CLEARING CLUSTER MUNITION REMNANTS

A REPORT BY MINE ACTION MONITOR FOR THE FIRST REVIEW CONFERENCE OF THE CONVENTION ON CLUSTER MUNITIONS

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The publication is available for download at www.mineactionmonitor.org. Please send any comments or suggestions to feedback@mineactionmonitor.org.

The rapid and efficient clearance of cluster munition remnants (CMR) around the world is a priority for Norwegian People's Aid's Department for Humanitarian Disarmament. We believe that, in most affected states, the problem can be addressed in just a few years or even months through an effective and targeted response.

Over the past two years, we have been conducting survey, and where necessary, clearance of CMR in a dozen states: Bosnia and Herzegovina, Cambodia, Grenada, Lao People's Democratic Republic, Lebanon, Libya, Mauritania, Montenegro, Mozambique, Serbia, South Sudan, and Vietnam. While priority is given to survey and clearance in affected states parties to the Convention on Cluster Munitions (CCM), we offer support and technical assistance to all states and territories that wish to address CMR on their territory in a timely fashion.

The solution to the CMR problem is, however, not only an operational one. Monitoring and advocacy are also both critical to ensuring that the necessary political will is generated to effectively tackle CMR contamination. For this reason, NPA has supported the work of the International Campaign to Ban Landmines-Cluster Munition Coalition's Cluster Munition Monitor since its inception and continues to do so, accepting primary responsibility for objective research into CMR survey and clearance around the world.

Based on the success of its publication *Clearing the Mines*, which was presented to the Third Review Conference of the Anti-Personnel Mine Ban Convention in 2014, Norwegian People's Aid (NPA) decided to support the creation of Mine Action Monitor.

Mine Action Monitor is an independent research and monitoring endeavour which aims to facilitate the implementation of survey and clearance obligations laid down in the Anti-Personnel Mine Ban Convention (APMBC) and the CCM. The present publication, *Clearing Cluster Munition Remnants*, is the first product of this new initiative, focusing on implementation of Article 4 of the CCM. NPA acknowledge the need to work closely with other operators, to improve the sector but also to put weight behind arguments on how to reach Article 4 (and APMBC Article 5) completion. NPA acknowledges the inputs of all organisations to this publication, and in particular those of Mines Advisory Group and The HALO Trust.

Although NPA directly supports the work of Mine Action Monitor, with funding kindly provided by the Royal Norwegian Ministry of Foreign Affairs, all of the Monitor's editorial decisions are taken independently of NPA, governments, and other non-governmental organisations (NGOs). This editorial independence is, we believe, critical to its credibility and effectiveness. We hope that *Clearing Cluster Munition Remnants* will prove an invaluable resource to states parties and signatories to the CCM, as well as to other states and donors, the United Nations, and NGOs. The publication and all individual country reports are available for download at www.mineactionmonitor.org, and comments on any aspect of the publication may be sent by email to feedback@mineactionmonitor.org.

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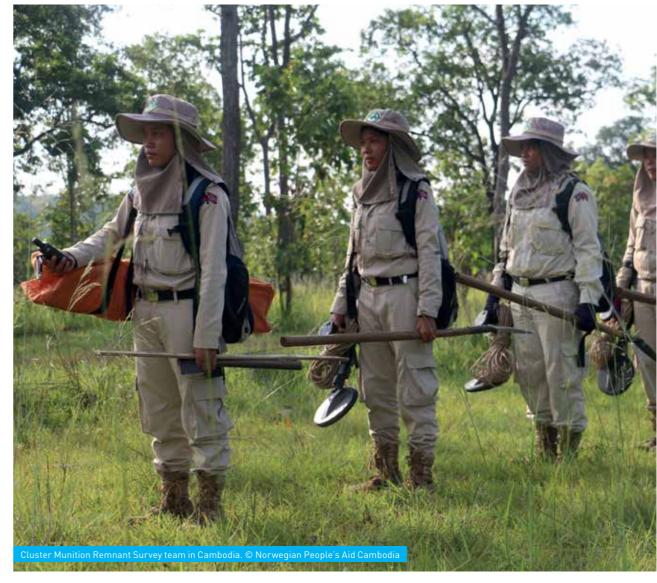
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OVERVIEW OF PROGRESS

In the five years since the entry into force of the Convention on Cluster Munitions (CCM), solid, though unspectacular, progress has been made towards ridding the world of unexploded submunitions and other cluster munition remnants (CMR).

Since the CCM's adoption in 2008, nine states have completed CMR survey and, where necessary, clearance: Albania, the Republic of Congo, Grenada, Guinea-Bissau, Mauritania, Norway, Thailand, Uganda, and Zambia. Since 1 January 2010 and through to the end of 2014, more than 255km² of land has been cleared of CMR, with the destruction of more than 295,000 submunitions. Furthermore, due to huge under-reporting, these figures do not by any means reflect the achievements of the international community in addressing this particularly hazardous form of contamination.

Yet, in too many contaminated states, particularly those that are party or signatory to the CCM, progress is either sluggish or non-existent, due largely to lack of political will, poor survey, and insufficient funding. Among others, states parties Chad, Chile, and Germany should already have completed resquisite survey and be carrying out full clearance of hazardous areas. Montenegro and Mozambique, both also states parties, should have declared completion of clearance by now, while signatories Angola and Colombia may be in a position to do so as soon as the requisite survey is conducted. Time is of the essence. For while recorded casualties from submunitions remain low, the impact of CMR on broader human security and on development is substantial.



GLOBAL CMR CONTAMINATION

As of August 2015, Mine Action Monitor believed or strongly suspected that at least 29 states and three areas were still affected by CMR.² Of these, 12 were states parties to the CCM, four were signatories, and 13 were not party (see Table 1).

Table 1: Global contamination from CMR

States parties	Signatory states	States not party	Other areas
Afghanistan	Angola*	Azerbaijan**	Kosovo
Bosnia and Herzegovina	Colombia*	Cambodia	Nagorno-Karabakh
Chad	DR Congo	Georgia**	Western Sahara
Chile	Somalia	Iran	
Croatia		Libya	
Germany*		Serbia	
Iraq		South Sudan	
Lao PDR		Sudan	
Lebanon		Syria	
Montenegro		Tajikistan	
Mozambique*		Ukraine	
United Kingdom*		Vietnam	
		Yemen	

^{*} Contamination may be found not to exist once appropriate survey has been conducted.

As Table 1 indicates, two states have cleared all CMR in areas under their control, but do not have access to other areas under their jurisdiction in which contamination is confirmed or strongly suspected. Furthermore, as many as five states may be able to declare that they no longer have CMR in areas under their jurisdiction or control once appropriate survey has been undertaken.



EXTENT OF CONTAMINATION

In many affected states, contamination is relatively limited and the problem manageable within a few months or years. The Lao People's Democratic Republic (Lao PDR) and Vietnam, however, are massively contaminated (defined as contamination across more than 1,000km²), while heavy contamination exists in Cambodia and Iraq (covering more than 100km²). Most other states have considerably less, although in a number of cases the extent of contamination is simply unknown or unclear. Furthermore, inadequate earlier surveys in a number of contexts, notably Kosovo and Lebanon, mean that despite ongoing clearance efforts

the overall assessment of contamination is not reducing, as previously unknown areas of contamination continue 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 Monitor based on available evidence, as opposed to the claims of governments or mine action programmes, which are sometimes unsubstantiated or improbable.

Table 2: Mine Action Monitor assessment of the extent of contamination

Massive (>1,000km²)	Heavy (100–1,000km²)	Medium (5–100km²)	Light (<5km²)	Unclear*
Lao PDR	Cambodia	Afghanistan	Angola	Azerbaijan
Vietnam	Iraq	Bosnia and Herzegovina	Colombia	Chad
		Chile	Croatia	Iran
		Kosovo	DR Congo	Somalia
		Lebanon	Georgia	Syria
		Nagorno-Karabakh	Germany	Ukraine
		South Sudan	Libya	
		Western Sahara	Montenegro	
		Yemen	Mozambique	
			Serbia	
			Sudan	
			Tajikistan	
			United Kingdom	
Two states	Two states	Six states & three areas	Thirteen states	Six states

* Unclear means that no credible estimate for contamination can be given although it is certain that CMR contamination remains.

During the Indochina Wars of the 1960s and 1970s, Lao PDR experienced the heaviest aerial bombardments in history, leaving it with the world's worst contamination from unexploded submunitions. The United States of America dropped more than 270 million submunitions on Lao PDR, dozens of millions more on Vietnam, and at least 26 million on Cambodia, leaving tens of millions of unexploded submunitions that continue to kill and maim today.

In Iraq, the highway between Kuwait and Basra 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, Nasiriyah, and the approaches to Baghdad. In 2004, Iraq's National Mine Action Authority identified 2,200 areas containing CMR along the Tigris and Euphrates river valleys.

Most of Lebanon's contamination is from the 2006 invasion by Israel (though some dates back to the 1980s), while Libya's CMR threat is largely the consequence of use by the Gaddafi regime in 2011. To the extent Georgia is still affected, an issue that will only become clear if and when access is granted to South Ossetia, this is the result of the internal violence and external armed conflict with Russia in 2008. But while much of the global threat from CMR is the consequence of conflicts in earlier decades dating back to 1960, new contamination continues to occur, notably amid ongoing armed conflicts in Libya, South Sudan, Sudan, Syria, Ukraine, and Yemen.

Although the overwhelming majority of CMR result from armed conflict, contamination in Chile and Germany is purely the consequence of the deployment of cluster munitions on testing and training ranges.

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^{**} Contamination only believed to exist in areas not under the control of the government.

GLOBAL PROGRESS IN CLEARING CMR

Table 3: Progress in clearance output in 2010 to end-2014

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Year	Area cleared (km²)	Submunitions destroyed
2014	73.91	68,322
2013	30.94	54,781
2012	77.98	59,171
2011	54.96	52,845
2010	18.55	59,978
Totals	256.34	295,097

Since 2010, a total of more than 255km² of CMR-contaminated areas have been cleared with the destruction of more than 295,000 unexploded submunitions. Table 3 summarises progress made in clearance output during the five calendar years of clearance from 1 January 2010 to 31 December 2014. Global clearance in 2014 was the second highest ever recorded and saw the greatest number of submunitions destroyed.

PROGRESS IN 2014

Table 4: Major CMR clearance in 2014

State/area	Area cleared (km²)	Submunitions destroyed
Lao PDR	50.00*	58,498
Nagorno-Karabakh	13.00	311
Cambodia	2.60	649
Lebanon	2.10	2,750
Iraq**	2.00	254
Western Sahara	1.76	321
Georgia	1.30	68

More than two-thirds of all recorded clearance in 2014 (by area), occurred in just one state party: Lao PDR, as reflected in Table 4. Nagorno-Karabakh, where HALO Trust is the sole CMR clearance operator, had the second highest clearance with 13km², although with the clearance of only a fraction of the number of submunitions destroyed in Lao PDR. Lebanon and Iraq, both also states parties, cleared 2.1km² and 2km², respectively.

Forty-five percent of all submunitions destroyed in 2014 were blown up during roving rather than planned operations. In terms of operators, UXO Lao, operating only in Lao PDR, led the way with the destruction of 25,689 submunitions during the year. Norwegian People's Aid (NPA) destroyed 16,601 submunitions in Bosnia and Herzegovina, Cambodia, Lao PDR, Lebanon, South Sudan, and Vietnam. Mines Advisory Group (MAG) destroyed 12,833 submunitions in Cambodia, the Democratic Republic of Congo (DR Congo), Lao PDR, Lebanon, South Sudan, and Vietnam. HALO Trust destroyed 5,254 submunitions in Georgia, Lao PDR, and Nagorno-Karabakh.

COMPLETION OF CLEARANCE

Table 5: Completion of CMR survey and clearance since 2008

No.	State	Date of completion
1	Mauritania	2013
2	Norway	2013
3	Grenada	2012
4	Republic of Congo	2012
5	Guinea-Bissau	2012
6	Thailand	2011
7	Zambia	2010
8	Albania	2009
9	Uganda	2008

Table 5 lists nine states that are no longer suspected to be contaminated with CMR since the adoption of the CCM in August 2008: seven states parties have declared completion of their Article 4 obligations, along with one signatory state, Uganda, and one state not party, Thailand, which are also believed to have completed clearance.

DEADLINES FOR CLEARANCE

Table 6: States parties' Article 4 deadlines for survey and clearance

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No.	State party	Article 4 deadline
1	Croatia	1 August 2020
2	Germany	1 August 2020
3	Lao PDR	1 August 2020
4	Montenegro	1 August 2020
5	United Kingdom	1 November 2020
6	Bosnia and Herzegovina	1 March 2021
7	Lebanon	1 May 2021
8	Chile	1 June 2021
9	Mozambique	1 September 2021
10	Afghanistan	1 March 2022
11	Chad	1 September 2023
12	Iraq	1 November 2023

All other states, however, whether or not they are signatories to the CCM, are bound by their obligations under international human rights law to protect life, which demand that clearance be completed as soon as possible, with preventive measures to protect civilians in the meantime. For instance, in the case of *Albekov and others v. Russia*, which concerned a failure to conduct mine clearance, 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]. Russia was not (and is not) a party to the Anti-Personnel Mine Ban Convention.

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 6 summarises these deadlines, the first of which expire in less than five years' time.

^{*} This figure is a low estimate based on total battle area clearance (BAC) adjusted pro rata for clearance of CMR compared to other forms of unexploded ordnance (UXO).

^{**} Figures for Iraq do not include reported figures for the Iraqi Kurdistan region attributed to Mines Advisory Group (MAG) as MAG did not actually conduct clearance of CMR there in 2014.

QUALITY OF SURVEY AND CLEARANCE PROGRAMMES

The quality of programmes for the survey and clearance of CMR varies widely among states parties and signatories (as it does among other states). To help states parties and their partners focus their capacity building and technical assistance efforts on areas of weakness, a performance scoring system has been developed by Mine Action Monitor. Ten areas have been identified that have a particularly strong influence on the effectiveness and efficiency of a CMR survey and clearance programme, as shown in the table below.

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 below.

Criterion	Key factors affecting scoring
Understanding of the problem	Has the extent of the CMR threat been identified with a reasonable degree of accuracy? Does the estimate include confirmed hazardous areas as well as suspected hazardous areas?
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 ten days in an area without finding any contamination, what happens?
Efficient clearance	How much does manual clearance cost per m ² ? Are costs increasing or decreasing?
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 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 there a functioning non-technical survey capacity? Is there a functioning technical survey capacity?
National mine action standards	Do national mine action standards exist? Do they respect the International Mine Action Standards (IMAS)? 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 to other states parties at CCM intersessional meetings? Does it report regularly and meaningfully to donors? Do these reports detail progress disaggregated by the different methods of land release?
Improving performance	Has the national programme, or key parts of it, improved or deteriorated over the previous calendar year?

Table 7: Programme performance in states parties with Article 4 obligations*

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State	Performance score	Performance rating
Croatia	7.0	Good
Afghanistan	6.5	Average
DR Congo (signatory)	6.2	Average
Bosnia and Herzegovina	6.1	Average
Mozambique	6.0	Average
Lao PDR	5.9	Average but improving
Lebanon	5.6	Average
United Kingdom	5.5	Average
Germany	5.4	Average
Montenegro	5.0	Average
Somalia (signatory)	4.9	Poor
Iraq	4.3	Poor
Chad	4.2	Poor
Chile	4.1	Poor

Table 7 summarises the scores for all states parties and two signatories. Only one state achieved a rating of good for 2014–15: Croatia, and even this state needs to improve its land release system for area confirmed or suspected to contain CMR. Eight states parties and one signatory (DR Congo) were rated as average (although recent improvement in Lao PDR was observed), while the programmes in Chad, Chile, Iraq, and Somalia were rated as poor (although Somalia's performance was improving).

SURVEY AND CLEARANCE OF CMR

Survey and clearance of CMR differs from approaches used to tackle both landmines and other forms of unexploded ordnance (UXO).⁵ Unexploded submunitions, the mainstay of the CMR threat, are always found in cluster munition strike zones. Such contamination, whether delivered by ground-based systems or from the air, will always have a "footprint" (the area covered by the submunitions when they hit the ground), ⁶ though informal or emergency clearance without careful recording of individual submunitions that have been removed may have distorted it.

Multiple overlapping footprints may impede accurate identification of each of the footprints. The size of each footprint in a strike zone will depend on factors such as the type and age of the cluster munition used, methods of delivery, soil conditions, vegetation, and terrain fluctuations. Unlike mines, all submunitions contain a high amount of metal.

Efficient release of areas suspected or confirmed to contain CMR demands a tailored and systematic approach that privileges survey and information management over clearance in areas suspected to contain unexploded submunitions.

Bombing data has proven fairly accurate in some contexts but less accurate or even non-existent in others. Other variables that differ from one context to another include the type and age of cluster munitions, deployment methods, topography, vegetation, and ground conditions. It is thus not possible to develop a single response that would work everywhere. Generic survey and land release principles must be adapted to suit the local context.

There is typically confusion about the difference between suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs). SHAs are all too often presented, incorrectly, as a useful measure of the scope of an explosive threat; this inflates the real problem and increases the costs of clearance. SHAs should be considered as a target for a more detailed evidence-based survey process.

CHAs should be established only on physical evidence of the presence of CMR. This is especially important in countries with historical contamination and where other information (such as bombing data) may be highly unreliable and inaccurate.

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^{*} Signatories DR Congo and Somalia are included as both have been tackling CMR contamination. The situation of CMR in Angola and Colombia is less clear, as noted below.

Non-technical survey describes detailed evidence-based survey activities that involve collecting and analysing information about CMR in an area. The objectives are to:

- confirm whether or not there is evidence of CMR;
- identify the type and extent of remnants and other hazards; and
- define, as far as possible, the perimeter of the contaminated area.

Technical survey describes a detailed survey intervention with assets that can detect or reveal CMR. It is usually integrated into the wider survey process. When applied outside a CHA its purpose is to assist the definition of specific CHAs and/or cancel land that was wrongly suspected to contain contamination. When applied inside a CHA its principal purpose is to indicate the absence of CMR, which will justify release by the survey; or the presence of such remnants, which indicates a requirement for clearance.

In sparsely vegetated areas, or if unexploded submunitions have been in the ground for many years, access by foot into contaminated areas is normally considered safe. While safety distances are always applied during subsurface clearance, the risk of accidental detonation during visual search is considered negligible. Surveyors may thus walk next to each other in a marked lane to ensure that the entire area is searched adequately.

The burial depth of unexploded submunitions is a function of the type of cluster munition and several external factors, including soil properties, vegetation, and topographic fluctuations. Some armed submunitions may be buried deeply while most are likely to be found on the surface or at shallow depths below it. It is unreasonably slow and costly to search systematically down to depths

beyond 15–25cm (and occasionally below 100cm) to ensure that all submunitions are cleared.

Surface-located submunitions may become invisible over time. Instrument-aided surface search (e.g. using metal detectors tuned to low sensitivity, bomb locators tuned to low sensitivity, and large loop detectors) can reinforce surface search during technical survey. This process must not be confused with clearance. It is designed to help define a more accurate footprint.

In stark contrast with mine clearance, clearance of cluster munition footprints typically aims to work from the centre of the strike outwards. "Fadeout" is the distance to which search will continue after finding what is perceived as the last target item in a footprint or the last box (a defined and marked area to assist systematic clearance of a strike) with evidence points. The perceived maximum distance between two items (submunitions or fragments) should equal the minimum fadeout distance (which, in practice, will typically be 30–50 metres).

In states with historical contamination, a specific cluster munition remnant survey (CMRS) approach may be warranted. The CMRS methodology, which was developed by NPA in south-east Asia, includes systematic search over 50 by 50 metre boxes to confirm presence of contamination and thereby identify confirmed hazardous areas.

Mortar, rocket, and air-dropped cluster munitions that have failed to disperse submunitions and have impacted the ground loaded with unarmed submunitions should be dealt with like any other UXO items and not as a cluster strike. These are known as "failed cluster munitions" in the CCM.7

REPORTING ON SURVEY AND CLEARANCE

It remains astonishing how poorly (and how infrequently) 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.8

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

The Mine Action Monitor 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 opposite. 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 Monitor 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 (BAC); and
- failure to disaggregate submunitions from other forms of UXO in clearance figures.

MODEL REPORTING TEMPLATES FOR STATES AND OPERATORS

Table 8: CMR contamination by province (as of end 2014)

Province No. of confirmed areas Area (km²) No. of suspected areas Area (km²)

Totals

As discussed, in reporting on survey the aim is to report on CHAs and to cancel or confirm SHAs using an appropriate combination of non-technical and technical survey. CHAs and SHAs must be clearly distinguished in reporting.

Table 9: Survey of CMR-contaminated areas in (2014)

Name of No. of suspected Area cancelled areas confirmed Area confirmed Area reduced by operator areas cancelled (km²) as contaminated (km²) technical survey (km²)

Totals

Land previously classified as an SHA will be **cancelled** if a follow-on survey concludes that no hazards exist in these areas. **Released** land describes all or parts of a CHA where a legitimate claim of CMR has been eliminated through technical survey and/or clearance. Area released by technical survey is also called reduced land in the IMAS.

Table 10: Clearance of CMR-contaminated area in (2014)

Name of No. of areas released Area cleared (km²) Submunitions destroyed Other UXO destroyed operator

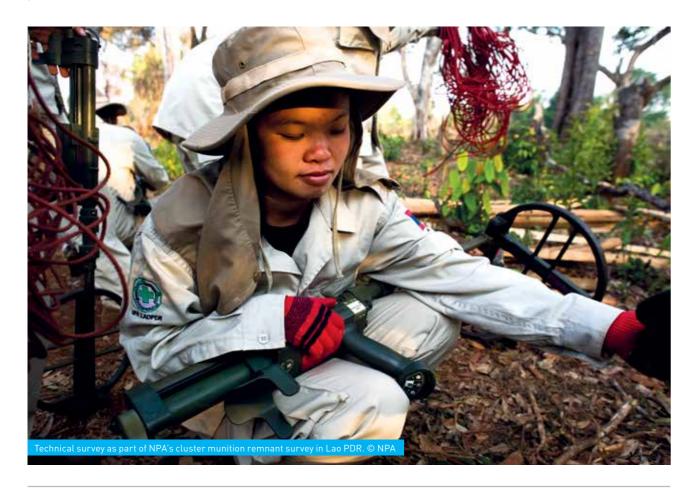
Totals

OUTLOOK AND RECOMMENDATIONS

Quality survey is the basis for all effective mine action, including clearance of CMR, but continues to be executed poorly in many affected countries. A thorough understanding of land release techniques and terminology, including among operators who should know better, is long overdue. With respect to CMR, Information Management System for Mine Action (IMSMA) templates should be changed to ensure that submunitions are systematically disaggregated from other UXO in clearance reports.

Finally, considerable human and financial resources have been dedicated to capacity building, especially for personnel in national mine action centres and other local

mine action institutions. Given the continuing problems in understanding and applying land release approaches and then reporting on them to donors, states, and others, one is entitled to ask whether this work was carried out effectively; and thus whether it has been money well spent. It has been 20 years since the landmark United Nations Department of Humanitarian Affairs' reports on the development of indigenous mine action capacities (covering Afghanistan, Angola, Cambodia, and Mozambique, together with a summary study report): perhaps it is time for the mine action community to take another hard look at its efforts to build capacity?



ENDNOTES

- 1 CMR are defined in the Convention on Cluster Munitions as comprising unexploded submunitions and bomblets and abandoned and failed cluster munitions. Failed cluster munitions are those where the container or dispenser has failed to open and/or disperse the submunitions. Abandoned cluster munitions are those that have not been used but have been effectively abandoned by the owner on foreign soil.
- 2 The UK is affected by cluster munition remnants that remain on the Falkland Islands/Malvinas. There is a sovereignty dispute with Argentina, which also claims jurisdiction over the islands. In addition, the following states are suspected still to have CMR on their territory: Eritrea, Ethiopia, Jordan, Kuwait, Russia, Saudi Arabia.
- 3 These are obligations of "due diligence" according to which a state must make all reasonable, good faith efforts to protect the lives of everyone under its iurisdiction or control.
- 4 European Court of Human Rights, *Albekov and Others v. Russia*, Judgment (Final), 6 April 2009, §90. See also *Pasa and Erkan Erol v. Turkey*, Judgment, 12
- 5 This section is based on NPA's August 2014 publication, Cluster Munition Remnants, *Methods of Survey and Clearance*, available at www.npaid.org and www.mineactionmonitor.org.
- 6 The number of submunitions may to some degree determine the size of the footprint. A footprint from one cluster bomb will normally not exceed a length of 300 metres and a width of 200 metres.
- 7 Art. 2(4), CCM
- 8 Art. 7(1)(h) and (i), CCM.

STATES PARTIES





PROGRAMME PERFORMANCE

Problem understood	7
Target date for completion of clearance of cluster munition	on remnants 6
Targeted clearance	7
Efficient clearance	7
National funding of programme	7
Timely clearance	6
Land release system in place	7
National mine action standards	6
Reporting on progress	6
Improving performance	6
PERFORMANCE SCORE: 6.5	AVERAGE

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.

CONTAMINATION

The Mine Action Coordination Centre of Afghanistan (MACCA) reported that at the end of 2014 there were 18 areas containing CMR covering a total of more than 7.26km²; a modest reduction from the 22 areas covering 7.64km² recorded in its Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline extension request submitted in March 2012.¹ By late April 2015, MACCA stated that total CMR contamination had dropped to 6.86km² covering four provinces.² These areas are said to block access to grazing and agricultural land.³

However, contamination by CMR appears more widespread than reported, as demining operators say they continue to find random submunitions on demining tasks. The extent of those finds is unclear as operators' standard reporting forms only provide for recording clearance of UXO.

Soviet forces used cluster munitions during the decadelong war of resistance to the Soviet-backed government and United States (US) aircraft dropped 1,228 cluster munitions containing some 248,056 submunitions between October 2001 and early 2002.⁵

PROGRAMME MANAGEMENT

The Mine Action Programme of Afghanistan (MAPA) is coordinated by MACCA with the support of a UN Mine Action Service (UNMAS) project office.

STRATEGIC PLANNING

Afghanistan stated 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. However, in its latest CCM Article 7 Report (for calendar year 2014), Afghanistan said it would clear CMR hazards in Nangarhar and Takhar provinces totalling 5km², nearly three-quarters of the remaining contamination, during Afghan year 1395 (which ends on 20 March 2017). It planned to clear a further three hazards totalling 0.8km² in Afghan year 1397, and the last known two hazards covering 1.06km² in Afghan year 1400 (which ends in March 2022, Afghanistan's Article 4 clearance deadline).

OPERATORS

Clearance of CMR is conducted by five long-established national and two international non-governmental organisations (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 Organization for Mine Clearance and Afghan Rehabilitation (OMAR). The international NGOs are Danish Demining Group (DDG) and HALO Trust.

LAND RELEASE

The MACCA recorded release of one CMR-contaminated area in 2014: MDC cleared 6,300m² destroying 20 submunitions.8 HALO Trust did not work on CMR hazards in 2014 but reported that it destroyed 12 submunitions in the course of mine clearance operations, and a further 93 in spot/roving explosive ordnance disposal and in the course of battle area clearance.9

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 is just on track to meet this deadline.

Clearance of Afghanistan's remaining CMR hazards by its Article 4 deadline is well within the MAPA's capacity. Afghanistan's APMBC Article 5 deadline extension request provided for clearance of all explosive remnants of war (ERW), including submunitions, by 2020. 10 However, that timetable has slipped and Afghanistan reported in 2015 that it intended to complete CMR clearance only by 2022. 11 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 that operators will continue to encounter residual contamination beyond the deadline.

ENDNOTES

- 1 Email from MACCA, 30 April 2015; Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline Extension Request, 29 March 2012, p. 165.
- 2 CCM Article 7 Report (for 2014), Form F. The provinces are Maydan Wardak, Nangarhar, Paktya, and Takhar.
- 3 Statement of Afghanistan, CCM Intersessional Meetings, Geneva, 15 April 2013.
- 4 Interviews with MACCA implementing partners, Kabul, May 2013.
- 5 Human Rights Watch and Landmine Action, Banning Cluster Munitions: Government Policy and Practice, Mines Action Canada, Ottawa, May 2009, p. 27.
- 6 Statement of Afghanistan, Fifth Meeting of States Parties to the CCM San Jose, 2–5 September 2014.
- 7 CCM Article 7 Report (for 2014), Form F.
- 8 Email from MACCA, 30 April 2015.
- 9 Email from Farid Homayoun, Country Director, HALO Trust, 9 May 2015.
- 10 APMBC Article 5 deadline Extension Request, 29 March 2012, p. 194.
- 11 CCM Article 7 Report (for 2014), Form F.



PROGRAMME PERFORMANCE

Problem understood	8
Target date for completion of clearance of cluster mur	nition remnants 5
Targeted clearance	6
Efficient clearance	6
National funding of programme	7
Timely clearance	6
Land release system in place	6
National mine action standards	6
Reporting on progress	5
Improving performance	6
PERFORMANCE SCORE: 6.1	AVERAGE

RECOMMENDATIONS FOR ACTION

- → Bosnia and Herzegovina (BiH) should accelerate clearance of cluster munition remnants (CMR) to fulfil its Article 4 obligations by the end of 2017, in advance of its treaty deadline.
- → BiH should improve the accuracy and timeliness of its Convention on Cluster Munitions (CCM) Article 7 transparency reports on CMR contamination and clearance.
- → BHMAC should revise its fade-out distances in accordance with best international practice to avoid unnecessary clearance.

CONTAMINATION

Bosnia and Herzegovina is contaminated with CMR, with 17 areas over a total of 0.78km² confirmed to contain CMR, while a further 400 areas over 8.76km² are suspected to contain CMR (see Table 1).¹

Table 1: CMR contamination in BiH as of April 2015

Administrative area	Suspected areas (km²)	Confirmed areas (km²)
Unsko-Sanski canton	0.58	0.09
Posavski canton	0	0
Tuzlanski canton	1.45	0
Zeničko-Dobojski canton	1.19	0
Bosansko-Podrinjski canton	0	0
Srednje-Bosanski canton	2.83	0.16
Hercegovačko-Neretvanski canton	0.24	0
Zapadno-Hercegovački canton	0.13	0.04
Sarajevo canton	0.37	0.04
Canton 10	0.79	0.17
Total Federation BiH	7.58	0.50
Total Republika Srpska	1.18	0.28
Brčko district	0	0
TOTALS	8.76	0.78

The BiH Mine Action Center (BHMAC) reported no casualties from submunitions for 2014. 2

PROGRAMME MANAGEMENT

Established by a 2002 Decree of the Council of Ministers, BHMAC is responsible for regulating mine action and implementing BiH's demining plan, including accreditation of all mine action organisations.³

STRATEGIC PLANNING

The BiH Mine Action Strategy for 2009–19 guides mine action in BiH but does not mention CMR clearance. BHMAC conducted the first of three planned revisions of the strategy in 2012–13, with the other two due in 2015 and 2017 respectively. The 2012 revision does 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. BHMAC reported that its second planned revision would be completed by the end of 2015.

OPERATORS

During 2014, three organisations were specifically accredited for cluster munition clearance and destruction: Norwegian People's Aid (NPA), Civil Protection of the BiH Federation, and the BiH armed forces.⁸

STANDARDS

In 2015, BHMAC accepted NPA's standing operating procedures for non-technical survey of areas suspected to contain CMR. National standards on technical survey and clearance of areas with CMR were already adopted in February 2013.9



LAND RELEASE

BiH released a total of more than 1.7km² containing CMR in 2014. A total of 0.41km² suspected to contain CMR was cancelled by non-technical survey and 1.07km² was released by technical survey (see Table 2), while 0.26km² of contaminated area was cleared (see Table 3).

SURVEY IN 2014

In 2014, NPA non-technical survey teams seconded to BHMAC regional offices conducted a survey of areas suspected to contain CMR. In this year, NPA demining teams also conducted seven technical survey and clearance tasks.¹⁰

Table 2. Survey in 2014

Operator	SHAs cancelled	Area cancelled (km²)	Areas confirmed to contain CMR	Confirmed area (km²)	Area released by technical survey (m²)
ВНМАС	91	0.41	17	0.78	0
NPA	7	0	0	0	758,084
Armed Forces	5	0	0	0	270,509
Civil Protection Federation BiH	3	0	0	0	46,208
Totals	106	0.41	17	0.78	1,074,801

CLEARANCE IN 2014

Three operators cleared a total of 0.26km² containing CMR in 2014, destroying 581 submunitions (see Table 3).

Table 3. Clearance of CMR-contaminated area in 2014¹¹

Operator	Areas released	Area cleared (m²)	Submunitions destroyed	Other UXO destroyed
NPA	7	241,956	394	1
Civil Protection Federation BiH	3	18,261	57	15
Armed Forces	5	2,504	130	0
Totals	15	262,721	581	16

During 2014, NPA implemented a pilot project using special detection dogs (SDD) 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 technical survey in areas contaminated with cluster munition remnants." This will enable "identification of footprints of a cluster munition strike... without established evidence points through previous non-technical survey." In 2015, NPA was continuing to release CMR-contaminated areas through non-technical survey, technical survey and clearance. However, from May 2015 the number of NPA teams engaged in technical survey and clearance of CMR-contaminated areas contaminated was decreased from two to one. 13

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 they "do not expect any obstacles" in meeting their Article 4 deadline. APA believes that "considering the scope of the problem of CMR contamination", BiH could meet its clearance obligations under the CCM before its deadline if it were to include "engagement of national organizations (BiH Armed Forces and Civil Protection)" in the work. The 2012 Mine Action Strategy Revision had expected that BiH would "completely eliminate" all CMR-contaminated areas by 2015.

NPA funding for CMR-related activities in BiH from a Norwegian TV appeal in 2011 ended in April 2015. Release of contaminated areas was continuing in 2015 supported by the Norwegian Ministry of Foreign Affairs.¹⁷



ENDNOTES

- 1 Emails from Tarik Serak, Head, Department for Mine Action Management, BHMAC, 23 April 2015; and Amela Balic, Operations Manager, Norwegian People's Aid (NPA) Bosnia, 15 April 2015.
- 2 Email from Tarik Serak, BHMAC, 23 April 2015.
- 3 Bosnia and Herzegovina Official Gazette, Sarajevo, 17 March 2002.
- 4 Statement of BiH, Thirteenth Meeting of States Parties to the Anti-Personnel Mine Ban Convention, Geneva, 5 December 2013, p. 2, at: http://www.apminebanconvention.org/meetings-of-the-states-parties/13msp/what-happened-at-the-13msp/day-4-thursday-5-december/statements/?eID=dam_frontend_push&docID=17462.
- 5 BHMAC, "Revision of Mine Action Strategy in Bosnia and Herzegovina 2009-2019 (First Revision 2012)", 14 March 2013.
- 6 UNDP, Draft Mine Action Governance and Management Assessment for Bosnia and Herzegovina, 13 May 2015, p. 17.
- 7 Email from Tarik Serak, BHMAC, 23 April 2015.
- 8 Ibid.
- 9 Email from Darvin Lisica, Programme Manager BiH, NPA, 11 August 2015.
- 10 Emails from Tarik Serak, BHMAC, 23 April 2015; and Amela Balic, NPA Bosnia, 15 April 2015.
- $11 \quad \text{Ibid. BiH's CCM Article 7 Report for 2014 wrongly totals the number of submunitions destroyed as 251. See Form F(3).}$
- 12 Email from Amela Balic, NPA Bosnia, 15 April 2015.
- 13 Ibid., 15 April and 25 May 2015.
- 14 Email from Tarik Serak, BHMAC, 23 April 2015.
- 15 Email from Amela Balic, NPA Bosnia, 15 April 2015.
- 16 BHMAC, "Revision of Mine Action Strategy in Bosnia and Herzegovina 2009-2019 (First Revision 2012)", 14 March 2013, p. 13.
- 17 Ibid., 15 April 2015.



ARTICLE 4 DEADLINE: 1 SEPTEMBER 2023
[UNCLEAR WHETHER ON TRACK TO MEET DEADLINE]

PROGRAMME PERFORMANCE

Problem understood	4
Target date for completion of clear	ance of cluster munition remnants 4
Targeted clearance	4
Efficient clearance	4
National funding of programme	4
Timely clearance	4
Land release system in place	6
National mine action standards	6
Reporting on progress	2
Improving performance	4
PERFORMANCE SCORE: 4.2	POOR

RECOMMENDATIONS FOR ACTION

- → Chad should submit its two missing Article 7 transparency reports as soon as possible.
- Chad should provide information on the threat from cluster munition remnants (CMR) and any clearance it has conducted, and set out plans to address CMR as soon as possible.

CONTAMINATION

The extent of the remaining threat from CMR 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 antitank PETAB-1.5 submunitions during survey in an area close to Faya Largeau.²

At the signing conference of the Convention on Cluster Munitions (CCM) on 3 December 2008, Chad spoke of "vast swathes of territory" contaminated with "mines and unexploded ordnance (UXO) (munitions and submunitions)."³ It has yet 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 they were used 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.⁴

PROGRAMME MANAGEMENT

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

In late 2014, MAG, which had been Chad's sole international demining operator in 2013 but had to withdraw from the country due to lack of funding, was contracted as part of a European Union-funded project (Projet d'appui au secteur du déminage au Tchad, PADEMIN) to conduct clearance, especially in the northern regions of Borkou, Ennedi, and Tibesti. MAG resumed demining operations in late 2014 with the new funds allocated by the European Union (EU).

Chad also reported in April 2015 that Handicap International, with funding from the PADEMIN project, had provided support to build CND's capacity in 2014. The operator will also be conducting non-technical survey in the southern region Moyen-Chari.⁶

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.⁷

Following the request of the Thirteenth Meeting of States Parties to the Anti-Personnel Mine Ban Convention, the CND elaborated, with technical support from United Nations Development Programme (UNDP), a national mine action plan for 2014–19. The plan notes that Chad adhered to the CCM but does not detail plans to clear CMR.⁸

Since 2008, Chad's mine action programme has suffered from a lack of international funding, weak government oversight, and persistent mismanagement within the CND, resulting in little or no demining until October 2012 when the EU provided funding to MAG.9 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 320.10 A new director was appointed in 2013.11 CND demining operations have also been plagued by poor equipment and lack of funding. In an update to states parties in June 2014, Chad acknowledged difficulties faced by its national mine action centre and called for resumption of technical and operational assistance.12

LAND RELEASE

Chad has not submitted either its initial CCM Article 7 transparency report (due on 28 February 2014) or its annual report for 2014 (due by 30 April 2015). It is therefore in violation of the CCM.

In 2014, MAG was conducting clearance in Tibesti but has not reported in detail on its survey and clearance operations.¹³

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.

ENDNOTES

- 1 Handicap International (HI), Fatal Footprint: The Global Human Impact of Cluster Munitions, Brussels, 2006, p. 17; HI, Circle of Impact: The Fatal Footprint of Cluster Munitions on People and Communities, Brussels, 2007, p. 48; Survey Action Centre, "Landmine Impact Survey, Republic of Chad", Washington DC, 2002, p. 59; and Human Rights Watch and Landmine Action, Banning Cluster Munitions: Government Policy and Practice, Mines Action Canada, Ottawa, 2009, p. 56.
- 2 Emails from Liebeschitz Rodolphe, UNDP, 21 February 2011; and Bruno Bouchardy, MAG Chad, 11 March 2011.
- 3 Statement of Chad, CCM Signing Conference, Oslo, 3 December 2008.
- 4 Statement of Chad, Third Meeting of States Parties to the CCM, Oslo, 13 September 2012.
- 5 MAG, "New Help For More Than 400,000 People in Chad", 15 December 2014, at: http://www.maginternational.org/our-impact/news/new-projectwill-help-more-than-400000-people-in-chad/.
- 6 Anti-Personnel Mine Ban Convention (APMBC) Article 7 Report, Form J, 1 April 2015; and "New Help For More Than 400,000 People in Chad", MAG, 15 December 2014.
- 7 Mine Action Strategic Plan 2013–2017, annexed to Third APMBC Article 5 deadline Extension Request, 2 May 2013.
- 8 HCND, Mine Action Plan 2014–2019, May 2014, p. 4.
- 9 Presentation of Chad at African Union/ICRC Weapons Contamination Workshop, Addis Ababa, 3-5 March 2013; Third APMBC Article 5 deadline Extension Request, 2 May 2013, p. 12.
- 10 Third APMBC Article 5 deadline Extension Request, 2 May 2013; and interview with Emmanuel Sauvage, UNDP, in Geneva, 16 April 2013.
- 11 Interview with Emmanuel Sauvage, UNDP, in Geneva, 16 April 2013.
- 12 Statement of Chad, APMBC Third Review Conference, Maputo, June 2014.
- 13 APMBC Article 7 Report, 1 April 2015, Form G.



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

PROGRAMME PERFORMANCE

Problem understood	7
Target date for completion of clearance of cluster munition remnants	2
Targeted clearance	2
Efficient clearance	2
National funding of programme	7
Timely clearance	0
Land release system in place	7
National mine action standards	7
Reporting on progress	5
Improving performance	2
PERFORMANCE SCORE: 4.1	POOR

RECOMMENDATIONS FOR ACTION

- → Chile should take the necessary measures to identify more accurately the extent of contamination and then address its areas contaminated with cluster munition remnants (CMR) in a timely manner.
- → Chile should submit its Convention on Cluster Munitions (CCM) Article 7 transparency reports in a timely manner.

CONTAMINATION

Chile has up to 97km² of CMR-contaminated area. It is also affected, to a limited extent, by other unexploded ordnance (UXO), with some 13km² of mined areas to release.

Three of 15 regions in Chile still contain areas with CMR as set out in Table 1. Contaminated areas are all located at military training bases where ammunition and munitions were used during training exercises. The contaminated area reported by Chile represents the total size of the training areas where cluster munitions were used. The precise extent of CMR contamination within the training area may well be smaller and will be determined through technical survey and clearance.

Table 1. CMR contamination by province as of June 2015²

Province	Confirmed areas	Area (km²)	Submunitions expected
Arica and Parinacota	1	33.71	608
Tarapacá	2	56.65	20
Magallanes and Antártica Chilena	1	6.52	20
Totals	4	96.88	648

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 of June 2015, Chile had not conducted any clearance of its four areas contaminated with CMR nor has it carried out the necessary survey. 3

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. It has still to take concrete action to implement this obligation.

ENDNOTES

- 1 Convention on Cluster Munitions (CCM) Article 7 Report, Form F, September 2012.
- 2 CCM Article 7 Report, Form F, September 2012; and email from Juan Pablo Rosso, Expert in International Security, International and Human Security Department, Chilean Ministry of Foreign Affairs, 16 June 2015.
- 3 Email from Juan Pablo Rosso, Ministry of Foreign Affairs, 16 June 2015.



ANTIOLE 4 DEADLINE: I ACCOST 2020 (ON THACK TO MEET DE

PROGRAMME PERFORMANCE

Problem understood	9
Target date for completion of clearance of cluster munition remnants	7
Targeted clearance	7
Efficient clearance	6
National funding of programme	9
Timely clearance	6
Land release system in place	6
National mine action standards	7
Reporting on progress	6
Improving performance	7
PERFORMANCE SCORE: 7.0	GOOD

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

Croatia is contaminated with cluster munition remnants (CMR). Five areas covering more than 2.8km² across five counties are confirmed to contain CMR (see Table 1).¹ Croatia has calculated that 4,776 unexploded submunitions remain in these areas.²

The Croatian Mine Action Centre (CROMAC) reports that this contamination has a socio-economic impact as many of these areas "are used for cattle breeding and are close to settlements".³

According to CROMAC, 2014 saw a "slight increase in the size" of certain areas suspected to contain CMR compared with the previous year. During clearance in the Krka National Park, operators spotted "bomblets outside of the project borders". CROMAC prepared an additional clearance project in the extended boundaries, resulting in the destruction of 39 submunitions and 1 item of unexploded ordnance (UXO).⁵ While Croatia was affected by the 2014 Balkan floods, none of the CMR-affected areas was flooded.⁶

Table 1. CMR contamination as of end 2014⁴

County	Contaminated area (m²)
Karlovac	20,111
Lika-Senj	705,208
Split-Dalmacia	765,490
Šibenik-Knin	278,580
Zadar	1,047,720
Total	2,817,109

PROGRAMME MANAGEMENT

CROMAC was established on 19 February 1998 as the umbrella organisation for mine action coordination. The CROMAC Council, an oversight and strategic planning body, consists of a president, appointed by the nation's Prime Minister, and 10 members, appointed from the Ministries of Defense, Finance, and Interior, as well as eminent persons. The CROMAC Council (now called the CROMAC Board), which used to meet at least four times a year, is meeting on an almost-monthly basis to discuss progress in implementing the annual workplan and other topical issues, such as a new law on mine action.

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.¹⁰

In September 2015, Croatia was hosting the First Review Conference of the CCM in Dubrovnik.

STRATEGIC PLANNING

There is no strategic plan for the release of all areas containing CMR. According to Miljenko Vahtarić, CROMAC's Assistant Director for International Cooperation and Education, "All these areas are cleared in accordance with the county and state priorities, of course taking in consideration obligations in accordance with signed conventions."

STANDARDS

According to one authority, Croatia does not have standing operating procedures (SOPs) for non-technical survey, technical survey, or clearance of areas contaminated with CMR. The problem is addressed through procedures more suited to mined areas, with unexploded submunitions treated as would be any other items of UXO. More broadly, Croatia has not yet developed a land release system specific for CMR, which is reflected in relatively poor clearance outputs as technical survey is not used to release land efficiently.¹²



LAND RELEASE

Croatia released 0.66km² of area containing CMR in 2014, all through clearance, destroying 306 submunitions and 11 other items of UXO (see Table 2). A further 341 KB-1 submunitions were found and destroyed in the course of mine clearance tasks during 2014. Croatia released no CMR-contaminated land through survey in 2014.

The majority of clearance was conducted by MUNGOS, a state-owned company. Other tasks were conducted by commercial demining companies.

Table 2: Clearance of CMR-contaminated area in 2014¹⁴

Operator	Areas released	Area cleared (km²)	Submunitions destroyed	Other UXO destroyed
MUNGOS razminiranje	4	0.26	130	1
FAS	1	0.03	35	0
Tornado	1	0.02	39	1
DOK-ING razminiranje	1	0.30	95	0
Detektor	1	0.01	1	1
Heksogen	1	0.04	6	8
Totals	9	0.66	306	11

SAFETY

According to CROMAC, no accidents occurred during demining or explosive ordnance disposal in 2014. $^{15}\,$



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.

Croatia reported seeing "no obstacles" in meeting its Article 4 deadline; in fact, it has predicted "that the problem will be solved by the end of 2018". 16 CROMAC expected clearance capacity to increase in 2015 due to greater European Union funding for demining. 17

ENDNOTES

- Email from Miljenko Vahtarić, Assistant Director for International Cooperation and Education, Croatian Mine Action Centre (CROMAC), 10 June 2015.
- 2 Ihio
- 3 Email from Miljenko Vahtarić, CROMAC, 27 April 2015.
- 4 CCM Article 7 Report (for 2014), Form F.
 5 Email from Miljenko Vahtarić, CROMAC, 27 April 2015.
- 6 Ibid.
- 7 CROMAC, "National Mine Action Strategy of Croatia 2009–2019", Zagreb June 2009, p. 2.
- 8 Interview with Nataša Matesa Mateković, Director, Planning and Analysis Department, CROMAC, Sisak, 29 February 2008; extract from "Law on Humanitarian Demining", National Gazette (Narodne Novine), No. 153/05, 28 December 2005; and interview with Miljenko Vahtarić, CROMAC, Sisak, 14 April 2014.

- 9 Email from Miljenko Vahtarić, CROMAC, 10 June 2015.
- 10 Interviews with Dijana Pleština, Director, OMA, in Geneva, 23 May 2012 and 10 April 2014; and email from Miljenko Vahtarić, CROMAC, 4 July 2013.
- 11 Email from Miljenko Vahtarić, CROMAC, 10 June 2015.
- 12 Email from Darvin Lisica, Programme Manager, Bosnia and Herzegovina, Norwegian People's Aid, 3 March 2015.
- 13 CCM Article 7 Report (for 2014), Form F.
- 14 Emails from Miljenko Vahtarić, CROMAC, 27 April and 10 June 2015. Croatia's CCM Article 7 Report for 2014 contains a mathematical error in the total for area cleared.
- 15 Email from Miljenko Vahtarić, CROMAC, 27 April 2015.
- 16 Ibid
- 17 Ibid



PROGRAMME PERFORMANCE

Problem understood	6
Target date for completion of clearance of cluster munition remnants	4
Targeted clearance	4
Efficient clearance	5
National funding of programme	8
Timely clearance	4
Land release system in place	7
National mine action standards	8
Reporting on progress	3
Improving performance	5
PERFORMANCE SCORE: 5.4	AVERAGE

RECOMMENDATIONS FOR ACTION

- → Germany should move forward more quickly to survey and clear the area suspected to contain cluster munition remnants (CMR). The apparent lack of urgency sets a bad example for other states parties.
- → Germany should be more transparent in detailing the activities and plans it has for release of the area.

CONTAMINATION

Germany has 11km² of area suspected to contain CMR¹ 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 1952–93.² The area is also contaminated by other unexploded ordnance (UXO).³

In its initial Convention on Cluster Munitions (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 Standing Committee meeting, Germany declared that the area at Wittstock was suspected to contain CMR. It 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 4km².⁷ In August 2014, however, Germany reported to Cluster Munition Monitor that the area suspected as contaminated was 11km², considerably higher than previously reported.⁸

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 network.

LAND RELEASE

No CMR-contaminated land was released by clearance or technical survey in 2014.¹³

SURVEY IN 2014

At the CCM intersessional meetings in April 2012 (Clearance and Risk Reduction Session), 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. By August 2014, however, it was stated only that preparations for a "technical investigation" were "underway".

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

CLEARANCE IN 2014

Germany has not reported clearance of any CMR.

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. It is unclear whether it is on track to meet the deadline.

There appears to be no compelling reason why Germany should not move ahead swiftly to complete both technical survey and the necessary clearance, without further delay.

ENDNOTES

- 1 Convention on Cluster Munitions (CCM) Article 7 Report, Form F, April 2015.
- 2 Ibid.
- 3 Statement of Germany, Anti-Personnel Mine Ban Convention (APMBC) Standing Committee on Mine Action, Geneva, 27 May 2013.
- 4 CCM Article 7 Report, Form F, 27 January 2011.
- 5 Statement of Germany, APMBC Standing Committee on Mine Action, Geneva. 21 June 2011.
- 6 Statement of Germany, CCM Intersessional Meetings, Geneva, 28 June 2011.
- 7 Ibid; Statement of Germany, Third Meeting of States Parties, to the CCM Oslo, 13 September 2012; CCM Article 7 Report, Form F, April 2013; CCM Article 7 Report, Form F, 30 April 2014.
- 8 Email from Silke Bellman, Desk Officer for Conventional Arms Control, German Federal Foreign Office, 4 August 2014.
- 9 Statement of Germany, Standing Committee on Mine Action, Geneva, 23 May 2012
- 10 CCM Article 7 Report, Form G, 4 April 2012.
- 11 Statements of Germany, Standing Committee on Mine Action, Geneva, 27 May 2012; and Twelfth Meeting of States Parties of the APMBC, Geneva, 6 December 2012.
- 12 APMBC Article 5 deadline Extension Request, 15 April 2013, p. 7.
- 13 CCM Article 7 Report (for 2014), Form F.
- 14 Statement of Germany, CCM Intersessional Meetings (Clearance and Risk Reduction Session), 17 April 2012.
- 15 Email from Silke Bellmann, Federal Foreign Office, 4 August 2014.
- 16 Interview with Silke Bellmann, Federal Foreign Office, Fifth Meeting of States Parties to the CCM, San José, September 2014.
- 17 CCM Article 7 Report (for 2014), Form F.
- 18 Interview with Volker Boehm, German Mission to the Conference on Disarmament, Geneva, 25 June 2015.



ARTICLE 4 DEADLINE: 1 NOVEMBER 2023 (NOT ON TRACK TO MEET THE DEADLINE)

PROGRAMME PERFORMANCE

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

PERFORMANCE SCORE: 4.3	POOR

RECOMMENDATIONS FOR ACTION

- → Iraq should strengthen the authority, management, personnel, and resources of the Department of Mine Action (DMA).
- The DMA should recruit international technical assistance to enable it to discharge its sector management responsibilities effectively and transparently.
- → The DMA and the Iraqi Kurdistan Mine Action Authority (IKMAA) should develop information management systems to enable them to collect and share timely data on the progress of mine action and the hitherto largely unrecorded activities of commercial operators as well as other national and international operators.

RECOMMENDATIONS FOR ACTION

- → The DMA and IKMAA should formulate multi-year plans setting out policy, priorities, and objectives.
- Iraq should develop institutional links between IKMAA, the DMA, and the Regional Mine Action Centre in the south.
- Iraq should develop the capacity and improve operating standards of national demining/ explosive ordnance disposal operators.

CONTAMINATION

Cluster munition remnants (CMR) contaminate significant areas of central and southern Iraq, a legacy of the 1991 Gulf War and the 2003 invasion of Iraq. In 2004, Iraq's national mine action authority identified 2,200 sites of CMR contamination along the Tigris and Euphrates river valleys. However, latest estimates identify 168

CMR-contaminated areas in nine central and southern governorates, including Baghdad, totalling 236km² with more than half in Muthanna governorate (see Table 1).² However, Iraq's Directorate of Mine Action has also identified more than 1,000km² of battle area that may also include some CMR contamination.³

Table 1: CMR contamination in central and southern Iraq4

Governorate	Confirmed areas	Area (km²)	Suspected areas	Area (km²)
Babylon	2	0.08	0	0
Baghdad	2	0.29	0	0
Basrah	86	23.00	3	0.12
Kerbala	6	2.00	0	0
Missan	11	0.90	0	0
Muthanna	30	135.70	0	0
Najaf	6	5.30	1	1.30
Thi-Qar	17	48.50	0	0
Wassit	8	21.2	0	0
Totals	168	236.97	4	1.42

The highway between Kuwait and Basra 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, Nasiriyah, and the approaches to Baghdad.⁵ 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.⁶

In the north, coalition air strikes around Dohuk in 1991 left contamination that posed a serious hazard to residents seeking to return to the area. In 2010, a Mines Advisory Group (MAG) survey of Dibis, an area north-west of Kirkuk, identified 20 previously unknown cluster strikes with contamination from unexploded BLU-97 and BLU-63 submunitions. Kurdish authorities report a total of 796,593m² of CMR contamination, 95% of it in Erbil governorate.



 2

PROGRAMME MANAGEMENT

The mine action programme in Iraq is managed along regional lines as follows:

IRAQI KURDISTAN REGION

Mine action in Iraq's northern governorates under the Kurdish Regional Government (KRG) is managed by the Iraqi Kurdistan Mine Action Agency (IKMAA). It coordinates four directorates in Dohuk, Erbil, Garmian, and Slemani.

CENTRAL AND SOUTHERN IRAQ

In central and southern Iraq, responsibility for mine action was transferred in 2008 to the Ministry of Environment, which set up a Directorate of Mine Action (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, functioning as its secretariat. 11

The DMA oversees four regional mine action centres (RMACs) for the north (covering the governorates of Anbar, Kirkuk, Mosul, and Saladin), the centre (Baghdad, Diyala, and Wassit), an area identified as "ME" (Babylon, Karbala, Najaf, and Qadsiya) and the south (Basrah, Missan, Muthanna, and Thi-Qar), 12 but the extent to which the RMACs were active in 2014 is unclear.

OPERATORS

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 as follows:

IRAQI KURDISTAN REGION

MAG was the only active humanitarian demining operator in this region. Commercial operators included Ararat, ASA, Chamy Razan, EODT, General Safety, Khabat, RONCO, Sardal Company for Demining, Shanica, and Valmara.

CENTRAL AND SOUTHERN IRAQ

In central and southern Iraq, the humanitarian agencies operating in 2014 included Danish Demining Group (DDG), Iraq Mine Clearance Organization (IMCO), and Norwegian People's Aid (NPA). Commercial operators, many contracted by oil companies, included Arabian Gulf, al-Safsafa, al-WAHA, G4S Ordnance Management, and Green Land. The army and civil defence were also active conducting explosive ordnance disposal and battle area clearance.

iMMAP, a United States non-profit non-governmental organisation, provided information management technical support to IKMAA and the DMA in Baghdad and Basrah.¹³

STRATEGIC PLANNING

Iraq has not produced a strategic plan for clearance of CMR.



LAND RELEASE

Escalating conflict between Iraq and Islamic State in the second half of 2014 severely affected mine action, forcing temporary suspension of operations in some areas, drawing army demining and explosive ordnance disposal (EOD) capacity away from operations in the south, and diverting attention to the immediate needs of hundreds of thousands of internally displaced people, particularly in the KRG, and the humanitarian agencies seeking to assist them. Operators in central and southern Iraq say land release has become increasingly hampered by the unavailability of military teams, who alone are authorised to conduct demolitions resulting in accumulation of cleared items on task sites posing a growing security hazard.

IKMAA reported that MAG released 119,983m² of cluster munition-affected land in 2014 destroying 920 submunitions and that IKMAA had destroyed another 267 CMR. MAG reported releasing a total of 7.04km² but asserted that it did not tackle any CMR contamination and data presented to a sector planning workshop in May 2015 did not record any clearance of CMR.¹⁴

The DMA reported clearance of 21 CMR-contaminated areas covering 12.89km² in 2014, resulting in destruction of 906 submunitions. This included 10.9km² attributed to DDG, 0.4km² by IMCO, and the remaining 1.59km² by civil defence teams in Basra, Missan, Najaf, and Thi-Qar.¹⁵

DMA data also varied sharply from results reported by operators. DDG reported clearing 9.18km² of battle area but said it did not tackle any cluster munition hazards or destroy any CMR.¹6 DDG closed its Basra-based programme at the end of 2014, citing lack of donor interest in funding operations in the south and relocating to the KRG where in early 2015 it started registration and accreditation procedures with IKMAA.¹7

IMCO, among the biggest of the operators working with total staff of 162, said it released 20.8km² of CMR-contaminated areas in Basra and Wassit governorates in 2014, destroying only 254 submunitions.¹8 IMCO was set up in 2003 with US support that in 2014 amounted to close to US\$10 million. However, IMCO was unable to resolve long-running issues over registration and accreditation with the DMA. In May 2015, it received a grant termination order from the US and was due to cease operating at the end of June 2015.¹9

NPA deployed a post-clearance sampling and survey team, supporting and tasked by RMAC-South in Basrah governorate, where it reported releasing more than 9km². In mid-2014, NPA started operating in Missan governorate with two battle area clearance (BAC) and two impact assessment (non-technical survey) teams as well as a risk education team. As of mid-2015, NPA teams had identified six suspected hazardous areas and 46 confirmed hazardous areas in Missan, including substantial amounts of CMR contamination in Maimar, Majar Kabeer, and Qalet Sali districts. It was recruiting two additional teams to work in Basra governorate.²⁰

ARTICLE 4 COMPLIANCE

Under Article 4 of the Convention on Cluster Munitions (CCM), 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.

It is hard to assess the progress of Iraq against its Article 4 obligations in the absence of comprehensive survey and clearance data. Prospects for Iraq fulfilling its treaty obligations are overshadowed by conflict and insecurity. However, mine/UXO sector planning and implementation are also severely constrained by political instability, institutional weakness, dysfunctional bureaucracy, and corruption, in addition to a shortage of trained personnel.

ENDNOTES

- 1 Landmine Action, Explosive remnants of war and mines other than antipersonnel mines, London, March 2005, p. 86.
- Data provided by Ahmed al-Jasim, Head, Information Management, DMA, 8 July 2015.
- 3 Presentation by iMMAP Iraq to 2015 Mine Action Country Planning Workshop for Iraq, Istanbul, 13 May 2015.
- 4 Data provided by Ahmed al-Jasim, DMA, 8 July 2015. Slightly different figures were provided in Iraq's CCM Article 7 report, totalling 236.91km².
- 5 UNICEF/UNDP, "Overview of Landmines and Explosive Remnants of War in Iraq", June 2009, p. 10.
- 6 Telephone interview with Kent Paulusson, Senior Mine Action Advisor for Iraq, UNDP, 28 July 2011.
- 7 Z. Kaka, "IRAQ: Saving lives of returnees in Dohuk", MAG, 28 May 2010.
- 8 Response to Cluster Munition Monitor questionnaire by Mark Thompson, Country Programme Manager, MAG, 23 July 2011.
- 9 Email from Khatab Omer Ahmed, Planning Manager, Directorate of Technical Affairs, Iraq Kurdistan Mine Action Agency, 25 July 2015.
- 10 Interview with Kent Paulusson, Senior Mine Action Advisor for Iraq, UNDP, in Geneva, 27 May 2009.
- 11 DMA presentation to 2015 Mine Action Country Planning Workshop for Iraq, Istanbul, 13 May 2015; "Capacity Development Support to National Mine Action Authorities in Iraq, Phase 1: Initial Assessment Mission," Geneva International Centre for Humanitarian Demining, February 2012.
- 12 DMA presentation to 2015 Mine Action Country Planning Workshop for Iraq, Istanbul, 13 May 2015.
- 13 Email from Isam Ghareeb, Country Representative, iMMAP, 8 July 2015.
- 14 Email from Nina Seecharan, Country Director, MAG, 11 June 2015; iMMAP Iraq presentation to 2015 Mine Action Country Planning Workshop for Iraq, Istanbul, 13 May 2015.
- 15 Data provided by Ahmed al-Jasim, DMA, 8 July 2015.
- 16 In contrast, Iraq's latest CCM Article 7 report claims that DDG cleared 262 MK 118 submunitions.
- 17 Email from Lene Rasmussen, Regional Manager, Middle East and North Africa, DDG, 6 July 2015.
- 18 In contrast, Iraq's latest CCM Article 7 report claims that IMCO cleared 160 submunitions in Basra.
- 19 Emails from Per Breivik, Chief Operating Officer, IMCO, 5 May and 4 June 2015.
- 20 Telephone interview with Ed Rowe, Acting Programme Manager, NPA, 3 June 2015; NPA presentation to 2015 Mine Action Country Planning Workshop for Iraq, Istanbul, 13 May 2015.



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

PROGRAMME PERFORMANCE

Problem understood	5	
Target date for completion of clearance of cluster munition remnants		
Targeted clearance	6	
Efficient clearance	6	
National funding of programme	5	
Timely clearance	5	
Land release system in place	6	
National mine action standards	7	
Reporting on progress	6	
Improving performance	8	
PERFORMANCE SCORE: 5.9	AVERAGE BUT IMPROVING	

RECOMMENDATIONS FOR ACTION

- The National Regulatory Authority (NRA) should facilitate and accelerate application of agreed new survey methods with a view to defining the scope of its cluster munition and unexploded ordnance (UXO) contamination.
- → The NRA should make explicit the priorities for survey and clearance.
- → Lao People's Democratic Republic (Lao PDR) should incorporate survey and clearance priorities in a multi-year workplan for the remaining years up to its Article 4 deadline.
- → Lao PDR should establish a budget line for sustained national funding of the sector.

CONTAMINATION

Lao PDR experienced the heaviest aerial bombardments in history during the Indochina War of the 1960s and 1970s, which left it with the world's worst contamination from unexploded submunitions. The United States of America dropped more than two million tonnes of bombs between 1964 and 1973,¹ 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 63.²

Lao PDR has claimed that cluster munition remnants (CMR) contaminate approximately 8,470km² and overall contamination from UXO covers up to 87,000km² (around 35% of Laotian territory).³ Such estimates, however, are based on bomb targeting data that bears little relation to actual contamination, do not reflect results of clearance, and are considered obsolete by many stakeholders in the UXO sector. The NRA reports that 14 of Lao PDR's 17 provinces and a quarter of all villages are contaminated by UXO⁴, but insufficient survey has been conducted to provide a credible estimate of total contamination. A new survey methodology approved by the NRA at the end of 2014 is expected to generate the first estimates based on evidence of contamination.

Unexploded submunitions accounted for close to twothirds (63%) of all items cleared in 2014, a significant increase in the proportion that coincides with operators' greater application of evidence-based clearance.⁵ UXO Lao, Lao PDR's largest clearance operator, reported in 2011 that during 15 years of operations, submunitions had accounted for 49% of all items cleared.⁶

The NRA identifies submunitions as the most common form of remaining explosive remnants of war (ERW) contamination and responsible for close to 30% of all incidents. Submunitions are also said to be the type of ERW most feared by the population. 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 led to calls for a survey and clearance strategy that gives priority to tackling CMR. UNDP

OTHER EXPLOSIVE REMNANTS OF WAR

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.¹¹ These reportedly range from 20lb fragmentation bombs to 2,000lb general-purpose bombs and sometimes bigger items.¹² Other major causes of incidents are artillery shells, grenades, mortars, and rockets.¹³

PROGRAMME MANAGEMENT

The NRA, created by government decree in 2004 and active since mid-2006, has an interministerial board chaired by Lao PDR's Deputy Prime Minister and composed of representatives from 11 government ministries.14 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. 15 A further decree in November 2011 appointed Deputy Prime Minister Asang Laoly as President of the NRA board.¹⁶ 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.17

Further change occurred with a new decree issued in February 2015 increasing the size of the 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.¹⁸

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." 19 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.²⁰

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. In 2014, the United Nations Development Programme (UNDP) supported a technical advisor to the NRA and UXO Lao, and a programme and finance advisor. Sterling International, funded by the US Department of State, provided a technical advisor supporting quality management and operations at the NRA, a second supporting national operator UXO Lao and a third advisor providing support to both organisations as required. ²¹ In 2015, however, UNDP was expected to appoint one technical advisor to serve both the national regulator and the national operator. ²²

STRATEGIC PLANNING

Lao PDR embarked in 2010 on a plan for 2010–2020 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 75,23 and the release of an average of 200km2 a year, 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".24

In 2010, the government adopted UXO clearance as a ninth Millennium Development Goal, targeting removal of all UXO from priority agricultural land by 2020.²⁵ Announcement 93, published by the government in November 2012, said all provincial and district development projects affected by UXO must undergo survey and clearance before implementation and must also allocate funding to cover the cost.²⁶ 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.²⁷

In December 2014, after more than two years of debate in the mine action sector and trials conducted in 2014 in Xieng Khouang and Savannakhet provinces, the NRA board approved new standards for evidence-based survey, which came into effect with a letter issued on 21 January 2015.²⁸ It stated that all organisations must implement these survey procedures. The decision was welcomed by many in the sector as a milestone towards defining the extent of Lao PDR's ERW contamination challenge, increasing efficiency of clearance operations, and shifting the mentality from clearing square metres to clearing contamination. Initial priority in survey would be given to 64 priority development areas and 167 resettlement areas, but it was also considering options for a national survey.²⁹

In the meantime, however, tasking continues to be decided at a provincial level and operators observed that few of the confirmed hazardous areas recorded in the NRA's Information Management System for Mine Action (IMSMA) database had been tasked for clearance. 30 UXO Lao reported little integration of mine action into rural development and poverty eradication plans.

OPERATORS

UXO Lao, the biggest operator with about 1,000 personnel, operates in nine provinces. Other humanitarian operators in 2014 included APOPO, HALO Trust, Handicap International, Mines Advisory Group (MAG), and Norwegian People's Aid (NPA). International commercial operators include Auslao UXO Clearance, BACTEC, Milsearch and MMG. National commercial operators include ASA Power Engineering, Lao BSL UXO Clearance, Lao Uneod Cooper, OUMMA UXO Clearance, PSD, SBH, and XTD UXO Clearance.

Lao PDR is also in the process of developing the role of its army in mine action. It set up a 15-strong humanitarian demining unit in February 2012 in line with a government directive to develop a humanitarian mine action capacity. The unit received explosive ordnance disposal (EOD) training at the UXO Lao training centre funded by the US Department of State. The NRA said it would receive accreditation and operate subject to NRA quality assurance, but the team was subsequently reported to have stood down.31 However, the NRA reported in 2015 that five army teams had completed training, funded by the US (one team) and the government (four teams), and that another five teams would receive training in 2015-16. funded by South Korea. The government provided 100 million kip (US\$12,500)32 for training an additional army EOD team in humanitarian clearance in 2014 and 500 million kip (US\$63,000) to conduct survey in Xaisomboun province. The NRA expected army teams to start operating in the course of 2015 once funds had been received. 33

amount of land cleared in 2014 but was unexpectedly hit by cashflow difficulties which forced the lay-off of 19 teams and 200 personnel in the last quarter of the year, part of the peak season for productivity. UXO Lao's budget for 2015 appeared to be fully funded, but with close to three-quarters of donor funds earmarked for particular provinces or activities it was unclear whether management would be able to rehire the teams that were stood down. UXO Lao's workplan for 2015 foresaw a 40% drop in area subjected to technical survey and clearance.³⁷

Operationally, UXO Lao was in a process of transition from request-based to evidence-based clearance, which was expected to yield substantial gains in efficiency. It reported dramatic gains in items cleared per hectare in the first two months of 2015, but in 2014 teams still followed both approaches and the proportion of evidence-based clearance reportedly varied according to the province. Despite a small (7%) increase in area released through clearance in 2014, NRA data, based on reporting received directly from UXO Lao's provincial teams, showed a fall in the total number of submunitions and other ERW cleared by UXO Lao.³⁸

HALO Trust, working in Sepon and Vilabouly districts of Savannakhet province, increased its operational staff by nearly two-thirds in the course of 2014, with additional

funding from the US Department of State and from the UK's Department for International Development (DFID). It recorded sharp increases in both the area surveyed (from 4.5km² in 2013 to 14km² in 2014), confirming 105 areas as hazardous and doubling the amount of land released through clearance. HALO attributed higher productivity to increased experience of teams and digitised reporting of technical survey from teams in the field using tablet computers.³⁹

MAG, working in two districts of Xieng Khouang province and four districts of Khamouane, operated with roughly the same capacity in 2014, but with additional funding available in 2015 it was planning to add 10 mine action teams and two additional mechanical assets, mainly for cutting vegetation. MAG was also working with NPA to develop a joint, five-year proposal for collaborating in survey and clearance of Boulapha district of Khamouane province with a view to taking it to end state.⁴⁰

The NRA recorded clearance by 11 commercial companies in 2014 and while long-established operators such as Milsearch, MMG, and BACTEC worked on tasks related to mining ventures and dam construction, many commercial operators appeared to have engaged in site verification. Their contribution to tackling Lao PDR's contamination as measured by items cleared remained minimal.

LAND RELEASE

The amount of land released by clearance rose only marginally (4.5%) to nearly 68km² in 2014, but the increase came mainly from humanitarian operators (see Table 1). Moreover, when items destroyed in battle area clearance (BAC) and roving operations (see Table 2) are combined, humanitarian operators also accounted for 98% of submunitions destroyed in 2014.³⁴

SURVEY IN 2014

Prolonged discussions between the NRA and operators yielded agreement by the NRA board at the end of 2014 to adopt a survey methodology based on the Cluster Munition Remnants Survey (CMRS), described as a form of quick technical survey, which NPA had developed in Lao PDR since 2011 and is now pursuing in Cambodia and Vietnam. The approach was seen as a breakthrough towards quantifying the extent of Lao PDR's contamination and shifting from request-based to evidence-based clearance, focusing clearance on confirmed hazards. Many operators had started to apply this or similar survey approaches. MAG, working in Xieng Khouang, is now using CMRS results and evidence points based on previously investigated US bomb strike data. MAG has also worked to improve evidence-based non-technical survey by developing a GIS-based information management system (Evidence Point Polygon Mapping) that uses historical operations data to map and define contaminated areas.

Operators believed further analysis and discussion was needed on fade-out distances, strike densities, and depth of contamination. The NRA expressed interest in conducting a national survey of all ERW in the next three years to assist preparation of a new strategic plan for the period after 2020.³⁵

NPA, working in three southern provinces of Attapeu, Saravane, and Sekong, increased the number of survey teams from 15 to 18 after cutting team size from six people to five, and surveyed a total of 114km² in 2014, 71% more than the previous year and of which only one-third (almost 39km²) was confirmed as hazardous. In the process, NPA reported destroying 13,530 submunitions and 718 other items of UXO.³6 In 2015, NPA expected to conduct more non-technical survey and to add two survey/roving EOD teams to help the process.

CLEARANCE IN 2014

Lao PDR conducted BAC over a reported 67.8km² in 2014, destroying in the process 27,048 submunitions as well as many other UXO items (see Table 1). Roving clearance saw operators destroy a further 31,450 submunitions in 2014 (see Table 2).

Results for mine action in Lao PDR are shaped by the performance of UXO Lao, much the biggest operator and working in nine provinces. It reported a slight rise in the

Table 1: Battle area clearance in 201441

Table 1. Dattle al ea ci				
Operator	Area cleared (km²)	Submunitions destroyed	Other UXO destroyed	Mines destroyed
Humanitarian				
APOPO	0.08	840	3	0
HALO ⁴²	1.09	1,347	273	0
HI ⁴³	0.49	395	652	0
MAG ⁴⁴	2.97	7,288	532	0
NPA ⁴⁵	0.26	127	4	0
UXO Lao	30.68	15,673	15,708	75
Subtotals	35.57	25,670	17,172	75
Commercial				
ASA	0	0	0	0
AUSLA0	4.54	0	0	0
BACTEC	0.44	107	199	3
Lao BSL	3.54	303	3	0
LAUNC	9.75	0	1	0
Milsearch	0.22	77	41	0
MMG	1.94	153	211	0
OUMMA	3.57	363	22	0
PSD	1.57	93	29	0
SBH	5.10	282	21	0
XTD	1.54	0	0	0
Subtotals	32.21	1,378	527	3
TOTALS	67.78	27,048	17,699	78

In the meantime, along with increasing survey, operators are also conducting more roving EOD operations (see Table 2). The NRA reported that operators destroyed 31,450 submunitions in 2014, more than double the number destroyed the previous year.⁴

Table 2: Roving clearance operations in 201447

Operator	Submunitions destroyed	Bombs destroyed	Other UXO destroyed	Mines destroyed
AP0P0	275	0	44	1
HALO ⁴⁸	3,258	49	1,119	0
HI	754	59	344	0
MAG ⁴⁹	2,842	17	967	1
Milsearch	37	0	12	0
NPA ⁵⁰	13,868	22	900	0
UXO Lao	10,416	185	13,357	71
Total	31,450	332	16,743	73



ARTICLE 4 COMPLIANCE

Under Article 4 of the Convention on Cluster Munitions (CCM), 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.

As the country with the world's heaviest CMR contamination, it is clear that Lao PDR will not complete clearance within its Article 4 deadline and will need to apply for an extension. However, while the need for an extension is no surprise, Lao PDR will need to show progress towards defining the extent of its CMR contamination and providing a baseline for measuring progress in implementing its targets.

In the past five years, the amount of land cleared annually has almost doubled (see Table 3). However, much of that clearance, based on requests rather than evidence of contamination, has targeted land with few items and has made a proportionately modest contribution to tackling the national problem. The NRA has observed that "targets expressed in hectares are not realistic and have been a major cause of inefficient clearance in the past" and endorsed evidence-based clearance focusing on areas with confirmed contamination.⁵¹

Table 3: Five-year summary of battle area clearance

Year	Area cleared (km²)
2014	67.78
2013	64.86
2012	54.42
2011	38.74
2010	34.98
Total	260.78

That evolution in thinking, together with the NRA's backing for new approaches to survey, is widely perceived as a breakthrough towards efficiency and productivity. Information management has continued to be strengthened through upgrading the NRA's IMSMA database, although inconsistencies in data presented by the NRA and operators, and the timely release of data remain an issue of concern. However, operators and donors say uncertainty still surrounds survey and clearance priorities, strategic goals, and the integration of UXO sector operations into wider rural development and poverty alleviation plans. Meanwhile, delays in approving Memoranda of Understanding continue to hamper progress and efficient use of donor resources.

The UXO sector continues to be largely dependent on international donor funding. In 2014, this reportedly dipped to about \$36 million from a total of \$41 million in 2013, but still up from \$30 million the previous year. Funding levels have been helped by a sharp rise in US support from US\$6 million in fiscal 2012 to \$9 million in 2013 and \$12 million in 2014. Some key donors, however, frustrated with slow progress in recent years in adapting more efficient survey and clearance methodology, say future levels of support may be influenced by progress toward quantifying the extent of contamination and transparency in framing national priorities.

Donors also raised questions about national funding for the UXO sector. The government reported contributing \$4.9 million to the sector in 2013 but this included \$4.7 million in tax exemptions. ⁵⁴ The NRA reported that the government decided in 2014 to provide 500 million kip (\$63,200) to support survey and clearance by a military team, but as of May 2015 the funds had not been received.

ENDNOTES

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- 2 NRA, "UXO Sector Annual Report 2009", Vientiane, undated but 2010, p. 13; Convention on Cluster Munitions (CCM) Article 7 Report (for 2013), Form F.
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- 17 "Announcement 93: UXO clearance for socio-economic development projects in the Lao PDR", NRA Board, 19 November 2012.
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- 36 Emails from Jonas Zachrisson, NPA, 8 April 2015, and Suhaib Abu Sheika, Regional Information Management Advisor, NPA, 4 June 2015.
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- 38 Interview with Tim Lardner, UNDP/UXO Lao, 16 February 2015; "UXO Operation Progress Report", NRA, received by email 11 May 2015; UXO Lao Project Board Meeting PowerPoint presentation, Vientiane, 18 March 2015.
- 39 Email from Matthew Hovell, South East Asia desk officer, HALO Trust, 6 May 2015; telephone interview with Jamie Graham, Country Programme Manager, HALO Trust, Lao PDR, 27 April 2015.
- 40 Interview with Simon Rea, MAG, Vientiane, 29 April 2015.
- 41 "UXO Operation Progress Report", NRA, received by email 11 May 2015.
- 42 HALO Trust reported releasing 0.77km² by clearance, destroying 1,429 submunitions and 270 other UXO items, and destroying a further 1,365 submunitions and 719 other UXO items during technical survey. Email from Matthew Hovell, HALO Trust, 6 May 2015.
- 43 Handicap International (HI) reported releasing 0.67km² through clearance and technical survey in 2014, destroying 534 submunitions and 769 UXO items. Email from Melanie Broquet, Head of Mission, UXO Sector, HI, Vientiane, 8 May 2015.
- 44 MAG reported releasing 3.82km² by clearance destroying 7,803 submunitions and 8,432 items of UXO. Email from Simon Rea, MAG, Vientiane. 15 May 2015.
- 45 NPA reported releasing 0.37km2 by clearance, destroying 777 submunitions and 29 other items of UXO. Emails from Jonas Zachrisson, NPA, 8 April 2015, and Suhaib Abu Sheika, NPA, 4 June 2015.
- 46 NRA, "UXO Operation Progress Report", received by email 11 May 2015.
- 7 Ibid.
- 48 HALO reported destroying 1,932 submunitions, 47 bombs, and 387 other UXO items in roving operations in 2014. Email from Matthew Hovell, HALO Trust, 6 May 2015.
- 49 MAG reported conducting 1,666 roving tasks, destroying 3,323 submunitions, and 1,550 other items of UXO.
- 50 NPA reported destroying 279 submunitions and 123 other items of UXO in roving operations in 2014. Email from Suhaib Abu Sheika, NPA, 4 June 2015.
- 51 Written comments provided by Phoukhieo Chanthasomboune, NRA, Vientiane. 28 April 2015.
- 52 Interview with Phoukhieo Chanthasomboune, NRA, Geneva, 12 February 2015.
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ARTICLE 4 DEADLINE: 1 MAY 2021 (NOT ON TRACK TO MEET THE DEADLINE)

PROGRAMME PERFORMANCE

Problem understood	5
Target date for completion of clearance of clu	ster munition remnants 6
Targeted clearance	5
Efficient clearance	5
National funding of programme	7
Timely clearance	5
Land release system in place	5
National mine action standards	5
Reporting on progress	7
Improving performance	6
PERFORMANCE SCORE: 5.6	AVERAGE

RECOMMENDATIONS FOR ACTION

- → Lebanon should clarify the extent of remaining contamination from cluster munition remnants (CMR) and mobilise the necessary resources to finish clearance.
- → The Lebanon Mine Action Centre (LMAC) should improve its land release system to accord with international standards.
- → Lebanon should submit its Convention on Cluster Munitions (CCM) Article 7 transparency reports in a timely manner.

CONTAMINATION

Lebanon has 799 areas confirmed or suspected to contain CMR, totalling 17.85km². Of this, 51 areas over 1.71km² were due to be cancelled by LMAC, which would reduce the contamination estimate to 16.14km².¹ A further 178 "dangerous areas" totalling 8.82km² are suspected to contain either CMR or mine contamination.² Four regions of the country still contain CMR contamination, as set out in Table 1.

Table 1. CMR contamination as of end 20143

Province	No. of areas	Area (m²)
Al Beqaa	36	1,146,340
Al Janoub	251	5,855,899
Al Nabatiyeh	504	10,580,080
Jabal Loubnan	8	264,000
Totals	799	17,846,319

CMR contamination is mainly the result of the conflict with Israel in July-August 2006, although some remnants are from conflicts in the 1980s.⁴

After the 2006 war, contamination was initially estimated to be 55km². This estimate was later increased, based on surveys conducted, to 57.8km² across 1,484 areas over the three regions of Beqaa, Mount Lebanon, and southern Lebanon.⁵ In 2014, as part of a 2013 milestone review to the 2011–20 mine action strategy, LMAC reported the total number of strike locations as 1,707.⁶

At the end of 2014, contamination was reported to cover 17.85km² across 799 areas,7 compared to reported contamination of 17km² over 748 areas as of June 2014.8 LMAC's director explained that the June 2014 estimate referred to confirmed, rather than suspected, CMR contamination.9 The increase in reported contamination between June and December 2014 was due to the discovery of 24 new CMR-contaminated areas.10

LMAC initially records each new cluster bomb strike as contaminating an estimated area of 33,000m². Upon subsequent survey and clearance, the precise area of contamination may found to be lesser or greater, depending on the type of cluster munition used, and whether the weapon was ground launched or dropped from an aircraft. According to LMAC, some areas contain contamination resulting from both ground-launched and air-dropped cluster munitions, which can further complicate accurate determination of the footprint of the strike.¹¹

During clearance, operations tasks may be subdivided by LMAC into: the main cluster strike area; the "fadeout" area; a "disclaimed" area (which refers to areas for which permission is not granted for clearance, and which require signed release papers); and the "uncleared" area, for which mechanical assets are required for clearance. If clearance of the whole task does not take place at the same time, the fadeout, disclaimed and/or uncleared areas are marked as separate tasks, which helps explain the fluctuation in number of hazardous areas between reporting periods.¹²

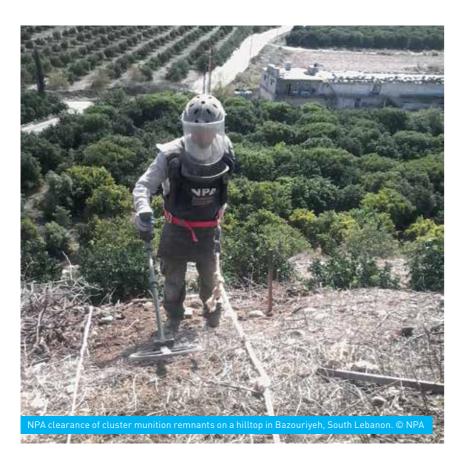
Lebanon has set three levels of priority regarding mine action. The first is to address infrastructure to allow those displaced by the 2006 conflict to return home; the second is to release agricultural land; and the third is to release land for activities other than agriculture. The first priority goals were met in 2009 and clearance of agricultural areas is now the priority target. Indeed, CMR continue to affect the agricultural community, particularly in Beqaa and southern Lebanon. A survey by Mines Advisory Group (MAG) of 347 tasks recommended for clearance revealed that in four-fifths, contamination had made access to resources unsafe or had blocked access altogether. Yet significant numbers of landowners and workers still enter contaminated areas, declaring they have no choice. In

Post-clearance surveys concerning cluster strike areas, carried out by LMAC in collaboration with clearance operators, have revealed that 78% of land was used for agriculture, 15% for pasture, and the remainder for residential and infrastructure development.¹⁵

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Lebanon is also contaminated by other unexploded ordnance (UXO), booby-traps, and anti-personnel mines. In December 2014, LMAC reported 93 areas totalling 2.89km² suspected to contain booby-traps, and 54 areas over 3.1km² suspected to contain UXO. These figures are the same as those previously reported for June 2014.16

 2



PROGRAMME MANAGEMENT

Established in 1998 by the Council of Ministers, the Lebanon Mine Action Authority (LMAA) is the responsibility of the Ministry of Defense and is chaired by the Minster of Defense. 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.¹⁷

LMAC, part of the Lebanese Armed Forces, ¹⁸ is based in Beirut. Since 2009, a regional base in Nabatiye has overseen operations in southern Lebanon. ¹⁹ LMAC also manages risk education and victim assistance. ²⁰

STRATEGIC PLANNING

In September 2011, LMAC adopted a strategic mine action plan for 2011–20.²¹ 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 and progress has fallen well short of planning targets.²² A 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, suffering from underfunding and consequently fewer operating teams, while previously unreported contaminated areas were also identified.²³

OPERATORS

In 2014, CMR clearance was conducted by international operators DanChurchAid (DCA), Mines Advisory Group (MAG), and Norwegian People's Aid (NPA); national operator Peace Generation Organisation for Demining (POD); and the Lebanese Armed Forces.²⁴ MAG is the only

international operator in Lebanon with mechanical assets to support manual clearance operations. 25 In 2014, three battle area clearance (BAC) teams were deployed by DCA, six by MAG, and seven by NPA. 26 Lebanon's overall BAC capacity dropped from 28 teams at the start of 2013 to 23 teams in 2014. 27

Subject to funding, NPA expected to maintain its capacity in 2015.²⁸ MAG reported that if sufficient funding is not secured for 2015 it may have to reduce staff numbers in Lebanon.²⁹ LMAC has consistently raised concerns over lack of survey and clearance capacity to address mine and CMR contamination, which it ascribes to inadequate funding.³⁰ The Swiss Foundation for Mine Action (FSD) closed its CMR clearance programme in March 2013 due to lack of funding.³¹

STANDARDS

Lebanon developed National Mine Action Standards (NMAS) in 2010.³² LMAC is currently working with the United Nations Development Programme (UNDP) and other partners to revise the NMAS, with a view to ensuring enhanced efficiency while respecting the International Mine Action Standards (IMAS).³³ LMAC expected to finish the revision by the end of 2015.³⁴

QUALITY MANAGEMENT

Between 10% and 40% sampling is conducted during clearance operations by the organisation site supervisor and quality assurance (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.³⁵ Sampling was conducted in all areas released during 2014.³⁶

LAND RELEASE

The total amount of CMR-contaminated areas released by clearance in 2014 was 2.1km²,³7 compared with almost 2.5km² in 2013.³8 No area was reported as released by technical survey in 2014 but a further 1.7km² was cancelled by non-technical survey.³9

SURVEY IN 2014

In 2014, 51 areas totalling 1.7km² suspected to contain CMR were identified for cancellation, 49 in the Nabatiyeh province, and the other two in Begaa. 40 As of June 2015, these tasks were awaiting entry into LMAC's database, pending consultation with MAG. 41 The cancellation of these areas was the result of a MAG survey of 443 CMR clearance tasks between September 2013 and April 2014, following which MAG recommended 96 tasks for cancellation, covering an estimated 2.8km². 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.42

In September 2014, at the Fifth Meeting of States Parties to the Convention on Cluster Munitions (CCM), Lebanon stated it was reviewing MAG's recommendations for task cancellation and hoped to use the survey findings to focus clearance on areas with strong evidence of contamination.⁴³ During the same meeting, Lebanon stated that as a result of the survey, 1.48km² of land out of 14.5km² had been released and formally released to the owners.⁴⁴

After reviewing the 96 tasks recommended by MAG for cancellation, LMAC has decided to cancel 51 tasks, totalling an area of 1.7km².⁴⁵ LMAC does not intend to cancel the remaining 45 tasks as recommended by MAG, as following a review, LMAC believes these areas do contain CMR contamination.⁴⁶

Furthermore, between June and December 2014, LMAC confirmed 24 new areas as CMR contaminated. The new tasks were the result of call-outs from the public, alerting LMAC to previously undiscovered explosive remnants of war (ERW). LMAC community liaison officers visited each call-out, followed by LMAC's chief of operations when necessary. New hazardous areas were recorded for those call-outs where CMR contamination was confirmed.⁴⁷

CLEARANCE IN 2014

Lebanon reported clearance of 2.1km² of CMR-contaminated land in 2014 across 51 areas, with the destruction of 2,750 submunitions, 610 other items of UXO, and 390 anti-personnel mines (see Table 2).

The 0.37km² decrease in 2014 clearance compared to the previous year was ascribed to the lower number of BAC teams and increased operational difficulty of clearance in the new areas.⁴⁸ Clearance operators similarly reported that operational efficiency became harder in 2014, as tasks assigned by LMAC included challenging ground conditions, areas of extremely high metal contamination, thick vegetation, laterite or mineralised soil, and difficult relief and topography.⁴⁹



SAFETY OF CLEARANCE PERSONNEL

In 2014, three accidents occurred during CMR survey and clearance. In January 2014, an NPA searcher accidentally detonated an M42 submunition with the end of a saw during vegetation removal drills. The detonation injured himself and the site supervisor who was standing nearby. In May 2014, an NPA searcher accidently detonated a

BLU-63 submunition while conducting rubble/rock-removal drills in order to search beneath them. Unfortunately, despite timely medical evacuation, his injuries proved fatal.⁵¹ In December 2014, a MAG searcher was injured as a result of the explosion of a submunition during clearance operations.⁵²

Table 2. Clearance of CMR-contaminated area in 2014⁵⁰

Operator	Areas released	Area cleared (m²)	Submunitions destroyed	Anti-personnel mines destroyed	UXO destroyed
MAG	19	703,285	537	0	180
NPA	9	438,325	228	0	25
DCA	7	247,001	568	0	30
POD	16	714,265	1,319	0	0
LAF*	0	0	98	390	375
Totals	51	2,102,876	2,750	390	610

^{*} The LAF destroyed all CMR, anti-personnel mines, and UXO during rapid response operations.

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.

In July 2015, however, the head of LMAC informed Mine Action Monitor that their data showed that Lebanon would complete clearance in 2019 on condition that the number of teams operating stayed the same and that no new CMR-contaminated areas were discovered.⁵³ It is also worth mentioning that Lebanon will be implementing a second mid-term review in 2016 and will update the findings accordingly.

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. 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. In 2012, non-governmental organisations (NGOs) deployed 28 teams. Lebanon's most recent CCM Article 7 report (for 2013) claims that 43 BAC teams are needed to complete CMR clearance in a timely manner.

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

Table 3: Clearance of CMR-contaminated area in 2010-1457

Year	Area cleared (km²)
2014	2.10
2013	2.47
2012	2.98
2011	2.51
2010	3.14
Total	13.2

A review of the 2011–20 strategy in early 2014 confirmed that under existing capacity it will not be possible to finish CMR clearance before 2020 at the earliest. Reasons cited for the delay are lack of funding and shortages in the number of teams, in addition to the identification of previously unrecorded contamination. 59

Lebanon has reported contributing US\$9 million annually towards CMR clearance, which covers administrative staff, two sampling teams, three non-technical survey teams, two mine clearance teams, two BAC teams, four mechanical teams, and seven mine detection dog teams.⁶⁰

ENDNOTES

- Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, Director, LMAC, 12 May and 17 June 2015; and email, 2 July 2015.
- Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 12 May 2015; and email, 2 July 2015.
- 3 Responses to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 12 May and 17 June 2015.
- 4 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011.
- 5 Convention on Cluster Munitions (CCM) Article 7 Report (for 2013) Form F; and Statement of Lebanon, Fourth Meeting of States Parties to the CCM, Lusaka. September 2013.
- 6 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014, p. 10.
- 7 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 12 May 2015.
- 8 Email from Brig.-Gen. Imad Odeimi, LMAC, 2 June 2014.
- Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.
- n Ibid
- 11 Interview with Oussama Merhi, UNDP Mine Action Advisor, LMAC, in Geneva. 26 June 2015.
- 12 Ibio
- 13 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014.
- 14 MAG, "Cluster Munition Contamination in Lebanon using survey data", September 2014. p. 4.
- 15 Statement of Lebanon, Fifth Meeting of States Parties to the CCM, Costa Rica Sentember 2016
- 16 Email from Brig.-Gen. Imad Odeimi, LMAC, 2 July 2014.
- 17 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014. DD. 4–5.
- 18 LMAC, "2012 Annual Report Lebanon Mine Action Centre", March 2013.
- 19 LMAC, "Lebanon Mine Action Strategy 2011-2020", September 2011, p. 4.
- 20 UNDP, "Mine Action in Lebanon: A Review of the Lebanon Mine Action Programme and UNDP Support to mine action in Lebanon", Final Report, September 2011, p. 9.
- 21 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.
- 22 Response to Cluster Munition Monitor questionnaire by Brig.-Gen. Imad Odiemi, LMAC, 2 May 2014.
- 23 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014.
- 24 Response to Cluster Munition Monitor questionnaire by Brig.-Gen. Imad Odiemi, LMAC, 2 May 2014.
- 25 Response to Mine Action Monitor questionnaire by Jacqui Brownhill, MAG, 1 May 2015.
- 26 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.
- 27 Ibid., 12 May 2015.
- 28 Response to Mine Action Monitor questionnaire by Rory Logan, NPA, 20 April 2015.
- 29 Response to Mine Action Monitor questionnaire by Jacqui Brownhill, MAG, 1 May 2015
- 30 Statements of Lebanon, First Meeting of States Parties to the CCM, Vientiane, September 2010; Fourth Meeting of States Parties, Lusaka, September 2013; Fifth Meeting of States Parties, Costa Rica, September 2014; Mine Action Support Group meeting, 18 October 2013; and CCM Intersessional Meeting, 9 April 2014; and CCM Article 7 Report (for 2013), Form F.
- 31 CCM Article 7 Report (for 2013) Form F.
- 32 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC. 17 June 2015.
- 33 Email from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Response to Mine Action Monitor questionnaire by Rory Logan, Programme Manager, NPA, 20 April 2015.
- 34 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.

- 35 Ibid.
- 36 Ibid.
- 37 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif LMAC, 12 May 2015.
- 38 Response to Cluster Munition Monitor questionnaire by Brig.-Gen. Imad Odiemi, LMAC, 2 May 2014. However, NPA's data did not tally with LMAC figures, which reported a higher amount for clearance to Cluster Munition Monitor (1.14km² compared to NPA's figure of 0.97km²). Response to Cluster Munition Monitor questionnaire by Eva Veble, Country Director, NPA, 29 May 2014.
- 39 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 12 May 2015.
- 40 Ibid., 12 May and 2 July 2015.
- 41 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC. 17 June and 2 July 2015.
- 42 MAG, "Cluster Munition Contamination in Lebanon using survey data", September 2014.
- 43 Statement of Lebanon, Fifth Meeting of States Parties to the CCM, Costa Rica. 2-5 September 2014.
- 44 Ibid.
- 45 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC. 17 June 2015.
- 46 Interview with Oussama Merhi, UNDP/LMAC, in Geneva, 26 June 2015.
- 7 Ibid.
- 48 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 12 May 2015.
- 49 Responses to Mine Action Monitor questionnaire by Rory Logan, NPA, 20 April 2015; and Jacqui Brownhill, MAG, 1 May 2015.
- 50 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 12 May 2015. Clearance data reported by MAG and NPA contained inconsistencies with the data reported by LMAC. MAG reported clearing eight areas in 2014 totalling 741,487m2, destroying 536 submunitions, 210 other items of UXO, and one anti-personnel mine. According to a UNDP advisor to LMAC, the difference in the number of UXO reported destroyed is likely due to a lack of disaggregation of MAG's UXO data into UXO destroyed by MAG and UXO identified by MAG for destruction by LAF. Interview with Oussama Merhi, UNDP/LMAC, in Geneva, 26 June 2015. NPA reported clearing 10 areas totalling 523,100m2 in 2014, destroying 229 submunitions and 19 other items of UXO. According to Oussama Merhi, the difference between NPA and LMAC data is likely due to the fact that one of the tasks reported by NPA was a re-clearance task (i.e. one previously cleared by an operator but where CMR were subsequently found), which may not be included in LMAC data. DCA and POD declined to provide clearance data to Mine Action Monitor so cross-verification was not possible
- 51 Response to Mine Action Monitor questionnaire by Rory Logan, NPA, 20 April 2015.
- 52 Response to Mine Action Monitor questionnaire by Jacqui Brownhill, MAG, 1 May 2015
- 53 Email from Brig.-Gen. Elie Nassif, LMAC, 16 July 2015.
- 54 LMAC, "Mid-term Review to Strategy 2011-2020, Milestone 2013", August 2014.
- 55 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011,
- 56 CCM Article 7 Report (for 2013), Form F.
- 57 See Cluster Munition Monitor reports on clearance in Lebanon covering the period 2010-13.
- 58 LMAC, "Mid-term Review to Strategy 2011-2020, Milestone 2013", August 2014.
- 59 Statement of Lebanon, Fifth Meeting of States Parties, Costa Rica, September 2014; and Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 12 May 2015.
- 60 Response to Mine Action Monitor questionnaire by Brig.-Gen. Elie Nassif, LMAC, 12 May 2015.



(CLEARANCE COMPLETED)

CONTAMINATION

Mauritania is no longer contaminated by cluster munition remnants (CMR), having completed clearance in 2013.¹ Mauritania formally declared compliance with Article 4 of the Convention on Cluster Munitions (CCM) in September 2014.

CMR contamination in Mauritania resulted from use of MK118, BLU-63, and M42 cluster munitions during the 1975–78 conflict over Western Sahara. Contamination was located in the northern border areas, around the village of Bir Moghrein in the region of Tiris Zemmour.² In Mauritania's first CCM Article 7 report, submitted in 2013 and covering 2012, it was reported that CMR contamination totalled 10km², covering eight areas north of the village of Bir Moghrein in the north-east of the country.³ Following survey by Norwegian People's Aid (NPA) in 2013, the estimated area of contamination was substantially revised downwards.⁴

Based on its technical and non-technical survey, NPA revealed that after cancellation by non-technical survey of 70,000m² of area suspected to contain CMR in 2012, the total area confirmed to contain CMR was 2.4km² and covered nine sites: Agwachin, Aldouik, Aydiyatt, Bir Mariam, Eweineget, Gharet el Hemeid, Odeyatt Bozeyan, Oum Edhbaitt, and Teghert.⁵ While Mauritania reported a slightly lower figure of 1.97km² for total area subsequently cleared, NPA records show that 2.4km² was in fact cleared during operations in 2013.⁶

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Mauritania is still contaminated by landmines and unexploded ordnance (UXO).

PROGRAMME MANAGEMENT

The National Humanitarian Demining Programme for Development (Programme National de Déminage Humanitaire pour le Développement, PNDHD) coordinates mine action operations in Mauritania. Since August 2007, the Programme has been the responsibility of the Ministry of Interior and Decentralisation, with oversight from an interministerial Steering Committee, set up by decree in September 2007. The PNDHD is headquartered in the capital, Nouakchott, with a regional mine action centre in Nouadhibou.

STANDARDS

National mine action standards and standing operating procedures have been developed and adopted in Mauritania.⁹ The standards, which were revised with the help of the Geneva International Centre for Humanitarian Demining (GICHD) in 2010, were translated into Arabic in 2011.¹⁰

OPERATORS

In accordance with a 2006 decree, all clearance activities have been conducted by the Army Engineer Corps operating under the PNDHD. In March 2011, NPA signed an agreement with Mauritania to provide support for mine and battle area clearance (BAC) in the country. NPA has since been working in Mauritania both as an operator and in a capacity-building role.¹¹

At the end of 2013, NPA released its civilian capacity deminers, and from 2014 onwards has been working with demining staff seconded from the Engineers Corps who are rotated every six months. The seconded personnel are working to complete clearance of minecontaminated areas in Nouadhibou province. The aim is also to develop the Engineers Corps' capacity to respond to residual threats after completion of planned clearance operations.

QUALITY MANAGEMENT

NPA has developed systems for quality assurance (QA) and quality control (QC) activities for both internal and external control. The PNDHD conducts QC before the cleared land is handed over to the community.¹⁴

LAND RELEASE

In 2012, NPA conducted non-technical survey, resulting in cancellation of $70,000m^2$ of area suspected to contain CMR, and confirmed $2.4km^2$ as CMR contaminated.¹⁵

Clearance began in February 2013 with the deployment of 23 NPA deminers and was completed on 30 June 2013.¹⁶ The total area released by clearance in 2013 was 2.4km².

Table 1. Clearance of CMR-contaminated area in 2013¹⁷



Location	Areas released	Area cleared (m²)	Submunition type	Submunitions destroyed
Bir Mariam	1	223,834	BLU-63	48
Gharet el Hemeid	1	521,740	MK118	481
Teghert	1	290,477	MK118	91
Oum Edhbaitt	1	44,487	BLU-63	200
Agwachin	1	351,277	BLU-63	28
Eweineget	1	112,847	MK118	1
Odeyatt Bozeyan	1	386,564	BLU-63, M42	44
Aldouik	1	322,573	M42	347
Aydiyatt	1	150,217	MK118	6
Totals	9	2,404,016		1,246

ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Mauritania was required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 August 2022. Mauritania completed clearance almost nine years before its treaty deadline.

In its declaration of Article 4 compliance, Mauritania stated that as of 9 September 2013 it had made every effort to identify all areas under its jurisdiction or control contaminated by CMR, and that as of that date it had cleared and destroyed all CMR found, in accordance with Article 4(1) of the CCM.¹⁸



ENDNOTES

- Declaration of Compliance with Art. 4(1)(a) of the CCM, submitted by Mauritania, 3 September 2014.
- lbid.
- 3 CCM Article 7 Report (for 2012), Form F.
- 4 CCM Article 7 Report (for 2013), Form F; and Declaration of Compliance with Art. 4(1)(a) of the CCM, 3 September 2014.
- 5 Response to Mine Action Monitor questionnaire by Melissa Andersson, Programme Manager, NPA, 13 May 2015.
- 6 Ibio
- 7 Decree No. 1960/MDAT/MDN establishing the PNDHD, 14 August 2007.
- 8 Decree No. 001358/MDAT establishing the Steering Committee of the PNDHD, 3 September 2007.
- 9 Statement of Mauritania, Ninth Meeting of States Parties of the Anti-Personnel Mine Ban Convention, Geneva, 27 November 2008.
- 10 Email from Alioune O. Mohamed El Hacen, PNDHD, 17 April 2011.
- 11 NPA, "Humanitarian Disarmament in Mauritania", June 2015, at: http://www.npaid.org/Our-Work/Humanitarian-Disarmament/Where-we-work/Humanitarian-Disarmament-in-Mauritania.
- 12 Response to Mine Action Monitor questionnaire by Melissa Andersson, NPA, 13 May 2015.
- 13 Response to Cluster Munition Monitor questionnaire by Melissa Andersson, NPA 18 March 2014
- 4 NPA Annual Report 2012 to the PNDHD.
- 15 Response to Mine Action Monitor questionnaire by Melissa Andersson, NPA, 13 May 2015.
- 16 Ibid
- 17 Email from Melissa Andersson, NPA, 8 June 2015.
- 18 Declaration of Compliance with Art. 4(1)(a) of the CCM, submitted by Mauritania, 3 September 2014.

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PROGRAMME PERFORMANCE

Problem understood	7
Target date for completion of clearance of cluster munition remnants	4
Targeted clearance	5
Efficient clearance	6
National funding of programme	5
Timely clearance	4
Land release system in place	6
National mine action standards	5
Reporting on progress	4
Improving performance	4
PERFORMANCE SCORE: 5.0	AVERAGE

RECOMMENDATIONS FOR ACTION

- Montenegro should clarify the location and extent of suspected and confirmed cluster munition remnants (CMR) contamination.
- → Montenegro should identify and apply as soon as possible the resources necessary to fulfil its Article 4 clearance obligations.

CONTAMINATION

Montenegro has estimated that 1.7km² of land contains CMR. Contaminated areas are located in two municipalities and one urban municipality (of a total of 23 municipalities).¹ According to Montenegro's most recent Convention on Cluster Munitions (CCM) Article 7 transparency reports, the 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 Bjelaje in the municipality of Plav.²

However, there are differences between this list of areas and the areas that Norwegian People's Aid (NPA) identified as suspected or confirmed to contain CMR in its detailed non-technical survey 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.

Table 1. Contamination by municipality as of April 2013³

Municipality	Community	Area (km²)
Golubovci	Matagužl (suburb of Podgorica)	0.295
	Aerodrom (suburb of Podgorica)	1.083
Rožaje	Jablanica	0.045
	Njeguši	0.062
Tuzi	Sipacanik	0.230
Total		1.715

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 ⁴

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 includes the additional villages of Besnik (in the municipality of Rožaje), and Cakor mountain and Bjelaje (in the municipality of Plav), which are suspected of CMR contamination, but where non-technical survey has yet to be conducted due to bad weather conditions. In addition, it seems that Sipacanik, in the municipality of Tuzi, may have been 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 2013.7 Montenegro reported a slightly lower figure of 1.7km² in its CCM Article 7 report,8 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.9

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. 10 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 MK118.11 Some unexploded submunitions were collected by units of 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 submunitions visible on the ground 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 of 27 January 2011, "there are no contaminated areas in Montenegro." 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. After the air strikes in 1999, military units reportedly collected more than 1,800 submunitions, but Montenegro informed a CCM intersessional meeting that clearance had not been conducted "fully according to humanitarian mine action standards" and that it planned to conduct a survey. This led to the 2012–13 NPA survey described above.

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 that currently has three trained members conducting demolitions.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, the non-technical survey, 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 non-technical survey and quality management.²³ The non-technical survey 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 of writing this phase has yet to commence.²⁵



LAND RELEASE

No planned land release operations took place in 2014, but $6,500\,\mathrm{m}^2$ of land suspected or confirmed to contain CMR was cleared after two unspecified items of UXO were found in Golubovci during construction work. ²⁶

SURVEY IN 2014

No survey has taken place since NPA's non-technical survey was completed in April 2013.²⁷

CLEARANCE IN 2014

No planned CMR clearance took place in either 2014 or 2013. In 2013, NPA, in cooperation with RCUD, had prepared 10 technical survey 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 24,150m².²8 As noted above, however, lack of funding has meant the work has not yet begun.²9 The only clearance in 2014 was of an area of 6,500m² during construction work in Golubovci.³0

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.

With funding from the Norwegian Ministry of Foreign Affairs, the non-technical survey completed in April 2013 resulted in a baseline of CMR contamination in Montenegro. In April 2013, Montenegro said it planned to complete clearance of all contaminated areas in 2014 "if the funds are provided." In early 2014, Montenegro indicated that clearance would be complete by "the end of 2016", subject to funds. In June 2015, RCUD reported that if sufficient funding were secured in 2015, CMR clearance in Montenegro would be completed by the end of 2017.

As of June 2015, however, neither national nor international funding had been secured for CMR clearance in Montenegro.³⁴ Montenegro continues to seek international cooperation and assistance to fulfil its survey and clearance obligations under the CCM.³⁵

ENDNOTES

- 1 Convention on Cluster Munitions (CCM) Article 7 Report (for 2014), Form F.
- 2 Ibid.; and CCM Article 7 Report (for 2013), Form F.
- 3 NPA, "Cluster Munition Remnants in Montenegro", July 2013, p. 26.
- 4 Ibio
- 5 Email from Veselin Mijajlovic, Director, Regional Centre for Divers' Training and Underwater Demining (RCUD), 16 June 2015.
- 6 Email from Veselin Mijajlovic, RCUD, 3 July 2015.
- 7 NPA, "Cluster Munition Remnants in Montenegro", July 2013, p. 26.
- 8 CCM Article 7 Report (for 2013), Form F.
- 9 CCM Article 7 Report (for 2014), Form F.
- 10 Interview with Veselin Mijajlovic, RCUD, Bijela, 14 March 2007.
- 11 NPA, "Cluster Munition Remnants in Montenegro", July 2013, p. 21.
- 12 Ibid., p. 22
- 13 Ibid., p. 21.
- 14 Ibid., p. 23.
- 15 CCM Article 7 Report (for 1 August 2010 to 27 January 2011), Form F.
- 16 Telephone interviews with Veselin Mijajlovic, RCUD, 19 and 25 July 2011.
- 17 Statement of Montenegro, CCM Intersessional Meetings, Geneva, 17 April 2012.
- 18 NPA, "Cluster Munition Remnants in Montenegro", July 2013, p. 26.
- 19 Telephone interview with Zoran Begovic, Assistant to the Minister, Ministry of Interior Affairs and Public Administration, 21 June 2011, and email, 8 April 2010; and interview with Borislav Miskovic, Montenegrin Police Force, Podgorica, 16 March 2008.
- 20 Email from Zoran Begovic, Ministry of Interior Affairs and Public Administration, 28 June 2012.
- 21 Email from Veselin Mijajlovic, RCUD, 29 July 2012.
- 22 Sluzbeni list RCG (Official Gazette of Montenegro), No. 66, pp. 28–32.
- 23 NPA, "Cluster Munition Remnants in Montenegro", July 2013, p. 9.
- 24 Ibid., p. 6
- 25 Email from Darvin Lisica, Programme Manager, Bosnia and Herzegovina, NPA, 3 March 2015.
- 26 CCM Article 7 Report (for 2014), Form F.
- 27 Email from Darvin Lisica, NPA, 3 March 2015.
- 28 Response to Cluster Munition Monitor questionnaire by Amela Balik, NPA, 3 March 2014.
- 29 Email from Darvin Lisica, NPA, 3 March 2015.
- 30 CCM Article 7 Report (for 2014), Form F.
- 31 CCM Article 7 Report (for 30 April 2012 to 31 March 2013), Form F.
- 32 CCM Article 7 Report (for 2013), Form F.
- 33 Email from Veselin Mijajlovic, RCUD, 16 June 2015.
- 34 Ibid.
- 35 Statement of Montenegro, Fifth Meeting of States Parties, Costa Rica, 2–5 September 2014; and email from Veselin Mijajlovic, RCUD, 16 June 2015.





PROGRAMME PERFORMANCE

Problem understood		4
Target date for completion of clear	ance of cluster munition remnants	8
Targeted clearance		6
Efficient clearance		7
National funding of programme		4
Timely clearance		4
Land release system in place		8
National mine action standards		8
Reporting on progress		4
Improving performance		7
PERENRMANCE SCORE: 4.0		AVERAGE

RECOMMENDATIONS FOR ACTION

- Mozambique should complete survey and verification of cluster munition remnants (CMR) contamination to declare itself in compliance with Article 4 of the Convention on Cluster Munitions (CCM) at the earliest possible date and no later than the end of 2016.
- Mozambique should ensure the national mine action database is accurate, up to date, and effectively managed by national authorities.
- → Greater efforts should be made to ensure reporting and recording of mine action data according to International Mine Action Standards (IMAS) land release terminology.



CONTAMINATION

Mozambique had no specific areas confirmed to contain CMR as of 31 December 2014. However, Mozambique's National Demining Institute (Instituto Nacional de Desminagem, IND) requested Norwegian People's Aid (NPA) to undertake a detailed CMR survey from June to December 2015 in Gaza, Manica, and Tete provinces, targeting specific communities.¹ Operations were being carried out by small, flexible roving teams as any tasks identified were expected to be small and widely dispersed.²

Cluster munitions are reported to have been used on "a limited scale" during the war in Mozambique.³ In its initial CCM Article 7 transparency report in 2013, Mozambique indicated that the extent of areas contaminated by CMR was not known, although it reported that cluster munitions had been used in seven provinces: Gaza, Manica, Maputo, Niassa, Sofala, Tete, and Zambezia.⁴ A small number of CMR, including both RBK-250 containers and unexploded submunitions such as Rhodesian-manufactured Alpha bomblets, were found in 2005–12 in Guro district of Manica province, Boane district of Maputo province, Mabalane district of Gaza province, and Changara and Chifunde districts in Tete province. All these CMR were destroyed.⁵ In 2012, NPA and HALO Trust found a total of 25 Alpha

bomblets in Chifunde and Changara districts in Tete province, and Gondola district in Manica province, which were subsequently destroyed in 2013.⁶

In September 2014, Mozambique informed states parties to the CCM of its belief that most of the resultant contamination had already been cleared as part of Mozambique's ongoing mine and explosive remnants of war (ERW) clearance efforts. According to the IND, the risk posed by CMR to the civilian population is limited and there have been no reports of any accidents from submunitions.

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Mozambique also has residual contamination from mines and unexploded ordnance (UXO), and ERW incidents have occurred in rural areas in the course of everyday community activities. The IND's 2015 annual workplan included an objective to "establish and implement mechanisms for the management of risks from residual UXO and other ERW". 10

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; currently, support is provided under a three-year programme due to expire in 2015.¹¹

LEGISLATION AND STANDARDS

In September 2013, the IND reported that it was revising its national mine action standards to include specific guidance on clearance of CMR. In April 2015, the IND reported requesting assistance from NPA to revise its national mine action standards, information management system, and quality management system specific to CMR survey and clearance in June and September 2014. In April 2015, the IND reported requesting assistance from NPA to revise its national mine action standards, information management system, and quality management system specific to CMR survey and clearance in June and September 2014. In April 2015, the IND reported requesting assistance from NPA to revise its national mine action standards.

OPERATORS

Mozambique has four international mine clearance operators in country: Belgian non-governmental-organisation (NGO) APOPO, HALO Trust, Handicap International, and NPA. Demining has also been conducted by the Mozambican Army and a number of commercial operators.

In 2014, APOPO and NPA were the only operators involved in CMR survey and clearance.

APOPO deployed one manual clearance team with embedded survey capacity to an area of CMR contamination identified by an NPA survey. NPA's survey team in Tete consisted of four personnel.

QUALITY MANAGEMENT

According to APOPO, personnel from the IND conducted external quality assurance through routine assessments and checks of clearance activities and procedures in 2014. APOPO reported having an internal quality management system in place regarding its CMR-contamination-related activities and that measures were taken to ensure that all standards and procedures were implemented in accordance with its standing operating procedures and the IMAS.¹⁶

LAND RELEASE

The total CMR-contaminated area released by clearance and technical survey in 2014 was approximately 350,000m². In June 2014, NPA's survey teams identified a confirmed hazardous area with at least six visible Alpha bomblets in Cahora-Bassa district in Tete province. The contaminated area was estimated to total approximately 240,000m². APOPO was tasked by the IND to clear the area by the end of 2014. The After additional survey and clearance in October and November, APOPO cleared a total of 349,453m², destroying 12 Alpha submunitions. Be

Following survey and clearance in 2014, no other confirmed areas requiring clearance or suspected areas requiring survey had been identified as of May 2015. The IND has reported that a mix of additional non-technical and technical survey would be used to confirm that areas already cleared do not contain any CMR as a process of verification in order to ensure compliance with Article 4 "by no later than 2016".¹⁹

SAFETY OF CLEARANCE PERSONNEL

No accidents involving CMR clearance personnel were recorded in Mozambique for 2014.²⁰

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 fulfil its Article 4 obligations well in advance of its treaty deadline.

In April 2015, the IND reiterated the government's commitment to ensure compliance with Article 4 of the CCM by "no later than the end of 2016", and declare CMR clearance complete following additional non-technical survey and verification. After further CMR survey work by NPA and submission of a final report on the results in December 2015, the IND will decide on the clearance of any reported areas.²²

Mozambique initially stated that it might need until 2021 to clear all CMR as the full extent of the problem was unknown.²³ At the Fourth Meeting of States Parties to the CCM, however, Mozambique reported its belief that it could complete its clearance obligations by the end of 2016, depending on further survey.²⁴ It has since reiterated that it is on track to complete CMR clearance on several occasions by the end of 2016, including at the Fifth Meeting

of States Parties in September 2014 and in a recent communiqué to Mine Action Monitor in April 2015.²⁵

Mozambique was expected to receive less funding for mine action in 2015, commensurate with the expected fulfilment of its obligations under the Anti-Personnel Mine Ban Convention to clear all anti-personnel mine contamination. Nonetheless, the IND has reported that sufficient capacity exists to address any remaining CMR. The IND stated in April 2015 its belief that sufficient funding existed to complete necessary survey in 2015. APOPO and NPA did not report receiving any government funding or in-kind support for CMR survey and clearance-related activities. 27

APOPO has reported that its operations did not include CMR survey or clearance in 2015. However they stood ready to deploy assets to suspected areas of contamination if requested by the IND.²⁸ An NPA "Self-Help Ammunition Destruction Options Worldwide" (SHADOW) project to destroy a stockpile of RBK 250 cluster munitions held by the Mozambique Armed Forces in Nacala started in 2014 and was due to be completed in 2015.²⁹

ENDNOTES

- 1 Response to Mine Action Monitor questionnaire by Afedra Robert Iga, Advisor, Capacity Building Project Mozambique, NPA, 4 June 2015. NPA reported it would require two small teams to complete the surveys and a significantly reduced budget in comparison to previous funding for mine clearance operations.
- NPA, "Humanitarian Disarmament Plan of Action Mozambique 2015", undated.
- 3 Statement by Alberto Maverengue Augusto, Director, IND, Fifth Meeting of States Parties to the CCM, San José, 4 September 2014.
- 4 CCM Article 7 Report (for 1 September 2011–31 May 2012), Form F.
- 5 Ibid.
- 6 Statement by Alberto Maverengue Augusto, IND, Fifth Meeting of States Parties, 4 September 2014 and CCM Article 7 Report (for 1 January 2013–1 July 2014), Form F. These submunitions were reported as destroyed through explosive ordnance disposal (EOD) and battle area clearance (BAC) but were not properly surveyed and no square metres for clearance of CMR were recorded. Email from Hans Risser, Chief Technical Advisor, Mine Action, UNDP. 29 May 2015.
- 7 Statement by Alberto Maverengue Augusto, IND, Fifth Meeting of States Parties, 4 September 2014.
- 8 Response to Mine Action Monitor questionnaire by the IND, 30 April 2015.
- 9 IND, "International Workshop on Demining in Mozambique: Workshop Summary", Maputo, 5–6 November 2012, p. 6.
- Mozambique, "Progress Report on completing the destruction of antipersonnel 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.
- 11 UNDP presentation, International Cooperation and Assistance panel Thirteenth Meeting of States Parties to the Anti-Personnel Mine Ban Convention, Geneva, 3 December 2013.
- 12 Statement of Mozambique, Fourth Meeting of States Parties to the CCM, Lusaka, 12 September 2013.
- 13 Response to Mine Action Monitor questionnaire by the IND, 30 April 2015.

- 14 Response to Mine Action Monitor questionnaire by APOPO, 11 May 2015.
- 15 Response to Mine Action Monitor questionnaire by Afedra Robert Iga, NPA, 4 June 2015.
- 16 Response to Mine Action Monitor questionnaire by APOPO, 11 May 2015.
- 17 Responses to Mine Action Monitor questionnaire by the IND, 30 April 2015; APOPO, 11 May 2015; and Mario Nuñes, Country Director, NPA, 29 April 2015. APOPO reported that the initial figure for its survey task was 264,000m². Email from APOPO, 24 June 2015.
- 18 Statement by Alberto Maverengue Augusto, IND, Fifth Meeting of States Parties, 4 September 2014; and Responses to Mine Action Monitor questionnaire by the IND, 30 April 2015; and APOPO, 15 May 2015.
- 19 Response to Mine Action Monitor questionnaire by the IND, 30 April 2015 and Statement by Alberto Maverengue Augusto, IND, Fifth Meeting of States Parties, 4 September 2014.
- 20 Response to Mine Action Monitor questionnaire by the IND, 30 April 2015.
- lbid.
- 22 Response to Mine Action Monitor questionnaire by Afedra Robert Iga, NPA, 4 June 2015.
- 23 CCM Article 7 Report (for 1 September 2011–31 May 2012), Form F.
- 24 Statement of Mozambique, Fourth Meeting of States Parties to the CCM, Lusaka, 12 September 2013.
- $\,$ 25 $\,$ Response to Mine Action Monitor questionnaire by the IND, 30 April 2015.
- 26 Ibid.
- 27 Ibid.; and Responses to Mine Action Monitor questionnaire by APOPO, 11 May 2015; and Mario Nuñes, NPA, 29 April 2015.
- $28\,\,$ Response to Mine Action Monitor questionnaire by APOPO, 11 May 2015.
- 29 Response to Mine Action Monitor questionnaire by the IND, 30 April 2015; and email from Hans Risser, UNDP, 8 June 2015. NPA was asked by the IND to conduct verification and feasibility for the destruction of the RBK 250 cluster munitions stockpile in 2013.



(CLEARANCE COMPLETED)

CONTAMINATION

Norway has fulfilled its Convention on Cluster Munitions (CCM) Article 4 obligations to clear cluster munition remnants (CMR), having completed clearance of the sole confirmed area containing CMR in September 2013.¹

The area that was contaminated is on the Norwegian mainland, part of the former Hjerkinn shooting range in the Dovre mountain area, in Oppland county. The hazardous area, known as "HFK-sletta", was used for test firing artillery-delivered cluster munitions (DM 1383 and DM 1385) in the period 1986–2007. It covered a total area of 617,300m². The shooting range is in the process of being decommissioned, and CMR clearance was part of a larger explosive ordnance disposal operation conducted by the Norwegian defence forces.²

In its initial CCM Article 7 report in 2011, and in subsequent Article 7 reports in 2012 and 2013, Norway reported that the contaminated area contained an estimated 30 unexploded submunitions.³ However, upon completion of CMR survey and clearance, Norway declared that only two bomblets had been destroyed between the start of operations in 2008 and completion in 2013.⁴

In March 2014, Norway reported under the Convention on Certain Conventional Weapons, that clearance of CMR contamination had been completed in late 2013 and that the remaining area contaminated by other unexploded ordnance (UXO) was expected to be cleared by 2020.⁵ At the CCM intersessional meetings in April 2014, Norway announced completion of CMR clearance, ⁶ and its April 2014 Article 7 transparency report declared that clearance had been completed by the third quarter of 2013.⁷ CMR clearance was conducted by a dedicated explosive detection dog (EDD) unit comprising three dog handlers and eight dogs engaged in searching "boxes" of 10m².⁸

At the Fifth Meeting of States Parties in September 2014, Norway announced it had submitted its formal Declaration of Article 4 Compliance to the United Nations on 29 August 2014, and, as such, had completed its clearance obligations under the CCM.



ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, Norway was required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 August 2020. Norway completed CMR clearance nearly seven years before its deadline.

In its declaration of Article 4 compliance, Norway stated that as of 9 September 2013 it had made every effort to identify all areas under its jurisdiction and [sic]¹⁰ control contaminated by cluster munitions, and that as of that date it had cleared and destroyed all CMR found in accordance with Article 4 of the CCM.¹¹

ENDNOTES

- Declaration of compliance with Article 4.1 (a) of the CCM, submitted by Norway, 1 September 2014.
- 2 Ibid.
- 3 CCM Article 7 Reports, Form F, 2011, 2012, and 2013 (for 1 August 2010–31 December 2012).
- 4 Declaration of compliance with Article 4.1 (a) of the CCM, submitted by Norway, 1 September 2014.
- 5 Convention on Certain Conventional Weapons Protocol V Report, Form A, 31 March 2014.
- 6 Statement of Norway, CCM Intersessional Meetings, Geneva, April 2014.
- 7 CCM Article 7 Report, Form F, 30 April 2014.
- 8 Declaration of compliance with Article 4.1 (a) of the CCM, submitted by Norway, 1 September 2014.
- 9 Statement of Norway, Fifth Meeting of States Parties, Costa Rica, 2–5 September 2014.
- 10 Norway's declaration of compliance with CCM Art. 4(1)(a) mistakenly states "jurisdiction and control", instead of "jurisdiction or control", which is the wording in Article 4.
- 11 Declaration of compliance with CCM Art. 4(1)(a), submitted by Norway, 1 September 2014.



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

PROGRAMME PERFORMANCE

Problem understood	6
Target date for completion of clearance of cluster munition remnants	3
Targeted clearance	6
Efficient clearance	3
National funding of programme	7
Timely clearance	3
Land release system in place	8
National mine action standards	9
Reporting on progress	5
Improving performance	5
PERFORMANCE SCORE: 5.5	AVERAGE

RECOMMENDATIONS FOR ACTION

60

- The UK should acknowledge it has outstanding Convention on Cluster Munitions (CCM) Article 4 obligations to survey and, where contamination is found, to clear cluster munition remnants (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 in the Falkland Islands in accordance with its international legal obligations.

CONTAMINATION

An unknown number of CMR remain on the Falkland Islands¹ 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 to Cluster Munition Monitor that no known areas of CMR contamination exist outside suspected hazardous areas (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

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 civilian CMR casualties have ever occurred on the islands.⁹

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

The extent of other explosive remnants of war (ERW) contamination on the Falkland Islands is not known, but survey and clearance results in the past few years suggest some UXO remain to be cleared. A total of seven items of UXO, including the two submunitions mentioned above, were destroyed during clearance in 2009–10.¹⁰

In 2015, the UK reported that 3.67km² of land had been released through cancellation from the threat of landmines, and clearance of UXO, during Phases 2 and 3 of the project. Of this total, 3.49km² was released in Phase 2 (January–March 2012), with the destruction of 79 UXO items, and 0.18km² in Phase 3 (January–March 2013), destroying a further six items of UXO, all in the "Stanley common fence" area.¹¹ An additional 27 items of UXO, including the 19 submunitions mentioned above, were destroyed during Phase 4(a) of clearance in January to April 2015.¹²

The UK has predicted that almost 1.2km² of battle area will be cleared in Phase 4(b) (September to December 2015), in the Elizabeth Cove area.¹³

PROGRAMME MANAGEMENT

A National Mine Action Authority (NMAA) was established in 2009 to oversee clearance of mined areas. ¹⁴ The Foreign and Commonwealth Office (FCO) chairs the NMAA, and the Falkland Islands government and project contractors are also represented. ¹⁵

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, which will involve survey of SHA and removal of any contamination, while Fenix Insight will be responsible for the Demining Project Office, which ensures quality management of the demining operations. While the announcement by the Governor's Office asserted that 108 minefields existed at the start of Phase 4,16 the FCO subsequently confirmed that the correct figure was in fact 107.17 It was envisaged that over the course of Phase 4, at least 23 mined areas as well as one battle area would be cleared.18

To implement Phase 4, which began in January 2015, BACTEC has a team of 46 demining staff, along with other support and management personnel. BACTEC is using three mechanical assets during the project: two flails and a tiller. 10

LAND RELEASE

No submunitions were destroyed in 2014, but, as noted above, 19 submunitions were destroyed during clearance operations in January to April 2015 in Stanley Area 3.²¹

ARTICLE 4 COMPLIANCE

Under Article 4 of the CCM, the United Kingdom 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.²²

However, Article 4(2)(a) of the CCM stipulates that, "as soon as possible", each state party shall: "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 Monitor 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.

ENDNOTES

- 1 There is a sovereignty dispute with Argentina, which also claims jurisdiction over the islands.
- 2 Letter to Landmine Action from Lt.-Col. Scott Malina-Derben, Ministry of Defence, 6 February 2009; and email correspondence from Jeremy Wilmshurst, Conventional Arms Policy Officer, Arms Export Policy Department, Foreign and Commonwealth Office (FCO), 11 June 2015.
- 3 Email from Jeremy Wilmshurst, FCO, 1 July 2015.
- 4 Ibid.
- 5 Ibid
- 6 Statement of UK, Tenth Meeting of States Parties, Anti-Personnel Mine Ban Convention (APMBC), Geneva, 1 December 2010.
- 7 Email from Jeremy Wilmshurst, Foreign and Commonwealth Office, 11 June 2015.
- 8 Ibid., 1 July 2015.
- 9 Statement of UK, APMBC Standing Committee on Mine Action, Geneva, 27 May 2009.
- 10 Statement of UK, APMBC Tenth Meeting of States Parties, Geneva, 1 December 2010; and APMBC Twelfth Meeting of States Parties, Geneva, 5 December 2012.
- 11 Email from Jeremy Wilmshurst, FCO, 9 July 2015, and response to Mine Action Monitor questionnaire, 3 June 2015; and presentation of UK, APMBC Standing Committee on Mine Action, Geneva, 22 May 2012.
- 12 Email from Jeremy Wilmshurst, FCO, 1 July 2015.
- 13 Response to Mine Action Monitor questionnaire by Jeremy Wilmshurst, FCO, 3 June 2015.
- 14 Statement of the UK, APMBC Standing Committee on Mine Action, Geneva, 27 May 2009.
- 15 Response to Mine Action Monitor questionnaire by Jeremy Wilmshurst, FCO, 3 June 2015.
- 16 Governor's Office, "Falkland Islands demining contracts awarded", 28 October 2014, at: https://www.gov.uk/government/world-location-news/falkland-islands-demining-contracts-awarded.
- 17 Response to Mine Action Monitor questionnaire by Jeremy Wilmshurst, FCO, 3 June 2015.
- 18 Governor's Office, "Falkland Islands demining contracts awarded", 28 October 2014.
- 19 In total, 74 staff are said to have been employed on the project.
- 20 Response to Mine Action Monitor questionnaire by Jeremy Wilmshurst, FCO. 3 June 2015.
- 21 Email from Jeremy Wilmshurst, FCO, 11 June 2015.
- 22 Interview with Jeremy Wilmshurst, FCO, and Lt.-Col. John Stroud-Turp, Security Policy and Operations, Ministry of Defence, in Geneva, 22 June 2015.

SIGNATORY STATES





RECOMMENDATIONS FOR ACTION

- → Angola should conduct a cluster munition remnants (CMR) survey as soon as possible to confirm whether or not it is still affected by CMR and take appropriate action based on the results.
- Angola should ratify the Convention on Cluster Munitions (CCM) as soon as possible.

CONTAMINATION

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The extent to which Angola is affected by CMR remains unclear. There is no confirmed contamination, but a small residual threat from either abandoned cluster munitions or unexploded submunitions may exist. As of July 2015, an appropriate survey has yet to be conducted in order to establish whether Angola is still affected by CMR. CMR contamination is a result of more than four decades of armed conflict that ended in 2002, although it is unclear when, or by whom, cluster munitions were used in Angola.

As of July 2015, clearance operators had not found CMR in more than seven years, apart from HALO Trust, which reported finding and destroying 12 unexploded submunitions in 2012. In 2011, HALO and the National Institute for Demining (Instituto Nacional de Desminagem, INAD) affirmed that unexploded submunitions remained in Kuando Kubango. In June 2015, Norwegian People's Aid (NPA) reported finding no CMR during its operations in northern Angola, with the exception of a small number of submunitions found in 2008.

Indeed, since 1994, very few cluster bomb strikes have been identified by HALO, which has concluded that the impact of submunitions is minimal. Clearing submunitions has been mainly through explosive ordnance disposal (EOD) callout/spot tasks. More typical is the destruction of old or unserviceable cluster munitions identified by HALO's Weapons and Ammunition Disposal (WAD) teams in military storage areas, some of which have already been earmarked for subsequent disposal by the Angolan Armed Forces. Between 2005 and 2012, HALO Trust WAD teams reported destroying a total of 7,284 submunitions.⁵

OTHER EXPLOSIVE REMNANTS OF WAR 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 the National Demining Institute (Instituto Nacional de Desminagem, INAD), which is responsible for demining and training operations under the auspices of MINARS.

OPERATORS

Five international non-governmental organisations (NGOs) conduct demining for humanitarian purposes in Angola: DanChurchAid (DCA), HALO Trust, Menschen gegen Minen (MgM), Mines Advisory Group (MAG), and NPA. A number of national commercial companies, accredited by CNIDAH and mostly employed by the state or other private companies, also operate in Angola.

ARTICLE 4 COMPLIANCE

As of July 2015, Angola was a signatory but not a state party to the Convention on Cluster Munitions. Nonetheless, Angola has obligations to clear CMR as soon as possible under international human rights law, in particular by virtue of its duty to protect the right to life of every person under its jurisdiction.⁶

ENDNOTES

- 1 According to reports from NGO operators in the national database at the Intersectoral Commission for Demining and Humanitarian Assistance (CNIDAH), as of February 2008, Norwegian People's Aid (NPA) reported clearing 13 submunitions in Kwanza Sul province; Mines Advisory Group (MAG) reported clearing 140 submunitions in Moxico province; and HALO Trust reported clearing 230 submunitions in Bié province. Email from Mohammad Qasim, UNDP/CNIDAH, 22 February 2008.
- Response to questionnaire by Gerhard Zank, Programme Manager, HALO Trust, 19 March 2013.
- 3 Interviews with Jose Antonio, Site Manager, Kuando Kubango, HALO Trust; and with Coxe Sucama, Director, INAD, in Menongue, 24 June 2011.
- 4 Email from Fredrik Holmegaar, Country Director, Humanitarian Disarmament Angola, NPA, 26 June 2015.
- 5 Response to guestionnaire by Gerhard Zank, HALO Trust, 19 March 2013.
- 6 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 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".



TAW) other than civit.

COLOMBIA





RECOMMENDATIONS FOR ACTION

- → Colombia should ratify the Convention on Cluster Munitions (CCM) as a matter of priority.
- Colombia should ensure the national mine action database disaggregates data on submunitions and other cluster munition remnants (CMR).
- Colombia should assess extent of CMR contamination as soon as possible.

CONTAMINATION

The extent to which Colombia is affected by CMR is unclear. In May 2009, Colombia's Minister of Defense, Juan Manuel Santos, acknowledged that the Colombian Armed Forces have 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 Defense 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 on 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 six children, injuring a further 27 civilians, including nine children, and displacing the village's inhabitants. Colombia sought to attribute the deaths to a bomb placed by Revolutionary Armed Forces of Columbia (FARC) guerrillas.

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. The Presidential Programme for Comprehensive Mine Action (Programa Presidencial para la Acción Integral contra Minas Antipersonal, PAICMA) is the technical secretary for CINAMAP, responsible for coordinating implementation of the 2009–2019 Integrated Mine Action Plan, which seeks to minimise the socio-economic impact of mines, improvised explosive devices (IEDs), and unexploded ordnance (UXO), and to implement sustainable development programmes in affected communities.

LAND RELEASE

There are no reports of any submunitions being destroyed during demining operations in 2014.

ARTICLE 4 COMPLIANCE

Colombia is a signatory to the CCM but as of June 2015 it had still to ratify. Nonetheless, Colombia 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.⁷

ENDNOTES

- 1 Carlos Osorio, "Colombia destruye sus últimas bombas de tipo racimo" ("Colombia destroys its last cluster bombs"), Agence France-Presse, 7 May 2009.
- Ministry of National Defense presentation on cluster munitions, Bogotá, December 2010.
- 3 Inter-American Court on Human Rights, 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.
- 4 Inter-American Court on Human Rights, Caso Masacre de Santo Domingo v. Colombia, Judgment, Series C, No. 259, 30 November 2012, §§210–30 (in Spanish); see http://www.weaponslaw.org/case-law/iacthr-santo-domingo-massacre.
- 5 Acta CINAMAP 02/2013, 18 December 2013, pp. 3-4.
- 6 Presidency of Colombia, Decree 2150 of 2007.
- 7 It 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 1969 American Convention on Human Rights, Article 4 of which provides that "Every person has the right to have his life respected."



PROGRAMME PERFORMANCE

THE CONGO

T ROOKAMPL TERTORPARCE				
Problem understood				
Target date for completion of clearance of cluster munition remnants				
Targeted clearance	7			
Efficient clearance	7			
National funding of programme	4			
Timely clearance	5			
Land release system in place	7			
National mine action standards	7			
Reporting on progress	3			
Improving performance	7			
PERFORMANCE SCORE: 6.2	AVERAGE			

RECOMMENDATIONS FOR ACTION

- ightarrow The Democratic Republic of Congo (DRC) should complete clearance of all areas contaminated by cluster munition remnants (CMR) before the deadline of the end of 2016 which it has set for itself.
- → The DRC should ratify the Convention on Cluster Munitions (CCM) as a matter of priority.
- o The quality of the national mine action database should be significantly improved. The DRC should ensure that the database is accurate, up to date, and effectively owned by national authorities.
- o Greater efforts should be made to ensure reporting and recording of mine action data according to International Mine Action Standards (IMAS) land release terminology.

CONTAMINATION

As of end of 2014, the DRC had 17,590m² of area confirmed to contain CMR (see Table 1).1 The contamination is located in two of the DRC's 11 provinces: Equateur in the north-east of the country and Katanga in the south. The DRC identified the five areas, all of which are believed to contain BL755 submunitions, in a national survey conducted in 2013.2

Table 1. CMR contamination by province as of end 2014³

Province	Confirmed areas	Area (m²)
Equateur (Bolomba)	4	12,340
Katanga (Kirungu/Moba)	1	5,250
	5	17,590

It is not known who used cluster munitions in DRC, nor when. In April 2014, the DRC stated that cluster munitions had been used by unspecified foreign armies, both those invited by the government and those "not invited". 4 Since 2009, small numbers of unexploded submunitions have been found in Equateur, Katanga, North and South Kivu,

Maniema, and Oriental provinces. 5 Submunition types reportedly include BL755, BLU-63, BLU-55, ShAOB, and PM-1.

Of the five remaining areas confirmed to contain CMR, contamination in the four areas in Equateur province was said to impact agricultural activities. The area in Katanga consisted of a cluster munition strike close to a hospital in Moba. In 2014, Mines Advisory Group (MAG) carried out clearance on the strike, but work had to be halted to prevent the closure of the hospital, the only one in Moba. MAG reported that its teams were clearing CMR in more heavily populated areas in 2014 compared to 2013.8

OTHER EXPLOSIVE REMNANTS OF WAR

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 unexploded ordnance (UXO) as well as significant quantities of abandoned explosive ordnance. In January 2015, the United Nations Mine Action Service (UNMAS) reported that a total of 2,539 ERW victims were registered in its database, including nearly 30 new victims in 2014 alone.9

PROGRAMME MANAGEMENT

On 9 July 2011, national mine action legislation was signed into law by the President of the DRC. The UN Mine Action Coordination Centre (UNMACC), established in 2002 by UNMAS, coordinates mine action operations through offices in the capital, Kinshasa, and in Goma, Kalemie, Kananga, Kisangani, and Mbandaka. 10 UNMACC is 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.11

In March 2013, Security Council Resolution 2098 called for demining activities to be transferred to the UN Country Team and the Congolese authorities. 12 As a consequence, UNMAS operates two separate projects after splitting its mine action 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.13 In accordance with Resolution 2147 of March 2014, demining is no longer included in MONUSCO's mandate.14

The Congolese Mine Action Centre (Centre Congolais de Lutte Antimines, CCLAM) was established in 2012 with support from UNMACC/UNMAS.15 In May 2015, UNMAS reported that in 2014 it continued to support CCLAM in its operations and to promote full transition of all coordination activities to the Centre by the end of 2016.16 UNMAS was unable to establish an effective information management system during this reporting period. Indeed, data from the national database in response to Mine Action Monitor research queries varied significantly from operators' records, and in some cases was partial or even unusable.

STRATEGIC PLANNING

The DRC's national mine action strategic plan for 2012-16 sets the goal of clearance of all areas contaminated with anti-personnel mines or unexploded submunitions by the end of 2016, as well as for transition of the mine action programme from UN management to full national ownership.17

OPERATORS

Five international operators are accredited for mine action in the DRC: DanChurchAid (DCA), Handicap International (HI), MAG, Mine Tech International (MTI), Mechem, and Norwegian People's Aid (NPA). MAG was the only operator to conduct CMR survey and clearance activities in the DRC in 2014. It deployed two teams to clear CMR, one in Equateur and the other in Katanga. All deminers and the two team leaders were personnel from the Congolese Armed Forces (Forces Armées de la République Démocratique du Congo, FARDC), seconded to MAG by CCLAM.19

STANDARDS

No developments were reported regarding mine action standards or guidelines specific to CMR survey or clearance in 2014. As of May 2015, National Technical Standards and Guidelines for mine action had been developed but had not yet been finalised. The draft version does not contain CMR-specific provisions.²⁰

QUALITY MANAGEMENT

MAG, Mechem, and NPA reported that external quality management activities were very limited in the DRC in 2014. ²¹ UNMAS claimed that a quality management system was in place and that quality assurance (QA) activities were normally carried out on a monthly basis per team/organisation in 2014. However, it said that in 2015 very few QA activities were being carried out in the field "due to both logistics and funding constraints". ²²

All three operators reported having internal quality management systems in place. Mechem stated a new QA system had been established, tested, and implemented in 2014, while MAG and NPA reported that internal quality control (QC) was carried out on a weekly basis.²³

LAND RELEASE

The total amount of CMR-contaminated area released in 2014 was 65,510m². In May 2015, MAG reported that the CMR-contaminated areas it worked on in 2014 had yet to be completed and therefore the land cleared in 2014 had not yet been released by the coordinating authorities.²⁴

SURVEY IN 2014

No CMR survey activity was carried out in 2014. Non-technical survey was conducted by MAG in Katanga and Equateur provinces as part of the National Landmine Contamination Survey in 2013, which was completed by NPA, HI, DCA, and MAG, in cooperation with national non-governmental organisations (NGOs). The areas where MAG deployed teams to clear CMR in 2014 had previously been confirmed as contaminated and no further technical survey was conducted.²⁵

CLEARANCE IN 2014

MAG cleared a total of 65,510m² of CMR-contaminated area in 2014. Most (46,280m²) was in Equateur province, with 19,230m² in Katanga province (see Table 2).²⁶

As noted above, the Katanga team was deployed to a cluster munition strike at Moba hospital. The area had to be extended from the original suspected area as more submunitions were found. A total of 30 submunitions and 21 items of UXO were destroyed during the year and all suspect areas were cleared. Other areas were covered by non-technical survey and visual search. It was agreed that the hospital team would report any further suspicious items spotted in non-suspect areas in the future.²⁷ In June 2015, MAG reported that its team would continue to work in the same province for several months and was ready to return and clear any explosive hazards, should the hospital request it or if assigned by UNMAS.²⁸

Work on CMR clearance was halted for three months following a devastating explosion in an ammunition depot in the city of Mbuji Mayi, Kasaï Oriental province in January 2014. MAG, which was asked to provide emergency assistance, redeployed the team working on CMR clearance in Katanga to Mbuji Mayi for three months.²⁹

Table 2. Clearance of CMR-contaminated area in 2014³⁰

Operator	Areas released	Area cleared (m²)	Submunitions destroyed	UXO destroyed
MAG (Equateur)	0*	46,280	8	422
MAG (Katanga)	0*	19,230	30	21
	0*	65,510	38	443

^{*} MAG reported that the land had yet to be formally released.

MAG reported destroying a total of 38 submunitions during CMR clearance in 2014.³¹ CCLAM reported the destruction of a further 17 submunitions in 2014 as a result of explosive ordnance disposal (EOD) tasks in areas not identified as CMR-contaminated by the 2013 national survey.³²

PROGRESS IN 2015

In June 2015, CCLAM stated that three submunitions had been destroyed between January and June 2015 during clearance of a further 16,165m² in the five known remaining CMR-contaminated areas identified by the survey. Two other submunitions were found outside these areas in the first half of the year.³³

According to CCLAM, as of June 2015, a total of 159 submunitions had been cleared in the DRC since 2011: five in the first half of 2015, 55 in 2014, 21 in 2013, 55 in 2012, and 23 in 2011.³⁴ CCLAM reported that the types destroyed were BL755, BLU-63, and PM-1.³⁵ CCLAM reported on another occasion that ShAOB submunitions were destroyed in Lubumbashi in 2012.³⁶

SAFETY OF CLEARANCE PERSONNEL

No incidents were reported involving CMR clearance in 2014.³⁷

ARTICLE 4 COMPLIANCE

As of 1 July 2015, the DRC was a signatory but not yet 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.³⁸

The DRC's national mine action strategic plan for 2012–16 sets the goal of clearance of all areas contaminated with anti-personnel mines or unexploded submunitions by the end of 2016.³⁹ 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.⁴⁰ MAG stated these two teams would continue to work in CMR-contaminated areas in Equateur and Katanga provinces and that no change in its CMR survey or clearance capacity was expected in 2015.⁴¹

ENDNOTES

- Response to Mine Action Monitor questionnaire by Colin Williams, Chief of Operations, UNMAS DRC, 19 May 2015.
- 2 Convention on Cluster Munitions (CCM) Article 7 Report (for 2012 and 2013), Form F.
- 3 Ibid.; and Response to Mine Action Monitor questionnaire by Colin Williams, UNMAS, 19 May 2015.
 4 Statement by Sudi Alimasi Kimputu, Coordinator, Congolese Mine Action
- 4 Statement by Sudi Alimasi Kimputu, Coordinator, Congolese Mine Action Centre, CCM Intersessional Meetings, Geneva, 7 April 2014; Statement of DRC, CCM Intersessional Meetings, Geneva, 28 June 2011.
- 5 Email from Charles Frisby, former UN Advisor, UNMACC, 30 March 2011; Statement of the DRC, Lomé Regional Seminar on the Universalization of the CCM, Lomé, Togo, 23 May 2013 (notes by Action on Armed Violence, AOAV); First Meeting of States Parties to the CCM, Vientiane, Lao PDR, 11 November 2010 (notes by the Cluster Munition Coalition, CMC); and CCM Intersessional Meetings, Geneva, 28 June 2011.
- 6 See Statements of the DRC, Regional Seminar on Universalization of the CCM, Lomé, 23 May 2013 (notes by AOAV); First Meeting of States Parties, Vientiane, 11 November 2010 (notes by the CMC); and CCM Intersessional Meetings, Geneva, 28 June 2011.
- 7 Response to Mine Action Monitor questionnaire by Colin Williams, UNMAS, 19 May 2015.
- 8 Response to Mine Action Monitor questionnaire by Julia Wittig, Programme Officer, MAG, 29 May 2015.
- 9 UNMAS, "Democratic Republic of the Congo (DRC), Support to UN Country Team and the Government", updated January 2015, at: http://www. mineaction.org/programmes/drc.
- 10 UNMAS, "The Democratic Republic of the Congo (DRC), Overview", updated August 2013, at: http://www.mineaction.org/programmes/drc.
- 11 UN Security Council Resolution 1925, 28 May 2010.
- 12 UN Security Council Resolution 2098, 28 March 2013.
- 13 UNMAS, "Democratic Republic of the Congo (DRC), Support to UN Country Team and the Government".
- 14 UN Security Council Resolution 2147, 28 March 2014; and UNMAS, "DRC Overview", updated April 2014, at: http://www.mineaction.org/ programmes/drc.
- 15 Response to Cluster Munition Monitor questionnaire by Michelle Healy, UNMACC, 29 April 2013.
- 16 Email from Colin Williams, UNMAS, 29 May 2015; and UNMAS, "Democratic Republic of the Congo (DRC), Support to UN Country Team and the Government".
- 17 DRC, "Plan Stratégique National de Lutte Antimines en République Démocratique du Congo, 2012–2016" ("National Mine Action Strategic Plan in DRC, 2012–2016"), Kinshasa, November 2011, p. 28, at: http://www.maccdrc.org/IMG/pdf/Plan_strategique_LAM_2012-2016.pdf.
- 18 Second Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline Extension Request, 7 April 2014, p. 50, at: http://www.apminebanconvention. org/fileadmin/APMBC/clearing-mined-areas/art5_extensions/countries/ DRC-ExtRequest-Received-7Apr2014-fr.pdf.
- 19 The team in Equateur included ten deminers while the Katanga team included eight deminers. Two other teams financed by another donor in 2013 were demobilised in 2014 due to project completion. MAG did not operate any mechanical assets in the DRC in 2014. Response to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29 May 2015.
- 20 Email from Colin Williams, UNMAS, 3 June 2015.

- 21 Responses to Mine Action Monitor questionnaire by Pehr Lodhammar, Programme Manager, Humanitarian Disarmament, NPA, 18 May 2015; Julia Wittig, MAG, 29 May 2015; and Johan Strydom, Project Manager DRC, Mechem, 13 May 2015.
- 22 Responses to Mine Action Monitor questionnaire by Pehr Lodhammar, NPA, 18 May 2015; Colin Williams, UNMAS, 19 May 2015; and Julia Wittig, MAG, 29 May 2015.
- 23 Responses to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29 May 2015; Johan Strydom, Mechem, 13 May 2015; and Pehr Lodhammar, NPA, 18 May 2015.
- 24 Response to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29 May 2015.
- 25 Ibid.
- 26 Response to Mine Action Monitor questionnaire by Johan Petrus Botha, Technical Operations Manager, MAG, 1 June 2015.
- 27 Response to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29 May 2015; and email, 12 June 2015.
- 28 Email from Julia Wittig, MAG, 8 June 2015
- 29 Response to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29 May 2015.
- 30 Response to Mine Action Monitor questionnaire by Johan Petrus Botha, MAG. 1 June 2015.
- 31 Response to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29
- 32 Statement by Sudi Alimasi Kimputu, CCLAM, CCM Intersessional Meetings, Geneva, 22 June 2015.
- 33 Ibid.
- 34 Ibid.; and Statement, Fifth Meeting of States Parties, San José, 5 September 2014.
- 35 Statement by Sudi Alimasi Kimputu, CCLAM, Fifth Meeting of States Parties, San José, 5 September 2014.
- 36 In May 2013, the DRC reported for the first time that ShAOB-type submunitions were destroyed during clearance operations in Lubumbashi in 2012. Statement of DRC, Regional Seminar on the Universalization of the CCM, Lomé, 23 May 2013 (notes by AOAV).
- 37 Responses to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29 May 2015; Pehr Lodhammar, NPA, 18 May 2015; Johan Strydom, Mechem, 13 May 2015; and Colin Williams, UNMAS, 19 May 2015.
- 38 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".
- 39 DRC, "National Mine Action Strategic Plan in DRC, 2012–2016", Kinshasa, November 2011, p. 28.
- 40 Response to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29 May 2015.
- 41 The team in Equateur was continuing to be deployed in the area of Bolomba/Piquet and the team in Katanga that had worked on the cluster strike at Moba hospital was moving to the Pweto area in response to UNMAS tasking orders. Response to Mine Action Monitor questionnaire by Julia Wittig, MAG, 29 May 2015; and email, 8 June 2015.



PROGRAMME PERFORMANCE

Problem understood	5
Target date for completion of clearance of c	luster munition remnants 3
Targeted clearance	4
Efficient clearance	5
National funding of programme	3
Timely clearance	4
Land release system in place	6
National mine action standards	6
Reporting on progress	6
Improving performance	7
PERFORMANCE SCORE: 4.9	POOR BUT IMPROVING

RECOMMENDATIONS FOR ACTION

- > Somalia should ratify the Convention on Cluster Munitions (CCM) as a matter of priority.
- → Continued efforts should be made to ensure reporting and recording of mine action data according to International Mine Action Standards (IMAS) land release terminology.
- → Somalia should develop a resource mobilisation strategy and initiate policy dialogue with development partners on long-term support for mine action, including consideration of cluster munition contamination.
- → Somalia should provide resources to support operational mine action.

CONTAMINATION

The extent of contamination from cluster munition remnants (CMR) in Somalia is unknown. In 2013, dozens of unexploded PTAB-2.5M submunitions and several unexploded AO-1SCh submunitions were found within a 30km radius of the town of Dolow (also spelled Doolow) on the Somali-Ethiopian border, in the southern Gedo region of south-central Somalia.¹ CMR contamination was also identified around the town of Galdogob (also spelled Goldogob), in the north-central Mudug province of Puntland, further north on the border with Ethiopia.² At the time, more contamination was expected to be found in south-central Somalia's Lower and Upper Juba regions.³

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.⁴ The Soviet Union supplied both Ethiopia and Somalia with weapons during the conflict. PTAB-2.5 and AO-1Sch submunitions were produced by the Soviet Union on a large scale.⁵

While the extent of CMR contamination along the Somali border with Ethiopia is not known, in September 2014 a Somalia Explosive Management Authority (SEMA) official claimed it posed an ongoing threat to the lives of nomadic people and their animals.⁶

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Somalia is heavily contaminated with explosive remnants of war (ERW) other than CMR, a result of more than two decades of civil war 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).

Unsecure and poorly managed stockpiles of weapons and ammunition, as well as the use of improvised explosive devices (IEDs) by non-state armed groups also have a serious humanitarian impact. The extent of the explosive threat is not well known, except in Puntland and Somaliland where a range of survey activities have been carried out over the past decade.⁷

In 2015, UNMAS reported that explosive hazards, including residual ERW contamination, explosive stockpiles and ammunition caches, presented a daily threat to communities along the main supply routes across south-central Somalia and along the Ethiopian border.⁸ In 2011–15, the vast majority of deaths and injuries from explosive hazards in south-central Somalia (93%) were caused by IEDs, while the number of victims of ERW fell from 170 in 2010 to 41 in 2013. Few mine victims were recorded.⁹

Landmines along the border with Ethiopia, mainly as a result of legacy minefields, also continued to affect civilians in south-central Somalia. 10

The humanitarian imperative to address ERW contamination in Somalia is heightened significantly by the movement of large numbers of internally displaced persons (IDPs) due to ongoing conflict in the country. In March 2015, it was estimated that 1.1 million Somalis, or one tenth of the population, were IDPs. 11 Contamination from mines and ERW in south-central Somalia remains a particular threat to their well-being. 12

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).

SOUTH-CENTRAL SOMALIA

SEMA was established in August 2013 as the mine action centre for south-central Somalia, replacing the Somalia National Mine Action Authority (SNMAA), which had been created two years earlier.¹³ In 2015, SEMA was seeking to coordinate the work of international and local mine action operators. 14 SEMA's goal was to assume full responsibility for all explosive hazard coordination, regulation, and management by December 2015. 15 As of June 2015, however, SEMA was not yet fully operational and lacked critical capacities to perform its mine action responsibilities.¹⁶ SEMA's director reported that with support from the Japanese government, UNMAS was assisting SEMA to better integrate within the Ministry of Internal Security.¹⁷ Discussions were also underway between donors and Norwegian People's Aid (NPA) and the Geneva International Centre for Humanitarian Demining (GICHD) to establish a joint capacity development project to strengthen SEMA's institutional capacity.¹⁸

In 2014, the African Union Mission in Somalia (AMISOM) deployed 12 explosive ordnance disposal (EOD) teams to each sector and 30 explosive dog detection (EDD) teams. Nine government police EOD teams were deployed in south-central Somalia.¹⁹

PUNTLAND

PMAC was established in Garowe with the support of UNDP 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 UNMAS reported that PMAC was working towards integrating with SEMA as the political relationship between the regions and the Federal Government of Somalia improved.²¹

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.²²

SOMALILAND

In 1997, UNDP assisted the government of Somaliland in establishing SMAC, which has since undertaken responsibility for coordinating and managing all demining in Somaliland.²³ Officially, SMAC is under the authority of the Office of the Vice-President of Somaliland, who heads the interministerial Mine Action Steering Committee.²⁴

Since 2009, UNMAS has worked with SMAC to develop a transition plan to a locally owned programme. UNMAS's financial support to SMAC ended in May 2014, although Swiss in-kind advisors assisted SMAC until the end of the year.²⁵

In 2014, five police EOD teams were operational in Somaliland. UNMAS continued to support the teams with funding, equipment, and training, which was scheduled to continue through to October 2015.²⁶

STRATEGIC PLANNING

Mine action activities in Somalia since 2013 have been increasingly tied to the implementation of the Somali Compact, and its priorities for government stabilisation and development, infrastructure initiatives, and humanitarian assistance.²⁷ 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 combatants, and to contribute to stabilisation.²⁸

In 2015, UNMAS developed a draft Explosive Hazard Management Strategic Framework for Somalia for 2015–19 (including Somaliland and Puntland), seeking to promote a comprehensive response to explosive threats with community participation.²⁹ The draft Framework contains objectives specific to CMR and cluster munition victims.³⁰ As of June 2015, the document was awaiting final approval from SEMA and the Federal Government of Somalia. UNMAS stated the draft was serving as guidelines for implementers until the end of September 2015, when SEMA was expected to hold an initial workshop with all stakeholders to develop its national strategy.³¹

UNMAS reported that in 2015, Puntland would work to develop a "comprehensive mine action programme" and review existing structures with a view to long-term stability.³²

Somaliland has a five-year strategic plan for mine action for 2011–16 with goals focusing on strengthened national coordination capacity, operationalisation of the Information Management System for Mine Action (IMSMA) database, clearance of high-priority minefields, and systematic victim support.³³

STANDARDS

UNMAS has developed National Technical Standards and Guidelines (NTSGs) for Somalia, including Puntland, which were used by implementers in 2014. The NTSGs do not include specific guidance for CMR survey or clearance. There were no updates to national mine action standards during the year.³⁴

OPERATORS

NON-GOVERNMENTAL ORGANISATIONS

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.³⁵ In 2014, DDG did not conduct any manual or mechanical mine clearance operations. It carried out EOD spot tasks, non-technical survey, and ERW workshops in: Galdogob, in Mudug province in Puntland; Abudwaq, in the central Galguduud region of south-central Somalia; and across Somaliland. It employed 270 personnel and, at the start of 2014, deployed seven EOD teams. This was reduced to four teams in March 2014 due to the end of donor funding. One EOD team continued to operate in Puntland, two teams in Somaliland, and one team in south-central Somalia.³⁶

HALO Trust's mine clearance programme in Somaliland was established in 1999. In 2014, HALO was the only mine action operator there, with the programme employing 452 operational and 129 support national staff.³⁷ It deployed three mechanical teams with front end loaders for the majority of 2014, carrying out survey, mine clearance, battle area clearance (BAC), and EOD spot tasks.³⁸ In the first half of 2015, HALO opened a new programme in south-central Somalia aiming to begin survey and clearance along the Somali border with Ethiopia. It reported funding for this purpose had been secured until the end of January 2016.³⁹

In 2014, MAG continued its arms management and destruction (AMD) programme across south-central Somalia, Puntland, and Somaliland, handing over a total of 20 armouries after construction and rehabilitation work. It also carried out risk education in Puntland.⁴⁰ At its maximum capacity in 2014, MAG employed 43 national and eight international staff. MAG previously conducted nontechnical survey and EOD in Puntland, along with training and support to police EOD teams, but halted its mine action programme in August 2013 in agreement with donors due to changes in strategy and a worsening security situation.⁴¹

In 2014, NPA was invited by the Somali authorities to initiate a programme in south-central Somalia for survey, BAC, and capacity-building assistance to the SEMA.⁴² It deployed three multitask teams (MTTs) in south-central Somalia to carry out BAC, starting in November 2014, employing a total of 41 personnel.⁴³

COMMERCIAL COMPANIES

The Development Initiative (TDI) was operational in 2012–13 until operations ended in December 2013 due to lack of funds.⁴⁴

In 2014, UNMAS continued to contract the Ukrainian commercial operator Ukroboronservice to undertake mine action-related tasks in south-central Somalia.

QUALITY MANAGEMENT

SEMA reported that it carried out external quality assurance (QA) activities in 2014 with support from UNMAS, as well as internal QA of the Puntland police EOD teams. 45 SMAC also conducted QA activities in 2014 comprising of random QA of ongoing clearance work and prior to handover checks of completed tasks. 46 NPA, HALO, and DDG all reported that internal QA processes were in place. 47

INFORMATION MANAGEMENT

In 2014, an IMSMA database was in use by SEMA covering south-central Somalia. PMAC was responsible for a separate IMSMA database in Puntland. In Somaliland, HALO Trust led a project to assist SMAC to repopulate its IMSMA database with HALO's historic country data. It was completed in June 2015, with support from UNMAS.



LAND RELEASE

SURVEY IN 2014

According to SEMA, only limited survey activities were carried out in south-central Somalia in 2014.⁵⁰ No overview of suspected hazardous areas exists in south-central Somalia and as of June 2015, no national survey had been conducted, mainly due to the security situation.⁵¹

PROGRESS IN 2015

Both HALO Trust and NPA initiated survey activities in south-central Somalia in 2015. HALO deployed its first operational teams in May 2015 with funding from the government of Japan via the UN Voluntary Trust Fund for a nine-month period until 31 January 2016.⁵² Four community liaison teams were recruited and deployed along the border to conduct a socio-economic survey and basic impact assessment.⁵³ As of June 2015, HALO was training eight survey teams to begin non-technical survey along the Somali-Ethiopian border. It hoped to have the first survey results by August 2015.⁵⁴

In the first half of 2015, NPA was preparing its MTT to start survey activities in south-central Somalia and began conducting systematic survey and clearance in the north of Banadir region, on the outskirts of Mogadishu, and along the Afgoye corridor.⁵⁵

Beginning in August 2015, an UNMAS contractor was set to conduct a survey along the four main supply routes in south-central Somalia.⁵⁶

CLEARANCE IN 2014

No CMR clearance occurred in Somalia in 2014. All clearance operations in south-central Somalia were implemented primarily on a response/call-out basis.⁵⁷ No land release occurred in Puntland in 2014; only limited operations were carried out consisting of risk education and EOD spot tasks.⁵⁸ HALO continued mine clearance, non-technical and technical survey, and EOD spot tasks in Somaliland, along with BAC.⁵⁹

Approximately 5.25km² of BAC occurred in south-central Somalia and Somaliland in 2014, a slight decrease from the reported 5.32 km² in 2013. 60 In 2014, an UNMAS commercial contractor and NPA conducted limited BAC in specific districts in Bay, Galguduud, Gedo, Hiraan, and Lower Shabele in south-central Somalia. 61 A total of 4,577,769m² of BAC was completed in south-central Somalia in 2014. 62 NPA reported its MTT carried out 170,000m² of surface BAC in November and December 2014. 63 UNMAS reported that commercial contractor Ukroboronservice conducted 4,407,769m² of surface BAC, destroying 163 UXO items. 64

In Somaliland, HALO Trust reported releasing five battle areas and clearing $673,520\text{m}^2$. It destroyed 102 items of UXO, two anti-personnel mines, and 43 anti-vehicle mines during clearance, and a further 123 UXO items, two anti-personnel mines, and five anti-vehicle mines during spot tasks. It did not find or destroy any CMR. 65

MAG did not find any CMR in its operations across south-central Somalia in 2014. 66 Likewise, DDG did not report finding any CMR in its EOD spot task activities in south-central Somalia, Puntland, or Somaliland in 2014. 67 SEMA reported that DDG had destroyed a submunition that was identified in a private stockpile in a home in Galdogob district, Puntland, which had been harvested and kept by the owner of the house. 68

ARTICLE 4 COMPLIANCE

As of July 2015, Somalia was a signatory but not a state party to the CCM. Nonetheless, Somalia 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.⁶⁹

ENDNOTES

- 1 Presentation by Mohammed Abdulkadir Ahmed, National Director, Somali National Mine Action Authority (SNMAA), "Somalia Weapons Contamination: Addressing Key Challenges to Meeting Clearance Deadlines Under the Mine Ban Convention and Convention on Cluster Munitions", AU Commission and ICRC Workshop on Weapons Contamination: Addressing Key Challenges to Meeting Clearance Deadlines Under the MBT and CCM, Addis Ababa, 5 March 2013, at: http://www.peaceau.org/uploads/AU-DSD-WORKSHOP-MARCH-2013/Day-1/key-clearance-challenges/Somalia%20 Contamination_Key%20Clearance%20Challenges.pptx.
- 2 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, Director, Somalia Explosive Management Authority (SEMA), 19 June 2015.
- 3 Presentation by Mohammed Abdulkadir Ahmed, "Somalia Weapons Contamination: Addressing Key Challenges to Meeting Clearance Deadlines".
- 4 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", undated, provided by email from Kjell Ivar Breili, Project Manager, Humanitarian Explosive Management project, UNMAS Somalia, 7 July 2015; and email from Mohammed Abdulkadir Ahmed, SNMAA, 17 April 2013, in Cluster Munition Monitor, "Somalia Cluster Munition Ban Policy", updated 23 August 2014. Pictures of the CMR are available at: https://www.flickr.com/photos/unmassomalia/ sets/72157632302508302/.
- 5 The Soviet Union, along with Cuba, both stockpilers of cluster munitions, also fought in support of Ethiopia during the conflict. Email from Mohammed Abdulkadir Ahmed, SNMAA, 17 April 2013, in Cluster Munition Monitor, Somalia Cluster Munition Ban Policy, updated 23 August 2014.
- 6 Statement of Somalia, CCM Fifth Meeting of States Parties, San José, 2–5 September 2014.
- 7 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia", undated, at: http://www.mineaction.org/sites/default/files/print/country_portfolio4765-1070-10565.pdf.
- 8 Ibid.; and email from Kjell Ivar Breili, UNMAS, 12 July 2015.
- 9 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia". In 2014, 84 people were reportedly victims of ERW and 434 of IEDs, of whom 127 were killed. UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", undated, p. 6.
- 10 Ibid., pp. 6 and 12. Minefields have only been identified in southcentral Somalia near crossing points and military barracks along the Ethiopian border.
- 11 Internal Displacement Monitoring Centre and Norwegian Refugee Council, "Somalia: Over a million IDPs need support for local solutions", 18 March 2015, p. 1, at: http://www.internal-displacement.org/assets/library/Africa/ Somalia/pdf/201503-af-somalia-overview-en.pdf.
- 12 Ibid., p. 5; and presentation by Kjell Ivar Breili, UNMAS, 18th International Meeting of Mine Action National Programme Directors and UN Advisors, Side event "Mine Action in Support of Stabilization in Somalia", Geneva, 16 February 2015. Notes by Norwegian People's Aid.
- 13 Interview with Mohamed Abdulkadir Ahmed, SEMA, in Geneva, 9 April 2014; and email from Kjell Ivar Breili, UNMAS, 12 July 2015.
- 14 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia".
- 15 SEMA's director reported that towards this goal, SEMA would focus on four main activities: "1. Enable adherence to relevant laws and establish new laws as required; 2. Enable adherence to international instruments; 3. Identify and understand the problems in Somalia and provide solutions in line with the FGS [Federal Government of Somalia] recovery and development strategies; and 4. Licensing and accreditation of implementing partners to ensure adherence to Somali national laws, norms, and regulatory frameworks". Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 16 Ibio
- 17 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 18 Ibid
- 19 Ibio
- 20 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", p. 9.
- 21 Ibid., pp. 6 and 9.
- 22 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015. It was the only EOD team operational in Puntland in 2014.

- 23 SMAC, "Annual Report 2011", Hargeisa, January 2012, p. 2.
- 24 Ibio
- 25 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 26 Ibid
- 27 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia"; and UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015–2019", p. 6.
- 28 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia".
- 29 Ibid.; and Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 30 UNMAS, "UN-suggested Explosive Hazard Management Strategic Framework 2015-2019".
- 31 Email from Kjell Ivar Breili, UNMAS, 7 July 2015; and Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015, In June 2015, SEMA submitted to the Minister for Internal Security the draft Humanitarian Explosive Management Strategic Framework and a Registration and Accreditation Law. It reported the draft would be sent to the Federal Parliament for approval after study/revision by the Ministry and that the Registration and Accreditation Law would be sent to the Council of Ministers.
- 32 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia".
- 33 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 34 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed. SEMA. 19 June 2015.
- 35 In 2007, DDG initiated a mine action programme in south-central Somalia (in Mogadishu) and in Puntland. DDG's mine action programme in Somaliland ceased mine clearance in 2006. DDG, "South-Central Somalia and Puntland". undated. but accessed 30 April 2014.
- 36 DDG reported that the reason for the reduction in number of EOD teams was due to international donors moving away from funding traditional EOD teams towards funding MTT and AMD projects. The governments in Somaliland and south central Somalia had also reached sufficient capacity to provide their own national EOD teams. Response to Mine Action Monitor questionnaire by Jamie McGhee, Somalia Operations Manager, DDG, 27 May 2015.
- 37 UNMAS, "United Nations suggested Explosive Hazard Management Strategic Framework 2015-2019", undated, provided by email from Kjell Ivar Breili, UNMAS, 7 July 2015, p. 12 and response to Mine Action Monitor questionnaire by Tom Griffiths, Programme Manager, HALO Trust Somaliland, 20 May 2015.
- 38 Response to Mine Action Monitor questionnaire by Tom Griffiths, Programme Manager, HALO Trust Somaliland, 20 May 2015.
- 39 Response to Mine Action Monitor questionnaire by Tom Griffiths, HALO Trust, 20 May 2015 and email 22 June 2015. As of May 2015, HALO employed 35 community members from Ceel Barde, Beletweyne, Mataban, and Abudwaq, trained and supported by six existing staff members re-tasked from its Somaliland programme.
- 40 Response to Mine Action Monitor questionnaire by Dave Willey, Regional Director – Angola, Somalia, South Sudan, MAG, 7 May 2015.
- 41 Response to Mine Action Monitor questionnaire by Homera Cheema, Desk Officer Somalia, MAG, 28 April 2014.
- 42 NPA, "Humanitarian Disarmament in Somalia", accessed 28 April 2014; and emails from Terje Eldøen, NPA, 29 April 2014; and from Ahmed Siyad, NPA, 1 May 2014.
- 43 Response to Mine Action Monitor questionnaire by Terje Eldøen, NPA, 19 May 2015.
- 44 Response to Mine Action Monitor questionnaire by Clive Meakin, Regional Business Development Manager, TDI, 30 April 2014, and email, 30 April 2014; and Anti-Personnel Mine Ban Convention Article 7 Report, Form G, 30 March 2013.
- 45 Ibid.
- 46 Email from Lasha Lomidzem, Programme Operations Officer, HALO Trust, 8 July 2015.

- 47 NPA reported that internal QA was performed on all its operations after they commenced in November. HALO likewise reported that a QA system was in place and that its programme had begun assessing deminers and section commanders using roving training and QA officer teams to assess, refresh, and retrain any staff that needed it. DDG stated it complied with all UNMAS and national mine action authority external QA activities in 2014. Responses to Mine Action Monitor questionnaire by Terje Eldøen, NPA, 19 May 2015; Tom Griffiths, HALO Trust, 20 May 2015; and Jamie McGhee, DDG, 27 May 2015.
- 48 Email from Kjell Ivar Breili, UNMAS, 7 July 2015.
- 49 Response to Mine Action Monitor questionnaire by Tom Griffiths, HALO Trust 20 May 2015 and email from Kjell Ivar Breili, UNMAS, 7 July 2015.
- 50 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 51 Ibid.; and Anti-Personnel Mine Ban Convention Article 7 Report (for 16 April 2012–30 March 2013).
- 52 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015; and email from Tom Griffiths, HALO Trust, 22 June 2015.
- 53 As of June 2015, the teams had visited 67 communities in 51 recorded villages across four target areas. Of the 67 communities visited, 45 believed their communities were impacted by mines and ERW, while the remaining 22 did not. Email from Tom Griffiths, HALO Trust, 22 June 2015.
- 54 In June 2015, HALO reported finding significant mixed contamination at the border but it would not be able to reliably estimate the scale of contamination until June 2016. Email from Tom Griffiths, HALO Trust, 22 June 2015.
- 55 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 56 Ibio
- 57 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia; and interview with Mohamed Abdulkadir Ahmed, SEMA, in Geneva, 9 April 2014.
- 58 Email from Kjell Ivar Breili, UNMAS, 7 July 2015. HALO continued working in the disputed territory of Sool and Sanaag, but this was reported in the SMAC database.

- 59 Response to Mine Action Monitor questionnaire by Tom Griffiths, HALO Trust, 20 May 2015. HALO reported cancelling 556,505m² through nontechnical survey, release of 101,221m² through technical survey, and clearance of 2,207,065m² of mined areas.
- 60 UNMAS Somalia, "IMSMA Report 2014 South Central", undated; and Response to Mine Action Monitor questionnaire by Tom Griffiths, HALO Trust, 20 May 2015. The 2013 figures were reported in Cluster Munition Monitor, "Somalia, Mine Action Profile", 14 September 2014.
- 61 UNMAS, "2015 Portfolio of Mine Action Projects, Somalia".
- 62 A total of 4,582,769m² of BAC was recorded in the IMSMA database in 2014, but it recorded NPA as conducting 175,000m² of BAC whereas NPA reported clearing only 170,000m². UNMAS later clarified that NPA's reported figure of 170,000m² was correct, making the total BAC 4,577,769m². Email from Terje Eldøen, NPA, 28 May 2015; UNMAS Somalia, "IMSMA Report 2014 South Central", undated; and email from Kjell Ivar Breili, UNMAS, 7 July 2015.
- 63 The teams found three fuzes but did not begin finding UXO until 2015. Email from Terje Eldøen, NPA, 28 May 2015.
- 64 UNMAS Somalia, "IMSMA Report 2014 South Central", undated; and email from Kjell Ivar Breili, UNMAS, 7 July 2015.
- 65 Response to Mine Action Monitor questionnaire by Tom Griffiths, HALO Trust, 20 May 2015.
- 66 Response to Mine Action Monitor questionnaire by Dave Willey, MAG,
- 67 Response to Mine Action Monitor questionnaire by Jamie McGhee, DDG, 27 May 2015.
- 68 Response to Mine Action Monitor questionnaire by Mohamed Abdulkadir Ahmed, SEMA, 19 June 2015.
- 69 Somalia 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 pages?"





 Azerbaijan should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.

CONTAMINATION

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.¹

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 some 20% of the territory of Azerbaijan.

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.² In addition, significant CMR contamination has been identified in and around Nagorno-Karabakh (see the report on Nagorno-Karabakh).³ In 2006 and 2007, CMR 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 2011.⁴ No CMR have since been encountered.

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Other areas are confirmed or suspected to contain explosive remnants of war (ERW), both unexploded ordnance (UXO) and abandoned explosive ordnance. Despite ongoing clearance efforts, significant contamination remains in and around warehouses at the former Soviet ammunition storage area in Guzdek village in Garadakh district, close to the capital, Baku. In 1991, 20 warehouses were blown up in Guzdek village resulting in tens of thousands of items of ordnance being scattered over a large area.⁵





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.⁶ 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).⁷ A joint working group, established in December 1999 and consisting of representatives from various ministries, provides regular guidance to ANAMA.⁸

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.

STRATEGIC PLANNING

ANAMA is integrated into the State Social and Economic Development programme of Azerbaijan. 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 assessment, and tender procedures.¹²

OPERATORS

In 2014, ANAMA employed approximately 600 staff, covering both operational and administrative functions, and 45 mine detection dogs. Six demining machines were deployed, four of which were mini flails and the other two medium flails, with one EOD BOT robot designed for the lifting of heavy items of UXO.¹³

National capacity includes two national demining organisations, IEPF and RA, contracted to perform mine clearance operations. These two operators jointly employ 176 operational and administrative staff.¹⁴

This mine action capacity was expected to be maintained in 2015. 15

QUALITY MANAGEMENT

ANAMA's training, survey, and quality assurance (QA) division (TSQAD), established in 2011, is responsible for training and QA. TSQAD also conducts quality control (QC).¹⁶

LAND RELEASE

No land containing CMR was released by clearance or technical survey in 2014 or cancelled by non-technical survey (NTS).¹⁷

ARTICLE 4 COMPLIANCE

Azerbaijan is not a 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.

Currently, 90% of mine action in Azerbaijan is nationally funded, with the government contributing more than 80% of the funding for mine clearance. ANAMA's long-term strategy is to be ready to mobilise and start clearance of the occupied territories, as and when this is possible.

ENDNOTES

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- 17 Email from Samir Poladov, ANAMA, 17 June 2015
- 18 ANAMA, "Azerbaijan National Agency for Mine Action 2014"; response to Mine Action Monitor questionnaire by Parviz Gidayev, ANAMA, 20 May 2015.
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- → Cambodia should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- → The Cambodian Mine Action and Victim Assistance Authority and the Cambodian Mine Action Centre should strengthen data collection and adopt common reporting formats.
- Cambodia should seek to better understand the extent of contamination as soon as possible.

CONTAMINATION

The exact extent of contamination from cluster munition remnants (CMR) in Cambodia is not known. Contamination resulted from intensive bombing by the United States of America during the Vietnam War, concentrated in north-eastern provinces along the borders with Lao People's Democratic Republic 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. Unexploded submunitions include BLU-24, BLU-26, BLU-36, BLU-42, BLU-43, BLU-49, and BLU-41.1

A baseline survey of seven eastern provinces² started in 2012 had, by April 2015, identified 1,336 areas of suspected explosive remnants of war (ERW) contamination totalling almost 349km². This included 433 suspected areas of CMR contamination covering almost 217km², of which almost half was located in one province, Stung Treng.³ The survey was expected to be completed by the end of 2015.⁴

PROGRAMME MANAGEMENT

The Cambodian Mine Action and Victim Assistance Authority (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, while senior government minister (Minister of Post and Telecommunication) Prak Sokhonn is CMAA vice-president and leads dialogue with donors as the chair of a Joint Government-Development Partners' Mine Action Technical Working Group.⁷

OPERATORS

Survey and clearance of CMR in eastern Cambodia are undertaken mainly by CMAC and Norwegian People's Aid (NPA). Mines Advisory Group (MAG) revived two explosive ordnance disposal (EOD) teams working in Ratanakiri province in 2014, which also tackle CMR.

LAND RELEASE

In 2014, CMAC conducted a baseline survey of ERW, including CMR, in eastern provinces and among all operators in Cambodia had the most assets deployed for battle area clearance (BAC). In 2014, it reported releasing 25.4km² through BAC, one-third more than the previous year, but its data did not disaggregate items destroyed through mine clearance and BAC or the number of submunitions among items of unexploded ordnance (UXO) destroyed.8

NPA worked closely with CMAC, providing administrative and technical support for CMAC teams conducting the baseline survey and developing its demining units' land release methods, resulting in a sharp increase in productivity. In the 11 months from June 2014 to April 2015, NPA reported releasing 54km² through its cluster munition remnants survey (CMRS).9

From mid-2013, NPA also worked in Ratanakiri province with its own multi-task teams and four explosive dog detection (EDD) teams to apply the CMRS methodology, integrating elements of non-technical and technical survey, which NPA developed in Lao PDR, as well as conducting clearance. In 2014, teams surveyed 43 suspected hazardous areas covering 13.8km², reducing these to 13 confirmed hazardous areas totalling 1.38km². The EDD teams released almost 2.9km² of land between June 2014 and April 2015, locating and destroying 606 submunitions and 193 other UXO items.¹⁰

MAG, the only other operator tackling CMR, worked with one BAC team in Ratanakiri as part of a US Department of Defense Humanitarian Demining Research and Development project. In 2014, it cleared 103,595m² of CMR contamination, destroying 43 submunitions. MAG reported that, as a research project, productivity was not as high as would normally be expected, but this was expected to rise with the team's experience. Additionally, MAG expected to receive funding to add more teams in 2015. As in Vietnam, NPA and MAG are discussing collaborating on CMRS and clearance of CMR.

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.¹²

Mine action stakeholders say there is better official understanding of the CCM, but the Cambodian military has continued to resist joining it while neighbouring Thailand, with which it has longstanding border disputes, remains outside of the convention.

Cambodia is taking steps to define the extent of its CMR contamination and operators are deploying increasing assets to clearance, supported by increased US funding for tackling its legacy contamination. Weaknesses in data collection and reporting and information management prevent a clear overview of progress.



ENDNOTES

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- 3 Norwegian People's Aid (NPA) Cambodia PowerPoint presentation, undated but May 2015, received by email from Jan Erik Stoa, Programme Manager, NPA, 1 June 2015.
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- 11 Interview with Greg Crowther, Regional Director, South and South East Asia, and Nick Guest, Technical Operations Manager, MAG, Phnom Penh, 6 May 2015; and email from Greg Crowther, 22 May 2015.
- 12 Cambodia 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."



 Georgia should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.

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 non-governmental organisation (NGO) clearance operators. The HALO Trust believes unexploded submunitions may remain in South Ossetia, but until it is able to conduct a survey it cannot be certain.

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 and by December 2009, HALO had cleared some 37km² in Georgian-controlled territory contaminated with submunitions and other explosive remnants of war (ERW).³ In May 2010, Norwegian People's Aid (NPA) completed clearance of its tasked areas.⁴ Despite fears of CMR in Poti military harbour, none was found during NPA demining operations in 2009.⁵

OTHER EXPLOSIVE REMNANTS OF WAR 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.⁶





PROGRAMME MANAGEMENT

In 2008, a memorandum of understanding was signed between the Georgian Ministry of Defense and international NGO Information Management and Mine Action Programs (iMMAP) to establish the Explosive Remnants of War Coordination Center (ERWCC).7 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 2011 and the ERWCC took ownership of the mine action programme.8

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). 10

STANDARDS

Georgian National Mine Action Standards and National Technical Standard Guidelines (NTSG) have been drafted and are awaiting completion in coordination with the Geneva International Centre for Humanitarian Demining (GICHD).¹¹ iMMAP has conducted training on the IMAS for ERWCC staff, the Joint Staff of the Georgian Armed Forces and DELTA.

OPERATORS

The HALO Trust conducted CMR clearance in Georgia in 2014. 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 2012, 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. No updated information has been received on the implementation of the project.

QUALITY MANAGEMENT

Under the control of DELTA, the ERWCC now conducts QA/QC. 14 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

In 2014, HALO cleared 1.3km² of CMR-contaminated areas. Four areas in the region of Shida Kartli were released during the operations, with the destruction of 68 submunitions, 39 other items of UXO, and one anti-vehicle mine.¹⁵

Improving security along the administrative borderline (ABL) with South Ossetia has allowed farmers to safely access previously inaccessible areas within Georgian-controlled territory. During the use of this land, previously undiscovered cluster munition strikes were identified and subsequently cleared by HALO.¹⁶ Most of HALO's work in Georgia in 2014 involved clearing former firing ranges contaminated with UXO other than submunitions.¹⁷

No clearance took place in 2013.

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. Prior to 2014, very limited clearance of CMR took place over the previous five years as contamination was thought to be only residual.

ENDNOTES

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- 13 Estonia CCW Protocol V Article 10 Report, 2 April 2012; and NATO/PfP Trust Fund Project in Georgia Fact Sheet, January 2012, at: http://www.mzv.cz/file/786123/Georgia_ERW_Fact_Sheet_3___230112.pdf; and email from Oleg Gochashvili, DELTA, 6 July 2015.
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- 15 Response to Mine Action Monitor questionnaire by Andrew Moore, HALO Trust, 29 May 2015.
- 16 Email from Andrew Moore, HALO Trust, 9 July 2015.
- 17 Ibid., 23 June 2015.



- > 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.¹

OTHER EXPLOSIVE REMNANTS OF WAR 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).²

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 2014.

ARTICLE 4 COMPLIANCE

Iran is not a state party 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

ENDNOTES

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- 2 "Mortar shell explosion in Mahmoud-Abad industrial zone: One killed and 5 injured so far", Blogh News, 9 March 2014, at: http://www.bloghnews.com/.
- 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."



- Libya's internationally recognised government 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 CMR as soon as possible and take other measures to protect civilians from explosive remnants of war.

CONTAMINATION

Libya has cluster munition remnants (CMR) contamination resulting from 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. Mines Advisory Group (MAG) has reported tackling Russian PTAB cluster bombs¹, while international media reported the presence of a fourth type of cluster munition that has remained unidentified.² 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 also reportedly saw 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 of Sirte in March. The Libyan Air Force, controlled by the internationally recognised government, had bombed both locations but denied using cluster bombs.³



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, 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 position early in 2014, subsequently renaming the centre LibMAC. In April 2014, LibMAC closed temporarily as a result of internal staff disputes.

The United Nations Development Programme (UNDP) observed in 2013 that "humanitarian mine action stakeholders in Libya have been thwarted in their attempts to effect the sound implementation of mine action in country due to a void in established governance within the sector. The resultant lack of confidence and the delays in recognizing a properly mandated National Mine Action Authority with the necessary resources and capacity by the government has only compounded the issue." Conditions deteriorated further with the sharp escalation of conflict in July 2014.

STRATEGIC PLANNING

A draft National Strategic Plan states that: "the strategic goal of the Government and its development partners over the 2011–2021 period is to reduce the humanitarian and socio-economic threats posed by landmines/ unexploded ordnance to the point where a residual amount of contamination remains that poses no significant impact on the population or infrastructure, and where capacity remains to take account of the needs of future development". The United Nations (UN) noted that the objective of the programme is to develop and modernise national structures to implement a national mine action programme. As of June 2015, the plan awaited government approval. LibMAC has asserted that it has developed operational priorities but operators say they have not received them.

OPERATORS

International operators represented in Libya in 2014 included Danish Demining Group (DDG), Handicap International, MAG, and the Swiss Foundation for Demining (FSD). Insecurity prompted all operators to withdraw international staff before the end of the year.

LAND RELEASE

Libya does not have an active programme for survey or clearance of CMR. Some battle area clearance (BAC) and explosive ordnance disposal (EOD) continued in 2014, but the escalation of conflict in the second half of the year brought systematic clearance operations to a standstill, although some spot clearance by a range of actors, including army engineers and volunteer groups, reportedly continued.8

MAG reported destroying nine submunitions in 2014, but this occurred in the course of clearance operations focused on ammunition storage areas (ASAs) in Hun, Misrata, and Zintan, in which it cleared 45,592 other items of unexploded ordnance (UXO). To facilitate clearance of rubble from bombed ASAs, MAG deployed an armoured excavator.

MAG had planned a major expansion of its work in 2015 but reported mid-year that it was in the process of closing its programme. DDG concentrated on EOD in the first half of 2014 but did not tackle any CMR and in June evacuated its international staff. 10

ARTICLE 4 COMPLIANCE

Libya is not a state party to the CCM. Nonetheless, Libya has obligations under customary international human rights law obligations 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.¹¹

ENDNOTES

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- 4 Telephone interview with Tripoli-based mine action stakeholder, 30 May 2014.
- 5 UNDP, "2nd Quarter Progress Report, (PIP) Supporting the Capacity Development of Central and local stakeholders in mine action activities in Libya (Phase two)", July 2013, p. 3.
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- 7 Interview with Stephen Bryant, UNDP, in Geneva, 2 April 2014.
- 8 Interviews with mine action stakeholders, speaking on condition of anonymity, June–July 2015.
- 9 Email from David Willey, Regional Director for Angola, Somalia, and South Sudan, MAG, 5 May 2015.
- 10 Email from Lutz Kosewsky, Operations Manager, DDG, 7 July 2014.
- 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 should identify funding, including from national sources, to clear the remaining areas containing cluster munition remnants (CMR) and then complete clearance as soon as possible.
- → Serbia should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.

CONTAMINATION

Serbia has less than 0.5km² confirmed to contain CMR and a further 5.3km² suspected to contain CMR. Serbia is also contaminated by other unexploded ordnance (UXO) and anti-personnel mines. Seven of the 150 municipalities in Serbia still contain areas confirmed or suspected to contain CMR, as set out in Table 1.

Table 1. CMR contamination by municipality as of end 2014¹

Municipality	Confirmed areas	Area (m²)	Suspected areas	Area (m²)
Stara Pazova	0	0	1	249,832
Brus/Raška	1	69,912	1	190,359
Užice	0	0	1	585,268
Sjenica	1	129,915	3	3,256,935
Niš (Crveni krst)	2	58,922	2	236,439
Bujanovac	1	210,929	1	303,823
Tutin	0	0	1	514,682
Totals	5	469,678	10	5,337,338

CMR contamination results from NATO air strikes in 1999. According to Serbia, NATO cluster munitions struck 16 municipalities: Brus, Bujanovac, Čačak, Gadžin Han, Knić, Kraljevo, Kuršumlija, Leposavić, Niš city-Crveni Krst, Niš city-Medijana, Preševo, Raška, Sjenica, Sopot, Stara Pazova, and Vladimirci.² In late 2014, a suspected area was newly identified in Tutin, a municipality not previously reported to be contaminated by CMR.³

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, cultivation, cattle grazing, and mushroom picking. Remnants are also found in debris of infrastructure impeding reconstruction as well as the development of tourism.⁴

PROGRAMME MANAGEMENT

Serbia does not have an interministerial national mine action authority. The Serbian Mine Action Centre (SMAC) was established on 7 March 2002. A 2004 law made it responsible for coordination of demining, collection and management of mine action information (including casualty data), and survey of suspected hazardous areas. 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.⁵

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 were said to be in the final phase of development as of March 2015.6

OPERATORS

SMAC does not 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. Norwegian People's Aid (NPA) personnel seconded to SMAC have conducted all surveys in Serbia. 8

QUALITY MANAGEMENT

SMAC undertakes quality assurance (QA) and QC of clearance operations in mine and ERW-affected areas. In 2014, of the almost 290,000m² cleared of submunitions, an area of some 17,000m² was physically sampled for quality management. On every clearance project, SMAC QC and QA officers report conducting sampling on between 5% and 11% of the total project area, depending on project complexity and size.9



LAND RELEASE

Total contaminated area released by clearance in 2014 was almost 0.29km², compared with more than 2.4km² in 2013. A further 0.81km² was cancelled in 2014 by non-technical survey.¹⁰

SURVEY IN 2014

Non-technical survey in 2014 was conducted by an NPA survey team seconded to SMAC, resulting in confirmation as contaminated of five areas suspected to contain CMR, totalling 0.47km². In addition, parts of six other suspected areas were cancelled in 2014, totalling 0.81km². No technical survey was conducted in 2014 but was planned for 2015.¹¹

CLEARANCE IN 2014

The quantity of land cleared in 2014 marks an 88% decrease compared to 2013.¹² According to SMAC, lack of funds for clearance operations resulted in decreased capacity in 2014, and subsequently a reduction in the area cleared.¹³

Only three operators conducted clearance in 2014, compared to eight the previous year. Two Croatian companies, DOK-ING Razminiranje and PIPER, engaged two demining teams each, employing a total of 24 deminers for each company. EMERCOM Demining, a Russian state agency, engaged one demining team, employing six deminers.¹⁴

Table 2. Clearance of CMR-contaminated area in 2014¹⁵

Operator	Areas released	Municipality	Area cleared (m²)	Submunitions destroyed
DOK-ING Razminiranje	1	Stara Pazova	149,845	22
PIPER	1	Gadžin Han	130,747	34
EMERCOM Demining	1	Niš (Crveni krst)	8,150	0
Totals	3		288,742	56



As a result of survey and clearance in 2014, Gadžin Han and Knić municipalities were declared clear of CMR.¹⁶

PROGRESS IN 2015

In 2015, Serbia planned to survey/re-survey areas suspected to contain CMR in Brus, Niš, Sjenica, Stara Pazova, and Tutin (around 8km²).¹⁷ In March 2015, NPA started technical survey of 1.35km² of suspected area in four communities in Sjenica and Stara Pazova municipalities. In addition, a two-person NPA nontechnical survey team will support SMAC.¹⁸

SMAC 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 of America (0.18km²); one Serbia-Montenegro Air Traffic Control-funded task (70,000m²); and one project funded by the Russian Federation (8,600m²).¹9 Russia has been funding a three-year humanitarian demining programme in Serbia, which was due to end in 2015. The programme, which is implemented by EMERCOM, supports a joint Russian-Serbian team conducting CMR and other UXO clearance in Serbia.²0

OTHER UXO CLEARANCE

In 2015, in addition to CMR and mine clearance, SMAC was planning to conduct UXO risk reduction projects in support of major infrastructure projects (Belgrade Waterfront, South Stream Gas Pipeline). In addition, UXO clearance was planned to continue in Paracin over an area of almost 0.58km².²¹

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.²²

In 2010–13, significant progress was made in clearing CMR-contaminated areas. In 2014, however, progress stalled and the less-than 0.29km² cleared during the year marks the lowest annual figure for CMR in the last five years. According to SMAC, lack of funds resulted in a decrease in area cleared.²³

The work of SMAC is funded by Serbia but there is no national funding for CMR clearance. $^{\!\!\!\!\!^{24}}$

According to SMAC, clearance progress is contingent on funding. If adequate funds for implementation of survey and clearance projects are secured, Serbia predicts that CMR clearance could be finished in three years. ²⁶ SMAC planned to appeal for funding to ITF Enhancing Human Security as well as to other international donors. Through the ITF, Serbia expected to receive funds from the USA to clear areas contaminated with US munitions. ²⁷

Table 3. Clearance of CMR in 2010–14 (km²)²⁵

Year	Area cleared (km²)
2014	0.29
2013	2.40
2012	1.42
2011	1.15
2010	0.81
Total	6.07

ENDNOTES

- 1 Response to Mine Action Monitor questionnaire by Branislav Jovanovic, Director, Serbian Mine Action Centre (SMAC), 23 March 2015.
- 2 Statement of Serbia, Standing Committee on Mine Action, Geneva, 21 June 2011; and interview with Petar Mihajlović, Director, and Sladana Košutić, International Cooperation Advisor, SMAC, Belgrade, 25 March 2011.
- 3 Email from Branislav Jovanovic, SMAC, 4 May 2015.
- 4 Response to Mine Action Monitor questionnaire by Branislav Jovanovic, SMAC, 23 March 2015.
- 5 "Law of Alterations and Supplementations of the Law of Ministries", Official Gazette, 84/04, August 2004; and interview with Petar Mihajlović, and Sladana Košutić, SMAC, Belgrade, 26 April 2010.
- 6 Response to Mine Action Monitor questionnaire by Branislav Jovanovic, SMAC, 23 March 2015.
- 7 Interview with Petar Mihajlović and Slaďana Košutić, SMAC, Belgrade, 26 April 2010.
- 8 Emails from Vanja Sikirica, Programme Manager, NPA, Belgrade, 13 March and 29 April 2014.
- 9 Email from Branislav Jovanovic, SMAC, 4 May 2015.
- 10 Response to Mine Action Monitor questionnaire by Branislav Jovanovic, SMAC, 23 March 2015.
- 11 Ibid.; and 18 June 2015; and Responses to Mine Action Monitor questionnaire by Miroslav Pisarevic, Project Manager, Humanitarian Disarmament Programme, NPA, Serbia, 19 March and 30 June 2015.
- 12 Response to Mine Action Monitor questionnaire by Branislav Jovanovic, SMAC, 23 March 2015.
- 13 Ibid.
- 14 Ibid.
- 15 Ibid.
- 16 Email from Branislav Jovanovic, SMAC, 4 May 2015.
- 17 Response to Mine Action Monitor questionnaire by Branislav Jovanovic, SMAC, 23 March 2015.
- 18 Ibid.; and Response to Mine Action Monitor questionnaire by Miroslav Pisarevic, NPA, 19 March 2015.
- 19 Response to Mine Action Monitor questionnaire by Branislav Jovanovic, SMAC, 23 March 2015, and email, 18 June 2015.
- 20 Response to Mine Action Monitor questionnaire by Branislav Jovanovic, SMAC, 23 March 2015.
- 21 Ibid
- 22 Serbia 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."
- $23 \ \ Response to Mine Action Monitor question naire by Branislav Jovanovic, SMAC, 23 \ March 2015.$
- 24 Ibio
- 25 See Cluster Munition Monitor reports on Serbia covering the period 2010-13.
- 26 Ibid.
- 27 Ibid.



- → 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.
- → Every effort should be made to end the conflict, which is preventing access to contaminated areas and increasing the risk to civilians from unexploded ordnance (UXO).
- → South Sudan should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- → The Information Management System for Mine Action (IMSMA) database reporting format should disaggregate CMR from other UXO. Continued efforts should be made to ensure reporting and recording of mine action data according to International Mine Action Standards (IMAS) land release terminology.
- → South Sudan should develop a resource mobilisation strategy and initiate policy dialogue with development partners on long-term support for mine action, including a specific focus on cluster munition contamination.
- → South Sudan should increase its financial support for operational mine action. Greater assistance from the government and international partners should be provided to the National Mine Action Authority (NMAA) to secure critical resources and strengthen its capacity to develop effective policies to address explosive hazards.

CONTAMINATION

At the end of 2014, South Sudan had a total of 108 areas suspected to contain CMR, with a total size estimated at more than 7.5km². Areas of CMR contamination from decades of pre-independence conflict continued to be identified in 2014, and the threat was compounded by renewed fighting which began in December 2013. In particular, instability in Jonglei, Unity, and Upper Nile states has made access to certain areas extremely limited, severely impeding efforts to confirm or address contamination.

Nine of the 10 states in South Sudan contain suspected CMR-contaminated areas (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. 5

Table 1. CMR contamination by province as of end 20146

Province	Suspected areas	Area (m²)
Central Equatoria	40	2,572,138
East Equatoria	40	2,925,822
Jonglei	4	96,972
Lakes	2	890,186
North Bahr El Ghazal	3	105,791
Unity	2	40,000
Upper Nile	2	N/R
West Bahr El Ghazal	3	N/R
West Equatoria	12	881,896
Totals	108	7,512,805

N/R = Not reported

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.

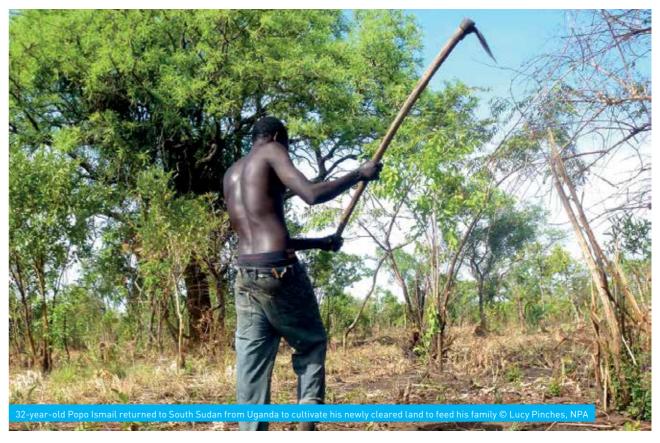
Since 2006, more than 770 sites containing CMR have been identified across all 10 states in South Sudan, including new contamination as a result of the conflict ongoing since December 2013.8 In August 2014, UNMAS reported that 95 known dangerous areas containing CMR remained. From August 2014 to December 2014, an additional 13 contaminated areas were identified in Central, Eastern, and Western Equatoria.9

On 7 February 2014, United Nations Mine Action Service (UNMAS) UXO survey teams discovered remnants of RBK-250-275 cluster bombs and unexploded AO-1SCh submunitions on the Juba-Bor road, south of Bor in Jonglei state.¹⁰ 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. 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 the air power to deliver these weapons, whereas opposition forces are not.11 In September 2014, South Sudan reported that a joint government-UNMAS team had investigated the allegations in the field and established that cluster munitions had been used, but could not determine the user.12

CMR contamination in South Sudan has a significant social, economic, and humanitarian impact on local communities, which is exacerbated by the lack of humanitarian access caused by the ongoing fighting and other contamination.

OTHER EXPLOSIVE REMNANTS OF WAR

South Sudan has a significant problem with mines and especially explosive remnants of war (ERW), resulting from large-scale use of explosive weapons during conflicts lasting from 1955–72 and 1983–2005. In 2015, UNMAS reported that the socio-economic cost of mines and ERW in South Sudan in terms of interrupted agricultural production, food insecurity, halted commerce, and the lack of freedom of movement "is incalculable". 13



PROGRAMME MANAGEMENT

The South Sudan Demining Authority (SSDA) — now named the National Mine Action Authority (NMAA) — was established in 2006 by presidential decree to act as the national agency for coordination, planning, and monitoring of mine action in South Sudan.¹⁴

Under UN Security Council Resolution 1996 (2011), UNMAS was given the responsibility to support South Sudan in demining while strengthening the capacity of the NMAA. Accordingly, UNMAS (with the NMAA) has been overseeing all mine action in South Sudan through its main office in Juba, and sub-offices in Bentiu, Malakal, Wau, and Yei. UNMAS is responsible for accrediting mine action organisations, developing national mine action standards, establishing a quality management system, managing the IMSMA database, and tasking operators.¹⁵ The NMAA takes the lead on victim assistance and risk education.¹⁶

While it is planned that eventually the NMAA will assume full responsibility for all mine action activities, South Sudan's National Mine Action Strategic Plan 2012–2016 notes that the government did "not have the financial and technical capacity to support its mine action program. UN agencies, development partners, and international organizations will need to support the program in providing technical and financial assistance". ¹⁷ UN Security Council Resolution 1996 authorised the UN Mission in South Sudan (UNMISS) to support mine action through assessed peacekeeping funds. ¹⁸

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 from Resolution 1996, focuses on four areas: protection of civilians; creating the conditions for humanitarian access; reporting and investigation human rights violations; and support to the Cessation of Hostilities agreements. Significantly, most capacity development for government institutions is no longer part of the mission's mandate.

STRATEGIC PLANNING

South Sudan has a National Mine Action Strategic Plan for 2012–2016, which was developed by the NMAA with assistance from the UN and the Geneva International Centre for Humanitarian Demining (GICHD). 19 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 has the capacity to 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 actively contributes to achieving the Millennium Development Goals, reducing poverty and increasing socioeconomic development, through mainstreaming mine action activities into development programmes.²⁰

In March 2015, UNMAS reported that due to the ongoing conflict, all evaluation of progress against the National Mine Action Strategic Plan for 2012–2016 had been suspended.²¹

STANDARDS

According to UNMAS, South Sudan's National Technical Standards and Guidelines for mine action cover CMR survey and clearance activities and do not require specific revision.²²

OPERATORS

There were four international demining non-governmental organisations (NGOs) in 2014: DanChurchAid (DCA), Danish Demining Group (DDG), Mines Advisory Group (MAG), and Norwegian People's Aid (NPA). Four commercial companies also conducted demining: G4S Ordnance Management (G4S), Mechem, MineTech International (MTI), and The Development Initiative (TDI). No national demining organisations were involved in clearance in 2014.²³

Of the eight international operators, four — NPA, MAG, G4S, and TDI — reported clearing CMR in 2014. NPA deployed four teams, including three multitask teams (MTTs) and one manual demining team with six deminers trained to clear CMR.²⁴ MAG primarily conducted explosive ordnance destruction (EOD) spot clearance and community liaison activities, but reported clearing CMR, as well as destroying landmines and other UXO. MAG deployed one seven-deminer MTT from February 2014 with a Bozena 4, and a new MineWolf team with eight deminers starting in November 2014.25 G4S reported a total capacity for its mine action operations of approximately 230 staff, including two integrated clearance teams, supported by 10 deminers and a community liaison team, with a MineWolf 240 as a primary resource, and eight MTTs.²⁶ TDI, which employed 298 staff in South Sudan, reported its teams were completing the final year of a three-year operation in 2014.27 UNMAS assigns CMR tasks to operators.28

QUALITY MANAGEMENT

In 2014, a new quality management system was under development, which, once approved by the NMAA, could be ready for implementation during the 2015–16 demining season.²⁹ The NMAA was reported to have visited field teams and carried out quality assurance (QA) activities in 2014.³⁰ All operators conducting CMR survey and clearance reported carrying out their activities according to standard operating procedures and that internal QA and quality control (QC) activities were conducted regularly.³¹

INFORMATION MANAGEMENT

According to UNMAS, IMSMA database clean-up is conducted on a weekly basis and has had no effect on the total number of square metres of contamination or suspected hazardous areas recorded in 2014.³² UNMAS stated that operators and programme implementers assist in data entry and fault-finding, and that as such the database is constantly evolving.³³

LAND RELEASE

In 2014, 1.4km^2 of CMR-contaminated area was released, compared with 0.6km^2 in 2013. Of this, 1.28km^2 was released through clearance and a further 0.12km^2 was cancelled through non-technical survey. This compares to release in 2013 of 96 CMR-contaminated areas totalling 0.63km^2 , $[0.51 \text{km}^2$ through technical survey and clearance, and cancellation of 0.12km^2 through non-technical survey).

UNMAS reported that due to ongoing conflict and security restrictions, movement of mine action teams was "severely curtailed" during the year and that operations were constantly held up awaiting permission to enter certain areas, with many areas becoming inaccessible. 36

SURVEY IN 2014

UNMAS database survey results for 2014 indicate that 1.4km² of land was confirmed as contaminated with CMR and 0.12km² was cancelled by non-technical survey (see Table 2).³⁷

Table 2. Survey of areas suspected to contain CMR in 2014³⁸

Operator	Areas cancelled	Area cancelled (m²)	Areas confirmed	Area confirmed (m²)
DCA	1	0	1	100
G4S	2	114,000	7	497,299
MAG	1	10,000	5	115,436
UNMAS	0	0	1	0
MTI	0	0	1	233,600
NPA	0	0	12	187,598 ³⁹
TDI	0	0	4	378,898
Totals	4	124,000	31	1,412,931

CLEARANCE IN 2014

Almost 1.28km 2 of CMR-contaminated area was cleared in 2014 by MAG, NPA, G4S, and TDI, as shown in Table 3. 40

Table 3. Clearance of CMR-contaminated area in 201441

Operator	Areas released	Area cleared (m²)	Submunitions destroyed	UXO destroyed
DDG	0	0	0	14
G4S	6	396,213	N/R	238
MAG	3	10,345	148	24
MTI	1	0	0	0
NPA	7	219,502	106	52442
OSIL ⁴³	3	0	0	0
TDI	4	652,919	N/R	458
Totals	24	1,278,979	254	1,258

N/R = Not reported

G4S informed Mine Action Monitor it could not provide disaggregated figures on the number of CMR destroyed from total UXO clearance figures, as it reports according to the IMSMA database format. Likewise, TDI stated it could not provide separate figures for CMR destroyed from UXO in 2014 from that contained in IMSMA reports. To

Other operators conducting mine action activities in South Sudan, such as Mechem and MTI, reported not encountering or destroying any submunitions as part of their operations in 2014. ⁴⁶ Despite reporting not finding any submunitions, MTI noted that due to the vast amount of weaponry used in the conflict and large numbers of cluster munitions, clearance of "fringe" submunitions during mechanical demining operations was common. ⁴⁷

BATTLE AREA CLEARANCE

In 2014, five operators (MAG, G4S, MTI, TDI, and NPA) conducted battle area clearance (BAC) over 5.57km², a slight decrease from the 5.78km² in 2013.⁴⁸

SAFETY OF CLEARANCE PERSONNEL

There were no reports of any CMR-clearance-related accidents in 2014.49

ARTICLE 4 COMPLIANCE

South Sudan is not a state party to the 2008 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 the right to life of every person under its jurisdiction.

South Sudan's National Mine Action Strategic Plan 2012–2016 includes as a specific objective that South Sudan become a state party to the CCM, approve national legislation ensuring the applications of its provisions, and develop policy dialogue with partners to mobilise resources for effective implementation.⁵⁰

Due to the ongoing conflict, it is not possible to estimate when South Sudan might complete clearance of CMR on its territory, nor identify the full extent of contamination.⁵¹

The South Sudan National Mine Action Strategic Plan budget for 2012–16 is estimated at US\$204 million. 52 According to UNMAS, no national funding or in-kind support is provided by the government of South Sudan for mine action, but it has been previously claimed that the government provides a budget to the NMAA to cover salaries and limited operational costs. 53

UNMAS did not foresee major changes in mine action capacity in South Sudan in 2015, noting that CMR contamination is "prioritised" within the overall mine and ERW clearance strategy in South Sudan. 54 However, with the collapse of the peace talks in March 2015, continued conflict and internal unrest were expected, particularly during the dry season, raising serious concerns of new contamination and further impediments to access to existing mined and ERW-contaminated areas. 55

Despite the heightened need for an urgent response to any new explosive hazard contamination and the impacts of renewed conflict on the civilian population, many operators have expressed concern over a decrease in funding for mine action in South Sudan in 2015, with donors prioritising other humanitarian sectors or refusing to fund mine action activities while the conflict is ongoing.⁵⁶

In 2015, NPA planned to increase its operational capacity for survey to three teams in order to better ascertain the extent of cluster munition, landmine, and ERW contamination in South Sudan. MAG planned to maintain its operational capacity in 2015 and expand its geographical coverage to border and if possible, conflict affected states, while seeking further support for its MTT and mechanical and EOD capacity. Mechanical it would add another four Quick Response Teams to its mine action capacity and work its assets through the wet season in 2015. Mechan, which did not conduct cluster munition clearance in 2014, was planning under a new contract from 1 August to 31 December 2015 to carry out surface and subsurface BAC and non-technical and technical survey, along with spot demolitions and mine clearance with two MTTs.

ENDNOTES

- Response to Mine Action Monitor questionnaire by Robert Thompson, Chief of Operations, United Nations Mine Action Service (UNMAS), 30 March 2015.
- UNMAS, "About UNMAS in South Sudan", updated March 2014, http://www.mineaction. org/programmes/southsudan.
- 3 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 4 Ibid., and email, 12 May 2014.
- 5 Republic of South Sudan, "National Mine Action Strategic Plan 2012-1016", Juba, February 2012, pp. 4-6, 9.
- 6 Ibid.
- 7 V. Wiebe and T. Peachey, "Clusters of Death: The Mennonite Central Committee Cluster Bomb Report", Chapter 4, July 2000; and Handicap International, "Circle of Impact: The Fatal Footprint of Cluster Munitions on People and Communities", May 2007, p. 55; and Cluster Munition Monitor, "Sudan Cluster Munition Ban Policy", updated 23 August 2014. See also UNMAS, "Reported use of Cluster Munitions South Sudan February 2014", 12 February 2014 See also UN Mission in South Sudan (UNMISS), "Conflict in South Sudan: A Human Rights Report", 8 May 2014, p. 26, at: http://unmiss. unmissions.org/Portals/unmiss/Human Rights Reports/UNMISS Conflict in South Sudan - A Human Rights Report.pdf.
- 8 Email from Robert Thompson, UNMAS, 12 May 2016
- 9 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015; and email. 12 May 2014.
- 10 UNMAS, "Reported use of Cluster Munitions South Sudan February 2014", 12 February 2014. See also UNMISS, "Conflict in South Sudan: A Human Rights Report", 8 May 2014, p. 26.
- 11 UNMISS, "Conflict in South Sudan: A Human Rights Report", 8 May 2014, pp. 26–27; and Cluster Munition Monitor, "South Sudan Cluster Munition Ban Policy", updated 16 August 2014.
- 12 Statement by South Sudan, Convention on Cluster Munitions Fifth Meeting of States Parties, San José, Costa Rica, 3 September 2014.
- 13 UNMAS, "About UNMAS in South Sudan", updated March 2015, at: http://www.mineaction org/programmes/southsudan.
- 14 South Sudan, "South Sudan De-Mining Authority", undated, at: http://www.gossonline.org/magnoliaPublic/en/Independant-Commissions-and-Chambers/De-Mining-Authority.html#publications.
- 15 South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, February 2012, p. iv, at: http://www.apminebanconvention.org/fileadmin/pdf/ma_development/nma-strat/NMAS-SouthSudan-2012-2016.pdf.

- 16 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 24 May 2013.
- 17 South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, February 2012, p. iii.
- 18 UNMISS, "United Nations Mine Action Coordination Centre [UNMACC]", undated, at: http://unmiss.unmissions.org/Default. aspx?tabid=4313&language=en-US.
- 19 South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, February 2012, p. iii.
- 20 Ibid, p. v.
- 21 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 22 Responses to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015; and Augustino Seja, NPA, 11 May 2015.
- 23 Email from Robert Thompson, UNMAS, 4 June 2015. Four national organisations carried out risk education.

24 Response to Mine Action Monitor

- questionnaire by Augustino Seja, NPA, 11 May 2015. 25 Response to Mine Action Monitor
- Officer, MAG, 9 April 2015.

 26 Email from Mark Buswell, Programme
 Manager South Sudan, G4S, 3 June 2015.

questionnaire by Ismael Frioud, Programme

- 27 Response to Mine Action Monitor questionnaire by Stephen Saffin, Chief Operating Officer, TDI, 4 June 2015.
- 28 Email from Mark Buswell, G4S, 3 June 2015.
- 29 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 30 Response to Mine Action Monitor questionnaire by Augustino Seja, NPA, 11 May 2015.
- 31 Ibid.; and Responses to Mine Action Monitor questionnaire by Stephen Saffin, TDI, 4 June 2015; Ismael Frioud, Programme Officer, MAG, 9 April 2015; and Mark Buswell, G4S, 27 May 2015.
- 32 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 33 Ibid.
- 34 Ibid.
- 35 Response to Mine Action Monitor questionnaire from Robert Thompson, UNMAS, 8 May 2014; and emails, 8 May 2014 and 29 September 2014.
- 36 Ibid.
- 37 Ibid.

- 38 Ibid. The totals are those cancelled and confirmed in 2014 and are included in the totals in Table 1 above on recorded contaminated areas. In South Sudan, UXO spots are also recorded as hazardous areas, so for some suspected CMR-contaminated areas that were confirmed or cancelled, no corresponding area is reported if the areas were UXO spots. Email from Robert Thompson, UNMAS, 11 May 2015.
- 39 NPA reported confirming a total cluster munition-contaminated area of 177,713m² in 2014. According to NPA, its figures vary slightly from those recorded in the IMSMA database as UNMAS calculates land release based on daily productivity per asset whereas NPA determines land released after task completion. Email from Quartim Carlos Matongueiro, Programme Manager, NPA South Sudan, 15 May 2015.
- 40 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 41 Ibid.; and Responses to Mine Action Monitor questionnaire by Ismael Frioud, MAG, 9
 April 2015; and Augustino Seja, NPA, 11 May 2015. CMR are not separately recorded in the IMSMA database in South Sudan and are included under figures for UXO. Email from Robert Thompson, UNMAS, 11 May 2015. Figures for submunitions destroyed are from reports from the clearing operator, where available. NPA reported clearing a total of 222,980m² of CMR-contaminated area in 2014.
- 42 NPA did not report destroying UXO during cluster munition clearance in its response to the Mine Action Monitor questionnaire. However, it did report destroying a total of 830 UXO in 2014, which is the same number reported in the UNMAS IMSMA database (524 UXO destroyed by NPA during cluster munition clearance and 306 during mine clearance in IMSMA). NPA reported this discrepancy was due to the fact it stores information on operational productivity, task completion, and land release in different formats from UNMAS. Email from Augustino Seja, NPA, 18 May 2015.
- 43 Operation Save Innocent Lives (OSIL) is a national implementing partner of MAG. They assessed three UXO spots in 2014 but found no contamination and the areas were subsequently closed. Email from Robert Thompson, UNMAS, 11 May 2015.
- 44 Email from Mark Buswell, G4S, 3 June 2015.
- 45 Skype interview with Stephen Saffin, TDI, 3 June 2015. While they were not reported to have cleared any CMR contamination, MTI informed Mine Action Monitor that it did not distinguish between UXO in its statistical reporting. Email from Melvin Smith, MTI, 3 June 2015.

- 46 Responses to Mine Action Monitor questionnaire by Johan Coetzee, Chief Technical Advisor, Mechem, 25 May 2015; and Mark Livingstone, Project Manager, MTI, 2 June 2015.
- 47 Response to Mine Action Monitor questionnaire by Mark Livingstone, MTI, 2 June 2015.
- 48 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 49 Ibid
- 50 South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, February 2012, p. vi.
- 51 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 52 South Sudan, "South Sudan National Mine Action Strategic Plan 2012–2016", Juba, February 2012, p. viii.
- 53 Ibid., p. 30.
- 54 Response to Mine Action Monitor questionnaire by Robert Thompson, UNMAS, 30 March 2015.
- 55 Ibid.
- 56 Ibid; and Responses to Mine Action Monitor questionnaire by Ismael Frioud, MAG, 9 April 2015; and Augustino Seja, NPA, 2 June 2015.
- 57 Response to Mine Action Monitor questionnaire by Augustino Seja, NPA, 2 June 2015. Following restructuring of its MTT, NPA reported that work will focus on survey but that any CMR contamination found in the process would be recorded and cleared.
- 58 Response to Mine Action Monitor questionnaire by Ismael Frioud, MAG, 9 April 2015. MAG's MTT's work was scheduled to finish at the end of June 2015 and if new funding is not secured, will not be redeployed. The MineWolf team is expected to continue operations and renew its contract in September 2015.
- 59 Responses to Mine Action Monitor questionnaire by Mark Buswell, G4S, 27 May 2015, and Stephen Saffin, TDI, 4 June 2015. TDI did not report specific changes to its capacity or operations in 2015 but stated that it would continue to focus on delivering CMR survey and clearance operations "to a high standard" in 2015.
- 60 Response to Mine Action Monitor questionnaire by Johan Coetzee, Mechem, 25 May 2015.



- → Sudan should ensure an immediate end to use of cluster munitions and urgently address the humanitarian threat from any new contamination. 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.
- → Sudan should re-establish conditions that allow international mine action organisations to operate and conduct land release in Sudan and to determine the extent of cluster munition remnants (CMR) contamination.
- → The Information Management System for Mine Action (IMSMA) database reporting format should disaggregate CMR from other unexploded ordnance (UXO). Continued efforts should be made to ensure reporting and recording of mine action data according to International Mine Action Standards (IMAS) land release terminology.

CONTAMINATION

The exact extent of contamination from CMR in the Republic of Sudan is not known. However, there have been reports of new use of cluster munitions in both 2012 and 2015. as reviewed below.

The most recent estimate of the extent of CMR contamination in Sudan dates back to June 2011, when the United Nations Mine Action Office (UNMAO) reported nine remaining areas suspected to be contaminated with unexploded submunitions and stated that 81 areas had been released (see Table 1).¹ In May 2015, the United Nations Development Programme (UNDP), which took over lead responsibility within the UN system for mine action coordination in Sudan in 2014, had no new reports of CMR contamination and no clearance of CMR was reported during the year.²

Table 1: CMR-contaminated areas in Sudan as of June 2011³

State	Open	Closed	Total
Kassala	7	2	9
South Kordofan	2	68	70
Blue Nile	0	9	9
Northern Darfur	0	1	1
Southern Darfur	0	1	1
Totals	9	81	90

The Sudanese NMAC, 4 which assumed full national ownership for implementing mine action activities upon UNMAO's departure in June 2011, has not provided updated information on the reported nine open areas contaminated with CMR since it was established. NMAC does not distinguish between clearance of different types of explosive remnants of war (ERW) in its reporting and so has been unable to confirm how much land was cleared of CMR from 2011 to 2015, or how many submunitions were destroyed. It did not respond to repeated requests for updated information by Mine Action Monitor in 2015, nor from Cluster Munition Monitor in previous years.

From 1995 to 2000, 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 copy, Chinese Type-81 dual-purpose improved conventional munitions (DPICM), Chilean-made PM-1, and Soviet-manufactured PTAB-1.5 and AO-1SCh submunitions. ⁵

In 2012, there were two allegations of cluster-munition use by the Sudanese Armed Forces, in Troji and Ongolo in Southern Kordofan. Chinese Type-81 DPICMs were found in Troji by an independent journalist, which local residents reported were used in a government attack on the town on 29 February 2012. On 24 May 2012, British newspaper *The Independent* published photos of an RBK-500 cluster munition containing AO-2.5RT submunitions that had failed to detonate in the village of Ongolo. Residents said the bomb had been dropped from a government aircraft on 15 April 2012. Cluster Munition Monitor was not able to independently confirm the use of cluster munitions or those responsible. The government of Sudan denied using cluster munitions in South Kordofan.

In May 2013, a UN Panel of Experts on Sudan documented several RBK-500 cluster bombs stored in the open along with other weapons at a Sudanese Air Force base at the El Fasher airport in North Darfur, as well as the possession of AO-2.5 RT submunitions by the Sudanese Air Force.8 It later published a photo of the stockpiled cluster munitions at the El Fasher airport in a report to the UN Security Council on 11 February 2014.9 The report stated that "the Panel has evidence of previous use of cluster munitions in Darfur. Render-safe operations have taken place on such munitions as recently as 2012. The Panel does not, however, have evidence of the exact dates of use of the munitions. It continues to investigate". The report further stated that the panel had "observed fluctuating stock levels at the ammunition storage area, indicative of the routine use (for either operations or training) and resupply of ammunition into Darfur by the national armed forces", and warned of a "real explosive risk" if the storage facility continued to be used to store weapons.¹⁰

On 15 April 2015, Human Rights Watch published evidence that Sudanese government forces used cluster munitions in civilian areas in the Nuba Mountains in South Kordofan in February and March 2015. Researchers documented evidence of CMR in villages in Delami and Um Durein counties. Local residents stated that two bombs were dropped by government aircraft on the village of Tongoli in



Delami county on 6 March 2015, and four bombs on Rajeefi village in Um Durein county in late February 2015. The CMR found by Human Rights Watch were RBK-500 cluster bombs containing AO-2.5 RT fragmentation submunitions, the same type reportedly used by the Sudanese government in 2012.¹¹ In response, a Sudanese army spokesperson was quoted by a news source denying the allegations, calling the Human Rights Watch report "totally fabricated and baseless" and claiming that "We never used this kind of weapons in war areas in Sudan".¹²

Just over a month later, on 27 May 2015, the Sudanese Air Force was reported to have dropped four cluster bombs on the town of Kauda in South Kordofan in an attack occurring around 7:30am.¹³ Nuba Reports, a network of local journalists from the Nuba Mountain area, published a video showing the clearance and burial of unexploded submunitions from the attack and reported testimonies of local villagers present at the time. According to the reports, all four bombs landed in residential areas; three in fields outside of villagers' homes and one just outside the house of Shadia Omar Osman and her family. None of the cluster bombs exploded on impact and submunitions were either found intact within the failed canisters or scattered unexploded on the ground. At least 58 submunitions were found in Shadia's family's yard. Two days later, soldiers from the Sudan People's Liberation Army North (SPLA-N), the rebel army in control of the region, collected the unexploded submunitions around Shadia's home and buried them in a pit, which they marked with thorn bushes. The cluster munitions reportedly used in the attacks and shown in the Nuba Reports video were again RBK-500 cluster bombs containing AO-2.5 RT submunitions.14

In May 2015, in his report on the African Union-UN Hybrid Operations in Darfur, the UN Secretary-General stated that during the reporting period from 26 February to 15 May 2015, the African Union and UN mission in Darfur (UNAMID) "collected evidence of two air-delivered cluster bombs near Kirigiyati village, Northern Darfur, and disposed of them safely". The UN Secretary-General called on the Government of Sudan "to immediately investigate the use of cluster munitions in Northern Darfur, which are prohibited under international law and pose a particular threat to the civilian population".



On 29 June 2015, the UN Security Council adopted Resolution 2228 which renewed UNAMID's mandate until 30 June 2016. The resolution again expressed concern "at the evidence, collected by AU-UN Hybrid Operation in Darfur (UNAMID), of two air-delivered cluster bombs near Kirigiyati, North Darfur". The resolution reiterated the UN Secretary-General's call on the Government of Sudan to "immediately investigate the use of cluster munitions". Upon the adoption of the resolution, the Sudanese representative rejected the resolution's reference to the use of cluster munitions in Sudan.

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Sudan also has a significant problem with anti-personnel mines, anti-vehicle mines, and unexploded ordnance (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.

While limited CMR contamination has been identified in the Darfur region, contamination from other ERW is much greater. ERW pose a serious threat to civilians, to peacekeepers from UNAMID, and to the delivery of humanitarian aid. ERW in Darfur includes unexploded air-delivered bombs, rockets, artillery and rifle projectiles, mortars, and grenades.²⁰

Since South Sudan's independence, new conflicts in Abyei, and in Blue Nile and South Kordofan states, have resulted in increased UXO contamination in Sudan.²¹ According to UNDP, the IMSMA database does not contain any data on the extent of contamination in Abyei due to the conflict and restricted access to the area.²²

PROGRAMME MANAGEMENT

The Sudanese NMAA and the National Mine Action Centre (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).²³ 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 2006.²⁴

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. The UN Mine Action Service (UNMAS), which had opened an emergency programme in Sudan in 2002, continued to provide assistance to mine action in Sudan through technical support to NMAC up to the end of 2013. As of January 2014, UNMAS ceded its lead in UN mine action efforts in Sudan to UNDP, which was expected to continue its support to NMAC until December 2016.²⁵

In Darfur, under the umbrella of UNAMID, UNMAS works under the name of the Ordnance Disposal Office (ODO) in

direct support of UNAMID priorities.²⁶ In 2012, UNAMID contracted commercial company The Development Initiative (TDI) to assess, survey, mark, identify, and clear contamination in all five Darfur states.²⁷ TDI's activities depend on availability of security forces and permission from the government of Sudan and the UN Special Representative for Political Affairs.²⁸ TDI has reported that it will transition to a mentoring role in supporting local national demining teams to increase their operational capacity and production by embedding one member of international staff in the teams. It said its task was up for re-tender in 2015.²⁹ Mine action in Darfur is funded through assessed peacekeeping funds for UNAMID.³⁰

In December 2013, UNMAS phased out of its lead role in support of mine action activities in a planned handover to UNDP. UNDP assumed the role in September 2014 and provided capacity building support to NMAC for a three-month period until December 2014. However after restructuring in light of adopting a new strategic plan for 2014–17, UNDP decided to transition out of support for mine action. As such, UNDP, along with the government of Sudan, requested UNMAS to retake the lead role in support of mine action in Sudan in December 2014.³¹

STRATEGIC PLANNING

Sudan has a multi-year National Mine Action Plan for 2013–19. According to the NMAC, the plan was designed in light of the overall security situation in Sudan and the capacity for mine action and types of assets available. The plan includes details of operations for addressing contamination in all affected states by year, with a focus on the eastern states of Kassala, Red Sea, and Gadaref, and parts of Blue Nile. When security permits, work will start according to the plan in South Kordofan and the remaining parts of Blue Nile states.³²

In June 2015, a representative from NMAC stated that Sudan was committed to meeting its National Mine Action Plan deadline of 2019 but reported that it faced big challenges due to lack of funding and ongoing conflict in Blue Nile and South Kordofan.³³

STANDARDS

In May 2015, NMAC stated that a review of National Technical Standards and Guidelines was ongoing and that a new version would be published on its website after their approval.³⁴

OPERATORS

In 2014, no international non-governmental organisations (NGOs) conducted mine clearance or survey in Sudan. One international NGO, Association for Aid and Relief Japan (AAR Japan), carried out mine risk education, along with a national NGO; SIBRO Organization for Development. The only international operator to carry out clearance activities in 2014 was TDI, which carried out explosive ordnance destruction (EOD) tasks in Darfur in support of UNAMID, deploying five multitask teams (MTTs).35 In 2015, NMAC called for other international NGO operators to undertake mine action in Sudan.36

Previously, two international mine clearance NGOs had programmes in Sudan but were forced to close down their operations owing to government restrictions that impeded their operations.³⁷ DanChurchAid (DCA) ended its operations in 2012.³⁸ 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.³⁹ Following months of negotiations with HAC and donors, MAG ended its operations in Sudan, leaving in early 2013.⁴⁰

National demining operators are the National Demining Units, JASMAR for Human Security, and Friends of Peace and Development Organization (FPDO). In 2014, the National Demining Units comprised four mine clearance teams (MCT), one MTT, three mine detection dog (MDD) teams, and one mechanical team. FPDO and JASMAR had one MCT each and conducted land release and mine risk education. In April 2014, the Government of Sudan reported that donor countries had not funded these operations.⁴¹

QUALITY MANAGEMENT

According to NMAC, a quality assurance (QA) programme became operational in 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. 42 TDI confirmed that a QA system was in place in Sudan but reported that very few external QA activities were carried out in 2014. 43

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 minimize the difference reflected between areas cleared and the size of total hazards closed". The clean-up process could not be completed in 2014, and as of May 2015 was still ongoing with field verification yet to be undertaken.⁴⁴ Sudan's IMSMA database does not contain information on the disputed Abyei area.⁴⁵

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 the NMAC. UNDP reported in February 2015 that the new version of IMSMA was not able to be imported into Sudan because of its geographic information system (GIS) function and United States import sanction restrictions.⁴⁶

LAND RELEASE

No data was available on any CMR clearance in 2014. NMAC does not distinguish between clearance of different types of ERW in its reporting 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 UNDP, no CMR clearance occurred in 2014 and no CMR contamination was recorded in the IMSMA database.⁴⁷ 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 state, which is also believed to be heavily contaminated with mines and ERW. The NMAC reported that as soon as the security situation improves mine clearance would restart.⁴⁸ In May 2015, JASMAR and FPDO were set to deploy clearance teams to South Kordofan.⁴⁹ In Darfur, also heavily affected by ERW, EOD tasks could only be carried out in certain accessible areas due to the impact of ongoing instability.⁵⁰

In 2014, NMAC reported a total of 0.57km² of battle area clearance (BAC): 0.27km² of subsurface clearance and almost 0.3km² of surface clearance. This was a decrease from 2013, when NMAC reported BAC of 0.95km². UNDP stated that the overall decrease in land release in Sudan in 2014 was due to reduced funding for mine action.⁵¹

TDI reported that 2014 was a "good year" for its operations with a significant increase in the amount of UXO it located and destroyed. It said this rise in productivity was due to greater independence of TDI teams from UNAMID escorts and a switch to escorts from the Sudanese Armed Forces and local police, which allowed the teams more freedom of movement and a greater ability to reach suspected hazardous areas.⁵²

SAFETY OF CLEARANCE PERSONNEL

There were no reported accidents involving mine action personnel in 2014.53

ARTICLE 4 COMPLIANCE

Sudan is not a state party to the 2008 CCM. 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.⁵⁴

Under its Anti-Personnel Mine Ban Convention Article 5 clearance deadline extension request, Sudan has 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.⁵⁵ 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).⁵⁶

The ongoing conflict and reports of new contamination to an unknown degree, 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 the NMAC, the Government of Sudan has supported mine action in the country by paying all NMAC staff salaries, and covering the operational cost of the NMAC and some of the deployment costs of the National Demining Units. ⁵⁷ In 2014, the government contributed a total of 3,000,000 SDG (equivalent to more than US\$325,000 at June 2015 exchange rates). The NMAC reported receiving less funding from donors in 2014 than expected and was seeking additional donor funding in 2015. ⁵⁸



ENDNOTES

- 1 The locations are based on a review of sites in the UNMAO database by Mine Action Monitor.
- 2 Interview with Javed Habibulhaq, Chief Technical Advisor, Mine Action, UNDP Sudan, in London, 25 February 2015, and email, 6 April 2015.
- 3 Email from Mohamed Kabir, Chief Information Officer, UNMAO, 27 June 2011.
- 4 The NMAC's website is at: http://su-mac.org/.
- V. Wiebe and T. Peachey, "Clusters of Death: The Mennonite Central Committee Cluster Bomb Report", Chapter 4, July 2000; and Handicap International, "Circle of Impact: The Fatal Footprint of Cluster Munitions on People and Communities", May 2007, p. 55; and Cluster Munition Monitor, "Sudan Cluster Munition Ban Policy", updated 23 August 2014. See also UNMAS, "Reported use of Cluster Munitions South Sudan February 2014", 12 February 2014; and UN Mission in South Sudan (UNMISS), "Conflict in South Sudan: A Human Rights Report", 8 May 2014, p. 26, at: http://unmiss. unmissions.org/Portals/unmiss/Human Rights Reports/UNMISS Conflict in South Sudan: A Human Rights Report.pdf.
- 6 See "Sudan Cluster Munition Ban Policy", Cluster Munition Monitor 2014, updated 23 August 2014.
- 7 "Sudan denies use of cluster bombs", United Press International, 28 May 2012.
- 8 "Report of the Panel of Experts on Sudan established pursuant to resolution 1591 (2005)", S/2014/87, 11 February 2014, pp. 23 and 91, at: http:// www.un.org/ga/search/view doc.asp?symbol=S/2014/87.
- 9 Ibid., p. 23.
- 10 Ibid., pp. 22-24.
- Human Rights Watch "Sudan: Cluster Bombs Used in Nuba Mountains", Press release, Nairobi, 16 April 2015, at: http://www.hrw.org/ news/2015/04/15/sudan-cluster-bombs-used-nuba-mountains.
- "Sudan denies using cluster bombs in South Kordofan", World Bulletin, 17 April 2015, at: http://www.worldbulletin.net/world/158004/sudan-denies-using-cluster-bombs-in-sth-kordofan.
- "Cluster Bombs Hit Homes in May", Nuba Reports, 15 June 2015, at: http://nubareports.org/cluster-bombs-hit-homes-in-may/ and email from the South Kordofan Blue Nile Coordination Unit, reprinted by the Humanitarian Aid Relief Trust, "Flash Update: Cluster Bombs Dropped in South Kordofan", 2 June 2015, at: http://www.hart-uk.org/news/flash-update-cluster-bombs-dropped-in-south-kordofan/. Kauda is one of the most populated towns in the Nuba mountains. Reports stated that had the bombs exploded, many would have been killed or injured as the attacks occurred at a time when families would have been at home getting ready for the day, children waking up, and people walking to fetch water, light cooking fires, and tend to livestock
- 14 "Cluster Bombs Hit Homes in May". Nuba Reports. 15 June 2015.
- "Report of the Secretary-General on the African Union-United Nations Hybrid Operation in Darfur", 26 May 2015, UN doc. S/2015/378, p. 12, at: http://www.un.org/en/ga/search/view_doc.asp?symbol=S/2015/378.
- 16 Ibid., p. 2
- 17 UN Security Council Resolution 2228 (2015) noted that UNAMID had disposed of the cluster munitions safely.
- 18 UN Security Council Resolution 2228 (2015).
- 19 UN, "Prioritizing Civilian Protection, Drawdown Benchmarks, Security Council Adopts Resolution 2228 (2015) Renewing Mandate of Darfur Mission until 30 June 2016", Press release SC/11951, 29 June 2015, at: http://www. un.org/press/en/2015/sc11951.doc.htm.
- 20 UNMAS, "About UNMAS in Darfur", August 2014, at: http://www.mineaction. org/programmes/darfur.
- 21 Human Rights Watch, "Under Siege: Indiscriminate Bombing and Abuses in Sudan's Southern Kordofan and Blue Nile States", 6 December 2012; "Unexploded Ordnance Kill 13 People in South Kordofan", *All Africa*, 10 August 2013; and UN, "UNMAS Annual Report 2012", New York, August 2013, p. 10.

- 22 Email from Javed Habibulhag, UNDP, 11 May 2015
- 23 Revised Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline Extension Request, 30 July 2013, p. 6.
- 24 Ibid.
- 25 APMBC Article 7 Report, 9 April 2014, p. 4.
- 26 UNMAS, "About UNMAS in Sudan", updated August 2014.
- 27 Ibid.
- 28 Ibid.
- 29 Response to Mine Action Monitor questionnaire by Stephen Saffin, Chief Operating Officer. TDI. 4 June 2015.
- 30 UNMAS, "About UNMAS in Sudan", updated August 2014.
- 31 APMBC Article 7 Report (for 2014), Form A, p. 5.
- 32 Revised APMBC Article 5 deadline Extension Request, 30 July 2013, pp. 28–33
- 33 Statement of Sudan, Anti-Personnel Mine Ban Convention Standing Committee meetings, Geneva, 25 June 2015. Notes by NPA.
- 34 APMBC Article 7 Report (for 2014), Form A, p. 12.
- 35 Email from Javed Habibulhaq, UNDP, 6 April 2015; APMBC Article 7 Report (for 2014), Form A, p. 16; and Response to Mine Action Monitor questionnaire by Stephen Saffin, TDI, 4 June 2015.
- 36 APMBC Article 7 Report (for 2014), Form A, p. 16.
- 37 ICBL, "ICBL Comments on Sudan's Article 5 Extension Request", May 2013.
- 38 DanChurchAid (DCA), "Previous Programmes: Sudan", undated but accessed at: http://www.danchurchaid.org/what-we-do/mine-action/ previous-programmes.
- 39 "Sudan causes frustration among NGOs", News24, 13 June 2012.
- 40 MAG, "MAG departs Sudan after six years of work to remove remnants of conflict", 7 March 2013.
- 41 Statement of Sudan, Standing Committee on Mine Action, Geneva, 11 April 2014.
- 42 Revised Article 5 Extension Request, 30 July 2013, p. 21.
- 43 Response to Mine Action Monitor questionnaire by Stephen Saffin, TDI, 4
 June 2015.
- 44 Ibid.
- 45 Email from Javed Habibulhaq, UNDP, 11 May 2015.
- 46 Interview with Javed Habibulhaq, UNDP, in London, 25 February 2015.
- 47 Ibid.; and email, 11 May 2015.
- 48 APMBC Article 7 Report (for 2014), Form A, pp. 14-15.
- 49 Email from Javed Habibulhag, UNDP, 11 May 2015.
- 50 APMBC Article 7 Report (for 2014), Form A, pp. 14–15.
- 51 Interview with Javed Habibulhaq, UNDP, London, 25 February 2015
- 52 Response to Mine Action Monitor questionnaire by Stephen Saffin, TDI, 4 June 2015.
- 53 Ibid.
- 54 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"
- 55 Revised APMBC Article 5 deadline Extension Request, 30 July 2013, p. 33.
- 6 Ibid., p. 31
- 57 APMBC Article 7 Report (for 2014), Form A, p. 15. This was confirmed by UNDP in February 2015. Interview with Javed Habibulhaq, UNDP, in London, 25 February 2015.
- 58 APMBC Article 7 Report (for 2014), Form A, p. 15.



- → Syrian government and opposition forces should immediately stop using cluster munitions and accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- → The Syrian government should set up a national mine action centre as the first step towards creating a national programme for tackling explosive remnants of war (ERW) contamination.
- Syria should allow competent international organisations access to advise and assist the development of a national programme and start the process of non-technical survey.

CONTAMINATION

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Syrian government forces have used cluster munitions extensively in the four-year-old conflict and Islamic State (IS) has also 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 The United Kingdom-based Syrian Network for Human Rights reported a sharp increase in Syrian government use of cluster munitions in 2014, recording multiple strikes in nine governorates, mostly by aircraft but in some instances by ground forces' rocket fire. Affected governorates named by the Syrian Network included Qunaitra.²

Human Rights Watch, citing Kurdish officials and photographs, said there was evidence to suggest IS forces had used cluster munitions fired from multiple rocket launchers in their offensive against the town of Kobani in August 2014.³ In a report produced after the battle for Kobani, Handicap International confirmed the presence of unexploded submunitions among dense ERW contamination.⁴

Human Rights Watch, pulling together reports of researchers, local activists, and bloggers, recorded at least six types of cluster munition that had been used, including air-dropped bombs and land-based rockets, and seven types of explosive submunition. It also cited evidence that government forces had used incendiary submunitions and that opposition forces had used unexploded submunitions as improvised explosive devices.⁵

PROGRAMME MANAGEMENT

There is no mine action programme in Syria, no national mine action authority, and no mine action centre.

In March 2012, the United Nations Mine Action Service (UNMAS) established an office in Damascus, initially as part of the UN Supervision Mission in Syria (UNSMIS). This was closed in August 2012 and UNMAS no longer has a presence in Syria. An UNMAS risk education project was included in the Syrian humanitarian response plan proposed for 2014, but Syrian authorities did not approve visas for staff to implement it. To assist humanitarian relief agencies and eventual reconstruction, UNMAS started a "clash database" based largely on open source material recording the locations of armed clashes, but handed this over in 2014 to the UN Office for the Coordination of Humanitarian Affairs.



One of nine cluster bombs launched by Syrian government forces again: a housing estate in Aleppo on 1 March 2013. © Amnesty International

LAND RELEASE

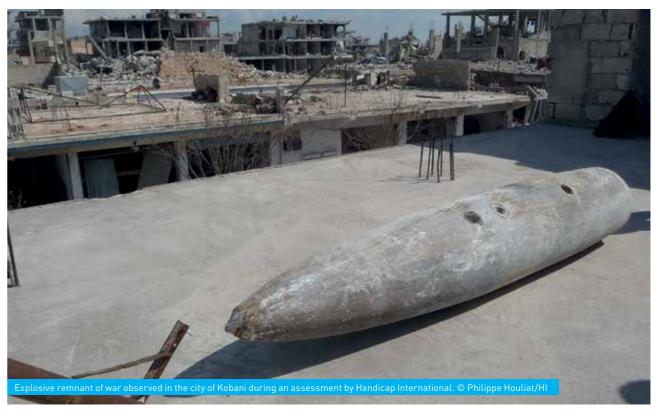
No formal programme exists for survey, clearance, or release of areas contaminated by submunitions.

ARTICLE 4 COMPLIANCE

Syria is not a state party to the CCM. Nonetheless, Syria 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.

ENDNOTES

- 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.
- 2 Syrian Network for Human Rights, "The Syrian regime's cluster munition attacks in 2014", undated but 2014.
- 3 Human Rights Watch, "Syria: Evidence of Islamic State cluster munition use", 1 September 2014, at: http://www.hrw.org/news/2014/09/01/syriaevidence-islamic-state-cluster-munition-use.
- 4 Handicap International, "Kobané: Le piège des restes explosifs", undated but accessed at: http://handicap-international.ca/kobane-le-piege-desrestes-explosifs.
- 5 Human Rights Watch, "Technical Briefing Note: Use of cluster munitions in Syria". 4 April 2014.
- 6 Emails from Flora Sutherland, Senior Programme Coordinator, UNMAS, New York, 28 May 2013 and 9 June 2015.
- 7 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 should complete clearance of its areas known to contain cluster munition remnants (CMR) and conduct the necessary survey to ensure that other contaminated areas do not exist.
- → Tajikistan should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.

CONTAMINATION

Tajikistan has 150,000m² of area confirmed to contain CMR, located in Darvoz district of Gorno-Badakhshan province in the central region.¹ Cluster munitions were used during Tajikistan's civil war in the 1990s, though the user's identity is not known.

In 2007–08, 336,000m² of CMR-contaminated land was cleared, with the destruction of 500 submunitions. In 2009 and 2010, re-survey of the area identified four hazardous areas covering 150,000m², which were subsequently reclassified as battle areas without CMR contamination.² In 2010, two submunitions were destroyed during clearance in the central region.³ Prior to 2014, the last unexploded submunition to be found was in 2011.4

In 2014, based on information provided by a member of the local Sagirdasht community, the quality assurance/ quality control (QA/QC) team of the Tajikistan National Mine Action Centre (TNMAC) found one AO-2.5RT submunition in Darvoz district. The QA/QC team subsequently found other submunitions, covering a total area they estimated at 400,000m². This estimate was subsequently revised downwards by Norwegian People's Aid (NPA) to 150,000m², following a field visit in July 2015. During this visit containers for two AO-2.5RT strikes, evidence of submunition detonations, and nine unexploded

submunitions were seen in the same area. Subsequently evidence of a third container was found and as of early August 2015 more than 60 unexploded submunitions had been cleared. The contaminated land is used for pasture during the summer months when the snow has melted, and the nearest village is 15km away. The contaminated area is around 200 metres from the nearest suspected mined area.

Prior to this recent discovery of land containing CMR, it was believed that only a residual CMR threat remained, in the central region. Tajikistan has stated that once survey and clearance of this area is completed, the country will have cleared all known areas containing CMR, although it is acknowledged that submunitions may still be discovered during other survey and clearance operations. In fact, other battle area clearance tasks may contain unexploded submunitions and it may be premature to declare completion until a proper survey is conducted.

OTHER EXPLOSIVE REMNANTS OF WAR 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.¹³

In June 2003, the government of Tajikistan and the United Nations Development Programme (UNDP) established the Tajikistan Mine Action Centre (TMAC) with a view to it becoming a nationally owned programme in the near future, ¹⁴ although this did not happen until more than 10 years later. TMAC was made responsible for coordination and monitoring of all mine action activities. ¹⁵ Since then, TMAC has acted as the secretariat for the CIIHL to which it reports. ¹⁶

On 3 January 2014, by government decree, the Tajikistan National Mine Action Centre (TNMAC) was established.¹⁷ Prior to this, lack of legal recognition had presented problems for TMAC.¹⁸ For example, TMAC could not open a bank account to receive and disburse funds.¹⁹ The importance of clarifying TMAC's status had been highlighted in the 2012 evaluation of UNDP support to mine action in Tajikistan.²⁰ 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.²¹

STRATEGIC PLANNING

The current national mine action strategic plan (NMASP) 2010–15 expires at the end of 2015, and a new strategy for 2016–20 was under development as of the middle of the year.²² The TNMAC completion workplan (2015–20) was also under revision, but relates predominantly to mine survey and clearance, and to Article 5 of the Anti-Personnel Mine Ban Convention.²³

LEGISLATION AND STANDARDS

In 2015, Tajikistan drafted a "Humanitarian Demining Law", which includes all aspects of mine action. As of June 2015, the draft law was due to be circulated for consultation, after which it must be approved by parliament and signed by the President of Tajikistan. It was expected that the law would be adopted by November 2015. 24

Tajikistan's National Mine Action Standards (TNMAS) have been revised and were awaiting translation into Russian and government approval as of June 2015. The TNMAS predominantly refer to mines, but also cover UXO including unexploded submunitions.²⁵

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, supported the development of the Union of Sappers of Tajikistan's capacity. PAS 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. PAS started operations in Tajikistan's mine action programme and its clearance output.



LAND RELEASE

No CMR-contaminated area was released by clearance or technical survey in 2014, and no area suspected to contain CMR was cancelled by non-technical survey.

SURVEY IN 2014

As noted above, in 2014, TNMAC's QA/QC team found one AO-2.5RT submunition and, following further investigation, identified an area of some 400,000m² that contains unexploded submunitions.²⁸ This was revised downwards to 150,000m² by NPA, as a result of a field visit to the site in July

PROGRESS IN 2015

In 2015, NPA planned to conduct technical survey in order to define more accurately the boundaries of the contaminated area and then to conduct battle area clearance (BAC) to release the land. Due to adverse weather it is only possible to conduct land release operations during four months of the year. Weather permitting, it was planned to complete survey and clearance of the remaining CMR-contaminated area before the end of 2015.30

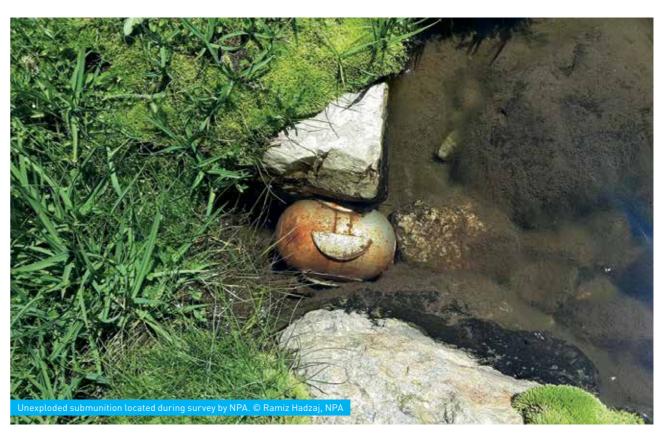




ARTICLE 4 COMPLIANCE

Tajikistan is not a party or signatory to the CCM and therefore does not have a specific deadline under Article 4 of the Convention. 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.31

TNMAC and NPA believe that once the remaining contaminated area is released in 2015, Tajikistan will have cleared all CMR-contaminated areas in the country.³² However, a number of BAC tasks remain in the Central Region and it is possible that further submunition strikes will be identified during the course of survey or clearance.



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- 24 Interview with Muhabbat Ibrohimzoda, TNMAC and Ahad Mahmoudov, UNDP in Geneva 23 June 2015
- 26 Geneva International Centre for Humanitarian Demining (GICHD), "Strategic Planning in Mine Action Programmes: Tajikistan", Geneva, October 2013, p. 3; and FSD, "The First MoU signed between the Swiss Foundation for Mine Action and the Union of Sappers in Tajikistan", November 2012, at: http:// www.fsd.ch/news/first-mou-signed-between-swiss-foundation-for-mineaction-union-sappers-tajikistan The UST is a national, civilian demining
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- → Ukraine should end all use of cluster munitions and accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- > Ukraine should establish an operational national mine action centre under civilian control.
- → Ukraine 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.

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 antigovernment 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.³

On 11 July, 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. ⁴ 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 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, Makiivka, and Ilovaisk) and Luhansk (Novosvitlivka).⁵

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 Artemivskyi district of Luhansk city, resulting from two attacks on 27 January. The attacks killed two civilians and injured two others. The OSCE 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.

During a ten-day investigation in eastern Ukraine, Human Rights Watch found evidence of the use of cluster munition rockets in at least seven villages, towns, and cities between 23 January and 12 February 2015, with some locations hit multiple times. Three of the areas investigated were in government-controlled territory, and four were in rebel-held territory. Thirteen civilians were killed during these attacks, including at least two children 9



OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Ukraine is contaminated by other unexploded ordnance (UXO) and by anti-personnel and anti-vehicle mines laid during the current conflict. It is also affected by UXO and abandoned explosive ordnance from World War I, World War II, ¹⁰ and Soviet military training. As of April 2015, Ukraine reported 32 former military firing ranges and areas contaminated with explosive objects from past

wars, with 150,000 hectares (1,500km²) remaining to be cleared. In 2013, 34 former military sites were reported totalling over 1,530km². Casualties continue to occur from explosive remnants of war (ERW).

In addition, a substantial part of the sea and other waters of Ukraine are contaminated with explosive items from past wars.¹³

PROGRAMME MANAGEMENT

An interministerial working group was set up by the Cabinet of Ministers in February 2006. On 25 December 2009, the Cabinet of Ministers of Ukraine issued an order that tasked the Ministry of Defence, Ministry of Emergency Situations (GSCHS), and Ukroboronservice (a commercial company), to put forward proposals by mid-April 2010 for a national body for demining. In April 2014, it was reported that Ukraine had "performed activities" to establish a National Mine Action Authority within the Ministry of Defense. In

On 2 September 2014, Presidential Decree No. 423 on "A Mine Action National Authority" was signed. Following the decree, the Ministry of Defence's "Department of Ecology and Mine Security" became responsible for coordinating demining and serves as the national mine action secretariat in Ukraine. The Ministry is working to develop legislation on a national mine action authority. The Geneva International Centre for Humanitarian Demining (GICHD) has been working with the OSCE Project Coordination Unit in Ukraine to help foster mine action institutions. As of June 2015, however, no national mine action centre had been established.

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 2009–2014.²⁰ The programme foresaw clearance of 15km² over five years with the destruction of 500,000 items of ERW. As of June 2015, there was no new programme for 2015 onwards due to the ongoing conflict in Ukraine.²¹

Ukraine has developed a plan for humanitarian demining operations in the Donetsk and Luhansk regions, if it obtains safe access to the areas. The main goals for 2015 are demining of populated areas, security during rehabilitation of infrastructure, and clearance of UXO from agricultural areas.²²

LEGISLATION AND 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 2014.²³

OPERATORS

Following a presidential decree in September 2014, the Ministry of Defence is now 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.²⁴

The State Emergency Service of Ukraine (SESU), formerly known as the Ministry of Emergencies, is generally responsible for humanitarian clearance of affected territories, with the exception of those allocated to the other ministries and bodies. The Ministry of Defence is responsible for all areas where military units, educational institutions, companies, or organisations belonging to the armed forces are permanently located. The Engineering Division of the Ministry of Defence conducts UXO spot clearance tasks. The national Border Guard 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 clearance of national transport (railways, roads, terminals etc.). Lastly, the Ministry of Internal Affairs has an engineering department that conducts EOD, in particular for improvised explosive devices.²⁵

Ukroboronservice is a national demining organisation that acts as a subcontractor for the Ukrainian government. Ukroboronservice is not currently undertaking clearance in Ukraine, but the government is considering putting out a tender for the services of humanitarian demining organisations.²⁶

As of April 2015, SESU deployed 32 "pyrotechnic" units, totalling 500 personnel, while the Ministry of Internal Affairs (MIA) deployed 27 units, totalling nearly 200 people. Forty percent of capacity is dedicated to humanitarian demining and UXO clearance in areas contaminated as a result of former conflicts.²⁷ According to the OSCE, the SESU planned to deploy 50 five-strong teams in the 2015 clearance season.²⁸

As of April 2015, the Ministry of Defence was deploying 25 manual clearance teams comprising a total of 125 personnel, two explosives detection dog (EDD) teams, 15 demining robots, and four BMR-2 machines.²⁹

QUALITY MANAGEMENT

Quality management is headed by the 133rd Engineering division, which monitors quality.³⁰

INFORMATION MANAGEMENT

The Information Management System for Mine Action (IMSMA) has been piloted by the GICHD and SESU in four regions of Ukraine; there are plans to institutionalise it and expand its use across the country.³¹

LAND RELEASE

Since the outbreak of fighting in eastern Ukraine, clearance of ERW contamination has been undertaken by both Ukrainian government authorities and pro-Russian separatist groups. 32 Clearance of ERW in the provinces of Donetsk and Luhansk is typically reactive and takes place soon after attacks or when notification of contamination is received via members of the local community. Items of UXO are either destroyed in situ, or removed to storage areas or compounds. 33

The SESU is actively clearing government-controlled areas of mines and UXO.34 Clearance of ERW, including CMR, is often undertaken by its pyrotechnic teams, and has sometimes taken place quickly within 36 hours of new contamination, especially in populated areas. Clearance operations are often as a result of emergency call-outs from members of the community, which trigger deployment of a reconnaissance team and, if required, a pyrotechnic team to neutralise the threat. Clearance has been slower in rural areas.35

In the separation zone, the Ukrainian armed forces are undertaking ad hoc clearance of ERW contamination.³⁶

In areas controlled by pro-Russian rebel groups, the separatists are undertaking clearance of ERW and mines. In Donetsk, former SESU personnel, now organised under the separatist Donetsk People's Republic (DPR), are undertaking the bulk of clearance around Donetsk city. The personnel are organised into regular shifts, with clearance being provided all day and all night.³⁷

The Ukrainian authorities and the pro-Russian rebels are, to varying degrees, recording written logs of emergency call outs and clearance operations, ³⁸ but data is not typically disaggregated into weapon type. ³⁹ Clearance data is not available from pro-Russian separatist groups, and an accurate picture of the scale of ERW clearance being undertaken in eastern Ukraine and of remaining CMR contamination is not available.

SAFETY OF CLEARANCE PERSONNEL

According to Ukraine Armed Forces, 45 people have been killed and 150 injured by explosive ordnance, mostly in the first half of 2015. A total of 95% of victims were reported to be military personnel, though data includes casualties from clearance operations as well as military operations.⁴⁰

ARTICLE 4 COMPLIANCE

Ukraine is not a 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.⁴¹

National funding is provided for clearance of ERW and mines, and the Department of Ecology and Mine Security has its own budget within the Ministry of Defence.⁴² Ukraine also receives assistance from foreign partners (OSCE and

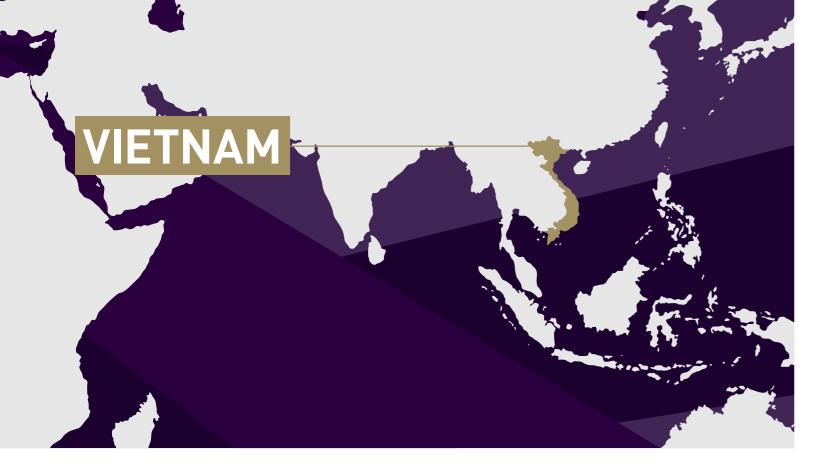
NATO) for demining material.⁴³ Germany has provided the Ministry of Emergency Situations with 50 metal detectors to assist the pyrotechnic units with demining activities in the liberated territories in the Donetsk and Luhansk regions.⁴⁴

According to the OSCE Project Coordination Unit, in order to address the main operational challenges Ukraine needs to institutionalise a national mine action authority and centre appropriate to a conflict setting; to introduce legislation for emergency ERW response; and expand the IMSMA system to enable centralised nationwide information management.⁴⁵

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- → Vietnam should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Vietnam should accelerate survey of areas contaminated with cluster munition remnants (CMR) in its most heavily affected provinces to better define the extent of contamination.
- Vietnam should accelerate development of a national database, making data available to operators on a timely basis.
- Vietnam should report comprehensively on the results of survey and clearance by all operators, national and international.

CONTAMINATION

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Vietnam is heavily contaminated by CMR but the extent is not known. The United States of America 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.¹ Most of the submunitions used were air-dropped, but artillery-delivered submunitions were also used in central Quang Binh and provinces to its south.²

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 reportedly covering an area of 4,000m² and containing some 25 tons of munitions.³



PROGRAMME MANAGEMENT

Vietnam's mine action programme is undergoing a period of transition from military management to civilian oversight. A Prime Minister's Decision in 2006 assigned the Ministry of National Defense to oversee mine action at the national level, with clearance undertaken by the Army Engineering Corps of the People's Army of Vietnam (PAVN).⁴ BOMICEN, part of the Ministry of National Defence, has acted as a central coordinating body for clearance and survey by national operators.⁵

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. VNMAC was given responsibility to propose policy, draw up plans, serve as the focal point for international cooperation, lead fundraising, and "to preside over" mine action information management. It is also responsible for organising and implementing quality assurance [QA]. The government appointed VNMAC's director and two deputy directors in 2014, and the centre became officially operational in February 2015.

STRATEGIC PLANNING

Vietnam's National Mine Action Plan for 2013–2015, released in May 2013, called for clearance of 1,000km² a year to support socio-economic development, giving priority to provinces with the highest levels of contamination and casualties. Implementation, however, was dependent on mobilising substantial additional financial resources. The Military Engineering Command estimated that to achieve the target would have needed at least double the actual number of clearance teams.

VNMAC reported that priorities for 2015–2016 included drafting and issuing a decree on mine action, fundraising for VNMAC's headquarters, developing a national database, conducting mine action in Ha Tinh province using Japanese funding, and developing and implementing mine action in Vietnam's most contaminated provinces.9

OPERATORS

Most clearance in Vietnam is conducted by the Army Engineering Corps, whose officials have previously reported operating some 250 mine/unexploded ordnance (UXO) clearance teams, including the teams of around 50 military companies.¹⁰

Four international humanitarian operators conducted clearance in Vietnam in 2014: Belgian non-governmental organisation (NGO) APOPO, Mines Advisory Group (MAG), Norwegian People's Aid (NPA), and PeaceTrees Vietnam. Germany brought in APOPO at the start of 2014 to take over the programme previously managed by Solidarity Service International (SODI), but Germany stopped its funding in September 2014 and the programme closed. In International operators are required to register with the People's Aid Coordinating Committee to work in Vietnam, but negotiate agreements to operate separately with the authorities of each province.



by a Project RENEW cluster munition remnant survey team in July 2014 in A Vao commune of Dakrong district. © Ngo Xuan Hien

LAND RELEASE

No land release data was received for 2014. BOMICEN had reported that army engineers released about 450km² in 2012¹² and VNMAC reported about 1,000km² of clearance in 2013 but provided no indication of what accounted for such an increase ¹³

The four international operators worked in the central provinces of Quang Binh, Quang Nam, Quang Tri and Thua Thien Hue. Gaps in data prevent year-on-year comparison of the operating results, but the amount of land cleared by international operators appears to have declined in 2014 while the number of submunitions destroyed appears to have increased.

The reasons include a shift by NPA from battle area clearance (BAC) to applying its cluster munition remnant survey (CMRS) methodology in Quang Tri and Hue, where it surveyed 27.9km² of land in 2014 identifying confirmed hazardous areas (CHAs) totalling 5.7km². The remaining 22.2km² was not "released" but recorded as "processed". NPA undertook only small clearance tasks at the request of local authorities, but the number of items destroyed in its roving explosive ordnance disposal (EOD) operations also increased sharply.¹⁴

MAG, the biggest of the four international operators with a total of 171 staff, reported releasing land through clearance of battle and mined areas as well as conducting more than 12,000 spot/roving EOD tasks. In early 2014, in Quang Tri, it started a pilot project to clear CHAs identified by NPA's CMRS teams and later added the project as a core component of its operations, reducing the number of spot tasks and increasing area clearance. Clearance of Quang Tri CHAs accounted for 1.57km² of the CMR-affected land it cleared in 2014 and for 1,075 of the submunitions it destroyed.¹⁵

Both MAG and NPA adjusted team deployments in 2014. MAG ended operations in Quang Nam province while raising its numbers in Quang Binh and Quang Tri, and NPA stood down non-technical survey staff in Hue because of

funding shortfalls. Both operators, however, expected significant increases in staff in 2015, at the start of what is expected to be a multi-year project to tackle survey and clearance of CMR in Quang Tri province with funding from the United States of America. NPA completed its survey of Trieu Phong district in a 2014 pilot project, leaving six districts and two cities to complete. NPA was due to receive \$3.5 million and MAG \$3.1 million under a one-year grant starting in February 2015, with a four-year option.¹⁶

APOPO's management of the former SODI operation in Quang Tri and Thua Thien Hue provinces lasted only nine months before Germany withdrew funding, resulting in the programme's closure at the end of September.¹⁷ PeaceTrees Vietnam, undertaking mine action to support community-building programmes in Quang Tri province, cleared some 93,500m² of land in 2014, destroying 5,330 items of UXO.¹⁸

Table 1. International NGO survey/clearance in 2014

Operator	CMR area cleared (km²)	BAC (km²)	Roving tasks	Submunitions destroyed	Other UXO destroyed	AP mines destroyed
AP0P0 ¹⁹	0	0.33	360	880	3,068	8
MAG	2.28	0.18	12,114	1,945	17,826	0
NPA/Project RENEW*	0	0.03	1,969	1,212	7,621	0
PeaceTrees Vietnam	N/R	0.09	N/R	N/R	5,330	N/R
Totals	2.28	0.63	14,443	4,037	33,845	8

N/R: Not Reported AP = anti-personnel

ARTICLE 4 COMPLIANCE

Vietnam is neither a state party nor a signatory to the CCM. Nonetheless, Vietnam 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.²⁰



COMPANY OF STREET

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- 11 Email from TeKimiti Gilbert, Head of Mine Action, APOPO, 16 June 2015.
- 12 Interview with Sr. Col. Nguyen Thanh Ban, Engineering Command, Hanoi, 18 June 2013.
- 13 Interview with Maj. Gen. Pham Quang Xuan, Director, VNMAC, in Geneva, 31 March 2014.
- 14 Emails from Jonathon (Gus) Guthrie, Programme Manager, NPA, Hanoi, 9 and 23 June 2015.
- 15 Emails from Portia Stratton, Country Director, MAG, 13 May and 30 June 2015.
- 16 Interview with Jonathon (Gus) Guthrie, Programme Manager, NPA, Hanoi, 14 April 2015, and emails of 9 and 23 June 2015; and emails from Portia Stratton, MAG, 13 May and 30 June 2015.
- 17 Email from TeKimiti Gilbert, APOPO, 16 June 2015.
- 18 PeaceTrees Vietnam Annual Report 2014, undated, but 2015.
- 19 Data for January to September 2014, received by email from TeKimiti Gilbert, APOPO, 16 June 2015.
- 20 Vietnam 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

- → Yemen should accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Yemen should survey at the earliest opportunity areas reportedly targeted with cluster munitions in the 2015 conflict and provide an updated assessment of cluster munition remnant (CMR) contamination.
- → Yemen should draw up a plan setting out priorities and, when security conditions permit, timelines for clearance.
- → The Yemen Mine Action Centre (YEMAC) should give access and accreditation to international operators to take advantage of their technical expertise and fundraising capabilities.

CONTAMINATION

Yemen has significant contamination from CMR but much of it is in areas of ongoing conflict and the full extent is not known. In 2014, YEMAC reported that it had identified some 18km² of suspected CMR hazards in the northern Sada'a governorate, but also knew of other areas of contamination in north-western Hajjah governorate that it had not been able to survey.¹

CMR contamination almost certainly increased in 2015 as a result of air strikes by the Saudi-led coalition on Houthi rebels, most notably in Sada'a, their main stronghold. Photographic evidence and accounts of local residents and activists cited by Human Rights Watch point to use in April 2015 of air-dropped CBU-105 and BLU-108 weapons in coalition attacks on the al-Safraa area, 30km south of the city of Sada'a. Another area of Sada'a governorate was struck in April with artillery-fired, ZP-39 dual-purpose improved conventional munition (DPICM) submunitions.

^{*} Established in August 2001, Project RENEW is a cooperative partnership between the government of Quang Tri province and international NGOs to address ERW.

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. MMAC, 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.⁵ It is supported by a Regional Executive Mine Action Branch (REMAB), a National Training Center in Aden, also set up in 1999, and another REMAB in al-Mukalla (Hadramout governorate) added in March 2004. REMABs are responsible for field implementation of the national mine action plan. However, escalating political turmoil and conflict in 2014, together with lack of funding, have impaired YEMAC's abilities to discharge its responsibilities.⁶

All mine and explosive remnants of war (ERW) survey and clearance is conducted by YEMAC, which reported starting in 2014 with six clearance teams composed of 293 deminers, 12 technical survey teams with 76 personnel, eight explosive ordnance disposal (EOD) teams with 85 personnel, and two quality assurance teams. YEMAC had previously reported that all clearance activities were conducted on an emergency basis and it had broken its teams into small groups to deal with ERW contamination, including CMR.8

STRATEGIC PLANNING

Yemen has no strategic plan for tackling CMR.

LAND RELEASE

YEMAC did not report results for operations in 2014 and it was unclear where or how many teams were still active by the end of the year. As of June 2015, Yemen had not submitted its Anti-Personnel Mine Ban Convention Article 7 transparency report for 2014.

By August 2014, funding shortages had led YEMAC to cut survey and clearance capacity by 30% and in October it suspended field operations altogether. It is not clear when or if clearance has resumed.

ARTICLE 4 COMPLIANCE

Yemen is neither a state party nor a signatory to the Convention on Cluster Munitions. Nonetheless, Yemen 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.¹⁰

ENDNOTES

- 1 Email from Ali al-Kadri, General Director, YEMAC, 20 March 2014.
- Human Rights Watch, "Yemen: Saudi-Led Airstrikes Used Cluster Munitions", 3 May 2015.
- 3 Human Rights Watch, "Yemen: Cluster munitions harm civilians", 31 May 2015.
- 4 CCM Article 7 Report, Form I, 31 March 2009.
- 5 Anti-Personnel Mine Ban Convention (APMBC) Article 5 deadline Extension Request, 31 March 2008, p. 2.
- 6 Interviews with mine action stakeholders requesting anonymity, February–June 2015.
- 7 Email from Ali al-Kadri, General Director, YEMAC, 20 March 2014.
- 8~ APMBC Article 5 deadline Extension Request, 31 March 2008, p. 3.
- Mine Action Technical Working Group Minutes, 12 August and 11 November 2014.
- 10 Yemen 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."

OTHER AREAS



- → Kosovo should disaggregate clearance of cluster munition remnants (CMR) from mine clearance in its reporting.
- → Kosovo should make a formal commitment to respect and implement the Convention on Cluster Munitions (CCM) and to clear all CMR as soon as possible.



CONTAMINATION

At the end of 2014, contamination from CMR in Kosovo remained in 51 areas over 7.69km². Three areas containing CMR were released during 2014.

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 NATO in 1999. NATO aircraft bombed 333 locations between 24 March and 10 June 1999 (Operation Allied Force), dropping 1,392 bombs that released 295,700 submunitions. Forces of the FRY also used cluster munitions during the 1998–99 conflict in Kosovo.

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

There is contamination in Kosovo from other explosive remnants of war (ERW). Most contamination 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.⁵ Kosovo Protection Force (KFOR) EOD teams regularly collect items of AXO in response to information provided by the public and demining organisations.⁶

PROGRAMME MANAGEMENT

In January 2011, the EOD Coordination Management Section became the Kosovo Mine Action Centre (KMAC) under the Ministry of the Kosovo Security Force (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.⁷

OPERATORS

Three NGOs have conducted land release in Kosovo: The HALO Trust, the Bosnia-based Mine Detection Dog Centre (MDDC), and Mines Awareness Trust (MAT). The MDDC and MAT were not funded to operate in 2014, but KMAC expected KSF and MDDC to start work on a new demining task in 2015. Norwegian People's Aid (NPA) received

accreditation to conduct a survey and was due to operate in northern Kosovo.8

HALO Trust reported that 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, continuing with their existing capacity and procedures, would take 12 years to complete mine and ERW clearance operations. The evaluation report suggested that if both organisations, with existing capacity, had access to HSTAMIDs (Handheld Standoff Mine Detection Systems) and adopted NPA's cluster munition remnants survey (CMRS) methodology, clearance could be completed in nine years. HALO applies CMRS methodology in Lao People's Democratic Republic but is unconvinced it presents advantages in Kosovo's conditions.

LAND RELEASE

Clearance accelerated in 2014, after the downturn in clearance as a result of funding constraints the previous year. KSF and the HALO Trust cleared a total of 0.84km² containing mines and/or CMR in 2014, double the area cleared in 2013 (see Table 1). Reporting by KMAC does not distinguish battle area clearance (BAC) from mine clearance, although reports by operators indicated most of the area cleared contained CMR.

KSF operated three platoons with 75 deminers also trained for BAC and a fourth platoon with 25 deminers also trained for EOD who conduct both area clearance and spot EOD

tasks. In 2014, it released one confirmed hazardous area and worked on three more that were suspended at the end of the demining season. KSF EOD also destroyed 449 UXO items in the course of 360 response tasks.¹⁰

HALO, working with 57 deminers, cleared 405,307m² containing CMR, nearly two-thirds more than the previous year, and accounting for two of the three CMR areas released in 2014. HALO deminers average 100m² a day on cluster munition sites reflecting the constraints on clearance posed by steep gradients, dense vegetation, and heavy metal contamination.¹¹

Table 1. Clearance of mined and CMR-contaminated areas in 2014¹²

Operator	Area cleared (m²)	Anti-personnel mines destroyed	Anti-vehicle mines destroyed	Submunitions destroyed	UXO destroyed
KSF	375,324	25	1	232	311
HAL0	464,763	16	0	123	75
KFOR	0	0	0	6	12
Totals	840,087	41	1	361	398

ARTICLE 4 COMPLIANCE

Kosovo is not a state party to the 2008 CCM. Nonetheless, Kosovo has obligations under customary international human rights law obligations 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.

ENDNOTES

- 1 Email from Ahmet Sallova, Head, KMAC, 18 March 2015.
- 2 See UN Mission in Kosovo (UNMIK), "UNMIK OKPCC EOD Management Section Annual Report 2005", Pristina, 18 January 2006, p. 2; and ICRC "Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo", Geneva, revised June 2001, pp. 6 and 15, at: http://www.icrc.org/eng/ resources/documents/misc/explosive-remnants-of-war-brochure-311201. htm
- "Kosovo Humanitarian Clearance", brochure produced by HALO, undated but 2013.
- 4 Human Rights Watch and Landmine Action, <u>Banning Cluster Munitions</u>
 Government Policy and Practice, Mines Action Canada, Ottawa, 2009, p. 238.
- 5 UNMIK, "OKPCC EOD Management Section Annual Report 2008", Pristina, 12 January 2009, p. 4.
- 6 Email from Ahmet Sallova, KMAC, 1 August 2012.
- 7 Ihid
- 8 Email from Ahmet Sallova, KMAC, 18 March 2015.
- 9 Email from Andrew Moore, Caucasus and Balkans Desk Officer, HALO Trust, 27 May 2015.
- 10 Email from Ahmet Sallova, KMAC, 18 March 2015.
- 11 Emails from Andrew Moore, HALO Trust, 21 May and 8 July 2015.
- 12 Email from Ahmet Sallova, KMAC, 18 March 2015.



- → The Nagorno-Karabakh authorities should provide funding for survey and clearance of cluster munition remnants (CMR).
- → The authorities should ensure that any remaining abandoned stockpiles of cluster munitions are destroyed.
- → The Nagorno-Karabakh authorities should make a formal commitment to respect and implement the Convention on Cluster Munitions (CCM) and to clear all CMR.

CONTAMINATION

The exact extent of contamination from CMR in Nagorno-Karabakh is not known, but it is widespread and affects all regions. As of the end of 2014, surface CMR contamination was estimated to comprise 86 areas covering 42.7km². The total area including subsurface contamination is believed to be higher.

CMR contamination as of September 2013 was reported to be 39.5km²,³ but this figure included contamination within the Soviet boundary of Nagorno-Karabakh only.⁴ Total CMR contamination across the whole of Nagorno-Karabakh at the end of 2013 was estimated to be 60.4km². CMR contamination has thus decreased significantly during 2014, as a result of clearance operations.⁵

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. Nagorno-Karabakh declared independence in 1991 but this has not been internationally recognised.

Nagorno-Karabakh has CMR in every region, but particularly Askeran, Martakert, and Martuni, where more than three quarters of remaining CMR are located. Unexploded submunitions caused at least 16 casualties in Nagorno-Karabakh between 1995 and 2013.⁶ No civilian submunition incidents were reported in 2014, although eight civilian mine incidents were recorded, resulting in 11 casualties.⁷

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Nagorno-Karabakh is also contaminated by landmines and other unexploded ordnance (UXO). Explosive remnants of war (ERW) contamination is said to "severely" impact on rural communities, limiting the incomes of thousands of families.⁸

PROGRAMME MANAGEMENT

A mine action coordination committee is responsible for liaising between the *de facto* government and The HALO Trust. In 2000, HALO established the Nagorno-Karabakh Mine Action Centre (NKMAC), which consolidates all mine action-related information and responds to requests from the *de facto* government ministries, other non-governmental organisations (NGOs), and local communities. The NKMAC maintains maps and a database that covers: all suspect areas surveyed; all areas cleared of mines and UXO; locations of all mine and UXO-related accidents; and a full record of all mine risk education given.

In 1995 and 1996, HALO trained local Karabakhi personnel in demining and left national staff to manage operations. In 1999, HALO returned to find the programme had suffered significant failures, including many accidents and a breakdown of management. Since 2000, HALO has been the sole organisation conducting land release in Nagorno-Karabakh. HALO's Nagorno-Karabakh operations cover both CMR clearance and mine clearance, and HALO does not field separate teams dedicated solely to mine clearance or CMR clearance. Operational staff are trained and experienced in working in both capacities.

A 2013 demining needs assessment by the United States Agency for International Development (USAID) concluded that HALO needed to seek and secure additional support and funding to continue its demining operations in Nagorno-Karabakh.¹⁴ In October 2013, HALO obtained a grant of US\$5 million from USAID for the next two and a half years.¹⁵

HALO's staff numbers fluctuated during 2014 as a result of changes in funding. From January to September 2014, approximately 155 staff were supported by USAID. This included 133 operational staff and 22 support staff, and equated to an operational capacity of 15 eight-person manual teams, one four-person explosive ordnance disposal (EOD) team, and three three-person mechanical teams, with each team operating an armoured Volvo front-loader. By October 2014, however, HALO's USAID budget in Nagorno-Karabakh was reduced by 25% for the fiscal year 2015, resulting in redundancy for 43 staff. This decreased operational capacity to 10 manual teams, one EOD team, and two mechanical teams, funded by USAID.¹⁶

HALO also received funding from the United Kingdom Foreign and Commonwealth Office (FCO) for one two-person risk education team and one four-person EOD team throughout 2014, and one eight-person manual team that operated for six months.¹⁷ In October 2014, Armenian Diaspora organisations "All Armenia Fund" (AAF) and "Landmine Free Artsakh" (LFA) provided HALO with funding for one additional manual team from August 2014 to April 2015.¹⁸

As of the end of 2014, HALO was employing 129 staff in Nagorno-Karabakh. 19 The 25% budget reduction in USAID applies from October 2014 to September 2015. HALO expected to maintain the reduced capacity throughout 2015. 20



LAND RELEASE

A total of 13km² of area contaminated with CMR was released by clearance in 2014, compared with 4.65km² in 2013. In addition, just under 7km² was released in 2014 during clearance operations as a result of overly large polygons being drawn.²1

SURVEY IN 2014

In 2014, HALO confirmed eleven suspected areas, totalling 5.5km², as contaminated.²²

CLEARANCE IN 2014

Just over 13km² of land, across 40 areas in the Askeran, Hadrut, Mardakert, Martuni, and Shushi regions of Nagorno-Karabakh was released by clearance in 2014. During battle area clearance (BAC) operations, 220 submunitions were destroyed, along with 58 other items of UXO, one anti-personnel mine, and three anti-vehicle mines.²³

The 13km² cleared in 2014 marks a significant increase compared to the previous year when 4.65km² of CMR-contaminated area was cleared during BAC operations.²⁴ This increase is due to the fact that teams were deployed to conduct more BAC in 2014 than in 2013, because of the inaccessibility of minefields in winter and during the wet season. HALO's CMR clearance operations nonetheless remained a "secondary" activity, as per USAID's requested prioritisation of mine clearance.²⁵

Furthermore, HALO was called out to 194 EOD tasks in 2014, during which 91 submunitions were destroyed along with 362 other items of UXO, 53 anti-personnel mines, and 13 anti-vehicle mines, in addition to the UXO destroyed during planned clearance operations as detailed above.²⁶

Land released in 2014 assisted 399 direct and 1,567 indirect beneficiaries. The released area will mainly be used for agriculture, grazing, and woodcutting.²⁷

ARTICLE 4 COMPLIANCE

Nagorno-Karabakh is not a state party to the 2008 Convention on Cluster Munitions (CCM). Nonetheless, the authorities in Nagorno-Karabakh have obligations under customary international human rights law obligations 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 have not provided HALO with any funding for clearance of CMR-contaminated or mined areas.²⁸

Progress in clearance of CMR has fluctuated over the last five years, as shown in Table 1.

HALO was receiving 25% less funding from its main donor, USAID, in 2015 than in the previous year, resulting in a one-third reduction in operational capacity. However, USAID has indicated willingness to extend HALO's current two-anda-half-year grant that ends in March 2016. USAID has requested that funds be used for clearance operations within the Soviet-era boundary of the Nagorno-Karabakh oblast, and that HALO focus on mine clearance. URR surface clearance is funded by USAID as a secondary activity, to be conducted when minefields are inaccessible. No sub-surface CMR clearance is funded by USAID. In HALO's opinion the above-mentioned prioritisation by USAID is reasonable, especially given that all reported accidents in 2014 were caused by mines.

Despite the clear humanitarian need to clear ERW, the international isolation of Nagorno-Karabakh also makes it difficult for HALO to raise funds to work in the region, and funds raised are often subject to territorial restrictions.³³ Almost no CMR is conducted outside the Soviet-era boundary of the Nagorno-Karabakh oblast.³⁴ Funding is needed to prevent Nagorno-Karabakh's communities being blighted by mines and CMR for decades to come.³⁵

Table 1. Clearance of CMR-contaminated area in 2010–14²⁹

Year	Area cleared (km²)
2014	13.01
2013	4.65
2012	7.60
2011	8.50
2010	2.83
Total	36.59

ENDNOTES

- 1 Email from Andrew Moore, Caucasus & Balkans Desk Officer, HALO Trust, 29 May 2015.
- 2 Email from Andrew Moore, HALO Trust, 11 June 2015.
- 3 United States Agency for International Development (USAID), De-mining Needs Assessment in Nagorno-Karabakh, September 2013, p. 13 and Annex D, p. v.
- 4 Email from Andrew Moore, HALO Trust, 2 July 2015.
- 5 Ibid
- 6 Emails from Nick Smart, 10 April 2012; Andrew Moore, 25 February 2010, and 6 April 2011; Matthew Hovell, 8 July 2009; and Valon Kumnova, all from HALO Trust. 6 April 2007.
- 7 Response to Mine Action Monitor questionnaire by Andrew Moore, HALO Trust, 22 May 2015.
- 8 The HALO Trust, "Nagorno-Karabakh", accessed 27 May 2015 at: http://www.halotrust.org/where-we-work/nagorno-karabakh.
- 9 Email from Andrew Moore, HALO Trust, 28 June 2013.
- 10 Ibid.
- 11 USAID, "De-mining Needs Assessment in Nagorno-Karabakh", September 2013, p. vii.
- 12 Ibid., pp. 20-21.
- 13 Response to Mine Action Monitor questionnaire by Andrew Moore, HALO Trust, 22 May 2015.
- 14 USAID, De-mining Needs Assessment in Nagorno-Karabakh, September 2013.
- 15 Ibid.; and email from Andrew Moore, HALO Trust, 19 March 2014.
- 16 Response to Mine Action Monitor questionnaire by Andrew Moore, HALO Trust, 22 May 2015.
- 17 Ibid

- 18 Ibid.
- 19 Ibid.
- 20 Ibid.
- 21 Ibid. During CMR clearance operations, HALO initially uses a standard polygon of 500,000m². Clearance starts at the centre of this area and extends outwards. When no further evidence of CMR is found, the remaining area is released/cancelled.
- 22 Response to Mine Action Monitor questionnaire by Andrew Moore, HALO Trust, 22 May 2015.
- 23 Ibid.; and email from Andrew Moore, HALO Trust, 23 June 2015.
- 4 Ibid.
- 25 Response to Mine Action Monitor questionnaire by Andrew Moore, HALO Trust, 11 June 2015.
- 26 Ibid., 22 May 2015.
- 27 Ibid.
- 28 Ibid
- 29 See Cluster Munition Monitor reports on Nagorno-Karabakh covering the period 2010-13.
- 30 Response to Monitor questionnaire by Andrew Moore, HALO Trust, 22 May 2015.
- 31 Ibid; and email from Andrew Moore, HALO Trust, 11 June 2015.
- 32 Email from Andrew Moore, HALO Trust, 11 June 2015.
- 33 HALO Trust website, accessed 27 May 2015, at: http://www.halotrust.org/ where-we-work/nagorno-karabakh.
- 34 Email from Andrew Moore, HALO Trust, 11 June 2015.
- 35 HALO website, accessed 27 May 2015, at: http://www.halotrust.org/where-we-work/nagorno-karabakh.



WESTERN SAHARA



RECOMMENDATIONS FOR ACTION

- → The Saharawi Arab Democratic Republic 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 is strongly encouraged to provide cluster strike data to the United Nations or humanitarian demining organisations to facilitate survey and clearance of CMR.



CONTAMINATION

Western Sahara had almost 4.7km² of area confirmed to contain CMR as of end 2014. Both the north and south of Western Sahara still contain confirmed CMR-contaminated areas, as set out in Table 1.1

Table 1. CMR contamination by region as of end 2014²

Region	Confirmed areas	Area (m²)	Suspected areas
North	28	1,461,410	0
South	21	3,213,061	0
Totals	49	4,674,471	0

The Royal Moroccan Armed Forces used cluster munitions, including both artillery-fired and air-dropped, against Polisario Front forces during their conflict in Western Sahara from 1975 to 1991. According to the Saharawi Arab Democratic Republic (SADR), cluster munitions of the types BLU-63, M42, and MK118 were used by the Royal Moroccan Armed Forces in multiple locations in Bir Lahlu, Dougaj, Mehariz, Mijek, and North Wadis.³

While clearance had been projected to be completed by the end of 2012,⁴ the discovery of previously unknown contaminated areas meant this target date was not met. As of end 2014, 49 known cluster munition strike zones east of the Berm required clearance; three of these areas were discovered only in June 2014.⁵ New strike areas are expected to be found as information is received from local populations.⁶

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Western Sahara also remains significantly affected by mines and explosive remnants of war (ERW) due to the conflict between the Royal Moroccan Army 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 side, and the Polisario Front on the east side.

A 2008 survey managed by Action on Armed Violence (AOAV) identified one area containing unused ammunition and 433 ERW spot clearance tasks. From 2012 to August 2014, AOAV carried out 42 spot tasks during which 46 ERW and 29 submunitions were destroyed.

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.

PROGRAMME MANAGEMENT

The United Nations Mission for the Referendum in Western Sahara (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 through a partnership between AOAV and Mechem, a commercial contractor, from 2012 to 2014.¹⁰

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. SMACO was established with UN support and started its activities in January 2014. Throughout the first half of 2014, AOAV and MINURSO MACC trained SMACO to coordinate and lead mine action activities east of the Berm. Training sessions were held on human resources, operations, logistics, management, and finance-related aspects of mine action, as well as quality management and the Information Management System for Mine Action (IMSMA) database. In 2015, SMACO did not have any operating teams but facilitated the operations of its partners.

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). It planned to develop a mine action strategy specific to Western Sahara in the second half of 2015 as well as local mine action standards applicable to the east of the Berm.¹⁴

OPERATORS

AOAV and commercial contractor MineTech International (MTI) were the two implementing operators conducting CMR survey and clearance in 2014, in partnership with MINURSO MACC. AOAV was operational in the first half of 2014, until it began a demobilisation and handover process on 24 June 2014 due to a lack of funding and loss of the UN Office for Project Services (UNOPS) tender for mine action in Western Sahara. In September 2014, MTI took over the UN tender and began operations, which were fully handed over from AOAV on 23 October 2014.¹⁵

From 1 January to 31 August 2014, AOAV had the following capacity: two multitask teams (MTTs); one mechanical clearance team (MCT); one Mine Wolf and Vehicle Mounted Mine Detection System; one battle area clearance (BAC) team; and a total of 72 staff, of whom 68 were local. From 1 September to 31 December 2014, MTI's capacity included one Vehicle Mounted Ground Penetrating Radar System; one community liaison officer team, two MTTs, and a total of 59 staff for all mine action-related activities.

In 2015, Norwegian People's Aid (NPA) was in the process of deploying to Western Sahara with two MTTs for a two-year period. MTI is expected to continue to operate with the same capacity in 2015. The MINURSO MACC also secured funding for an additional MTT for a nine-month period. 18

QUALITY MANAGEMENT

MINURSO MACC reported that quality assurance (QA) activities are conducted externally by the MACC Operations and QA Officer on a regular basis, on average of three QA assessments per month, as well as internally by implementing partners.¹⁹ AOAV conducted its own internal quality control (QC) assessments on a daily basis, which were recorded and submitted in daily reports to MINURSO MACC.²⁰

LAND RELEASE

Total CMR-contaminated area released by clearance and technical survey in 2014 was more than $1.75 \, \text{km}^2$. This represents an increase of 75% on the extent of CMR clearance in 2013.²¹

SURVEY IN 2014

AOAV, Mechem, MTI, and MINURSO confirmed a total of nearly 0.9km² as contaminated with CMR through non-technical and technical survey in 2014, as set out in Table 2.

Table 2. Survey in 2014²²

Operator	Areas cancelled	Areas confirmed as contaminated	Area confirmed (m²)
AOAV-MECHEM	0	13	795,017
MTI	0	1	16,813
MINURS0	0	1	76,542
Totals	0	15	888,372

CLEARANCE IN 2014

AOAV and MTI together cleared a total of more than $1.75 \,\mathrm{km^2}$ of CMR contamination in 2014 (see Table 3), up by 75% from $2013.^{23}$ This was due to an increase in battle area clearance (BAC) capacity to address cluster munition strike areas in $2014.^{24}$

Table 3. Clearance of CMR-contaminated area in 2014²⁵

Operator	Area cleared (m²)	Submunitions destroyed	Other UXO destroyed
AOAV-MECHEM	1,436,181	306	289
MTI	320,385	15	8
Totals	1,756,566	321	297

Most of AOAV's mechanical clearance tasks were in the Mijek region. Its BAC team, which operated independently, began operations in the south and concentrated its efforts in the Mehaires region due to high levels of CMR contamination. AOAV reported finding and destroying more items in 2014 due in part to a shift in geographic focus to newly identified areas with higher levels of CMR contamination. It also reported its clearance productivity tripled from 2013 to 2014 due to an increase in the number of deminers and deputy team leaders deployed.²⁶

SAFETY OF CLEARANCE PERSONNEL

No mine action personnel were killed or injured by CMR in 2014.²⁷

ARTICLE 4 COMPLIANCE

Western Sahara is not a state party to the CCM. However, in June 2014, the Saharawi Arab Democratic Republic (SADR) submitted a voluntary CCM Article 7 transparency report to the UN, 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".²⁸

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.

In 2015, MINURSO MACC planned to release up to 2km² of CMR-contaminated areas to the east of the Berm and conduct QA assessment visits to BAC operations.³⁰ The MACC did not expect a change in funding levels for 2015.

Table 4. Clearance of CMR contamination in 2010–14²⁹

Year	Area cleared (m²)
2014	1,756,566
2013	985,000
2012	819,122
2011	1,045,500
2010	2,015,367
Total	6,621,555

As of May 2015, NPA had completed recruitment and was training national staff members to be deployed as two MTTs in August 2015, to carry out initial survey around the village of Bir Lehlou. Throughout 2015, NPA was planning to work closely with SMACO to increase its capacity.³¹

The MACC estimates that with current mine action capacity on the ground, along with the number of known threat areas, it will take approximately 10 years to address high- and medium-threat hazardous areas, including minefields and cluster munition strike areas.³²

ENDNOTES

- Response to Mine Action Monitor questionnaire by Sarah Holland, Programme Officer, UNMAS, 18 May 2015.
- 2 Ibid. Bir Lahlou, Tifariti, and Mehaires are considered to make up the north, and Mijek and Agwanit the south. Email from Graeme Abernethy Programme Manager, UNMAS, 9 June 2015.
- 3 Saharawi Arab Democratic Republic, voluntary Convention on Cluster Munitions Article 7 Report, Form F, 20 June 2014 and Cluster Munition Monitor, "Cluster Munition Ban Policy: Western Sahara", updated 12 August 2014, at: http://www.the-monitor.org/index.php/cp/display/region_profiles/ theme/4001.
- 4 Email from Karl Greenwood, Chief of Operations, AOAV/Mechem Western Sahara Programme. AOAV. 18 June 2012.
- 5 Responses to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015 and 24 February 2014; and email from Gordan Novak, Senior Technical Advisor, AOAV Western Sahara, 25 July 2014.
- 6 Email from Gordan Novak, AOAV Western Sahara, 25 July 2014.
- 7 Emails from Diek Engelbrecht, Senior Technical Advisor, MINURSO MACC, 30 March 2010; and from Penelope Caswell, AOAV, 18 May 2010, incorporating information from James Mbogo, MINURSO MACC.
- 8 Email from Graeme Abernethy, UNMAS, 9 June 2015.
- 9 Response to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015.
- 10 Report of the UN Secretary-General on the situation concerning Western Sahara, UN Security Council, UN doc. S/2013/220, 8 April 2013; and email from Sarah Holland, UNMAS, 5 June 2015. Mechem provided the mechanical clearance component of the AOAV/Mechem project.
- 11 Response to Cluster Munition Monitor questionnaire by Sarah Holland, UNMAS, 24 February 2014; and email, 25 February 2014.
- 12 Interview with Ruth Simpson, Programme Manager, AOAV, Geneva, 1 April 2014.
- 13 Email from Samu Ami, Coordinator, SMACO, 21 May 2015.
- 14 Email from Sarah Holland, UNMAS, 5 June 2015.
- 15 Response to Mine Action Monitor questionnaire by Melissa Fuerth, Head of Programmes, AOAV, 7 May 2015; and email from Melissa Andersson, Country Director, NPA, 11 April 2015.
- 16 Responses to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015 and Melissa Fuerth, AOAV, 7 May 2015. AOAV reported its MTT1 and MTT2 teams were each 15 strong while its MCT consisted of eight persons.
- MTI's total staff included international, national, and support staff, including guards. The change in MACC implementing partners in September 2014 resulted in a change in staffing levels, mine and ERW clearance capacity, and clearance priorities. Response to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015.
- 18 Ibid.; and response to Monitor questionnaire by Melissa Fuerth, AOAV, 7 May 2015.
- 19 Response to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015.
- 20 Response to Mine Action Monitor questionnaire by Melissa Fuerth, AOAV, 7 May 2015.
- 21 Response to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015.
- 22 Ibid. Figures as reported by UNMAS. In May 2015, AOAV no longer had access to data on its survey activities in 2014. Response to Mine Action Monitor questionnaire by Melissa Fuerth, AOAV, 7 May 2015.

- 23 Previously, in 2013, AOAV conducted new surveys of cluster munition strike sites that resulted in the discovery of an additional 22 strike zones, cleared 10 areas contaminated by cluster munitions over a total area of almost 1km2 (985,000m2), destroying 1,046 submunitions as well as three anti-vehicle mines. Fifteen EOD spot tasks were also conducted, destroying 12 items of UXO and five anti-vehicle mines. Response to Cluster Munition Monitor questionnaire by Sarah Holland, UNMAS, 24 February 2014.
- 24 Response to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015.
- 25 Ibid. AOAV reported different figures from those contained in the UNMAS database. It reported carrying out a total of 1,392,541m2 of BAC in 2014, destroying a total of 179 submunitions, three anti-vehicle mines, and 647 items of UXO. Response to Mine Action Monitor questionnaire by Melissa Fuerth, AOAV, 7 May 2015. UNMAS and AOAV were unable to reconcile the figures reported or account for the discrepancies. MTI declined to provide data directly on its clearance operations. Email from Melanie Villegas, Project Executive. MTI. 14 May 2015.
- 26 Response to Mine Action Monitor questionnaire by Melissa Fuerth, AOAV, 7 May 2015.
- 27 Response to Mine Action Monitor questionnaire by Melissa Fuerth, AOAV, 7 May 2015.
- 28 SADR voluntary CCM Article 7 Report, Form F, 20 June 2014 and Cluster Munition Monitor, "Cluster Munition Ban Policy: Western Sahara", updated 12 August 2014.
- 29 See past Cluster Munition Monitor reports on Western Sahara in 2011–13; response to Cluster Munition Monitor questionnaire, 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.
- 30 Response to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015.
- 31 Email from Melissa Andersson, NPA, 2 June 2015.
- 32 Response to Mine Action Monitor questionnaire by Sarah Holland, UNMAS, 18 May 2015.





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