PROGRAMME PERFORMANCE	For 2015	For 2014
Problem understood	6	6
Target date for completion of mine clearance	5	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	5	5
Reporting on progress	7	7
Improving performance	6	6
PERFORMANCE SCORE: AVERAGE	5.5	5.7

PERFORMANCE COMMENTARY

Lebanon has been falling further behind its own targets for mine clearance, though its 2016 decision to initiate clearance along the Blue Line should help aid progress. While mine clearance capacity is certainly one factor impacting progress, there are also improvements that could also be made to land release methodology, including with regard to specified clearance depth, and the utility of mandated fadeout from areas where no contamination is found. Proposed strengthening of land release methodology is still to be embodied in national mine action standards, which are currently being revised.

RECOMMENDATIONS FOR ACTION

- **Lebanon should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.**
- **Where possible, non-technical survey (NTS) and technical survey should be used to more accurately define areas of actual contamination, factoring in the required fadeout distance, especially with respect to militia minefields in northern Lebanon. This would also help more accurately establish a national baseline of mine contamination.**
- **The Lebanon Mine Action Centre (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. As part of this process, LMAC should consider reflecting the views of humanitarian demining operators on issues such as the specified clearance depth and fadeout.**
- **Where appropriate, LMAC should use demining machinery and mine detection dogs (MDDs) as primary as well as secondary clearance assets.**
- **LMAC should cross-check information entered into the Information Management System for Mine Action (IMSMA) database, to ensure mine contamination and land release data are being assessed and recorded accurately.**
- **The United Nations Interim Force in Lebanon (UNIFIL) should explore the possibility of resuming humanitarian demining operations.**

CONTAMINATION

As at the end of 2015, Lebanon had 29km^2 of confirmed mined area, across 1,462 confirmed hazardous areas (CHAs), as set out in Table 1, and more than 5.25km^2 of mined area divided into 626 "tasks" along the Blue Line.[1]

A further 178 "dangerous areas" totalling 8.8km^2 were suspected to contain either cluster munition remnants (CMR) or mines, an area which has remained unchanged since the end of 2014.[2] LMAC planned to survey some of the dangerous areas during 2016, depending on the assigned prioritisation of the tasks.[3] An additional 93 dangerous areas totalling almost 2.9km^2 were suspected to contain booby-traps, some of which fall under the APMBC definition of an anti-personnel mine.[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 and/or survey is needed to confirm the type and extent of contamination.[5]

1 Email from Brig.-Gen. Elie Nassif, Director, Lebanon Mine Action Centre (LMAC), 21 May 2016. The Blue Line represents the UN's border demarcation between Lebanon and Israel of 7 June 2000 for the purposes of determining whether Israel had fully withdrawn from Lebanon.

2 Emails from Brig.-Gen. Elie Nassif, LMAC, 2 July and 15 October 2015.

3 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.

4 Emails from Brig.-Gen. Elie Nassif, LMAC, 2 July and 15 October 2015.

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

Table 1: Contamination by province as at end 2015[6]

Province	CHAs	Area (m^2)
Al Beqaa	38	1,484,173
Al Janoub (south Lebanon)	214	1,492,107
Al Nabatiyeh (south Lebanon)	786	6,717,764
Jabal Loubnan (Mount Lebanon)	348	19,092,295
Al Shimal (north Lebanon)	75	301,618
Beirut	1	1,000
Totals	**1,462**	**29,088,957***

*In addition, 5,251,007m^2 of mined area exists along the Blue Line.

The 29km^2 of contamination, excluding the Blue Line, represents an increase in overall baseline contamination over the 28.2km^2 of contaminated area as at the end of 2014. The difference in total mine contamination has not yet been satisfactorily explained.

Lebanon's mine contamination is largely a legacy of 15 years of earlier civil conflict and Israeli invasions of south Lebanon (in 1978 and 1982), and subsequent occupations that ended in May 2000. Mines affect the north and south of the country, though the majority are in the south. The minefields in north Lebanon and Mount Lebanon are typically "militia" minefields (i.e. were laid without a pattern and for which minefield maps do not exist), and were laid by multiple actors during the civil war. The minefields in the south are typically conventional minefields, where the location of the mines is identified on minefield maps.[7]

Previously unrecorded contamination, notified by members of the public, and typically investigated by rapid response units, is only recorded as a CHA after survey.[8]

The mid-term review of Lebanon's 2011–20 national strategy stated that as at end September 2013, of the total 44.5km^2 of mined area (excluding the Blue Line), almost 21.5km^2 (48%) had been cleared and 23km^2 (52%) remained.[9] The review also reported that, as at 2013, one-quarter of the 9.5km^2 of Blue Line minefields had been cleared, leaving almost 7.3km^2 to release.[10] According to the mid-term review, clearance of Blue Line minefields was behind target, due to underfunding and political decisions.[11] In 2016, LMAC reported that Lebanon had taken the decision to initiate clearance on the Blue Line itself.[12] As at September, operators were seeking international funding for that clearance, though it was unclear which minefields would be tasked for clearance.

Mines hinder socio-economic development, restricting access to land and productive resources. Most contamination is on valuable agriculture land.[13] According to LMAC, mines along the Blue Line negatively affect more than 200,000 people.[14] It has been reported that people are crossing the Blue Line to harvest olive groves and graze livestock.[15]

6 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.

7 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

8 Ibid.

9 LMAC, "Mid-term review to strategy 2011–2020, milestone 2013", August 2014, pp. 18 and 37.

10 Ibid.

11 Ibid.

12 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016; and interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

13 Emails from Brig.-Gen Elie Nassif, LMAC, 12 May 2015; Jacqui Brownhill, Desk Office, Mines Advisory Group (MAG), 1 May 2015; and Catherine Smith, Deputy Desk Officer, Handicap International (HI), 20 March 2015.

14 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.

15 Interview with Henri Francois Morand, UN Mine Action Service (UNMAS), Naquaora, 14 April 2016; and Report of the UN Secretary-General on the implementation of Security Council Resolution 1701 (2006), UN doc. S/2016/189, 26 February 2016, p. 4.

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.[16]

LMAC, part of the Lebanese Armed Forces (LAF),[17] 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.[18] LMAC's director is typically changed every couple of years. The high turnover of senior staff has negatively affected the management of the two mine action centres.

Coordination and collaboration between LMAC/RMAC and clearance operators is said to be generally good. In south Lebanon, coordination meetings between RMAC and operators take place at least monthly, at which clearance, QA, and other operational issues are discussed.[19]

A donor support group meeting is convened annually, bringing together donors, operators, and the national authorities.[20] UN Development Programme (UNDP) personnel, funded by the European Union (EU), are also seconded to LMAC and RMAC to support capacity building, including for reporting, strategic review, IMSMA database entry, quality management, and community liaison. UNDP does not provide technical assistance on operational decisions.[21]

In 2015, the Ministry of Defence, represented by LMAC, signed a Memorandum of Understanding with the Geneva International Centre for Humanitarian Demining (GICHD) to manage and coordinate the Arabic Outreach Programme for Mine Action. Planning, management, and coordination of the Programme are due to be handed over to LMAC by the end of 2017, and LMAC, through the Regional School for Humanitarian Demining in Lebanon (RSHDL), will serve as a regional centre for the Programme's activities.[22]

Strategic Planning

In September 2011, LMAC adopted a strategic mine action plan for 2011–20.[23] The plan called for clearance of all cluster munition remnants (CMR) by 2016, and completion of mine clearance by 2020. Both goals are dependent on capacity, but progress has fallen well short of targets.

A first mid-term review to the strategy was conducted in January–March 2014 to assess progress towards the 2013 milestone, and to adjust the 2016 and 2020 milestones accordingly. The review revealed that in 2011–13 mine clearance was slow, suffering from underfunding and fewer operating teams than foreseen, while previously unrecorded contaminated areas were identified.[24] A second mid-term assessment was being undertaken in 2016, with the results due to be published in 2017.[25]

Demining along the border with Israel was said to depend on "political developments".[26] Subsequently, in 2016, LMAC reported that the Lebanese government had taken the decision to initiate clearance on the Blue Line.[27]

Lebanon has set three levels of priority for mine action operations. The first was 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 goal was met in 2009, and clearance of agricultural and development areas are now the priority targets.[28] LMAC aims to better monitor post-clearance activities and assess how clearance supports livelihood and socio-economic development.[29] Systematic pre- and post-impact surveys by operators, using an agreed format, could support this.[30]

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

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

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

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

20 Ibid.; and interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 18 April 2016.

21 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

22 Statement of Lebanon, CCM Fifth Meeting of States Parties, San José, 2–5 September 2015.

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

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

25 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

26 Presentation by Maj. Bou Maroun, RMAC, Nabatiye, 4 May 2012; and response to Landmine Monitor questionnaire by Leon Louw, Programme Manager, UN Mine Action Support Team (UNMAST), 7 May 2014.

27 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

28 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014; and email from Brig.-Gen Elie Nassif, LMAC, 21 May 2016.

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

30 Email from Craig McDiarmid, Programme Manager, Norwegian People's Aid (NPA), 8 June 2016.

Operators

In 2015, mine clearance was conducted by international operators DanChurchAid (DCA), Handicap International (HI), Mines Advisory Group (MAG), and the LAF. Capacity was of a total of eleven mine clearance teams (nine working for international non-governmental organisations (NGOs) and the other two working for the LAF Engineering Regiment); five mechanical teams (four operated by the Engineering Regiment and one by MAG); and eight MDD teams operated by the Engineering Regiment.[31] This represents an increase of one mechanical and one MDD team over 2014.

MDDs and machines are mostly used as secondary assets, and in some cases for technical survey. Machines are used for ground preparation, including rubble removal and vegetation cutting.[32] However, often the terrain is not suitable for MDDs or machines. LMAC has consistently raised concerns over lack of survey and clearance capacity to address mine and CMR contamination, which it ascribes to a lack of funding.[33] Furthermore, based on indications from operators, LMAC feared demining capacity would decrease in the second half of 2016.[34]

In 2015, MAG deployed two clearance teams and eight mechanical assets in support of manual clearance. This represented a slight decrease in capacity in comparison to 2014.[35] MAG also reported plans to conduct a national comprehensive survey of mined areas, if funding were available.[36]

HI deployed three manual clearance teams at the beginning of 2015, then added a fourth in March, bringing the total to four teams of seven deminers each, all working in north Lebanon. HI's capacity remained at four teams in 2016.[37] HI's mine clearance operations in north Lebanon and the Mount Lebanon area are determined by seasonal factors: clearance of minefields below 1,000 metres occurs during winter (October to April), and then clearance of tasks above 1,000 metres begins in April and continues through the summer, depending on snow.[38]

The 2015 capacity of the ER (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 MDD teams, in addition to the operations and QA/QC (quality control) staff who manage and monitor clearance activities.[39]

UNIFIL was established in 1978[40] to confirm withdrawal of Israeli forces from southern Lebanon (which occurred in 2000); restore international peace and security; and assist the Government of Lebanon to re-establish its authority in the area.[41] The primary task of UNIFIL mine clearance teams has been to clear access lanes through minefields in order to visibly demarcate the 118km-long Blue Line. UNIFIL does not generally conduct clearance on the Blue Line for humanitarian purposes but only to facilitate placement of markers by clearing three-metre-wide lanes into mined areas.[42] UNMAS continues to engage with UNIFIL regarding the possibility of UNIFIL re-engaging in humanitarian mine action, but as at September 2016, this had not yet occurred.[43] A total of 134 demining personnel were validated by the UN Mine Action Service Lebanon (UNMAS Lebanon) during 2015, which consisted of two rotations of the UNIFIL troop contributing countries (TCCs). One mechanical team was deployed, by the Cambodian Field Engineering Platoon.[44]

At the beginning of 2015, operational assets were provided by two UNIFIL TCCs: Cambodia and China. These assets comprised five manual clearance teams, one mechanical clearance team, and one explosive ordnance disposal (EOD) team. UNIFIL expected to maintain that capacity throughout 2016.[45] This represents a decrease in capacity compared to the 306 demining personnel validated by UNMAST during 2014, when operational assets consisted of ten demining teams.[46]

UNMAS Lebanon, a project of the UN Mine Action Service (UNMAS) trains UNIFIL demining units and monitors and validates UNIFIL mine clearance along the Blue Line to ensure compliance with IMAS. UNMAS Lebanon operating funds come from UNIFIL's assessed peacekeeping budget.[47]

31 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.

32 Ibid.

33 Statements of Lebanon, Convention on Cluster Munitions (CCM) First Meeting of States Parties, 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 Meetings, 9 April 2014; and CCM Article 7 Report (for 2013), Form F.

34 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.

35 Email from Bekim Shala, MAG, 8 April 2016.

36 Ibid.

37 Email from Roberto Sarzano, Mine Action Coordinator, HI, 22 September 2016.

38 Email from Chris Chenavier, HI, 7 April 2016.

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

40 UN Security Council Resolutions 425 (1978) and 426 (1978).

41 UNIFIL, "UNIFIL Mandate", at: http://unifil.unmissions.org/Default.aspx?tabid=11553&language=en-US.

42 Presentation by Maj. Pierre Bou Maroun, RMAC, Nabatiye, 4 May 2012; and email from Henri Francois Morand, UNMAS, 2 October 2015.

43 Emails from Sarah Holland, Programme Officer, UNMAS, 30 September 2016; and Henri Francois Morand, UNMAS, 13 October 2016.

44 Ibid.

45 Ibid.

46 Email from Henri Francois Morand, UNMAS, 2 October 2015.

47 Email from Sarah Holland, UNMAS, 30 September 2016.

Standards

Lebanon developed NMAS in 2010.[48] LMAC has been working with UNDP to revise the standards, under a project funded by the EU.[49] The revision is seeking to enhance efficiency while respecting IMAS, as well as to "add new modules that were not present in our NMAS version one, as well as relevant modules that are not present in the IMAS, such as mine victim assistance".[50] LMAC had expected to finish the revision by the end of 2015,[51] but the standards were still to be finalised as at September 2016. The NMAS will then need to be approved by the Ministry of Defence.[52] Based on the new version of the NMAS, implementing agencies will develop their own standing operating procedures (SOPs).[53]

While clearance operators have been consulted and have submitted recommendations for the NMAS revision,[54] there are concerns that some key recommendations concerning land release for both landmines and CMR may not be adequately reflected in the final revision. It is hoped that LMAC will consult on the revised NMAS draft with all relevant stakeholders before the standards are finalised.

At present, clearance operators do have an opportunity to discuss with LMAC/RMAC specific land release considerations for assigned clearance tasks that arise during pre-clearance assessment. This may result in the refining of the task size or approved land release specifications.[55] 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. The process could usefully be incorporated in the revised NMAS. In addition, the new standards should enable clear reporting of land release as per the IMAS: area cancelled by NTS, area reduced by technical survey, and land released by clearance.

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 officer during work; and 30% sampling is conducted by LMAC's sampling team at the end of the task. Sampling was conducted in all areas released during 2015.[56]

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 reflects operational data more accurately, especially where the task size/area of mine-contamination exceeds the original task size in the database.[57] 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.[58]

Information management in Lebanon could benefit from cross-checking of data entered into IMSMA, and the entry and extraction of land release data.

LAND RELEASE

Total mined area released by clearance in 2015 was almost 0.92km^2, compared with 1.28km^2 in 2014. No land was reported to have been reduced by technical survey or cancelled by NTS.

Survey in 2015

No survey was reported as having been conducted in 2015. In 2014, 0.81km^2 of SHA was cancelled by NTS.

Clearance in 2015

LMAC reported clearance of almost 0.92km^2 in 2015, across 37 mined areas, with the destruction of 601 anti-personnel mines, 61 anti-vehicle mines, and 72 items of unexploded ordnance (UXO) (see Table 2). This is a decrease compared to the 1.28km^2 cleared in 2014.

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

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

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

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

52 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

53 LMAC, "LMAC Newsletter Issue No. 5: 1 January–30 June 2015".

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

55 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

56 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.

57 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 11 April 2016.

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

Table 2: Mine clearance in 2015[59]

Operator	Areas cleared	Area cleared (m²)	AP mines destroyed	AV mines destroyed	UXO destroyed
DCA	14	23,374	10	1	16
HI	18	97,305	264	17	25
MAG	5	235,666	10	39	4
LAF Emergency Response	0	564,186	317	4	27
Totals	**37**	**920,531**	**601**	**61**	**72**

AP = Anti-personnel AV = Anti-vehicle

Furthermore, UNIFIL reported destruction of 46 anti-personnel mines during their 2015 operations on the Blue Line.[60]

An additional 1.69km² was cleared through BAC in 2015.[61]

According to LMAC, mine clearance focuses on CHAs, and most of the tasks assigned for clearance were found to have mines.[62] However, mines were only found in one of the five areas cleared by MAG in 2015, with only UXO found in a second area, but no contamination of any kind in the remaining three.[63] HI reported that 20% of the overall mined area it cleared did not contain mines.[64] This was said to be largely due to the unconventional nature of the militia minefields being cleared by HI in North Lebanon (Batroun, Becharre, and Koura Districts), and Mount Lebanon (Jbeil District) and the fact that the CHAs of these minefield tasks are not always accurately defined. Some clearance tasks were created due to mine incidents having occurred, but subsequently no further contamination was discovered. There have also been incidences of clearance tasks created due to a fear of mines, rather than actual evidence of contamination.

While some clearance task areas do not contain any contamination, others require clearance of a much larger area than recorded in the IMSMA database. HI reported that in 2015 it cleared over 60% more area than the CHA outlined in the task dossiers received from LMAC. Furthermore, HI expected this percentage to be even greater in 2016, with significantly more area cleared than initially tasked, and thousands more mines destroyed than expected.[65] Again, this is largely due to the lack of clearly defined CHAs for militia minefields. There have also been reports of mines being found completely outside the task area, and which were destroyed during clearance of access lanes.

In addition, the CHAs tasked by LMAC to clearance operators do not include obligatory fadeout distances, which can considerably increase the overall size of the task.[66]

Accordingly, in certain areas, additional NTS and technical survey could help to more accurately define areas of actual contamination in the militia minefields. Unfortunately, deployment of MDDs or demining machinery to help facilitate survey and clearance in north Lebanon is limited in scope, due to the climate and terrain of many of the tasks in the region.[67]

Under the current NMAS, the search/clearance depth for mines in Lebanon is 20cm.[68] While LMAC reports that the LAF have occasionally found mines at a depth of 20cm, humanitarian clearance operators have reported that based on empirical evidence from their own operations, mines are typically found much closer to the surface, and not below 15cm.[69] As such, operators view clearance to 20cm as unnecessary, and have recommended that the mandated clearance depth could and should be reduced.[70] Those mines that are found deeper than 15cm are much deeper than 20cm, and hence would not be detected based on a specified clearance depth of 20cm.

59 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016; Clearance data reported by MAG and HI contained inconsistencies with LMAC data. MAG reported clearing five areas in 2015, totalling 657,086m², destroying 10 anti-personnel mines, 39 anti-vehicle mines, and 4 items of UXO. HI reported clearing 16 areas in 2015, totalling 97,569m², destroying 264 anti-personnel mines, 17 anti-vehicle mines, and 19 items of UXO. DCA declined to provide clearance data to Mine Action Review, so cross-verification was not possible.

60 Email from Sarah Holland, UNMAS, 30 September 2016.

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

62 Ibid., 21 May 2016.

63 Email from Bekim Shala, MAG, 8 April 2016.

64 Email from Chris Chenavier, HI, 7 April 2016.

65 Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016; and Chris Chenavier, HI, Toula, 18 April 2016.

66 Interview with Chris Chenavier, HI, 18 April 2016.

67 Ibid.

68 LMAC, "Annual Report 2014", p. 29.

69 Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016; and Chris Chenavier, HI, 18 April 2016.

70 Interview with Chris Chenavier, HI, 18 April 2016.

LMAC encourages clearance operators to prepare an accurate pre-clearance report, and as and when required LMAC/RMAC discusses the required clearance depth for specific tasks with the operator, which may be approved at 13cm instead of 20cm.[71] However, this approach is contingent on the decision of individual officials and the process would benefit from a more systematic approach, which could usefully be set out in the revised NMAS.

Manual clearance is LMAC's preferred primary asset for mine clearance in Lebanon, and a ten-metre fadeout is required for anti-personnel mines, and a twenty-metre fadeout for anti-vehicle mines. In conventional minefields, the fadeout area is typically the responsibility of the LAF, which uses secondary assets to do so (MDDs and mechanical assets).[72] MAG, however, believes that mechanical assets could also usefully be deployed as a primary asset.[73] Moreover, at present, LMAC requires operators to undertake fadeout from the task boundary, even for tasks in which no mines have been found,[74] a practice that represents an inefficient use of time- and resource-intensive clearance assets.

ARTICLE 5 COMPLIANCE

Lebanon is not a party or signatory to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires clearance of mines as soon as possible.[75]

Clearance of mined areas was expected to be completed by the end of 2020, in accordance with the 2011–2020 national strategy.[76] Meeting this target, though, depends on deployment of considerable resources: an estimated 125 manual clearance teams, 2 mechanical teams, and 9 two-strong MDD teams.[77] Current mine clearance capacity is far lower. Lebanon has cleared 3.81km^2 of mined area in the last five years, as detailed in Table 3.

Table 3: Mine clearance in 2011–15[78]

Year	Area cleared (km^2)
2015	0.92
2014	1.28
2013	0.54
2012	0.99
2011	0.08
Total	**3.81**

Lebanon has reported contributing US$9 million towards mine clearance in the country, covering the costs of administrative staff, two sampling teams, three NTS teams, two mine clearance teams, two BAC teams, four mechanical teams, and eight MDD teams, in addition to operations and QA/QC staff who manage and monitor clearance activities.[79] In addition, LAF provided three companies for rapid response across Lebanon.[80]

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.[81] There are concerns that the refugee crisis resulting from conflicts in neighbouring Syria may reduce mine action funding in Lebanon. The EU has indicated that its funding for CMR and mine clearance, currently provided to DCA, HI, MAG, and NPA, will likely not be extended after the end of the current grant period in August 2018.[82]

While operators agree that lack of capacity is certainly holding back clearance, they also believe that swifter progress could come from improved land release methodology.[83] This warrants further attention from LMAC as well as other mine action stakeholders in Lebanon.

According to LMAC, in order for Lebanon to complete mine clearance by the end of 2020, and in line with 2011–20 strategy, it would need the 138 clearance team capacity as specified in the strategy.[84] Current capacity is far below this level, and as such, Lebanon is well behind its targets for mine clearance. Based on the reported 29km^2 of total mined area as at the end of 2015, and average clearance rates of less than 1km^2 per year, it could take many years for Lebanon to become mine-free. Lebanon was conducting a second mid-term review in 2016 and will update findings accordingly in 2017.[85]

71 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakih, LMAC, Beirut, 18 April 2016.

72 Ibid., 11 and 18 April 2016; and interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.

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

74 Interview with Chris Chenavier, HI, 18 April 2016.

75 Lebanon is a state party to the 1996 International Covenant on Civil and Political Rights, Article 6 of which requires that states parties respect and protect the right to life.

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

77 Ibid.

78 See Mine Action Review and Landmine Monitor reports on clearance in Lebanon covering 2011–15.

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

80 LMAC, "Annual Report 2014".

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

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

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

84 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.

85 Ibid.