

LEBANON

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

PROGRAMME PERFORMANCE	2015	2014
Problem understood	5	5
Target date for completion of cluster munition clearance	6	6
Targeted clearance	5	5
Efficient clearance	5	5
National funding of programme	7	7
Timely clearance	5	5
Land-release system in place	4	5
National mine action standards	4	5
Reporting on progress	7	7
Improving performance	6	6
PERFORMANCE SCORE: AVERAGE	5.4	5.6

PERFORMANCE COMMENTARY

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

RECOMMENDATIONS FOR ACTION

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

CONTAMINATION

At the end of 2015, Lebanon had 773 areas confirmed to contain CMR, totalling more than 16.3km².¹ Four regions still contain CMR contamination, as set out in Table 1. This compares to 799 areas confirmed or suspected to contain CMR, totalling 17.85km², as at the end of 2014, although the figure should have been 16.1km² as the 1.7km² of land cancelled in 2014 had not been entered into the database.²

A further 178 “dangerous areas” totalling 8.82km² are suspected to contain either CMR or mine contamination,³ a figure unchanged since the end of 2014.⁴ The designated “dangerous areas” are mainly the result of accidents having been reported to LMAC by the local community, and for which further investigation/survey is required in order to confirm the type and extent of suspected contamination.⁵

The difference in total CMR contamination between the end of 2014 and end of 2015 cannot be explained solely by taking into account the area cancelled by non-technical survey, released by clearance, and discovered to be contaminated (but previously unrecorded) during 2015. This is because many of the CMR clearance tasks conducted in 2015 needed to clear a larger area than the one recorded in the database, thereby impacting the baseline contamination area.⁶

Table 1: CMR contamination at the end of 2015⁷

Province	Areas	Area cleared (m ²)
Beqaa	36	1,160,692
Jabal Loubnan	8	264,000
Janoub	246	5,544,253
Nabatiyeh	483	9,349,855
Totals	773	16,318,800

CMR contamination is largely the result of the conflict with Israel in July–August 2006. During the conflict Israel fired an estimated four million submunitions on south Lebanon, 90% of which were dispersed in the last 72 hours of the conflict.⁸ In addition, some CMR still remain from earlier conflicts with Israel in 1978 and 1982.⁹

After the 2006 war, contamination was initially estimated to cover 55km². This estimate was later increased, based on surveys conducted, to almost 58km² across 1,484 areas, over the three regions of Beqaa, Mount Lebanon, and south Lebanon.¹⁰ In 2016, LMAC claimed original contamination had been more than 60km², with almost 44km² having been cleared to date, leaving 16.3km² of contamination to release at the beginning of 2016.¹¹

1 Email from Brig.-Gen. Elie Nassif, Director, LMAC, 14 May 2016; presentation by LMAC at the 19th International Meeting of National Mine Action Programme Directors and UN Advisers, Geneva, 18 February 2016; and Convention on Cluster Munitions (CCM) Article 7 Report (for 2015), Form F.

2 Emails from Brig.-Gen. Elie Nassif, LMAC, 12 May, 17 June, and 2 July 2015.

3 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

4 Emails from Brig.-Gen. Elie Nassif, LMAC, 12 May and 2 July 2015.

5 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, Head of Operations, LMAC, 18 April 2016, Beirut.

6 Telephone interview with Brig.-Gen. Fakhri, LMAC, 14 July 2016.

7 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016; and CCM Article 7 Report (for 2015), Form F.

8 Landmine Action, “Foreseeable Harm: the use and impact of cluster munitions in Lebanon: 2006”, 2006.

9 Ibid.; and interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.

10 CCM Article 7 Report (for 2013) Form F; and Statement of Lebanon, CCM Fourth Meeting of States Parties, Lusaka, September 2013.

11 Presentation by LMAC at the 19th International Meeting of National Mine Action Programme Directors and UN Advisers, Geneva, 18 February 2016.

The baseline estimate of overall contamination continues to be revised (and increased), in part because previously unrecorded contamination is still being discovered; and also because the 33,000m² (per strike) area automatically assigned to CMR tasks by LMAC has been proven in many instances to underestimate the actual task size. For example, based on empirical field data, Mines Advisory Group (MAG) has calculated the average CMR clearance task to be approximately 60,000m²,¹² while Norwegian People's Aid (NPA) previously calculated it to be 65,000m² per task.¹³

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

The United Nations (UN) Mine Action Coordination Centre – south Lebanon (MACC-SL) assumed the role of coordinating CMR clearance in 2007, in cooperation with the National Demining Office (now known as LMAC), and contracted out CMR clearance to non-governmental organisations (NGOs), commercial operators, and government groups.¹⁴ However, not all clearance undertaken in the years immediately following 2006 was in accordance with International Mine Action Standards (IMAS). Some Israeli bombing data has been provided – most recently through the UN Interim Force in Lebanon (UNIFIL) – but has proved to be very inaccurate.¹⁵

Additional CMR may also exist in the Blue Line minefields in the far south of Lebanon, along the border with Israel.¹⁶ Since late 2015, permission has been granted for clearance to be undertaken of some of the Blue Line minefields. Only when clearance begins will the extent to which these mined areas are also contaminated with CMR be revealed.¹⁷

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

the socio-economic impact of remaining clearance.¹⁸ A national NGO, Peace Generation Organization for Demining (POD), supported MAG in carrying out the survey.¹⁹ The survey resulted in MAG recommending 96 tasks for cancellation, covering an estimated 2.8km².²⁰ The remaining 347 tasks surveyed by MAG were recommended for clearance.²¹

In September 2014, at the Fifth Meeting of States Parties to the CCM, Lebanon stated it was reviewing MAG's recommendations for task cancellation and that it hoped to use the survey findings to focus clearance on areas with strong evidence of contamination.²² Lebanon further stated that, as a result of the survey, almost 1.5km² of land of 14.5km² had been released and formally handed over to the owners.²³

After reviewing the 96 tasks recommended by MAG for cancellation, LMAC decided to cancel 51 tasks, totalling an area of 1.7km².²⁴ LMAC decided not to cancel the remaining 45 tasks recommended for cancellation, as following a review it believed these areas to still contain CMR contamination. These tasks therefore remain in the database, and will be tasked for clearance, depending on their assigned priority.²⁵ While LMAC has chosen not to cancel these tasks, information from MAG's NTS will be used to inform pre-clearance plans.²⁶

Furthermore, MAG's pre-clearance NTS revealed contaminated areas ranging from between 10,000m² to 50,000m², and it is believed that LMAC is planning to review this data, which could help to more accurately record the baseline CMR contamination in the surveyed areas, and also assist in the tasking of more accurately delineated areas for clearance.²⁷

New, previously unrecorded CMR contamination continues to be discovered in south Lebanon, and during 2015, 13 new CMR-contaminated areas were discovered, totalling 429,000m² according to LMAC.²⁸ These new areas are automatically recorded in the database as 33,000m² per area, but the actual CMR contaminated area may prove to be larger or smaller, and can only be more accurately determined after survey/investigation. The size of CMR contamination depends on a variety of factors, including the type of cluster munition used,

12 Interview with Bekim Shala, Programme Manager, MAG, Nabatiyeh, 14 April 2016.

13 Email from Eva Veble, Lebanon Programme Manager, NPA, 8 July 2016.

14 Human Rights Watch, "Flooding South Lebanon. Israel's use of cluster munitions in Lebanon in July and August 2006", 16 February 2008.

15 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016.

16 Ibid.

17 Ibid.

18 MAG, "Cluster Munition Contamination in Lebanon using survey data", September 2014.

19 Email from Bekim Shala, MAG, 14 June 2016.

20 Ibid. Of the 96 tasks, three were recommended for cancellation due to their proximity to others, with a recommendation that multiple tasks be merged in the contamination database. One additional task was recommended for cancellation because of duplication in database coordinates. The remaining 347 tasks surveyed by MAG were recommended for clearance.

21 Email from Bekim Shala, MAG, 14 June 2016.

22 Statement of Lebanon, CCM Fifth Meeting of States Parties, San José, 2–5 September 2014.

23 Ibid.

24 Email from Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.

25 Interview with Oussama Merhi, UNDP Mine Action Advisor for LMAC, in Geneva, 26 June 2015; interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016; and email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

26 Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.

27 Email from Bekim Shala, MAG, 21 June 2016.

28 CCM Article 7 Report (for 2015), Form F; and email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

terrain, and whether the weapon was ground-launched or dropped from an aircraft.²⁹ Some areas contain contamination resulting from both ground-launched and air-dropped cluster munitions, which can further complicate the picture.³⁰

LMAC has also recorded historical CMR tasks in south Lebanon as 33,000m² in size. In the Mount Lebanon region, though, cluster strikes have been recorded as 10,000m² per task, as the 1982 cluster munition strikes were not as intense as the 2006 strikes in the south.³¹ At present, clearance tasks assigned to clearance operators by LMAC are deemed to already include survey data, and LMAC does not permit additional survey to be conducted by operators other than during pre-clearance assessments. That said, in June 2016, MAG reported having been recently tasked by RMAC to conduct pre-clearance NTS on some CMR-contaminated areas, which can be viewed as a positive development.³²

Lebanon has set three levels of priority regarding mine action. The first is to address infrastructure to allow those displaced by the 2006 conflict to return home; the second is to release agricultural land; and the third is to release land for activities other than agriculture. The first priority goal was met in 2009, and clearance of agricultural areas and development areas are now the priority targets.³³ Indeed, CMR continue to affect the agricultural community, particularly in Beqaa and south

Lebanon. The pre-clearance NTS by MAG of the 347 tasks recommended for clearance revealed that in four-fifths, contamination had made access to resources unsafe or had blocked access altogether.³⁴ Nonetheless, many landowners and workers still enter CMR-contaminated areas, declaring they have no choice.³⁵

LMAC has reported that around 85% of cleared land has been used for socio-economic purposes, such as by farmers to generate a source of income.³⁶ Post-clearance surveys concerning cluster strike areas, carried out by LMAC in collaboration with clearance operators, have revealed that 78% of cleared land was used for agriculture, 15% for pasture, and the remainder for residential and infrastructure development.³⁷ LMAC aims to enhance monitoring of post-clearance activities, and of how clearance affects livelihood and socio-economic development.³⁸ Comprehensive implementation of pre- and post-impact surveys by operators, using an agreed format, could support to achieve this aim.³⁹

In 2015, 12 people were injured by CMR (all male, 11 of whom were 18 years old or under), and 1 man was killed.⁴⁰

Other ERW and Landmines

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

PROGRAMME MANAGEMENT

Established in 1998 by the Council of Ministers, the Lebanon Mine Action Authority (LMAA) is the responsibility of the Ministry of Defence and is chaired by the Minister of Defence himself. The LMAA has overall responsibility for Lebanon's mine action programme. In 2007, a national mine action policy outlined the structure, roles, and responsibilities within the programme, and LMAC was tasked to execute and coordinate the programme on behalf of the LMAA.⁴¹ LMAC also manages risk education and victim assistance.⁴²

LMAC, part of the LAF,⁴³ is based in Beirut. Since 2009, the Regional Mine Action Centre (RMAC), based in Nabatiye, and a part of LMAC, has overseen operations in south Lebanon and western Beqaa, under LMAC

supervision.⁴⁴ The Director of LMAC is typically rotated every couple of years, and in recent years there has been a high turnover of the colonels who have run the RMAC. Both factors have negatively affected the management of the two mine action centres.

There is said to be generally good coordination and collaboration between the LMAC/RMAC and clearance operators. In south Lebanon, coordination meetings between RMAC and operators take place at least monthly, during which clearance operations, quality assurance (QA), and other operational issues are openly discussed.⁴⁵

29 Interview with Oussama Merhi, UNDP, LMAC, in Geneva, 26 June 2015; and CCM Article 7 Report (for 2015), Form F.

30 Interview with Oussama Merhi, UNDP, LMAC, in Geneva, 26 June 2015.

31 CCM Article 7 Report (for 2015), Form F; and interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 May 2016.

32 Email from Bekim Shala, MAG, 21 June 2016.

33 LMAC, "Mid-term Review to Strategy 2011-2020, Milestone 2013", August 2014; and email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

34 MAG, "Cluster Munition Contamination in Lebanon using survey data", September 2014, p. 4.

35 Ibid.

36 Statement of Lebanon, First CCM Review Conference, Dubrovnik, 7-11 September 2015.

37 Statement of Lebanon, CCM Fifth Meeting of States Parties, San José, September 2014.

38 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

39 Email from Craig McDiarmid, Programme Manager, NPA, 8 June 2016.

40 CCM Article 7 Report (for 2015), Form F; and email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

41 LMAC, "Mid-term Review to Strategy 2011-2020, Milestone 2013", August 2014, pp. 4-5.

42 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.

43 LMAC, "2012 Annual Report Lebanon Mine Action Centre", March 2013.

44 LMAC, "Lebanon Mine Action Strategy 2011-2020", September 2011, p. 4.

45 Interview with Lt.-Col. Henry Edde, Director, RMAC, Nabatiyeh, 12 April 2016.

A donor support group meeting is convened annually, which brings together donors, operators, and the national authorities.⁴⁶ UN Development Programme (UNDP) personnel, funded by the European Union (EU), are also seconded to LMAC and RMAC, providing support towards capacity building, including transparency reporting, strategic reviews, IMSMA database entry, community liaison officers, and QA. UNDP does not provide technical assistance on operational decisions.⁴⁷

Strategic Planning

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

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

Operators

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

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

In 2015, MAG deployed five BAC clearance teams, down from six teams in 2014. The decrease was due to decreased funding, mainly as a result of currency depreciation. In addition, MAG deployed eight machines for mine clearance. In 2016, MAG expected to be able to

increase its BAC capacity through additional funding. MAG is the only international operator in Lebanon with mechanical assets to support manual clearance operations, and these assets can be used by other organisations upon request of LMAC.⁵⁴

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

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

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

Standards

Lebanon developed its NMAS in 2010.⁵⁹ LMAC has been working with the UNDP, under a project funded by the European Union, and other partners to revise the standards.⁶⁰ The revision is taking place with a view to enhancing efficiency while respecting IMAS, as well as to "add new modules that were not present in our NMAS version one, as well as relevant modules that are not present in the IMAS such as MVA".⁶¹ LMAC originally expected to finish the revision of NMAS by the end of 2015,⁶² but as at May 2016 the revision was in the process of being proof-read.⁶³ The NMAS will then need to be officially approved by the Ministry of Defence.⁶⁴

While clearance operators have been consulted and have submitted recommendations for the NMAS revision,⁶⁵ there are concerns that some key recommendations concerning land release for both CMR and landmines may not be adequately reflected in the final revision. It is hoped that LMAC will consult on the revised NMAS draft with all relevant stakeholders before the standards are finalised.

46 Ibid.; and interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 18 May 2016.

47 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016.

48 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.

49 Response to Cluster Munition Monitor questionnaire by Brig.-Gen. Imad Odiemi, LMAC, 2 May 2014.

50 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014.

51 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016.

52 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

53 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016; and CCM Article 7 Report (for 2015), Form F.

54 Email from Bekim Shala, MAG, 3 April 2016.

55 Email from Craig McDiarmid, NPA, 13 April 2016.

56 CCM Article 7 Report (for 2014) Form F.

57 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

58 Statements of Lebanon, CCM First Meeting of States Parties, Vientiane, September 2010; CCM Fourth Meeting of States Parties, Lusaka, September 2013; CCM Fifth Meeting of States Parties, San José, September 2014; First CCM Review Conference, Dubrovnik, 7–11 September 2015; Mine Action Support Group meeting, 18 October 2013; CCM intersessional meetings, 9 April 2014; and CCM Article 7 Report (for 2013), Form F.

59 Email from Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.

60 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Rory Logan, Programme Manager, NPA, 20 April 2015; Statement of Lebanon, First CCM Review Conference, Dubrovnik, 7–11 September 2015.

61 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Rory Logan, NPA, 20 April 2015.

62 Email from Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.

63 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

64 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016.

65 Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016; and Craig McDiarmid, NPA, Tyre, 12 April 2016.



Fatima Bahmad, deputy team leader, addressing the MAG team.
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BLU63b submunition, Lebanon. © NPA

At present, clearance operators do have an opportunity to discuss with LMAC/RMAC specific land release considerations for assigned clearance tasks that arise during the pre-clearance assessment stage of operations. This may result in the refining of the task size or approved land release specifications.⁶⁶ However, this approach is contingent on the decision of individual LMAC/RMAC officials and the process would benefit from a more systematic approach using objective land release principles. This could usefully be set out in the revised NMAS. In addition, the new standards should permit and facilitate clear reporting of land release as per the IMAS: area cancelled by NTS, area reduced by technical survey, and land released by clearance.

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

Quality Management

Between 10% and 40% sampling is conducted during clearance operations by the organisation site supervisor and QA officer; 10% sampling is conducted by the LMAC QA/QC (quality control) officer during work; and 30% sampling is conducted by LMAC's sampling team at the end of the task. Sampling was conducted on all areas released during 2015.⁶⁷

Information Management

IMSMA is used by LMAC and RMAC to record land release in Lebanon. LMAC has reported that the system for database entry now more accurately reflects operational data, especially in instances where the task size/area of CMR-contamination exceeds the original task size in the database.⁶⁸ Previously, any area cleared in excess of the original task size was entered into the database as a new task. Now, while the contaminated area and area cleared are both recorded, area in excess of the original task size is not recorded as additional tasks in the database.⁶⁹

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

Furthermore, during clearance, a single task may not always be completed in a single assignment, as clearance of separate sections of the task, such as the "fade-out" area or the "disclaimed" area (area for which permission is not granted for clearance, and which requires signed release papers), may be postponed in favour of higher priority/high-impact tasks elsewhere, and returned to at a later date. In such instances, the fade-out, disclaimed, and/or uncleared areas are marked as separate subtasks in the database, although they are linked through numerical labelling to the original task. This explains, in part, the changing number of hazardous areas between reporting periods.⁷⁰ It should be noted that from 2016 disclaimed areas can be cleared without the landowner's permission.⁷¹

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

66 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016.

67 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

68 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016.

69 Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.

70 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 May 2016.

71 Email from Brig.-Gen. Elie Nassif, LMAC, 5 July 2016.

LAND RELEASE

The total amount of CMR-contaminated areas released by clearance in 2015 was just under 1.69km² according to information provided to Mine Action Review by LMAC, compared to 2.1km² in 2014.⁷² This information differs from the figures provided by Lebanon in its Article 7 report for 2015, as discussed below.

No area was reported as reduced by technical survey in 2015, but 92,614m² was reported as having been cancelled through NTS in 2015.⁷³

Survey in 2015

In 2015, Lebanon's Article 7 report recorded 17 areas totalling 92,614m² released through NTS.⁷⁴ This compared to 51 areas totalling 1.7km² cancelled in 2014, following MAG's pre-clearance NTS project.⁷⁵

Furthermore, in 2015, LMAC confirmed 13 previously unrecorded areas, totalling 429,000m², as CMR-contaminated (i.e. a standardized 33,000m² allocated per each new area/task in the database).⁷⁶ New CMR-contaminated areas are typically the result of call-outs from the public, alerting LMAC to previously undiscovered explosive remnants of war (ERW). LMAC community liaison officers visit each call-out, followed by LMAC's chief of operations when necessary. New hazardous areas are recorded for those call-outs where CMR contamination is confirmed.⁷⁷

Clearance in 2015

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

Manual clearance is the primary method of clearing CMR in Lebanon, but machines are sometimes deployed to make access lanes and remove rubble. MDDs are sometimes deployed as a secondary asset for mine clearance operations, but are not used for CMR clearance.⁷⁸

Clearance figures include items destroyed during rapid response call-outs.⁸⁰ The clearance figures reported in Table 2 vary from those reported in Lebanon's latest CCM Article 7 report, in which it is claimed that 1,637,492m² was cleared in 2015, and a further 189,649m² re-cleared.⁸¹ The number of submunitions reportedly destroyed also differs. This inconsistency in the data is said to be because the Article 7 report does not include clearance data from the Engineering Regiment of the LAF.⁸²

In June 2016, NPA reported a recent improvement in the tasking process, with tasks being assigned sufficiently in advance to enable pre-impact assessments to be conducted. Often, this had not been possible due to time limitations caused by a "last minute" allocation of tasks and subsequent deployment of teams.⁸³



Table 2: Clearance of CMR-contaminated area in 2015⁷⁹

Operator	Area cleared (km ²)	Submunitions destroyed	APM destroyed	AVM destroyed	UXO destroyed
MAG	391,345	359	12	39	33
DCA	256,037	870	0	0	38
NPA	409,600	271	0	0	60
POD	580,510	1,788	0	0	0
LAF/Engineering Regiment	50,241	40	0	0	0
Totals	1,687,733	3,328	12	39	131

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

72 Email from Brig.-Gen. Elie Nassif, LMAC, 12 May 2015.

73 Ibid.

74 CCM Article 7 Report (for 2015), Form F ; and email from Brig.-Gen. Elie Nassif, LMAC, 5 July 2016.

75 Emails from Brig.-Gen. Elie Nassif, LMAC, 12 May and 2 July 2015.

76 CCM Article 7 Report (for 2015), Form F; and email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

77 Ibid.

78 Interview with Lt.-Col. Henry Edde, RMAC, Nabatiyeh, 12 April 2016.

79 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016. Clearance data provided by MAG and NPA was inconsistent with LMAC data. MAG reported clearing 15 areas in 2015 totalling 1,120,324m², destroying 317 submunitions and 21 items of UXO while NPA reported clearing 12 areas totalling 570,605m², and destroying 275 submunitions and 58 items of UXO. DCA does not provide data to Mine Action Review so the accuracy or quality of their clearance output is unclear.

80 Interview with Lt.-Col. Henry Edde, RMAC, Nabatiyeh, 12 April 2016.

81 CCM Article 7 Report (for 2015), Form F.

82 Email from Brig.-Gen. Elie Nassif, LMAC, 5 July 2016.

83 Email from Craig McDiarmid, NPA, 8 June 2016.

ARTICLE 4 COMPLIANCE

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

The Director of LMAC asserts that Lebanon is committed to complete CMR clearance by 2020, if clearance capacity does not decrease.⁸⁴ However, fewer BAC teams, discovery of previously unrecorded CMR-contaminated areas, and the impact of working in difficult terrain, have all been identified as obstacles to meeting this deadline.⁸⁵ Lebanon is in the process of implementing a second mid-term review of the National Mine Action Strategy, and has pledged to report on the findings in 2017.⁸⁶

Clearance of CMR-contaminated land was expected to be completed by the end of 2016, in accordance with the 2011–20 national strategy.⁸⁷ However, meeting this target was contingent on maintaining the number of BAC teams needed.⁸⁸ In May 2012, stakeholders believed the 2016 target date was reasonable if both funding and the number of teams stabilised or increased, and if contamination estimates proved accurate. A review of the 2011–20 strategy in early 2014 confirmed that with existing capacity it will not be possible to finish CMR clearance before 2020 at the earliest.⁸⁹

Lebanon's most recent CCM Article 7 report (for 2015) estimates that 40 BAC teams would be needed in order to complete CMR clearance by 2020.⁹⁰ This equates to an additional 15 to 19 BAC teams that would be required, based on capacity as at the end of 2015.⁹¹ A more accurate estimate of the required capacity will be made during the second mid-term assessment of the strategic plan that is currently under way.⁹²

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

Lebanon has reported contributing US\$9 million annually towards mine action in Lebanon, including CMR and mine clearance, which covers administrative staff, two sampling teams, three NTS teams, two mine clearance teams, two BAC teams, four mechanical demining teams, and eight MDD teams, in addition to the operations and QA/QC staff who manage and monitor clearance activities.⁹⁴

Table 3: Five-year summary of clearance⁹³

Year	Area cleared (km ²)
2015	1.69
2014	2.10
2013	2.47
2012	2.98
2011	2.51
Total	11.75

Lebanon received US\$13.5million in international cooperation and assistance for its mine action work, including mine and CMR clearance, risk education, victim assistance, and capacity building.⁹⁵ There are concerns that the refugee crisis, resulting from the conflict in neighbouring Syria, may negatively impact on mine action funding in Lebanon. The EU has indicated that its funding for CMR and mine clearance, currently provided to DCA, Handicap International, MAG, and NPA, will likely not be extended after the end of the current grant period of August 2018.⁹⁶

While operators agree that lack of capacity is certainly holding back CMR clearance, it is also believed that swifter progress could come from improved land release.⁹⁷ This warrants further attention from LMAC as well as other mine action stakeholders in Lebanon.



Cluster munition clearance in the Bekaa valley, Lebanon. © Sean Sutton/MAG

84 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

85 Ibid; and CCM Article 7 Report (for 2015), Form F.

86 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.

87 LMAC, "Mid-term Review to Strategy 2011–2020", Milestone 2013", August 2014.

88 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011.

89 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014.

90 CCM Article 7 Report (for 2015), Form F.

91 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016.

92 CCM Article 7 Report (for 2015), Form F.

93 See Cluster Munition Monitor reports on clearance in Lebanon covering 2011–15.

94 Email from Brig.-Gen. Elie Nassif, LMAC, 14 May 2016; and CCM Article 7 Report (for 2015), Form F.

95 CCM Article 7 Report (for 2015), Form F.

96 Feedback from clearance operators, during research field visit to Lebanon, May 2016.

97 Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016, and Craig McDiarmid, NPA, Tyre, 12 April 2016.