2 The locations are based on a review of sites in the UNMAO database by Mine Action Review.
3 Email from Ahmed Elser Ahmed Ali, Chief of Operations, NMAC, 8 June 2016.
4 Ibid.
5 Email from Javed Habibulhaq, Programme Manager, UNMAS, 2 June 2016.
6 The NMAC’s website is at: http://su-mac.org/.
7 Email from Mohamed Kabir, Chief Information Officer, UNMAO, 27 June 2011.
9 See Cluster Munition Monitor, “Country Profile: Sudan. Cluster Munition Ban Policy”, updated 23 August 2014. In 2012, use of cluster munitions was alleged in Troj and Ongolo villages, in South Kordofan, in February and April. In 2015, Human Rights Watch published evidence that Sudanese government forces used RBK-500 cluster munitions in attacks on villages in Delami and Um Durein counties in South Kordofan’s Nuba mountains in February and March. In May 2015, the Sudanese Air Force was reported to have used cluster bombs, whose submunitions failed to explode as intended, in an attack on the town of Kauda in South Kordofan. The munitions used in all of the attacks contained AO-2.5RT submunitions.
The Government of Sudan has denied using cluster munitions in the attacks in South Kordofan on several occasions. The UN Secretary-General called on the Government of Sudan "to immediately investigate the use of cluster munitions". In June 2016, NMAC even claimed that Sudan had never used cluster munitions "in operations against rebels". This is not a factually accurate statement.

**Other ERW and Landmines**

Sudan also has a significant problem with anti-personnel mines, anti-vehicle mines, and UXO, primarily as a result of more than 20 years of civil war, which led to the Comprehensive Peace Agreement in 2005 and the independence of South Sudan in July 2011. According to NMAC, 19 persons were killed and 34 injured by mines and ERW in 2015.

**PROGRAMME MANAGEMENT**

The Sudanese National Mine Action Authority (NMAA) and NMAC manage Sudan’s mine action programme. In 2005, UN Security Council Resolution 1590 and the Comprehensive Peace Agreement established the legal framework for UNMAO to manage quality assurance (QA) of all mine action activities in Sudan in the frame of the UN Mission in Sudan (UNMIS). The same year, the NMAC initiated a partnership with UNMAO, the NMAA was set up, and a National Mine Action Policy Framework was developed, revised, and then approved by August 2006.

Following UNMIS and UNMAO’s closure in July 2011 upon the independence of South Sudan, NMAC assumed full ownership of national mine action with responsibility for coordinating all mine clearance, including accreditation and certification of mine clearance agencies. In January 2015, UNMAS, which had opened an emergency programme in Sudan in 2002, reassumed its lead in UN mine action efforts in Sudan and its role in providing assistance and technical support to NMAC, after a one-year handover to the UN Development Programme in 2014.

In Darfur, under the umbrella of UNAMID, UNMAS works under the name of the Ordnance Disposal Office (ODO) in direct support of UNAMID priorities. In 2012, UNAMID contracted The Development Initiative (TDI), a commercial company, to assess, survey, identify, mark, and clear contamination in all five Darfur states. TDI's activities depend on availability of security forces and permission from the government of Sudan and the UN Special Representative for Political Affairs. Mine action in Darfur is funded through assessed peacekeeping funds for UNAMID.

**Strategic Planning**

Sudan has a multi-year National Mine Action Plan for 2013–19. According to NMAC, the plan was designed in light of the overall security situation in Sudan and the capacity for mine action and available demining assets. The plan includes details of operations for addressing contamination in all affected states by year, with a focus on the eastern states of Gadaref, Kassala, and Red Sea, and parts of Blue Nile. When security permits, work will start accordingly in South Kordofan and the remainder of Blue Nile.

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13 Email from Ahmed Elser Ahmed Ali, NMAC, 8 June 2016.
17 Email from Javed Habibulhaq, UNDP, 11 May 2015.
18 Revised Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline Extension Request, 30 July 2013, p. 6.
19 Ibid.
20 Email from Javed Habibulhaq, UNMAS, 13 June 2016.
22 Ibid.
23 Ibid.
25 Revised Article 5 deadline Extension Request, 30 July 2013, pp. 28–33.
NMAC reported an annual operational plan for 2015 was developed, which included clear objectives, inputs and outputs, timeframes, and budgets, in accordance with the multi-year National Mine Action Plan and in consultation with relevant stakeholders. In May 2016, however, NMAC said it was not possible to implement the activities according to the plan, primarily due to lack of funding and the security situation in South Kordofan and Blue Nile.\(^{26}\)

**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.\(^ {27}\) A year later, in May 2016, NMAC reported that the NMAS had been finalised but were awaiting final approval. According to NMAC, draft standards are shared with all partners and mine action operators during their accreditation process, but do not contain a specific chapter on cluster munitions.\(^ {28}\)

**Operators**

In 2015, no international non-governmental organisations (NGOs) were demining in Sudan. One international NGO, Association for Aid and Relief Japan (AAR Japan), carried out risk education, along with national NGOs Friends of Peace and Development Organization (FPDO) and JASMAR for Human Security. The only international operator to carry out clearance activities in 2015 was TDI, which carried out explosive ordnance destruction (EOD) tasks in Darfur in support of UNAMID, and deployed four multi-task teams (MTTs) totalling approximately 66 people.\(^ {29}\) In 2015, TDI reported continuing efforts to train national demining teams. TDI’s MTT contract, which was up for re-tender in 2015, was won by MineTech International (MTI) for 2015/2016.\(^ {30}\)

In 2015, NMAC called for other international NGO operators to undertake mine action in Sudan.\(^ {31}\) Previously, two international mine clearance NGOs with programmes in Sudan closed down operations owing to government restrictions that impeded their operations.\(^ {32}\) DanChurchAid (DCA) ended its operations in 2012.\(^ {33}\) 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.\(^ {34}\) Following months of negotiations with HAC and donors, MAG ended its operations in Sudan, leaving in early 2013.\(^ {35}\)

National demining operators are JASMAR for Human Security, National Units for Mine Action and Development (NUMAD), and FPDO.\(^ {36}\) In 2015, a total of six manual clearance teams and one mine detection dog (MDD) team were deployed for mine action operations. This was a reduction in capacity from 2014, when NMAC reported that in addition to the six manual clearance teams, three MDD teams and a mechanical team were also operational.\(^ {37}\)

**Quality Management**

According to NMAC, a quality assurance (QA) system was operational from 2006 with three regionally based QA teams of one to two persons each. The teams are based in Damazeen, Kassala, and Kadugli, as well as in Khartoum, with each team responsible for one to three states.\(^ {28}\) In May 2016, NMAC reported that its quality management section regularly monitors all field operations and conducted eight quality management visits to the field in 2015.\(^ {38}\) TDI confirmed that an internal QA process was in place, and that its teams also received QA visits from UNMAS and NMAC during the year.\(^ {39}\)

**Information Management**

NMAC reported that database clean-up began in January 2013 as part of preparations to transfer to an upgraded version of IMSMA. It expected the process to have no effect on areas reported as cleared in the database but would affect the amount of cancelled areas recorded, which it said “will be incorporated into the database and in turn will minimise the difference reflected between areas cleared and the size of total hazards closed”. Sudan’s IMSMA database does not contain information on the disputed Abyei area.\(^ {40}\)

In 2014, discussions were underway with an international donor to provide in-kind support for information management and for an updated version of IMSMA to be installed – a priority for NMAC. The updated version could not be imported, however, due to its geographic information system (GIS) function, which is subject to United States (US) import restrictions.\(^ {41}\)

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26 Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.
29 Email from Javed Habibulhaq, UNDP, 6 April 2015; APMBC Article 7 Report (for 2014), Form A, p. 16; and email from Stephen Saffin, Chief Operating Officer, TDI, 30 May 2016.
30 Email from Stephen Saffin, TDI, 30 May 2016.
31 APMBC Article 7 Report (for 2014), Form A, p. 16.
32 ICBL, “ICBL Comments on Sudan’s Article 5 Extension Request”, May 2013.
34 "Sudan causes frustration among NGOs”, News 24, 13 June 2012.
35 MAG, “MAG departs Sudan after six years of work to remove remnants of conflict”, 7 March 2013.
36 Email from Javed Habibulhaq, UNDP, 2 June 2016.
38 Revised APMBC Article 5 Extension Request, 30 July 2013, p. 21.
40 Email from Stephen Saffin, TDI, 30 May 2016.
41 Email from Javed Habibulhaq, UNDP, 11 May 2015.
In June 2016, UNMAS reported that the new version of IMSMA will finally be imported to Sudan and that the embargo issue had been resolved with the support of the US Embassy in Khartoum and the Geneva International Centre for Humanitarian Demining. It stated that Sudan should receive the new IMSMA version and complete the data clean-up process by the end of 2016.\footnote{Email from Javed Habibulhaq, UNMAS, 2 June 2016.} NMAC confirmed that a committee had been formed with UNMAS to finalise the clean-up and that work was ongoing.\footnote{Email from Ahmed Elser Ahmed Ali, NMAC, 8 June 2016.}

## LAND RELEASE

No data was available on any CMR clearance in 2015. NMAC does not distinguish between different types of ERW in its reporting on clearance and is unable to confirm how much land was cleared of CMR since it was established in 2011, nor how many submunitions were destroyed.

As stated above, according to UNMAS and NMAC, no CMR clearance occurred in 2015 and no new CMR contamination was recorded in the IMSMA database.\footnote{Emails from Javed Habibulhaq, UNMAS, 2 June 2016; and Ahmed Elser Ahmed Ali, NMAC, 8 June 2016.} Since June 2011, ongoing conflict has prevented mine action activities from being carried out in South Kordofan, thought to be the most heavily CMR-contaminated state, and Blue Nile, which is also believed to be heavily contaminated with mines and ERW. NMAC reported that as soon as the security situation improves mine clearance would restart.\footnote{APMBC Article 7 Report (for 2014), Form A, pp. 14–15.}

In 2015, NMAC reported a total of nearly 1.25km² of battle area clearance (BAC): 65,250m² of sub-surface clearance and 1.18km² of surface clearance. This was an increase from 2014, when NMAC reported total BAC of 0.57km².\footnote{NMAC, "ISMSA Monthly Report", December 2015.} However, according to NMAC, overall land release in Sudan significantly decreased in 2015 compared to the previous year, from 4.22km² released in 2014 to 1.67km² released in 2015, due to reduced funding for mine action and a corresponding reduction in the number of teams deployed.\footnote{Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.}

TDI reported that its “output remained steady” in 2015 and productivity continued to be enhanced by greater independence of TDI teams from UNAMID escorts and a switch to escorts from the Sudanese Armed Forces and local police, which allowed teams more freedom of movement and a greater ability to reach suspected hazardous areas. It stated that the SAF and police escorts provided excellent support for its teams during the year.\footnote{Email from Stephen Saffin, TDI, 30 May 2016.}

### Deminer Safety

There were no reported accidents involving mine action personnel in 2015. However, one national demining NGO was attacked in 2015, resulting in the loss of a vehicle but no personnel were harmed.\footnote{Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.}
SUDAN

ARTICLE 4 COMPLIANCE

Sudan is not a state party to the Convention on Cluster Munitions. Nonetheless, Sudan has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.51

Under its Anti-Personnel Mine Ban Convention (APMBC) Article 5 clearance deadline extension request, Sudan reported plans to clear all contaminated areas in the states of Darfur, Gedaref, Kassala, and Red Sea by 2016, when clearance was scheduled to begin in Blue Nile and Kordofan states.52 It indicated that a general mine action assessment (GMAA) could be completed in Blue Nile and South Kordofan within six months of the survey beginning (dependent on improved security).53

In May 2016, NMAC stated that a number of international NGOs had expressed an interest in working in Sudan, which it said would further strengthen national capacity and deliver standardised quality of survey and clearance activities. With an increased number of qualified mine action operators and productivity, NMAC said it believed that Sudan could meet its Article 5 deadline for clearance of anti-personnel mine contamination of 1 April 2019 in a “timely manner”.54 However, ongoing conflict and reports of new contamination, along with a lack of any recent data or records of CMR contamination disaggregated from UXO, make it extremely difficult to estimate when Sudan could complete CMR survey and clearance.

According to NMAC, in 2015, the Government of Sudan provided the equivalent of US$1 million for mine action in the country by paying all NMAC staff salaries, and covering the operational cost of NMAC, and some of the deployment costs of the National Demining Units. This is a significant increase from 2014, when the government reportedly contributed a total of SDG3 million (equivalent to almost US$0.5 million).55 In May 2016, NMAC reported funding for the mine action programme had become a key item within the Sudanese national budget.56

According to UNMAS and NMAC, Sudan’s mine action programme requires an operating budget of US$12.4 million to implement its 2016 mine action plan targets, which includes clearance of nearly 1km² of land in Talkok in Kassala state.57 NMAC also reported it expected to clear 25 “dangerous areas” with an estimated size of 5.3km² in South Kordofan state and seven “dangerous areas” covering an estimated 0.88km² in Blue Nile state in 2016. In eastern Sudan, NMAC expected to clear 11 “hazardous areas” over 1.15km².58

Sudan’s national mine action programme was receiving increased funding in 2016, which NMAC ascribed to Sudan’s inclusion in UNMAS’s Portfolio of Mine Action Projects.59 NMAC said that Italy and Japan had already committed funds for Sudan’s mine action programme and hoped this would pave the way for further donor funding.60 In May 2016, NMAC informed states parties to the APMBC that though it had a total of US$4.4 million in funding for mine action activities during the year, it was still US$8 million short of its budget requirements.61

In January 2016, Italy donated €250,000 to UNMAS for mine action in Sudan for a survey, clearance, and risk education project in Kassala state.62 In March 2016, Japan contributed US$2.1 million to UNMAS to survey and clear mines and explosive hazards in Kassala, Red Sea, South Kordofan, and Blue Nile states, in coordination with NMAC. UNMAS expected release of more than 1.5km² of hazardous area as a result of the donation.63

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51 Sudan is a state party to the 1966 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: “Every human being has the inherent right to life”.
52 Revised APMBC Article 5 deadline Extension Request, 30 July 2013, p. 33.
53 Ibid., p. 31.
54 Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.
56 Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.
58 Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.
60 Email from Ahmed Elser Ahmed Ali, NMAC, 9 May 2016.
61 Statement of Sudan, APMBC intersessional meetings (Standing Committee on Mine Action), Geneva, 19 May 2016.
RECOMMENDATIONS FOR ACTION

- Syria should ensure that its armed forces do not use cluster munitions.
- Other states engaged in the armed conflicts in Syria should ensure that their armed forces and any armed groups they support do not use cluster munitions.
- Syria should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Syria should initiate survey and clearance of cluster munition remnants (CMR) as soon as possible and take other measures to protect civilians from explosive remnants of war (ERW).

SYRIA CONTAMINATION

CMR contamination in Syria is the consequence of ongoing armed conflicts since 2012. Syrian government forces have used cluster munitions extensively in the four-year-old conflict while Islamic State (IS) has reportedly used them in a number of instances, but the extent of contamination is not known.

In 2014, Human Rights Watch reported that it had identified 224 separate locations in 10 of Syria’s 14 governorates that had been attacked with cluster munitions by the Syrian government, many of them more than once.¹ Use continued in 2015 and 2016. Between 30 September (when Syria and Russia began a joint military offensive) and 14 December 2015, cluster munitions were reportedly used on at least 20 occasions. At least 35 civilians, including five women and seventeen children, were killed, and dozens more were injured by cluster munitions, according to a report by Human Rights Watch.² In January and February 2016, the Syrian-Russian joint military operation included use of cluster bombs in at least 14 attacks that killed or injured dozens of civilians.³

Other ERW and Landmines

According to the UN Mine Action Service (UNMAS), contamination from the armed conflicts include landmines, improvised explosive devices (IEDs), artisanal mines, some of which are connected to booby traps, and other ERW.⁴ In Kobani, an April 2015 assessment by Handicap International found that the level of weapons contamination in the city centre was extremely high: an average of 10 pieces of munitions per square metre.⁵

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), 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 direct implementation of survey and clearance activities.6

LAND RELEASE

Syria does not have an active civilian programme for survey or clearance of CMR as a result of generalised violence and ongoing armed conflicts. 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."7

Russian deminers arrived in Syria in March 2016. In April, the Russian military reported completing demining of the ancient part of the city of Palmyra, recaptured by Syrian and Russian forces in late March from IS militants.8

ARTICLE 4 COMPLIANCE

Syria is not a state party or signatory to the CCM. Nonetheless, it has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.9

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1 Human Rights Watch, “Technical Briefing Note: Use of cluster munitions in Syria”, 4 April 2014. The governorates were Aleppo, Damascus City and Rural Damascus, Daraa, Deir al-Zour, Hama, Homs, Idlib, Latakia, and Raqqa.


7 Ibid.


9 Syria is a state party to the 1966 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: “Every human being has the inherent right to life.”
TAJIKISTAN

RECOMMENDATION FOR ACTION

→ Tajikistan should accede to the Convention on Cluster Munitions (CCM) as soon as possible.

CONTAMINATION

The last known area of cluster munition remnants (CMR) contamination was cleared in 2015. However, Tajikistan has stated that submunitions may still be encountered in the future, during other survey and clearance operations. Norwegian People’s Aid (NPA) similarly reported that following completion of clearance operations in 2015 CMR contamination in Tajikistan is now “virtually non-existent”, but CMR may be found in new areas or during battle area clearance (BAC) tasks, until NPA and the Tajikistan National Mine Action Centre (TNMAC) have assessed these tasks through non-technical survey (NTS).

Furthermore, the fact that a total of four cluster munition containers were discovered during NPA’s survey and BAC, combined with evidence that the containers had been moved by locals and the total number of CMR destroyed during BAC, indicates that additional CMR contamination may be present in areas close to the suspected hazardous area (SHA) released in 2015. NPA was due to investigate this in 2016, once weather permitted.

Cluster munitions were used during Tajikistan’s civil war in the 1990s, though it is not known who dropped them. In total, since the start of the mine action programme in 2003 until the end of 2015, approximately 750 submunitions were reportedly identified and destroyed in Tajikistan. Prior to 2014, an unexploded submunition was last found in 2011.

In 2014, based on information provided by a member of the local Sagirdasht community, the quality assurance (QA)/quality control (QC) team from TNMAC found one A0-2.5RT submunition in Darvoz district. The QA/QC team subsequently found other submunitions, covering a total area they estimated at 400,000m². During a subsequent field visit by NPA in July 2015, containers for two A0-2.5RT strikes, evidence of submunition detonations, and nine unexploded submunitions were seen in the same area. Subsequently two further empty cluster munition containers were found inside the strike area.

The contaminated land that was cleared in 2015 has been used for pasture during the summer months when the snow has melted, and the nearest village is 15km away. The contaminated area was around 200 metres from the nearest suspected mined area.

Prior to the discovery in 2014 of previously unrecorded CMR contamination, it was believed that only a residual CMR threat remained, in the central region. No further CMR contamination has been reported since 2014.

Other ERW and Landmines

Tajikistan also has hazardous areas containing other unexploded ordnance (UXO) and anti-personnel mines.
PROGRAMME MANAGEMENT

The Commission for the Implementation of International Humanitarian Law (CIIHL) acts as Tajikistan’s national mine action authority, responsible for mainstreaming mine action in the government’s socio-economic development policies.\(^{14}\)

In June 2003, the Government of Tajikistan and the United Nations Development Programme established the Tajikistan Mine Action Centre (TMAC) with a view to it becoming a nationally owned programme in the short term,\(^{15}\) though this did not happen until more than ten years afterwards. TMAC was made responsible for coordinating and monitoring all mine action activities.\(^{16}\) Since then, TMAC has acted as the secretariat for the CIIHL to which it reports.\(^{17}\)

On 3 January 2014, a government decree established TNMAC.\(^{18}\) Prior to this, lack of legal recognition had presented problems for TMAC,\(^{19}\) including, for example, its inability to open a bank account to receive and disburse funds.\(^{20}\) The importance of clarifying TMAC’s status had been highlighted in the 2012 evaluation of UNDP support to mine action in Tajikistan.\(^{21}\) TNMAC reports to the First Deputy Prime Minister of Tajikistan, who chairs the CIIHL. Since its nationalisation TNMAC believes its cooperation with national ministries and agencies has improved.\(^{22}\)

Strategic Planning

The current national mine action strategic plan (NMASP) 2010–15 expired at the end of 2015.\(^{23}\) As at May 2016, the new strategy for 2016–20 had been submitted for comment to relevant government ministries and agencies, after which formal government approval will be sought.\(^{24}\) This approval was expected to be granted in 2016.\(^{25}\) The annual TNMAC work plan for 2016 was approved by the government in December 2015.\(^{26}\) However, the annual plan only includes mine survey and clearance, as no known CMR-contaminated areas remain.\(^{27}\)

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1 Emails from Aubrey Sutherland-Pillai, Country Director, Norwegian People’s Aid (NPA) Humanitarian Disarmament Tajikistan, 6 April; and Muhhabbat Ibrohimzoda, Tajikistan National Mine Action Centre (TNMAC), 19 May 2016.
2 Email from Muhhabbat Ibrohimzoda, TNMAC, 12 May 2015, and interview in Geneva, 18 February 2016.
3 Email from Aubrey Sutherland-Pillai, NPA, 6 April 2016.
4 Email from Sasa Jelicic, Operations Manager, NPA, 16 June 2016.
6 Response to Cluster Munition Monitor questionnaire by Abdulmain Karimov, Tajikistan Mine Action Centre (TMAC), 11 June 2013.
7 Email from Muhhabbat Ibrohimzoda, TNMAC, 3 April 2015.
8 Emails from Daler Mirzoaliev, Operations Manager, NPA, 14 July 2015; and Aubrey Sutherland-Pillai, NPA, 9 July 2015.
9 Email from Aubrey Sutherland-Pillai, NPA, 12 May 2016.
10 Email from Muhhabbat Ibrohimzoda, TNMAC, 12 May 2015.
11 Email from Daler Mirzoaliev, NPA, 14 July 2015.
12 Ibid., and CCM Article 7 Report, 25 March 2011, p. 129.
13 Emails from Aubrey Sutherland-Pillai, NPA, 6 April 2016; and Muhhabbat Ibrohimzoda, TNMAC, 19 May 2016.
14 APMBC Article 5 deadline Extension Request, 31 March 2009, p. 4.
18 Email from Muhhabbat Ibrohimzoda, TNMAC, 3 April 2015.
21 Ibid., pp. 27–29.
22 Email from Muhhabbat Ibrohimzoda, TNMAC, 12 May 2015.
23 Interview with Muhhabbat Ibrohimzoda, TNMAC and Ahad Mahmoudov, UNDP, in Geneva, 23 June 2015.
24 Email from Muhhabbat Ibrohimzoda, TNMAC, 19 May 2016.
25 Interview with Muhhabbat Ibrohimzoda, TNMAC, in Geneva, 18 February 2016.
26 Ibid.
27 Email from Muhhabbat Ibrohimzoda, TNMAC, 19 May 2016.
Legislation and Standards

In 2015, Tajikistan drafted a “Humanitarian Demining Law”, which includes all aspects of mine action. It was expected that the law would be adopted by November 2015. However, as at May 2016 the draft law was awaiting parliamentary approval before being submitted for signature by the President of Tajikistan.

Tajikistan’s National Mine Action Standards (TNMAS), which have been revised and translated into Russian, were awaiting government approval as at May 2016. It was expected that the TNMAS would be approved after approval of the Humanitarian Demining Law. The TNMAS predominantly refer to mines, but also cover UXO including CMR.

Operators

The Swiss Foundation for Mine Action (FSD) and NPA are the two international demining operators in Tajikistan. FSD started operations in 2003, since when it has conducted surveys (in 2004–05 and 2007–09) and clearance; provided technical assistance to TMAC; and, by November 2012, had supported the development of the Union of Sappers of Tajikistan’s capacity. FSD did not conduct any CMR survey or clearance in 2015.

NPA started operations in Tajikistan after signing a Memorandum of Understanding with the government in 2010. NPA’s arrival significantly increased the demining capacity of Tajikistan’s mine action programme and its clearance output. To undertake the CMR clearance in 2015, NPA deployed one female demining team comprising eight deminers, one male demining team comprising seven deminers, two team leaders, and two task supervisors.
LAND RELEASE

In 2015, 446,260 m² of CMR-contaminated area was released by BAC.\(^{37}\) There was no clearance of CMR in 2014.

Survey in 2015

Discovery of new CMR contamination in 2014 resulted in an SHA of 400,000 m² being tasked to NPA for release. A joint field trip by NPA and TNMAC in July 2015, prior to commencement of BAC operations, had recommended the SHA be revised down to 150,000 m².\(^{38}\) However, the suggested revision was subsequently found to be incorrect, due to the imprecise orientation of the SHA polygon, and the estimated size of the SHA, based on the available information, remained at 400,000 m².\(^{39}\)

Clearance in 2015

In 2015, NPA released 446,260 m² of CMR-contaminated land through BAC conducted in July and August (335,181 m² manually cleared and 111,079 m² visually searched). During clearance, 84 AO-2.5RT submunitions and three pieces of UXO (RPG-7) were destroyed, and four cluster bomb containers were discovered.\(^{40}\)

It is thought likely that all four containers may have been moved by locals, and while two of the containers were discovered inside the SHA, BAC teams discovered a third cluster munition container outside of the originally tasked SHA, and a fourth container which had been moved by shepherds to a nearby village. This, combined with the total number of CMR destroyed during BAC, indicates that further CMR contamination may exist in the area/valley adjacent to where NPA completed BAC in 2015.\(^{41}\)

The onset of winter, and adverse weather conditions at the high altitude location of the BAC site, prevented NPA from further investigating this in 2015. However, NPA planned to conduct an assessment in 2016, in order to confirm or eliminate the possibility of further CMR contamination.\(^{42}\)

ARTICLE 4 COMPLIANCE

Tajikistan is not a state party or signatory to the CCM and therefore does not have a specific deadline under Article 4 of the CCM. Nonetheless, Tajikistan has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.

Tajikistan has cleared all known CMR-contaminated areas in the country.\(^{43}\) Further investigation is, though, required in the area adjacent to the last known SHA released in 2015, and the possibility remains that CMR contamination may subsequently be discovered in existing or future battle areas. Tajikistan has reported that if any such contamination is found, it will be swiftly addressed by TNMAC and NPA through BAC.\(^{44}\)
RECOMMENDATIONS FOR ACTION

→ Ukraine should accede to, and abide by, the Convention on Cluster Munitions (CCM).
→ 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 explosive hazards.
→ Ukraine should systematically collect data on mine, cluster munition remnants (CMR), and other explosive remnants of war (ERW) contamination, survey, and clearance, and establish a centralised database that enables its analysis for planning purposes.
CONTAMINATION

The extent of contamination from CMR in Ukraine is not known. Amid the violence that erupted in Ukraine in 2014, evidence suggests that both government and anti-government forces have used cluster munitions. These have included surface-fired Smerch (Tornado) and Uragan (Hurricane) cluster munition rockets, which deliver 9N210 and 9N235 anti-personnel fragmentation submunitions. Evidence of ground-launched cluster munition use in eastern Ukraine first emerged in early July 2014, indicating that 300mm 9M55K cluster munition rockets with 9N235 fragmentation submunitions had been used in Kramatorsk and Slavyansk, in the Donetsk region of eastern Ukraine. These rockets are fired from the 9K58 Smerch multiple-barrel rocket launchers over a maximum range of 90km. On 11 July 2014, photographs taken by the Associated Press (AP) at an insurgent base at Slavyansk showed remnants of at least eight 220mm 9M27K-series cluster munition rockets and at least three submunitions that were either of type 9N210 or 9N235. The rockets are fired from the 9K57 Uragan multi-barrel rocket launcher, which has a maximum range of 35km. According to AP, the remnants at Slavyansk were collected and destroyed by Ukrainian government explosive ordnance disposal (EOD) teams. In October 2014, Human Rights Watch (HRW) documented widespread use of cluster munitions in fighting between government forces and pro-Russian rebels in more than a dozen urban and rural locations in the provinces of Donetsk (central Donetsk, Starobesheve, Makijivka, and Ilovaisk) and Luhansk (Novosvitlivka). In early 2015, the Special Monitoring Mission (SMM) in Ukraine of the Organization for Security and Co-operation in Europe (OSCE) reported finding CMR in the Artemivskiy district of Luhansk city, resulting from two attacks on 27 January. The attacks killed two civilians and injured two others. The OSCE SMM also reported evidence of CMR in Komsomolske, south-east of Donetsk, resulting from an attack on 2 February; and in Kramatorsk, in the north of the Donetsk region, on 10 February. In addition, the Kiev Post reported cluster munitions had been fired on the cities of Mariupol and Kramatorsk in 2015. During a ten-day investigation in eastern Ukraine, HRW found evidence that cluster munition rockets had been used in at least seven localities between 23 January and 12 February 2015, with some hit multiple times. Three of the areas were in government-controlled territory while the other four were in rebel-held territory. Thirteen civilians were killed during these attacks, including at least two children. Ukraine has claimed that many unexploded submunitions contaminate the Donetsk and Luhansk regions, with the most intensive use in and around the city of Debaltsevo in Donetsk oblast. In 2016, Ukraine estimated, highly improbably, that total contamination by explosive ordnance (including CMR) covered more than 7,000km². Ukraine cannot accurately estimate the extent of CMR contamination until the survey process is completed. According to a December 2015 report of the Office of the United Nations High Commissioner for Human Rights (OHCHR), ERW and improvised explosive devices (IEDs) caused 52% of all civilian casualties between

3 Ibid.; and B. Szlanko, "Cargo rockets, 220mm 9M27K or 300mm 9M55K. Abandoned rebel base in #Slavyansk, prob. fired by Ukrainians. #Ukraine", 11 July 2014, tweet (@balintszlanko), at: http://t.col/7xGy4gw9g.
6 OSCE, "Latest from the OSCE SMM to Ukraine based on information received as of 18:00 (Kyiv time), 3 February 2015: civilians killed and wounded in strike with cluster munitions in Izvestkova street in Luhansk city", 3 February 2015; and HRW, "Dispatched: more cluster munition use in Ukraine", 4 February 2015.
16 August and 15 November 2015, underscoring the urgent need for clearance. Danish Demining Group (DDG), which collects casualty data from open media sources, recorded a total of 925 casualties (killed and injured) from mines, CMR, and other ERW between 19 July 2014 and 9 May 2016. Of these, however, only two people were believed to have been killed by submunitions and a further five injured.

Cluster munition use in urban and rural areas of eastern Ukraine is blocking access to family allotments and collective farms, which has a serious impact in an area where many rely on agriculture. Those living in conflict-affected areas, especially around the contact line, are some of the most vulnerable, including the elderly, persons with disabilities, and the poor. To heat homes in the winter, people go into the forest, facing significant risks from explosive hazards as a result. This is said to have resulted in many fatalities and injuries.

In addition, mines, CMR, and other ERW contamination, including IEDs and booby-traps, pose a risk to the internally displaced and returning refugees, especially in areas fought over previously and that are now away from the front line.

Other ERW and Landmines

Ukraine is contaminated by other ERW and by anti-personnel and anti-vehicle mines laid during the current conflict. It is also affected by unexploded ordnance (UXO) and abandoned explosive ordnance (AXO) remaining from World Wars I and II and Soviet military training and stockpiles. In February 2016, Ukraine claimed that 32 former military firing ranges and the many other areas contaminated with explosive objects from past wars covered 1,500km². These figures are the same as those put forward in April 2015.

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15 Email from Rowan Fernandes, Head of Programme, DDG Ukraine, 20 May 2016.
16 Protection Cluster Ukraine, “Eastern Ukraine: Brief on the need for humanitarian mine action activities”.
17 Ibid.
18 Ibid.
19 See, e.g., “During a Year in Kerch and Sevastopol neutralized 33 thousands of munitions”, Forum, 4 December 2009.
20 “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, Head, Division for pyrotechnic work and humanitarian demining, SESU, at the 19th International Meeting, Geneva, 17 February 2016.
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, Ministry of Emergency Situations, and Ukroboronservice (a state-owned commercial company), to put forward proposals for a national body to oversee demining.22

On 2 September 2013, Presidential Decree No. 423 on the “Mine Action National Authority” was signed, authorising the authority’s establishment.23 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 national mine action authority in Ukraine.24

As at May 2016, Ukraine was in the process of passing mine action legislation that would list the executive bodies involved in mine action in Ukraine, regulate the national mine action authority, and mandate development of a priority action plan.25 The Mine Action Bill was sent to the Cabinet in late 2015, endorsed in February 2016, and then submitted by the Cabinet for parliamentary approval.26 A change of Cabinet in April 2016 resulted in the Bill needing re-endorsement, after which it will be re-submitted for parliamentary approval.27

The GICHD has been working with the OSCE Project Co-ordinator in Ukraine to help foster mine action institutions.28 A timeline for the establishment of a national mine action centre, under a multi-ministry national mine action authority, is planned to be agreed once the mine action legislation has been adopted.29

Currently, while responsibility for mine action coordination falls principally to the National Security and Defence Council and the Ministry of Defence, several other ministries are also involved in the sector, including the Ministry of Internal Affairs (the National Police and National Guard), the Security Services, State Emergency Services of Ukraine (SESU), the State Security and Defence Council and the Ministry of Defence, several bodies involved in mine action in Ukraine, regulate the national mine action authority, and mandate development of a priority action plan.25 The Mine Action Bill was sent to the Cabinet in late 2015, endorsed in February 2016, and then submitted by the Cabinet for parliamentary approval.26 A change of Cabinet in April 2016 resulted in the Bill needing re-endorsement, after which it will be re-submitted for parliamentary approval.27

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The demining centre of the Ukrainian Armed Forces, in Kamianets-Podilsky, mainly focuses on building the military’s capacity for EOD, including training and testing of methods and equipment, quality assurance (QA), and provision of EOD, counter-IED, and demining specialists.31 Experts from the North Atlantic Treaty Organization (NATO) provide training and advice at the centre, and in December 2015 several units from Canada were training deminers alongside Ukrainian experts.32

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 (NTS), demining, internal QC of SESU units, information management, and handover of land cleared by SESU to local authorities, as well as risk education.33

In addition, SESU has a training centre near Merefa, in the Kharkiv region, and the Special Transport Service has a centre in Chernihiv, both of which are focused largely on EOD and battle area clearance (BAC).34 Furthermore, SESU has initiated establishment of a Regional Centre for Humanitarian Demining, based in Lysychansk in Luhansk region. The new centre is intended to ensure trained SESU deminers can be sent to affected areas in Donetsk and Luhansk under Ukrainian control.35

The OSCE has a strong presence in Ukraine, and has two separate missions each with its own mandate: the Special Monitoring Mission (SMM) and its Project Co-ordinator. The SMM is mandated to contribute to reducing tensions and to help foster peace, stability, and security. As part of this role, it gathers information and reports on alleged violations of fundamental OSCE principles.36 The OSCE Project Co-ordinator is mandated to plan, implement, and monitor projects that help

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22 Cabinet of Ministers Order No. 73471/1-09, 25 December 2009.
24 Interview with Colonel Oleksandr Shchebetiuk, Head of Engineer Ammunition Service, Central Engineering Department, Ukrainian Armed Forces, in Geneva, 26 June 2015; and email from Anton Shevchenko, Project Officer, Politico-Military and Environmental Projects, OSCE, 23 June 2015.
34 Email from Anton Shevchenko, OSCE, 14 June 2016.
Ukraine enhance its security and develop its legislation, institutions, and practices in line with democratic standards.37

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.38 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); demining training programmes; and has provided equipment and supplies.39

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 contamination by 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).40

Ukraine also has a mine action sub-cluster, established in 2015, which sits under the Global Protection Cluster - the UN-led humanitarian coordination system.41 The sub-cluster was co-chaired by DDG and the UN Development Programme (UNDP) until May 2016, when DDG stepped down as co-chair, to ensure no conflict of interest. UNDP, DDG, HALO Trust, the Swiss Foundation for Mine Action (FSD), and Handicap International (HI) are members of the sub-cluster, and in addition, the OSCE Project Co-ordinator, and the International Committee of the Red Cross (ICRC), also attend meetings of the sub-cluster. However, as at May 2016 the sub-cluster had not met regularly.42

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 2009–2014.43 The programme foresaw clearance of 15km² over five years with the destruction of 500,000 items of ERW. As at June 2016, the government was in the process of developing a State Programme on mine action for 2017–21, which will cover all areas of mine action.44

Ukraine has developed a plan for humanitarian demining in the Donets and Luhansk regions, in areas it can access safely. The main goals for 2015 were demining of populated areas, security during rehabilitation of infrastructure, and clearance of UXO from agricultural areas.45 These remained Ukraine’s goals for 2016, and in addition, local government authorities have been helping to prioritise clearance tasks based on humanitarian criteria.46

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 2014.47 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.48

In Ukraine, all national standards must be approved by the Ukrainian Scientific and Research Training Center of Standardization, Certification and Quality, which is the National Standardization Authority in Ukraine.49 The next meeting to discuss the draft standards was scheduled for October 2016.50

39 Ibid.
42 Email from Rowan Fernandes, DDG Ukraine, 20 May 2016.
50 Email from Anton Shevchenko, OSCE, 14 June 2016.
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 that undertake clearance and disposal of ERW and mines, including the SESU, the Ministry of Internal Affairs (the National Police and National Guard), the Security Service, the State Special Transport Service, and the State Border Service.51

A Commission on Humanitarian Demining of SESU coordinates the activities of SESU pyrotechnic teams and determines SESU’s priorities.52 In December 2015, Ukraine reported that during the ongoing conflict SESU had suffered severe losses to its buildings and vehicles.53 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 use of the demining equipment and how to conduct operations in accordance with IMAS, in addition to providing life-support training to SESU medics associated with the teams.54 A similar project is also being implemented by the OSCE Project Co-ordinator.55

The Ministry of Defence is 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.56

As at April 2015, the Ministry of Internal Affairs deployed 27 units totalling nearly 200 people. Forty per cent of capacity is dedicated to humanitarian demining and ERW clearance in areas contaminated as a result of former conflicts.57 The Ministry of Defence was deploying 25 manual clearance teams totalling 125 deminers, two explosive detection dog (EDD) teams, 15 demining robots, and four BMR-2 armoured demining machines.58

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).59 Ukroboronservice, a state enterprise whose activities include arms manufacture, also has a “humanitarian demining” section.60 As at May 2016, Ukroboronservice was not conducting clearance operations in Ukraine.61

Three international demining organisations — DDG, FSD, and HALO Trust — were operating in Ukraine as at May 2016.62 DDG began risk education in late 2014 in Donbass and in February 2016 it began to conduct NTS 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.63 As at May 2016, DDG was deploying three survey teams, comprising 11 personnel, including one driver and two managers.64

In early 2016, HALO Trust began conducting NTS, mine clearance, and battle area clearance (BAC) in government-controlled areas of Luhansk and Donetsk regions, more than 15km from the contact line.65 HALO Trust’s capacity as at May was six survey teams (24 personnel) and four clearance teams (52 personnel), which was due to rise to eight clearance teams (96 personnel) in June.66 HALO Trust was expecting to increase to 15 clearance teams and 2 or more mechanical teams later in 2016.67

As at May 2016, FSD had only been undertaking risk education activities in government-controlled areas of Donetsk and Luhansk regions, but hoped to begin NTS over the summer and clearance by the end of 2016.68

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.69

52 Ibid.
54 Emails from Rowan Fernandes, DDG Ukraine, 20 May and 17 June 2016.
55 Email from Anton Shevchenko, OSCE, 14 June 2016.
56 Interview with Col. Oleksandr Shchebetiuk, Ukrainian Armed Forces, in Geneva, 26 June 2015; and email from Anton Shevchenko, OSCE, 23 June 2015.
60 See Ukroboronservice, undated, at: http://en.uos.ua/.
63 Email from Rowan Fernandes, DDG Ukraine, 20 May 2016.
64 Ibid.
65 Interview with Adam Jasinski, Programme Manager for Ukraine, HALO Trust, Thornhill, 28 April 2016, and email, 18 May 2016.
66 Email from Adam Jasinski, HALO Trust, 18 May 2016.
67 Ibid.
68 Email from Mike Barry, Programme Manager, FSD Ukraine, 6 May 2016.
69 Protection Cluster Ukraine, “Eastern Ukraine: Brief on the need for humanitarian mine action activities”.
Quality Management
The draft mine action law envisages a national mine action centre with a QA function. In the meantime, quality management (QM) of government clearance operations is overseen by the demining centre of the Ukrainian Armed Forces. Both DDG and HALO Trust are conducting internal QM. For DDG, team leaders and lead mine action personnel conduct QM tasks, while in HALO Trust team leaders and supervisors conduct QC during clearance while a roving officer conducts QA.

Information Management
In cooperation with OSCE Project Co-ordinator and GICHD, SESU began using the IMSMA database. In 2015, IMSMA was piloted by GICHD and SESU in four regions of Ukraine. 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, Dniprovskyi, Eastern Poliskyi and Central) and the Operational Centre in Kiev.

In 2016, Ukraine was implementing a project which aims to create a national database to store data on contamination from all entities and government departments involved in mine action in Ukraine, as well as from non-governmental organisations (NGOs).

LAND RELEASE
Since the outbreak of fighting in eastern Ukraine, clearance of ERW has been undertaken by both Ukrainian government authorities and separatist groups. Clearance of ERW 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. Once identified, ERW are marked on the ground, and their position fixed and reported to the local authorities. ERW are either destroyed in situ or removed to storage areas or compounds.

SESU clearance has been slower in rural areas than in towns and cities. 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. NTS is helping to identify contaminated land, especially in liberated areas.

The Ukrainian Armed Forces are responsible for clearing ERW in areas close to the front lines and former military positions. In December 2015, the working group of the Trilateral Contact Group on Ukraine agreed 12 priority areas for humanitarian demining.

In areas controlled by pro-Russian rebel groups, separatists are said to be also clearing ERW and mines. 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 conducted both day and night.

The Ukrainian authorities and the pro-Russian rebels are, to varying degrees, recording written logs of emergency call-outs and clearance operations, but data is not always disaggregated into weapon type. Clearance data is not available from pro-Russian separatist groups, and an accurate picture is not available of the scale of ERW clearance being undertaken in eastern Ukraine and of remaining CMR contamination.

Progress in 2016
In early 2016, HALO Trust began conducting NTS in government-controlled areas of Ukraine around the contact line, and up to 15km from the front line. 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. HALO Trust expected to complete NTS in government-controlled areas in summer 2016. If access is permitted closer to the contact line, where contamination is more extensive, survey would continue into the autumn. Due to the ongoing nature of the conflict, comprehensive survey along the contact line was not expected to be possible in the near future.

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. All clearance sites were surveyed by HALO Trust prior to the start of work, to ensure there is an IMSMA hazard report for each site.

Currently HALO Trust only undertakes manual clearance, but it planned to import armoured plant machinery in 2016 to assist in clearing urban/semi-urban areas with rubble. All teams are trained and equipped for both mine clearance and BAC, and for all expected threats in the conflict zone, as NTS has yet to determine the proportion of different types of hazard. 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.

DDG also began NTS in government-controlled areas of the Donetsk and Luhansk regions 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. Initial areas tasked were due for completion in the summer and additional areas have been requested. DDG was confident that it would commence clearance operations later in 2016.

As at May 2016, HALO Trust and DDG survey had collectively identified use of anti-vehicle mines (TM-57 and TM-62 and PTM series), anti-personnel mines (OZM-72 fragmentation mines, and MON, PMN, and POM series); improvised fragmentation mines and booby-trapped ERW (mainly tripwire-initiated systems connected to conventional munitions); cluster munitions (9N series) and remnants; rockets from multiple launch rocket systems (PG series); and unexploded mortar shells and grenades.
ARTICLE 4 COMPLIANCE

Ukraine is not a state party or signatory to the CCM. Nonetheless, Ukraine has obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction. Russia has similar obligations in any areas of Ukraine over which it exercises effective control.102

National funding is provided for clearance of ERW and mines, and the Department of Environmental Safety and Mine Action is a division of the Ministry of Defence from which it is funded.103 Ukraine also receives assistance from foreign partners (OSCE and NATO) for demining equipment.104 In 2015, in Donbas, the OSCE Project Coordinator equipped four SESU teams and provided PPE for deminers.105 Germany has provided the Ministry of Emergency Situations with 50 metal detectors to assist the pyrotechnic units with demining activities in the liberated territories in the Donetsk and Luhansk regions.106

HALO Trust is currently funded by the United Kingdom, the Netherlands, the European Union (EU), Norway, and Switzerland, and was expecting funding to increase later in 2016.107 DDG currently has committed funding through the EU and UNICEF up to the end of 2016, and was expecting additional funding for its survey and clearance operations.108 Nonetheless, the OHCHR has also highlighted a lack of equipment for mine clearance on both sides of the contact line.109

70 Email from Adam Jasinski, HALO Trust, 18 May 2016.
72 Emails from Adam Jasinski, HALO Trust, 18 May 2016, and Rowan Fernandes, DDG Ukraine, 20 May 2016.
75 Ibid.
77 Side-event presentation by Mark Hiznay, HRW, in Geneva, February 2015, and interview, 18 February 2015.
78 Ibid.
80 Ibid.
81 Side-event presentation by Mark Hiznay, HRW, in Geneva, February 2015, and interview, 18 February 2015.
82 “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 of Experts, Geneva, April 2015.
84 Email from Eva Vébé, Programme Director, Albania, Norwegian People’s Aid, 10 June 2015; meeting with Col. Oleksandr Shchebeliuk, Ukrainian Armed Forces, in Geneva, 26 June 2015; and “Mine Action in Ukraine”, Side-event presentation by Lt.-Col. Yevhenii Zubarevskyi, Ministry of Defence, in Geneva, 17 February 2016.
86 Email from Megan Latimer, GICHD, 3 July 2015.
87 Side-event presentation by Mark Hiznay, HRW, in Geneva, February 2015, and interview, 18 February 2015.
89 Interview with Adam Jasinski, HALO Trust, Thornhill, 28 April 2016; and email, 18 May 2016.
90 Email from Adam Jasinski, HALO Trust, 18 May 2016.
91 Ibid.
92 Ibid.
93 Ibid.
94 Ibid.
95 Ibid.
96 Ibid.
98 Emails from Rowan Fernandes, DDG Ukraine, 20 May and 17 June 2016.
99 Email from Rowan Fernandes, DDG Ukraine, 17 June 2016.
100 Ibid.
102 Both states are party to the 1950 European Convention on Human Rights, which requires in its Article 2 that member states respect and protect the right to life.
103 Interview with Col. Oleksandr Shchebeliuk, Ukrainian Armed Forces, in Geneva, 26 June 2015.
106 CCW Amended Protocol II Article 13 Report (for 2014), Form E; and Germany CCW Amended Protocol II Article 13 Report (for 2014), Form E.
107 Email from Adam Jasinski, HALO Trust, 18 May 2016.
108 Emails from Rowan Fernandes, DDG Ukraine, 20 May and 17 June 2016.
RECOMMENDATIONS FOR ACTION

- Vietnam should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Vietnam should prepare a strategic plan giving priority to clearance of cluster munition remnants (CMR) and widening application of the CMR survey methodology applied in Quang Tri province.
- Vietnam should accelerate development of a national database and make data available to operators on a timely basis.
- Vietnam should publish comprehensive annual reports on the results of survey and clearance by all operators, national and international.

PROGRAMME PERFORMANCE 2015

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

PERFORMANCE SCORE: AVERAGE 5.1
CONTAMINATION

Vietnam is massively contaminated by CMR, but no credible estimate exists of the extent (to the nearest hundred square kilometre). The United States (US) dropped 413,130 tons of submunitions over Vietnam between 1965 and 1973, striking 55 provinces and cities, including Haiphong, Hanoi, Ho Chi Minh City, Hue, and Vinh. Vietnam’s Military Engineering Command has recorded finding 15 types of US-made submunitions. Most submunition types used by the US were air-dropped, but artillery-delivered submunitions were also used in central Quang Binh and provinces to the south of it.

The Military Engineering Command says it has encountered substantial amounts of cluster munitions abandoned by the US military, notably at or around old US air bases, including eight underground bunkers found in 2009, one of them reportedly covering an area of 4,000m$^2$ and containing some 25 tons of munitions.

PROGRAMME MANAGEMENT

Vietnam’s mine action programme has shifted 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. However, 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. VNMAC was given 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 overseeing and implementing quality assurance. The government appointed VNMAC’s director and two deputy directors in 2014 and the centre became officially operational in February 2015.

International operators conclude agreements to work in Vietnam with the People’s Aid Coordinating Committee but negotiate their programme of operations separately with the authorities of each province.

Quang Tri province, which includes the former demilitarised zone that separated North and South Vietnam and is one of the most heavily contaminated regions, approved the creation of a Legacy of War Coordination Centre (LWCC) in February 2015. The LWCC, established by the province’s Department of Foreign Affairs with funding and technical support provided by Norwegian People’s Aid (NPA), is responsible for drawing up an annual workplan, coordinating operations of NPA and Mines Advisory Group (MAG) and operates a database integrating mine action data of all operators, including the results of NPA’s and MAG’s integrated survey and clearance operations.

4 Prime Minister’s Decision No. 96/2006/QD-TTg, 4 May 2006.
5 Email from Col. Nguyen Trong Dac, Ministry of National Defense, 6 August 2006.
6 Interview with Maj. Gen. Pham Quang Xuan, Director, VNMAC, in Geneva, 31 March 2014.
7 Prime Minister’s Decision 319/QD-TTg, 4 March 2014.
8 Information provided by Do Van Nhan, Deputy Director General, VNMAC, received by email from Vietnam Veterans of America Foundation (VVA/F), 19 June 2015.
9 Legacy of War Coordination Centre website, at: http://lwcc-dbu-quangtri.vn/en-us/INTRODUCTION/Project-Establishment; email from Le Nah Thu, Project Officer, MAG, 9 May 2016.
Strategic Planning

VNMAC said it had drafted an action plan for 2016−20, which was awaiting approval by the prime minister, but provided no further details.10

VNMAC priorities for 2016 included issuing a decree on mine action monitoring, elaborating quality management standards, building VNMAC’s headquarters in Hanoi, constructing a national database, and conducting technical survey and clearance of approximately 300km².11

VNMAC reported that mine action in 2015 received a $4 million grant from Japan for clearance in Ha Tinh province and the US pledged $10.2 million for survey and clearance of Quang Tri.12

Operators

Most clearance in Vietnam is conducted by the Army Engineering Corps, whose officials have previously operated some 250 mine and battle area clearance teams, including those of around 50 military companies.13 Four international humanitarian operators active in Vietnam in 2015 included Danish Demining Group (DDG), MAG, NPA, and PeaceTrees Vietnam.

LAND RELEASE

No results were available for operations by VNMAC and the Army Engineering Corps which account for most clearance, preventing any assessment of Vietnam's overall progress in dealing with cluster munitions contamination.

Survey and clearance by international operators accelerated in 2015, mainly as a result of a project for integrated survey and clearance carried out by NPA and MAG, respectively, in Quang Tri province using US funding.

Survey in 2015

In 2015, NPA survey in Quang Tri and Thua Thien Hue provinces confirmed almost 11.4km² of CMR contamination across 234 areas (see Table 1).

MAG and NPA for many years worked independently in different districts of Quang Tri. After a pilot project in 2014, Quang Tri provincial authorities approved a project under which NPA concentrated on conducting its cluster munition remnants survey (CMRS) while MAG cleared the confirmed hazardous areas (CHAs) generated by NPA’s survey. The project aims to complete clearance of all the province’s main contaminated areas by 2020. Both operators expanded capacity supported by multi-year funding from the US. NPA, partnering Project Renew, had a total operations staff of 152 which included 21 CMRS teams, five explosive ordnance disposal (EOD) teams and one ten-strong team of “BAC searchers” NPA also conducted community-based NTS in Quang Tri using the evidence points collected as a starting point for CMRS.14

MAG also operated in the neighbouring province of Quang Binh conducting non-technical and technical survey as well as clearance, working from evidence points established during spot EOD tasks. It cancelled four suspected hazardous areas covering a total of 85,000m² and confirmed 176 areas covering 1.88km².16

Table 1: Cluster Munitions Remnants Survey in 201515

<table>
<thead>
<tr>
<th>Operator</th>
<th>Province</th>
<th>Areas confirmed</th>
<th>Area confirmed (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPA</td>
<td>Quang Tri</td>
<td>212</td>
<td>11,150,000</td>
</tr>
<tr>
<td></td>
<td>Thua Thien Hue</td>
<td>22</td>
<td>278,750</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>234</td>
<td>11,393,750</td>
</tr>
</tbody>
</table>

10 Information provided by Dang Van Dong, VNMAC, received by email from the International Centre, VVAF, Hanoi, 23 June 2016.
11 Information provided by Dang Van Dong, Deputy Director, VNMAC, received by email from the International Centre, VVAF, Hanoi, 23 June 2016.
12 Information provided by Dang Van Dong, VNMAC, received by email from the International Centre, VVAF, 23 June 2016.
14 Emails from Le Anh Thu, Project Officer, MAG, 9 May 2016; and Resad Junuzagic, Country Director, NPA, 26 May and 15 June 2016.
15 Email from Resad Junuzagic, NPA, 26 May 2016.
16 Email from Le Anh Thu, MAG, 9 May 2016.
Clearance in 2015
Vietnam’s Army Engineering Corps and military-affiliated commercial companies have previously reported clearance of several hundred square kilometres a year but no information was received for operations in 2015. International operators reported clearance of 9.8km² for the year (see Table 2).

Land released through clearance by international operators rose sharply in 2015 as a result of a nearly fivefold increase in clearance by MAG compared with the previous year. MAG added 14 mine action teams and seven brush-cutting teams in 2015 bringing the total number of staff to 377. The expansion was made possible by substantial additional funding from the US and Japan, giving MAG a budget of $6.8 million for the year.17

PeaceTrees Vietnam, operating in Quang Tri province, said it employed 29 technicians who cleared 101,868m² and destroyed a total of 3,031 items of unexploded ordnance (UXO) but did not specify clearance of CMR or provide any other details.18

MAG’s increased focus on clearance in Quang Tri also led to a downturn in spot EOD tasks in 2015. DDG, which established a presence in Vietnam in 2013 initially conducting risk education in Quang Nam province, started deploying EOD teams on spot tasks in June 2015, and in December started battle area clearance (BAC) focused on CMR. By the end of March 2016 it had completed 105 BAC tasks releasing 43,414m².19

Table 2: Clearance of CMR-contaminated areas in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>Province</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>Submunitions destroyed</th>
<th>APM destroyed</th>
<th>AVM destroyed</th>
<th>UXO destroyed</th>
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<tr>
<td>MAG</td>
<td>Quang Binh</td>
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<td>2,958,784</td>
<td>2,591</td>
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<tr>
<td>NPA</td>
<td>Quang Tri</td>
<td>3</td>
<td>143,250</td>
<td>234</td>
<td>17</td>
<td>1</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Thua Thien Hue</td>
<td>0</td>
<td>491,267</td>
<td>44</td>
<td>1</td>
<td>0</td>
<td>451</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>150</strong></td>
<td><strong>9,832,700</strong></td>
<td><strong>6,633</strong></td>
<td><strong>19</strong></td>
<td><strong>1</strong></td>
<td><strong>4,902</strong></td>
</tr>
</tbody>
</table>

APM = Anti-personnel mines   AVM = Anti-vehicle mines

Table 3: Spot/roving clearance and EOD in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>Province</th>
<th>Roving tasks</th>
<th>Submunitions destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDG</td>
<td>Quang Nam</td>
<td>265</td>
<td>51</td>
<td>729</td>
</tr>
<tr>
<td></td>
<td>Quang Tri</td>
<td>179</td>
<td>20</td>
<td>314</td>
</tr>
<tr>
<td>MAG</td>
<td>Quang Tri</td>
<td>3,490</td>
<td>105</td>
<td>3,519</td>
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<tr>
<td></td>
<td>Quang Binh</td>
<td>2,992</td>
<td>764</td>
<td>3,060</td>
</tr>
<tr>
<td>NPA</td>
<td>Quang Tri</td>
<td>1,781</td>
<td>168</td>
<td>3,612</td>
</tr>
<tr>
<td></td>
<td>Thua Thien Hue</td>
<td>172</td>
<td>205</td>
<td>935</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>8,879</strong></td>
<td><strong>1,313</strong></td>
<td><strong>12,169</strong></td>
</tr>
</tbody>
</table>

APM = Anti-personnel mines   AVM = Anti-vehicle mines

ARTICLE 4 COMPLIANCE
Vietnam is not a state party or signatory to the CCM. Nonetheless, Vietnam has international human rights law obligations to protect life, which requires that CMR be cleared as soon as possible.20

17 Ibid.
18 Email from Rebecca Giovanni, Program Coordinator, PeaceTrees Vietnam, 7 June 2016.
19 Email from Clinton Smith, Country Director, DDG, 6 April 2016.
20 Vietnam is a state party to the 1996 International Covenant on Civil and Political Rights, Article 6(1) of which stipulates that: “Every human being has the inherent right to life.”
RECOMMENDATIONS FOR ACTION

- Yemen should accede to the Convention on Cluster Munitions (CCM).
- The Yemen Mine Action Centre (YEMAC) should allow and facilitate survey and clearance by international operators.
- YEMAC and its international supporters should prioritise training teams in survey and clearance of cluster munition remnants (CMR).
- YEMAC should acknowledge its responsibility to report on its mine action activities and publish annual reports on, at a minimum: programme capacity, progress of survey and clearance operations, and funding.

PROGRAMME PERFORMANCE 2015

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

PERFORMANCE SCORE: POOR 3.0
CONTAMINATION

Yemen was contaminated with explosive remnants of war (ERW), including CMR, before 2015, but since the start of the latest conflict on 26 March 2015 the United Nations has confirmed that intensive air strikes by the Saudi-led coalition have significantly increased its extent and the threat to the civilian population.

YEMAC reported in 2014 it had identified some 18km² of suspected CMR hazards in the northern Saada governorate bordering Saudi Arabia but also knew of other areas of contamination in north-western Hajjah governorate it had not been able to survey. Since the start of the latest round of hostilities in March 2015, international observers and researchers reported that Saudi coalition land and aerial bombardments using a variety of cluster munitions had struck many areas of north-western Yemen. YEMAC has identified heavy CMR contamination in Saada governorate as well as additional CMR contamination in Amran, Hodeida, Mawit, and Sanaa governorates.

Human Rights Watch has documented Saudi air strikes using cluster munitions dating back to 2009. In 2015, after reviewing photographs and citing witness accounts, it reported finding air-dropped BLU-97 and CBU-105 sensor-fuzed submunitions as well as artillery-fired ZP-39 dual-purpose improved conventional munition (DPICM) submunitions in Saada governorate. It also reported finds of CBU-105 submunitions in Amran and Sana’a governorates. In 2016, it documented the presence of BLU-63 submunitions in Sanaa city after an air strike on the capital in January, and CBU-105 submunitions after an attack on the port town of Hodeida. Amnesty International also reported the presence of Brazilian Astros II munitions in Saada and British-made BL755 submunitions in Hayran in Hajjah governorate.

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), brings together representatives of seven concerned ministries.

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 (REMBAB) and a national training centre in Aden also set up in 1999 and another REMAB in al-Mukalla (Hadramatou governorate) added in March 2004. REMABs are responsible for field implementation of the national mine action plan.

However, escalating political turmoil and conflict in Yemen since 2014, together with lack of funding, have severely impaired YEMAC’s abilities to discharge its responsibilities. The presence in Aden of members of the internationally recognised but exiled government supported by coalition forces while Sanaa remained under the control of the Houthis further complicated the functioning of YEMAC, hampering communication and coordination between YEMAC headquarters and its Aden branch.

Strategic Planning

Yemen has no strategic plan for tackling CMR. Towards the end of 2015, with normal operations around the country stalled by conflict, YEMAC set up three unexploded ordnance (UXO) clearance teams to focus on cities.

YEMAC acknowledges, however, that its deminers and EOD personnel are not trained or equipped to deal with CMR, an issue highlighted by the death of three personnel in a submunition incident in Hajjah governorate in May.

Operators

All survey and clearance of ERW is conducted by YEMAC. By the start of 2016, it had some 850 staff, between 350 and 400 of whom were said to be active, under the management of offices in Sana’a and Aden.

LAND RELEASE

Systematic survey and clearance activities have been disrupted by the conflict in Yemen and lack of funds. YEMAC operations were frozen in mid-2014 and resumed on a limited emergency basis only after late September 2015. YEMAC set up three mobile UXO sweeping teams which visited schools and facilities set up for people displaced by conflict in Sanaa and Amran, collecting unexploded ordnance.

YEMAC did not respond to requests for information about its activities in 2015. YEMAC planned to work in 2016 with eight teams clearing UXO and six mine clearance ‘units’ but it was unclear whether it was able to follow through.

ARTICLE 4 COMPLIANCE

Yemen is neither a state party nor a signatory to the 2008 Convention on Cluster Munitions. Nonetheless, it has international human rights law obligations to protect life, which requires that CMR be cleared as soon as possible.

2. Email from Ali al-Kadri, General Director, YEMAC, 20 March 2014.
9. Interviews with mine action stakeholders who declined to be identified, February–June 2015.
11. Ibid.
OTHER AREAS
Kosovo should commit to respect and implement the Convention on Cluster Munitions (CCM) and to clear all cluster munition remnants (CMR) as soon as possible.

<table>
<thead>
<tr>
<th>PROGRAMME PERFORMANCE</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem understood</td>
<td>7</td>
</tr>
<tr>
<td>Target date for completion of cluster munition clearance</td>
<td>6</td>
</tr>
<tr>
<td>Targeted clearance</td>
<td>7</td>
</tr>
<tr>
<td>Efficient clearance</td>
<td>7</td>
</tr>
<tr>
<td>National funding of programme</td>
<td>3</td>
</tr>
<tr>
<td>Timely clearance</td>
<td>6</td>
</tr>
<tr>
<td>Land-release system in place</td>
<td>7</td>
</tr>
<tr>
<td>National mine action standards</td>
<td>7</td>
</tr>
<tr>
<td>Reporting on progress</td>
<td>5</td>
</tr>
<tr>
<td>Improving performance</td>
<td>6</td>
</tr>
<tr>
<td><strong>PERFORMANCE SCORE: AVERAGE</strong></td>
<td><strong>6.1</strong></td>
</tr>
</tbody>
</table>

Kosovo should commit to respect and implement the Convention on Cluster Munitions (CCM) and to clear all cluster munition remnants (CMR) as soon as possible.
CONTAMINATION

At the end of 2015, contamination from CMR in Kosovo covered an estimated 16km² across 55 areas.1 This compares to 51 areas, over 7.69km², at the end of 2014.2 The increase in baseline CMR contamination in 2015 is due to almost 8.9km² of previously unrecorded contamination confirmed by non-technical survey (NTS) in northern Kosovo during the year.3

Contamination is primarily a result of conflict between the Federal Republic of Yugoslavia (FRY) and the Kosovo Liberation Army (KLA) in the late 1990s, and between the FRY and the North Atlantic Treaty Organization (NATO) in 1999.4 NATO aircraft bombed 333 locations between 24 March and 10 June 1999 (Operation Allied Force), dropping 1,392 bombs that released more than 295,700 submunitions.5 Forces of the FRY also used cluster munitions during the 1998–99 conflict in Kosovo.6 The failure rate of the submunitions was typically between 10 and 15%, resulting in tens of thousands of unexploded submunitions lying on and under the ground. A large clearance programme followed in 1999 under a United Nations (UN) mandate, but this ended prematurely in 2001, leaving many CMR-contaminated areas still needing to be cleared.7

In 2013, HALO Trust and the Kosovo Mine Action Centre (KMAC) conducted a joint NTS of cluster munition strikes and minefields across Kosovo, with the exception of four districts in the north. The survey identified 130 CHAs: 51 cluster munition strikes, covering 7.63km², and 79 mined areas over 2.76km².8

Norwegian People’s Aid (NPA), in coordination with KMAC and local municipality authorities, subsequently conducted a NTS of the four northern municipalities, which were not covered in the 2013 HALO Trust/KMAC survey.9 The NTS confirmed 8.9km² of CMR contamination in three of the four municipalities surveyed (Leposavić, Zubin Potok, and Zvëcjan). No CMR contamination was found in the fourth municipality of Mitrovica North.10 On the basis of available evidence, NPA believes that 83 cluster bombs were dropped in this region, dispersing a total of 17,041 submunitions.11

Cluster munition contamination in Kosovo impedes and endangers use of the land for agriculture, pasture, tourism, and firewood collection, and most directly affects the rural poor.12 Kosovo is a small country with a relatively large population, and CMR often exists in close proximity to human activity.13

NPA’s 2015 NTS in northern Kosovo revealed that of the confirmed CMR-contaminated area, 43% is mountainous, in area intended for tourism (a key developmental potential for the region), 25% is agricultural land, and 23% forests.14 In the three CMR-contaminated provinces surveyed in northern Kosovo, NPA identified 995 local inhabitants as being directly vulnerable, and a further 1,027 as indirectly vulnerable.15

Other ERW and Landmines

Kosovo is contaminated with anti-personnel mines. In addition, it remains affected by other explosive remnants of war (ERW). Most ERW consists of unexploded aircraft bombs (located mainly in the west of the province) and items of abandoned explosive ordnance (AXO). However, explosive ordnance disposal (EOD) teams continue to encounter items of unexploded ordnance (UXO) dating back to World War II.16 Kosovo Protection Force (KFOR) explosive ordnance disposal (EOD) teams regularly dispose of items of AXO in response to information provided by the public and demining organisations.17

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1 Email from Ahmet Sallova, Head, Kosovo Mine Action Centre (KMAC), 12 April 2016.
2 Email from Ahmet Sallova, KMAC, 18 March 2015.
3 Norwegian People’s Aid (NPA), Cluster Munition Remnants in Northern Kosovo: non-technical survey of contamination and impact, September 2015, and email from Goran Peršić, Project Manager, NPA Kosovo, 13 May 2016.
8 Ibid.
9 NPA, Cluster Munition Remnants in Northern Kosovo: non-technical survey of contamination and impact, September 2015, and email from Goran Peršić, NPA Bosnia and Herzegovina, 13 May 2016.
10 Ibid.
12 Email from Ahmet Sallova, KMAC, 12 April 2016; and HALO Trust, “Kosovo”, webpage accessed 26 May 2016 at: https://www.halotrust.org/where-we-work/europe-and-caucasus/kosovo/
15 Ibid.
17 Email from Ahmet Sallova, KMAC, 1 August 2012.
PROGRAMME MANAGEMENT

In January 2011, the EOD Coordination Management Section became KMAC under the Ministry of the Kosovo Security Forces (KSF). KMAC is responsible for managing clearance of mines and ERW. It prepares an annual workplan in cooperation with demining non-governmental organisations (NGOs) and coordinates operations of both the NGOs and KFOR. It also coordinates survey, quality assurance, 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, cluster munitions, and UXOs in Kosovo.

Legislation and Standards

Kosovo has its own mine action standards in place, which reportedly conform to International Mine Action Standards (IMAS).

Operators

The KSF provide clearance capacity in Kosovo, including round-the-clock EOD emergency response. In addition, NGOs also conduct land release in Kosovo: HALO Trust, the Bosnia-based Mine Detection Dog Centre (MDDC), and Mines Awareness Trust (MAT). MDDC received US funding in 2015, but only for mine clearance and not CMR; and MAT was not funded to operate in either 2014 or 2015. In December 2014, NPA received accreditation to conduct an NTS, which was subsequently completed in August 2015.

Capacity in 2015 remained the same as in 2014. HALO Trust deployed 24 operational staff on CMR clearance, and expected capacity to remain the same throughout 2016. KSF operated three platoons with 75 deminers also trained for BAC, and a fourth platoon with 25 deminers also trained solely to conduct EOD rapid response tasks.

Quality Management

KMAC has two Quality Assurance (QA) officers, who conduct site visits to ensure work is conducted in accordance with the IMAS and the standing operating procedures (SOPs).
LAND RELEASE

A total of 0.34 km² of CMR-contaminated area was released by clearance in 2015. No area was reported as reduced by technical survey, or cancelled by NTS, but 8.9 km² was confirmed by NTS as CMR-contaminated.

Survey in 2015

In 2015, NPA conducted both desk study and field-based NTS in Kosovo, in cooperation with KMAC, confirming 30 areas as CMR-contaminated across nine communities in three municipalities. In total, almost 8.9 km² was confirmed as CMR contaminated (see Table 1). No area was cancelled or reduced by TS.

The results of the NTS will form the basis for a Kosovo’s future CMR land-release strategy for northern Kosovo.

Table 1: NTS of CMR-contaminated areas in 2015

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Community</th>
<th>Areas confirmed</th>
<th>Area confirmed (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leposavić</td>
<td>Belo Brdo</td>
<td>3</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>Guvnjište</td>
<td>3</td>
<td>1.31</td>
</tr>
<tr>
<td>Zubin Potok</td>
<td>Brnjak</td>
<td>1</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>Čečevo</td>
<td>4</td>
<td>1.50</td>
</tr>
<tr>
<td></td>
<td>Oklace</td>
<td>3</td>
<td>1.95</td>
</tr>
<tr>
<td></td>
<td>Bube</td>
<td>2</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>Banje</td>
<td>2</td>
<td>0.09</td>
</tr>
<tr>
<td>Zvecan</td>
<td>Boljetin</td>
<td>2</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Zaza</td>
<td>10</td>
<td>1.77</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td><strong>30</strong></td>
<td><strong>8.89</strong></td>
</tr>
</tbody>
</table>
Clearance in 2015

KSF and HALO Trust collectively cleared a total of just under 0.34km² in 2015 (see Table 2). While it is impossible to make a direct comparison, as data in previous years was not disaggregated between mines and CMR, the 0.34km² of CMR contaminated area cleared in 2015 represents a decrease compared to 2014. This is reportedly due to a greater focus on mine clearance operations in 2015.

In 2015, KSF released one confirmed hazardous area and worked on three others that were suspended at the end of the demining season, clearing 275,932m² in total. In the course of clearance, 38 submunitions and 456 other items of UXO were destroyed.

HALO Trust cleared 61,766m² containing CMR across two CHAs in 2015, in the course of which 25 CMRs and two other items of UXO were destroyed. During HALO Trust clearance, CMR contamination was only found to exist in one of the two tasks [the task located in Zhub/Gjakova]. No submunitions were found in the second task in Landovice/Prizren, due to the fact that the main task had been cleared in 2014, and then suspended during winter due to adverse weather conditions. Fadeout was completed in 2015, during which no further submunitions were found.

HALO Trust deminers average clearance of 100m² a day on cluster munition strike sites, reflecting the constraints on clearance posed by steep gradients, dense vegetation, and heavy metal contamination.

Table 2: Clearance of CMR-contaminated areas in 2015

<table>
<thead>
<tr>
<th>Operator</th>
<th>Areas cleared</th>
<th>Area cleared (m²)</th>
<th>Submunitions destroyed</th>
<th>UXO destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSF</td>
<td>1*</td>
<td>275,932</td>
<td>38</td>
<td>456</td>
</tr>
<tr>
<td>HALO Trust</td>
<td>2</td>
<td>61,766</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>3</td>
<td>337,698</td>
<td>63</td>
<td>458</td>
</tr>
</tbody>
</table>

* An additional three tasks were suspended due to the end of the demining season.

According to KMAC, CMR-contaminated areas with high impact are prioritised for clearance, based on the number, location, and livelihoods of communities at risk, and also taking into consideration risk education and development. Clearance operations mostly focus on areas confirmed as CMR-contaminated rather than on SHAs.

An evaluation of Kosovo’s mine action programme in 2014, on behalf of the International Trust Fund (ITF) Enhancing Human Security, concluded that KSF and HALO Trust, continuing with their existing capacity and procedures, would not be in a position to complete clearance operations until 2026. The evaluation report suggested that if both organisations, with existing capacity, had access to HSTAMIIDs (Handheld Standoff Mine Detection Systems) and adopted NPA’s cluster munition remnants survey (CMRS) methodology, clearance could be completed in nine years. HALO Trust applies CMRS methodology in the Lao People’s Democratic Republic but remains unconvinced it presents advantages in Kosovo’s conditions.

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31 Email from Ahmet Sallova, KMAC, 12 April 2016.
32 Ibid.
33 Ibid.
34 Ibid, and email from Andrew Moore, HALO Trust, 2 June 2016.
35 Email from Andrew Moore, HALO Trust, 2 June 2016.
36 Ibid.
37 Emails from Andrew Moore, HALO Trust, 21 May and 8 July 2015.
38 Emails from Ahmet Sallova, KMAC, 12 April 2016; Admir Berisha, HALO Trust, 24 May 2016, and Andrew Moore, HALO Trust, 2 June 2016.
39 Email from Admir Berisha, HALO Trust, 24 May 2016.
40 Email from Andrew Moore, HALO Trust, 27 May 2015.
ARTICLE 4 COMPLIANCE

Kosovo is not a state party or signatory to the CCM. Nonetheless, Kosovo has obligations under customary international human rights law to clear CMR as soon as possible, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.

The Kosovo government provides approximately €120,000 in financial support to KMAC and €950,000 to the KSF for mine and CMR clearance.\(^1\) KMAC expected to maintain the same level of donor funding in 2016.\(^2\)

HALO Trust expected to receive the same funding throughout 2016 as the previous year.\(^3\) As at May 2016, though, NPA had not yet secured funding to start CMR clearance in Kosovo.\(^4\)

Unfortunately the misperception that CMR and mine clearance in Kosovo was completed in 2001 persists, whereas the reality is that significant contamination remains to be cleared. Kosovo is a poor country and needs economic assistance to help it complete cluster munition clearance in a timely manner, otherwise completion risks being prolonged for decades after the end of the conflict.\(^5\)

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\(^1\) Email from Ahmet Sallova, KMAC, 12 April 2016.
\(^2\) Ibid.
\(^3\) Email from Admir Berisha, HALO Trust, 24 May 2016.
\(^4\) Email from Goran Peršić, NPA, 13 May 2016.
**RECOMMENDATIONS FOR ACTION**

→ The Nagorno-Karabakh authorities should make a formal commitment to respect and implement the Convention on Cluster Munitions (CCM) and to clear all cluster munition remnants (CMR).

→ The Nagorno-Karabakh authorities should provide funding for CMR survey and clearance.

**PROGRAMME PERFORMANCE 2015**

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

PERFORMANCE SCORE: AVERAGE 5.0
**CONTAMINATION**

The exact extent of contamination from CMR in Nagorno-Karabakh is not known, but it is significant and widespread.\(^1\) As at the end of 2015, CMR contamination (both surface and subsurface) across the whole of Nagorno-Karabakh was estimated to be 67km\(^2\) across 202 confirmed hazardous areas (CHAs), in six of a total of eight districts (see Table 1).

In addition, a further 2km\(^2\) of new CMR contamination was estimated to have resulted from use of cluster munitions in the hostilities between Armenia and Azerbaijan in April 2016.\(^3\)

Nagorno-Karabakh has CMR in most regions, but particularly Askeran, Martakert, and Martuni, where more than three-quarters of remaining contamination is located. The presence of submunitions does not, in most instances, deny access to land, and many CMR-contaminated areas have been cultivated continuously for 20 years or more. Most accidents in Nagorno-Karabakh are due to mines, and in the last five years, of the 25 mine/unexploded ordnance (UXO) accidents, only 2 were reportedly due to CMR.\(^5\)

**Table 1: CMR contamination by district as at the end of 2015**\(^2\)

<table>
<thead>
<tr>
<th>District</th>
<th>CHAs</th>
<th>Area (km(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Askeran</td>
<td>51</td>
<td>19.1</td>
</tr>
<tr>
<td>Hadrut</td>
<td>24</td>
<td>8.6</td>
</tr>
<tr>
<td>Lachin</td>
<td>17</td>
<td>8.5</td>
</tr>
<tr>
<td>Martakert</td>
<td>45</td>
<td>11.7</td>
</tr>
<tr>
<td>Martuni</td>
<td>57</td>
<td>15.1</td>
</tr>
<tr>
<td>Shushi</td>
<td>8</td>
<td>4.0</td>
</tr>
<tr>
<td>Totals</td>
<td>202</td>
<td>67.0</td>
</tr>
</tbody>
</table>

In 2015, there was one civilian accident involving cluster munitions, which involved a farmer sustaining light shrapnel wounds, after detonating a SHOAB cluster bomb while cultivating land with a tractor.\(^6\) In addition, five civilian mine and UXO incidents were recorded, resulting in five casualties, of which one was a fatality.\(^7\)

**Other ERW and Landmines**

Nagorno-Karabakh is also contaminated by landmines and explosive remnants of war (ERW). This poses a grave threat to both human and animal safety and contamination impedes use of the land.\(^8\)

**PROGRAMME MANAGEMENT**

A mine action coordination committee is responsible for liaising between the local authorities and HALO Trust.\(^9\) Regular coordination committee meetings are held between the local authorities, HALO Trust, and the International Committee of the Red Cross (ICRC).\(^10\)

In 2000, 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.\(^11\) The NKMAC maintains maps and a database that cover: all suspect areas surveyed; all areas cleared of mines and UXO; locations of all mine- and UXO-related incidents; and a full record of all risk education given.\(^12\)

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1. Email from Andrew Moore, Caucasus and Balkans Desk Officer, HALO Trust, 29 May 2015.
2. Email from Andrew Moore, HALO Trust, 26 May 2016.
4. Ibid.
5. Email from Andrew Moore, HALO Trust, 26 May 2016.
6. Ibid.
7. Ibid.
8. Ibid.
9. Email from Andrew Moore, HALO Trust, 28 June 2013.
10. Ibid., 28 June 2013.
Standards and Quality Management

No national standards exist in Nagorno-Karabakh, and HALO Trust follows its own standard operating procedures (SOPs). Similarly, HALO Trust uses its own quality management systems, with quality assurance (QA) and quality control (QC) applied by four levels of management.13

Operators

Since 2000, HALO Trust has been the sole organisation conducting land release in Nagorno-Karabakh. HALO Trust’s Nagorno-Karabakh operations cover both CMR clearance and mine clearance, and HALO Trust does not field separate teams dedicated solely to mine clearance or CMR clearance. Operational staff are trained and experienced in working in both capacities.14 After the April 2016 conflict, HALO Trust’s survey teams collaborated with the local authorities’ Service of Emergency Situations to survey new contamination rapidly, and destroy submunitions close to populated areas.15

In 2015, HALO Trust employed an average of 120 local staff, and its overall operational capacity for mine and CMR operations comprised 11 manual clearance teams, two mechanical teams, and two explosive ordnance disposal (EOD)/survey teams.16

LAND RELEASE

A total of 2.9km² of area contaminated with CMR was released by clearance in 2015,17 compared with 13km² in 2014.18 In addition, almost 3.5km² of land was reduced during clearance operations in 2015 as a result of overly large polygons having been drawn.19

Survey in 2015

Just over 1.14km² was reduced by technical survey in 2015. Furthermore, HALO Trust confirmed seven suspected areas totalling 3.5km² as CMR-contaminated. No area suspected to contain CMR was cancelled by non-technical survey.20

In order to determine whether a strike requires further clearance, HALO Trust initially surveys a 500,000m² area around evidence of submunitions. Clearance is started from the centre of the area and extended outwards. If no further evidence of CMR is found, the remaining area is reduced.21

Clearance in 2015

Just over 2.9km² of land across nine areas in the Askeran, Hadrut, Martakert, Martuni and Shushi regions, was released by clearance by HALO Trust in 2015. During manual battle area clearance (BAC) 105 submunitions were destroyed, along with eight other items of UXO.22 The decrease from 13km² of CMR-contaminated land cleared in 2014 was partly the result of reduced operational capacity, following the 25% reduction in United States Agency for International Development (USAID) funding in 2015.

Furthermore, HALO Trust was called out to 199 EOD tasks in 2015, during which 179 submunitions were destroyed along with 907 other items of UXO and stray ammunition, 46 anti-personnel mines, and 19 anti-vehicle mines, in addition to the UXO destroyed during planned clearance operations as detailed above.23

HALO Trust’s CMR clearance operations continue to remain a “secondary” activity, as per the donors’ request to prioritise mine clearance.24 Since most reported accidents in Nagorno-Karabakh are the result of mines/UXO, and not CMR, HALO Trust believes this prioritisation is justified.25 Most submunition clearance is conducted on days when minefields cannot be accessed safely due to the adverse weather during the winter months.26

Land released from CMR in 2015 assisted 192 direct beneficiaries, and 6,315 indirect beneficiaries. The released land will mainly be used for agriculture, grazing, and woodcutting.27

Progress in 2016

HALO Trust’s main priority in 2016 was surface and sub-surface clearance of 2km² of new CMR contamination resulting from the April 2016 conflict.28 Emergency clearance was ongoing as at May 2016 in the villages of Nerkin Horatagh and Mokhratagh, close to the town of Martakert in north-east Nagorno-Karabakh.29 These areas were struck with LAR-160 rockets, containing M-095 submunitions. The emergency clearance operations are funded by USAID, using clearance capacity diverted from HALO Trust’s original workplan.30 In May 2016, HALO Trust reported that it expected that clearance of the new contamination would be completed within six months.31

In addition, in 2016, USAID-funded teams were also continuing surface clearance of eight legacy cluster munitions strikes, resulting from the conflict in the 1990s.32 As stated previously, this activity is secondary to mine clearance operations.
ARTICLE 4 COMPLIANCE

Nagorno-Karabakh is not a state party or signatory to the CCM. Nonetheless, the Nagorno-Karabakh authorities have obligations under customary international human rights law to clear CMR as soon as possible, in particular by virtue of the duty to protect the right to life of every person under their jurisdiction.

The Nagorno-Karabakh authorities do not provide HALO Trust with any funding for clearance of CMR-contaminated or mined areas.\textsuperscript{33}

Progress in clearance of CMR has fluctuated over the last five years, as shown in Table 2.

In October 2013, HALO Trust secured a grant of US$5 million from USAID for the next two and a half years of operations.\textsuperscript{35} In October 2014, however, HALO Trust’s USAID budget in Nagorno-Karabakh was reduced by 25% for the fiscal year 2015, resulting in redundancy for 43 operational staff.\textsuperscript{36}

In 2016, USAID funding was continuing at the same 2015 level.\textsuperscript{37} USAID has requested that funds be used for clearance operations within the former Soviet-era Nagorno-Karabakh Autonomous Oblast (NKAO), and that HALO Trust focuses on mine clearance.\textsuperscript{38} CMR surface clearance is funded by USAID as a secondary activity, to be conducted when access to minefields is limited during winter months.\textsuperscript{39} With the exception of emergency clearance operations to address the new April 2016 CMR contamination, no sub-surface CMR clearance is funded by USAID.\textsuperscript{40}

HALO Trust also receives funding from the United Kingdom Foreign and Commonwealth Office (FCO), the Armenian Diaspora organisation “Landmine Free Artsakh” (LFA), and a private donor.\textsuperscript{41} Due to a fundraising campaign, HALO Trust was expecting to increase private funding from late 2016, but any additional increase will principally fund mine clearance.\textsuperscript{42}

HALO Trust expected that clearance of CMR resulting from the April 2016 hostilities would be completed in 2016, and that surface clearance of legacy CMR contamination within the NKAO boundaries of Nagorno-Karabakh would be completed by the end of 2018. However, this would still leave sub-surface contamination within the NKAO boundaries of Nagorno-Karabakh, in addition to CMR contamination in areas outside the NKAO which are under the control of the Nagorno-Karabakh forces. While HALO Trust hopes to clear Nagorno-Karabakh of all mines by 2020, there is currently no equivalent target date for CMR.\textsuperscript{43}

Despite the clear humanitarian need to clear ERW, the international isolation of Nagorno-Karabakh also makes it difficult for HALO Trust to raise funds to work in the region, and funds raised are often subject to territorial restrictions.\textsuperscript{44} Almost no CMR is conducted outside the NKAO.\textsuperscript{45} Funding is needed to prevent Nagorno-Karabakh’s communities being blighted by mines and CMR for decades to come.\textsuperscript{46}

HALO Trust continues to carry out clearance of the cluster munition strike near Mokhratagh village, Nagorno-Karabakh. © The HALO Trust

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2.91</td>
</tr>
<tr>
<td>2014</td>
<td>13.01</td>
</tr>
<tr>
<td>2013</td>
<td>4.65</td>
</tr>
<tr>
<td>2012</td>
<td>7.6</td>
</tr>
<tr>
<td>2011</td>
<td>8.5</td>
</tr>
<tr>
<td>Total</td>
<td>36.67</td>
</tr>
</tbody>
</table>

Table 2: Five-year summary of clearance\textsuperscript{34}

HALO teams carry out clearance of the cluster munition strike near Mokhratagh village, Nagorno-Karabakh. © The HALO Trust

13 Email from Andrew Moore, HALO Trust, 26 May 2016.
14 Ibid., 22 May 2015.
15 Ibid., 26 May 2016.
16 Ibid.
17 Ibid.
19 Ibid, 26 May 2016.
20 Ibid.
21 Ibid.
22 Ibid., and 7 June 2016.
23 Email from Andrew Moore, HALO Trust, 7 June 2016.
24 Ibid.
25 Ibid.
26 Ibid.
27 Ibid.
28 Ibid.
30 Email from Andrew Moore, HALO Trust, 26 May 2016.
31 Ibid.
32 Ibid.
33 Email from Andrew Moore, HALO Trust, 26 May 2016.
34 See Cluster Munition Monitor reports on Nagorno-Karabakh covering the period 2011-14.
36 Email from Andrew Moore, HALO Trust, 26 May 2016.
37 Ibid.
38 Ibid, and email, 11 June 2015.
39 Email from Andrew Moore, HALO Trust, 26 May 2016.
40 Emails from Andrew Moore, HALO Trust, 11 June 2015 and 26 May 2016.
42 Email from Andrew Moore, HALO Trust, 26 May 2016.
43 Ibid.
45 Email from Andrew Moore, HALO Trust, 11 June 2015.

RECOMMENDATIONS FOR ACTION

→ The Saharawi Arab Democratic Republic (SADR) should make a formal commitment to respect and implement the Convention on Cluster Munitions (CCM) and to clear all cluster munition remnants (CMR) east of the Berm as soon as possible.

→ Morocco should ensure immediate access and unhindered movement of all civilian staff of the United Nations Mission for the Referendum in Western Sahara (MINURSO), including UN Mine Action Service (UNMAS) international staff, in order to allow demining by MINURSO and UNMAS to return to full functionality.

PROGRAMME PERFORMANCE 2015

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

PERFORMANCE SCORE: AVERAGE 5.9
Western Sahara had almost 4.9 km² of area confirmed to contain CMR east of the Berm as at the end of 2015. Of this, six cluster strike areas with a total size of 0.5 km² are located inside the buffer strip and are inaccessible for clearance. Both the north and south of Western Sahara still contain confirmed CMR-contaminated areas, as set out in Table 1.²

This is an increase in confirmed CMR contamination from the 51 areas totalling 4.67 km² recorded at the end of 2014.⁴

The Royal Moroccan Armed Forces (RMAF) used both artillery-fired and air-dropped cluster munitions against Polisario Front forces during their conflict in Western Sahara from 1975 to 1991. According to SADR, BLU-63, M42, and MK118 submunitions were used by the RMAF at multiple locations in Bir Lahlou, Dougaj, Mehaires, Mijek, and North Wadis.⁵

While clearance had been projected to be completed by the end of 2012,⁶ discovery of previously unknown contaminated areas meant this target date was not met. New contaminated areas have continued to be identified, with an additional 15 cluster strike areas with a total size of 0.54 km² discovered in 2015. New strike areas are expected to be found in the future as mine action activities continue and additional information is received from local populations.⁷

Of the 4.89 km² of CMR contamination remaining at the end of 2015, six cluster munition strike areas with a total size of 520,609 m² are located inside the buffer strip and are inaccessible for clearance. This amount of reported contamination may also increase if access restrictions to the buffer strip are removed and survey and clearance can be conducted.⁸

Other ERW and Landmines

Western Sahara also remains significantly affected by mines and explosive remnants of war (ERW) other than CMR due to the conflict between the RMAF and the Popular Front for the Liberation of Saguia el Hamra and Rio de Oro (Polisario Front) forces. A 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 significant mine, CMR, and other UXO contamination in Western Sahara continues to pose a daily threat to the local and nomadic populations, along with UN personnel and humanitarian actors.⁹ In 2015, UNMAS reported that CMR contamination blocked access to arable land and water sources for the local population and impeded the free movement of UN personnel due to the close proximity of CMR to patrol routes and areas of UN operations.¹⁰

Table 1: CMR contamination by region east of the Berm as at the end of 2015³

<table>
<thead>
<tr>
<th>Region</th>
<th>Confirmed Hazardous Areas</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>30</td>
<td>1.31</td>
</tr>
<tr>
<td>South</td>
<td>25</td>
<td>3.58</td>
</tr>
<tr>
<td>Totals</td>
<td>55</td>
<td>4.89</td>
</tr>
</tbody>
</table>

2 Email from Sarah Holland, Programme Officer, UNMAS, 21 April 2016.
3 Ibid. Bir Lahlou (also spelled Bir Lehlou), Tifariti, and Mehaires (also spelled Meharrize) are considered to make up the north, and Mijek and Agwanit the south. Email from Graeme Abernethy, Programme Manager, UNMAS, 9 June 2015.
4 In May 2016, UNMAS reported that the actual number of CMR-contaminated areas as of end 2014 was 51 areas instead of the 49 it had reported to Mine Action Review in May 2015. It stated that the increase in contamination from 2014 to 2015 was due to new areas identified by survey during the year and the fact that “during CMR clearance for a particular task, fade out is applied to the individual clearance requirement and in almost all cases, this far exceeds the initial size of the CMR recorded in IMSMA”. According to UNMAS, fade out distances may vary from site to site, but in normal circumstances would be “not more than 50m from the last submunitions located in a particular area of a task”. Emails from Graeme Abernethy, UNMAS, 27 May 2016, and Sarah Holland, UNMAS, 23 May 2016 and 18 May 2015.
6 Email from Karl Greenwood, Chief of Operations, AOAV/Mechem Western Sahara Programme, AOAV, 18 June 2012.
7 Email from Sarah Holland, UNMAS, 23 May 2016, and email from Gordan Novak, AOAV Western Sahara, 25 July 2014.
8 Emails from Sarah Holland, UNMAS, 23 May 2016; and Graeme Abernethy, UNMAS, 27 May 2016. The six areas were identified in a 2008 survey.
9 Emails from Sarah Holland, UNMAS, 21 April 2016 and 18 May 2015.
10 Email from Sarah Holland, UNMAS, 21 April 2016.
PROGRAMME MANAGEMENT

MINURSO manages a Mine Action Coordination Centre (MACC), which was upgraded from a mine "cell" in February 2008. MINURSO MACC supports mine action activities, which were implemented by commercial contractor Dynasafe MineTech Limited (DML) and NGO Norwegian People’s Aid (NPA) in 2015.11

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 activities in Western Sahara east of the Berm and for land release activities.12 SMACO was established with UN support and started its activities in January 2014.

Strategic Planning

MINURSO MACC’s activities are conducted in accordance with the Strategy of the United Nations on Mine Action 2013–18 and the International Mine Action Standards (IMAS). UNMAS planned to develop a mine action strategy specific to Western Sahara in the second half of 2015.13 As at April 2016, the strategy was still under development and awaiting finalisation and approval by all mine action stakeholders.14

In 2016, UNMAS also intends to develop local mine action standards applicable east of the Berm, in coordination with mine action partners. These will include provisions specific to battle area clearance (BAC). Once completed, the standards will be jointly managed by SMACO and MINURSO MACC.15

UNMAS reported that the MACC identifies priorities for clearance of both cluster strike areas and minefield clearance to the east of the Berm in conjunction with SMACO. These priorities are then confirmed with MINURSO and an annual operational workplan is developed and implemented. Priorities for CMR clearance are strike areas that restrict MINURSO from carrying out its mandate and have a high impact on local communities.16

Operators

In 2015, MINURSO MACC deployed three multi-task teams (MTTs) and one community liaison/risk education/survey team, employing a total of 37 operational staff. Of its four teams, one MTT was tasked to address cluster strike areas.17

DML was the only implementing operator tasked with conducting CMR survey and clearance during 2015. Formerly called Mine Tech International (MTI), the company changed its name on 3 August 2015 to Dynasafe MineTech Limited.18 It took over the UN Office for Project Services (UNOPS) tender for mine action in Western Sahara in September 2014 from NGO Action on Armed Violence (AOAV), which closed operations due to lack of funding.19

NPA was also operational in Western Sahara as at September 2015 but did not have any tasks related to CMR contamination. It deployed two MTTs to conduct mine clearance.20

Quality Management

An external quality management system is in place and is implemented by MINURSO MACC. UNMAS reported that of all quality assurance (QA) assessment visits conducted in 2015, almost one-third pertained to cluster strike areas.21 NPA reported that SMACO also conducted external QA and quality control (QC) activities.22

Information Management

UNMAS stated that a complete audit of the information management system for mine action (IMSMAl database was initiated in 2015, which was expected to be completed mid-2016. According to UNMAS, the audit was designed to ensure the data in IMSMA is accurate and comprehensive, and includes information on mined areas, cluster strike areas, and UXO spot sites.23 In May 2016, UNMAS reported that the audit had validated the accuracy of the CMR-related information recorded in IMSMA and confirmed that a total of nearly 4.89km² was contaminated with CMR and correctly recorded as CHAs.24

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11 Ibid.
13 Email from Sarah Holland, UNMAS, 5 June 2015.
14 Email from Sarah Holland, UNMAS, 21 April 2016.
15 Ibid.
16 Ibid.
17 Email from Sarah Holland, UNMAS, 21 April 2016.
19 Email from Melissa Fuhrer, Head of Programmes, AOAV, 7 May 2015; and email from Melissa Andersson, Country Director, NPA, 11 April 2015.
20 Email from El Hadji Mamadou Kebe, Programme Manager, NPA, 4 May 2016.
21 Email from Sarah Holland, UNMAS, 21 April 2016.
22 Email from El Hadji Mamadou Kebe, NPA, 4 May 2016.
23 Email from Sarah Holland, UNMAS, 21 April 2016.
24 Email from Graeme Abernethy, UNMAS, 27 May 2016.
LAND RELEASE

Total CMR-contaminated area released by clearance in 2015 was just over 1.84km², an increase on the 1.75km² of area cleared in 2014.25

Survey in 2015

In 2015, DML identified 15 new cluster munition strike areas with a total size of 537,431m² through its survey activities.26 In 2014, AOAV, Mechem, MTI, and MINURSO confirmed a total of nearly 0.9km² as contaminated with CMR through non-technical and technical survey.

Clearance in 2015

In 2015, UNMAS reported that DML cleared 11 CMR-contaminated areas with a total size of 1,841,225m² to the east of the Berm, destroying 143 submunitions and another 120 items of UXO.27 This compares to clearance of seven areas totalling 1,756,566m² in 2014 by AOAV and MTI, with the destruction of 321 submunitions and 297 items of UXO.28

ARTICLE 4 COMPLIANCE

Western Sahara is not a state party or signatory to the CCM. However, the SADR submitted a voluntary CCM Article 7 transparency report to the UN in 2014, stating that “By submitting its voluntary report, the SADR would like to reaffirm its commitment to a total ban on cluster munitions as well as its willingness to accede to the Convention on Cluster Munitions and be bound by its provisions”.29

The SADR has obligations under international human rights law to clear CMR as soon as possible, including in accordance with the 1981 African Charter on Human and Peoples’ Rights.

UNMAS reported that the priority for its operations in 2016 would be to clear CMR-contaminated areas in support of MINURSO’s ceasefire monitoring efforts and its logistical supply teams. A total of six cluster strike areas will be tasked for clearance before the end of 2016, it said.30

According to UNMAS, no survey operations for cluster strike areas were planned for 2016, but discovery of new CMR contamination during the course of mine and ERW survey and clearance operations remains a possibility. UNMAS expected current capacities and funding levels to remain unchanged during the year.31

Table 4: Five-year summary of clearance32

<table>
<thead>
<tr>
<th>Year</th>
<th>Area cleared (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1,841,225</td>
</tr>
<tr>
<td>2014</td>
<td>1,756,566</td>
</tr>
<tr>
<td>2013</td>
<td>985,000</td>
</tr>
<tr>
<td>2012</td>
<td>819,122</td>
</tr>
<tr>
<td>2011</td>
<td>1,045,500</td>
</tr>
<tr>
<td>Total</td>
<td>6,447,413</td>
</tr>
</tbody>
</table>

26 Email from Sarah Holland, UNMAS, 21 April 2016. DML declined to provide data directly to Mine Action Review and requested that UNMAS data be used instead. Email from Melanie Villegas, Project Executive, Dynasafe MineTech Limited, 6 April 2016.
27 Email from Sarah Holland, UNMAS, 21 April 2016.
28 Email from Sarah Holland, UNMAS, 18 May 2015.
30 Email from Sarah Holland, UNMAS, 21 April 2016. See past Cluster Munition Monitor reports on Western Sahara in 2011–13; response to Cluster Munition Monitor questionnaire by Sarah Holland, UNMAS, 24 February 2014; and emails from Ruth Simpson, AOAV, 17 July 2013; Karl Greenwood, AOAV, 20 June 2012; and Penelope Caswell, AOAV, 11 April 2011. Different figures for the destruction of unexploded submunitions in 2010 were provided by MINURSO MACC in May 2011: 7,138 destroyed during BAC, and a further 113 during spot clearance. Email from Ginevra Cucinotta, MINURSO MACC, 11 May 2011.
31 Email from Sarah Holland, UNMAS, 21 April 2016.
32 Ibid.
In keeping with previous estimates, UNMAS stated that with current mine action capacity, it would take about nine years to clear all current CHAs, including minefields and cluster munition strike areas, provided that the number of CHA does not increase significantly in 2016.33

Following a visit by 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 84 civilian staff members of MINURSO, including the international staff of UNMAS. This resulted in the suspension of UNMAS-contracted demining activities in Western Sahara as at 20 March 2016.34 The decision sparked international condemnation and has threatened to paralyse MINURSO’s mission in Western Sahara, raising concerns over stability in the region and setting a dangerous precedent for UN peacekeeping operations.35

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 has been unable to fully carry out its mandate as the majority of its civilian component have been prevented from performing their duties. The resolution requests that the UN Secretary-General report back to the Security Council within 120 days on whether MINURSO has returned to full functionality.36

In April 2016, SMACO reported that as a result of these events, anticipated funding had been put on hold until the issue between MINURSO and Morocco is resolved. It stated that consequently, and without the MACC, it was “nearly unable to conduct its duties as it is totally reliant on UNMAS support which has been affected by the current crises”.37 NPA stated that SMACO was carrying out QA/QC activities but was having difficulty performing its functions and struggling with significant financial and logistical problems.38

As at the end of May 2016, UNMAS demining activities had not resumed and the DML teams were still suspended. The MINURSO MACC remained in Las Palmas, where it relocated following the expulsion.39

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33 Ibid., and email, 18 May 2015.
37 Email from Samu Ami, Coordinator, SMACO, 27 April 2016.
38 Email from El Hadji Mamadou Kebe, NPA, 27 May 2016.
39 Ibid.
ANNEX 1: ARTICLE 4 OF THE CONVENTION ON CLUSTER MUNITIONS

ARTICLE 4: CLEARANCE AND DESTRUCTION OF CLUSTER MUNITION REMNANTS AND RISK REDUCTION EDUCATION

1. Each State Party undertakes to clear and destroy, or ensure the clearance and destruction of, cluster munition remnants located in cluster munition contaminated areas under its jurisdiction or control, as follows:

(a) Where cluster munition remnants are located in areas under its jurisdiction or control at the date of entry into force of this Convention for that State Party, such clearance and destruction shall be completed as soon as possible but not later than ten years from that date;

(b) Where, after entry into force of this Convention for that State Party, cluster munitions have become cluster munition remnants located in areas under its jurisdiction or control, such clearance and destruction must be completed as soon as possible but not later than ten years after the end of the active hostilities during which such cluster munitions became cluster munition remnants; and

(c) Upon fulfilling either of its obligations set out in sub-paragraphs (a) and (b) of this paragraph, that State Party shall make a declaration of compliance to the next Meeting of States Parties.

2. In fulfilling its obligations under paragraph 1 of this Article, each State Party shall take the following measures as soon as possible, taking into consideration the provisions of Article 6 of this Convention regarding international cooperation and assistance:

(a) Survey, assess and record the threat posed by cluster munition remnants, making every effort to identify all cluster munition contaminated areas under its jurisdiction or control;

(b) Assess and prioritise needs in terms of marking, protection of civilians, clearance and destruction, and take steps to mobilise resources and develop a national plan to carry out these activities, building, where appropriate, upon existing structures, experiences and methodologies;

(c) Take all feasible steps to ensure that all cluster munition contaminated areas under its jurisdiction or control are perimeter-marked, monitored and protected by fencing or other means to ensure the effective exclusion of civilians. Warning signs based on methods of marking readily recognisable by the affected community should be utilised in the marking of suspected hazardous areas. Signs and other hazardous area boundary markers should, as far as possible, be visible, legible, durable and resistant to environmental effects and should clearly identify which side of the marked boundary is considered to be within the cluster munition contaminated areas and which side is considered to be safe;

(d) Clear and destroy all cluster munition remnants located in areas under its jurisdiction or control; and

(e) Conduct risk reduction education to ensure awareness among civilians living in or around cluster munition contaminated areas of the risks posed by such remnants.

3. In conducting the activities referred to in paragraph 2 of this Article, each State Party shall take into account international standards, including the International Mine Action Standards (IMAS).

4. This paragraph shall apply in cases in which cluster munitions have been used or abandoned by one State Party prior to entry into force of this Convention for that State Party and have become cluster munition remnants that are located in areas under the jurisdiction or control of another State Party at the time of entry into force of this Convention for the latter.

(a) In such cases, upon entry into force of this Convention for both States Parties, the former State Party is strongly encouraged to provide, inter alia, technical, financial, material or human resources assistance to the latter State Party, either bilaterally or through a mutually agreed third party, including through the United Nations system or other relevant organisations, to facilitate the marking, clearance and destruction of such cluster munition remnants.

(b) Such assistance shall include, where available, information on types and quantities of the cluster munitions used, precise locations of cluster munition strikes and areas in which cluster munition remnants are known to be located.
5. If a State Party believes that it will be unable to clear and destroy or ensure the clearance and destruction of all cluster munition remnants referred to in paragraph 1 of this Article within ten years of the entry into force of this Convention for that State Party, it may submit a request to a Meeting of States Parties or a Review Conference for an extension of the deadline for completing the clearance and destruction of such cluster munition remnants by a period of up to five years. The requested extension shall not exceed the number of years strictly necessary for that State Party to complete its obligations under paragraph 1 of this Article.

6. A request for an extension shall be submitted to a Meeting of States Parties or a Review Conference prior to the expiry of the time period referred to in paragraph 1 of this Article for that State Party. Each request shall be submitted a minimum of nine months prior to the Meeting of States Parties or Review Conference at which it is to be considered. Each request shall set out:

(a) The duration of the proposed extension;

(b) A detailed explanation of the reasons for the proposed extension, including the financial and technical means available to and required by the State Party for the clearance and destruction of all cluster munition remnants during the proposed extension;

(c) The preparation of future work and the status of work already conducted under national clearance and demining programmes during the initial ten year period referred to in paragraph 1 of this Article and any subsequent extensions;

(d) The total area containing cluster munition remnants at the time of entry into force of this Convention for that State Party and any additional areas containing cluster munition remnants discovered after such entry into force;

(e) The total area containing cluster munition remnants cleared since entry into force of this Convention;

(f) The total area containing cluster munition remnants remaining to be cleared during the proposed extension;

(g) The circumstances that have impeded the ability of the State Party to destroy all cluster munition remnants located in areas under its jurisdiction or control during the initial ten year period referred to in paragraph 1 of this Article, and those that may impede this ability during the proposed extension;

(h) The humanitarian, social, economic and environmental implications of the proposed extension; and

(i) Any other information relevant to the request for the proposed extension.

7. The Meeting of States Parties or the Review Conference shall, taking into consideration the factors referred to in paragraph 6 of this Article, including, inter alia, the quantities of cluster munition remnants reported, assess the request and decide by a majority of votes of States Parties present and voting whether to grant the request for an extension. The States Parties may decide to grant a shorter extension than that requested and may propose benchmarks for the extension, as appropriate.

8. Such an extension may be renewed by a period of up to five years upon the submission of a new request, in accordance with paragraphs 5, 6 and 7 of this Article. In requesting a further extension a State Party shall submit relevant additional information on what has been undertaken during the previous extension granted pursuant to this Article.
ANNEX 2: REPORTING TEMPLATES

Annex 2 provides templates for reporting accurately and meaningfully on cluster munition remnants (CMR) contamination and identification and release of land confirmed or suspected to contain CMR.

Table 1: **CMR contamination by province as at the end of (2015)**

<table>
<thead>
<tr>
<th>Province/Region</th>
<th>No. of CHAs with CMR</th>
<th>Area (km²)</th>
<th>No. of SHAs with CMR</th>
<th>Area (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CHAs = Confirmed hazardous areas   SHAs = Suspected hazardous areas

Table 2: **Non-technical survey in (2015)**

<table>
<thead>
<tr>
<th>Operator</th>
<th>No. of SHAs cancelled</th>
<th>Area cancelled (km²)</th>
<th>No. of SHAs confirmed as CMR contaminated</th>
<th>Area confirmed (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: **Technical survey of CMR-suspected area in (2015)**

<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>
<tbody>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4: **Clearance of CMR-contaminated areas in (2015)**

<table>
<thead>
<tr>
<th>Operator</th>
<th>No. of areas cleared</th>
<th>Area cleared (km²)</th>
<th>Submunitions destroyed</th>
<th>Other UXO destroyed</th>
<th>APM destroyed</th>
<th>AVM destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APM = Anti-personnel mine   AVM = Anti-vehicle mine   UXO = Unexploded ordnance
##GLOSSARY OF ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>APM</td>
<td>Anti-personnel mine</td>
</tr>
<tr>
<td>APMBC</td>
<td>Anti-Personnel Mine Ban Convention</td>
</tr>
<tr>
<td>AVM</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>BLS</td>
<td>Baseline Survey</td>
</tr>
<tr>
<td>CHA</td>
<td>Confirmed hazardous area</td>
</tr>
<tr>
<td>CCM</td>
<td>Convention on Cluster Munitions</td>
</tr>
<tr>
<td>CCW</td>
<td>Convention on Certain Conventional Weapons</td>
</tr>
<tr>
<td>CMR</td>
<td>Cluster munition remnants</td>
</tr>
<tr>
<td>CMRS</td>
<td>Cluster Munition Remnant Survey</td>
</tr>
<tr>
<td>DCA</td>
<td>DanChurch Aid</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 devices</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>LOC</td>
<td>Line of Contact</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>MDD</td>
<td>Mine detection dog (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>
</tr>
<tr>
<td>NMAS</td>
<td>National Mine Action Standards</td>
</tr>
<tr>
<td>NPA</td>
<td>Norwegian People’s Aid</td>
</tr>
<tr>
<td>NTS</td>
<td>Non-technical survey</td>
</tr>
<tr>
<td>NTSG</td>
<td>National Technical Standards and Guidelines</td>
</tr>
<tr>
<td>QA</td>
<td>Quality assurance</td>
</tr>
<tr>
<td>QC</td>
<td>Quality control</td>
</tr>
<tr>
<td>RACC</td>
<td>Route Assessment and Clearance Capacity (team)</td>
</tr>
<tr>
<td>SHA</td>
<td>Suspected hazardous area</td>
</tr>
<tr>
<td>TS</td>
<td>Technical survey</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>UNMAS</td>
<td>United Nations Mine Action Service</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>UXO</td>
<td>Unexploded ordnance</td>
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</table>
RECOMMENDATIONS FOR ACTION

Afghanistan should amend clearance reporting forms to disaggregate cluster munition remnants (CMR) from other unexploded ordnance (UXO) in line with the requirements of the Convention on Cluster Munitions (CCM).

Afghanistan should plan to fulfil its clearance obligations earlier than its Article 4 deadline to allow for slippage and newly identified contamination.

ARTICLE 4 DEADLINE: 1 MARCH 2022 (JUST ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE

<table>
<thead>
<tr>
<th>Year</th>
<th>Problem understood</th>
<th>Target date for completion of cluster munition clearance</th>
<th>Targeted clearance</th>
<th>Efficient clearance</th>
<th>National funding of programme</th>
<th>Timely clearance</th>
<th>Land-release system in place</th>
<th>National mine action standards</th>
<th>Reporting on progress</th>
<th>Improving performance</th>
<th>PERFORMANCE SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>5</td>
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<td>5.9</td>
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<td>2014</td>
<td>8</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>7</td>
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PERFORMANCE SCORE: AVERAGE 5.9 6.1

PO Box 8844 Youngstorget
N-0028 Oslo
Norway

Telephone: +47 2203 7700
Email: norsk.folkehjelp@npaid.org

www.npaid.org