



LEBANON

PROGRAMME PERFORMANCE

	2017	2016
Problem understood	6	6
Target date for completion of mine clearance	6	6
Targeted clearance	5	5
Efficient clearance	6	5
National funding of programme	7	7
Timely clearance	6	6
Land-release system in place	5	4
National mine action standards	7	5
Reporting on progress	7	7
Improving performance	6	6
PERFORMANCE SCORE: AVERAGE	6.1	5.7

PERFORMANCE COMMENTARY

The performance of Lebanon's national mine action programme strengthened during 2017, with greater collaboration and consultation between the national authorities and non-governmental clearance operators regarding the revision of Lebanon's national mine action standards (NMAS) and the potential for improving operational efficiencies.

These developments were actively supported and overseen by stronger management and national ownership from the new director of the Lebanon Mine Action Centre (LMAC), who took up his post in early 2017. In collaboration with clearance operators, the United Nations Development Programme (UNDP), and other stakeholders, LMAC discussed making improvements to its accepted methodology for survey and clearance of mined areas, in line with the International Mine Action Standards (IMAS) and other best practice. These included, among others, reduction of the required clearance depth from 20cm to 15cm, and adjustments to the fade-out specifications in pattern minefields. These enhancements were incorporated into the revised NMAS, which was finalised and released in March 2018.

Also in 2017, as part of effort to enhance operational efficiencies, LMAC made greater use of non-technical survey to more accurately define confirmed hazardous area (CHA), and cancel land found not to be contaminated. Lastly, in August 2017, area in Lebanon along its north-east border with Syria, which is believed to contain mines, was liberated from Islamic State by the Lebanese Armed Forces (LAF). Non-technical and technical survey is being conducted to determine the size and nature of the contamination in this area, and will be immediately followed by clearance.

RECOMMENDATIONS FOR ACTION

- Lebanon should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- LMAC should ensure that all demining organisations update their standing operating procedures (SOPs) to incorporate the enhancements made to the revised NMAS and that these revised survey and clearance methodologies are implemented throughout the mine action programme. Technical working groups under LMAC auspices could provide a useful forum for review of this process.
- Wherever possible, non-technical survey and technical survey should be used to more accurately define areas of actual mine contamination, factoring in the required fade-out distance. This would also help to more accurately establish a national baseline of mine contamination.
- LMAC should review empirical data from clearance operations to date on the Blue line, and in consultation with clearance operators and partner organisations, assess whether the required fadeout distance on the Blue Line can be further reduced to enhance efficiency.
- Where appropriate, LMAC should consider using demining machinery and mine detection dogs (MDDs) as primary as well as secondary clearance assets.
- LMAC should update its workplan for the remaining period of its National Mine Action Strategy 2011–20, to reflect current capacity and the expected impact of the enhancements to land release methodology in the revised NMAS.
- The planned integration and consolidation of the LMAC and Regional Mine Action Centre (RMAC) databases and servers should be carried out as soon as possible, with a view to ensuring mine contamination and land release data are being assessed, recorded, analysed, and extracted accurately and in a timely manner.

CONTAMINATION

At the end of 2017, Lebanon had a little over 20km² of confirmed mined area, including the Blue Line, across 1,415 CHAs (see Table 1).¹ There are also new mined areas along Lebanon's north-east border, resulting from overspill from the conflict in neighbouring Syria.² As part of military operation "fajr-al-jouroud", the LAF recaptured Lebanese territory from Islamic State in the outskirts of Ras Baalbek and al-Qaa [towns] on the Syrian border in August 2017. Responsibility for mine action operations in this area were handed over to LMAC in the last quarter of 2017, whereupon LMAC and clearance operators visited the sites.³ Non-technical and technical survey of the mined area is being conducted to estimate the size of contamination and the type of explosive devices present (believed to include mines of an improvised nature and booby-traps).⁴ Survey by Mines Advisory Group (MAG) and Norwegian People's Aid (NPA) began in July 2018, funded by the United States, and follow-on clearance is planned on completion of the survey.⁵

Lebanon is also contaminated with cluster munition remnants (CMR) and other explosive remnants of war (ERW) (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Lebanon for further information).

A further 323 "dangerous areas" totalling more than 15km² are suspected to contain mines, booby-traps, CMR, or other unexploded ordnance (UXO) contamination.⁶ The "Dangerous Areas" relate predominantly to rapid response or explosive ordnance disposal (EOD) spot tasks and are often the result of accidents having been reported to LMAC by the local community,⁷ for which further investigation/survey is required in order to confirm the type and extent of suspected contamination.⁸ LMAC dispatches LAF engineering troops, partner non-governmental organisations (NGOs), and community liaison officers to rapid response call-outs, depending on the situation, the availability of response teams, and proximity to the suspected area.⁹

Table 1: Mine contamination by province (at end-2017)¹⁰

Province	CHAs	Area (m ²)
Al Beqaa	38	1,107,643
Al Janoub (south Lebanon)	211	1,493,996
Al Nabatiyeh (south Lebanon)	788	6,625,595
Jabal Loubnan (Mount Lebanon)	323	10,562,802
Al Shimal (north Lebanon)	55	278,315
Totals	1,415	20,068,351

The 20km² of mine contamination as the end of 2017 is the same as that reported for the end of the previous year,¹¹ despite clearance having taken place and the fact that no new areas of confirmed mine contamination were recorded in 2017.¹² LMAC clarified that the baseline of anti-personnel mine contamination at end of 2016, including the Blue Line, was nearly 27.8km² (the 20.1km² of contamination reported in last year's *Clearing the Mines* report excluded the Blue Line). Baseline contamination of 20.1km², at the end of 2017 included deduction of 0.51km² of mined area cleared in 2017, and an additional 7.19km² of clearance by the armed forces covering several years, but reported in 2017.¹³

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

the civil war. The minefields in the south are typically conventional minefields, laid in a pattern and where the location of the mines is identified on minefield maps.¹⁴

Mines hinder socio-economic development, restricting access to land and productive resources, and preventing construction of schools, parks, and infrastructure of benefit to the local community.¹⁵ Most contamination is on valuable agriculture land and is in rural areas where the use of the land is crucial for livelihood activities.¹⁶ According to LMAC, mine contamination along the Blue Line negatively affects more than 200,000 people.¹⁷ It has been reported that people cross the Blue Line to harvest olive groves and graze livestock.¹⁸

There was a considerable increase in the number of mine and ERW victims in 2017, with 22 injured and 6 killed.¹⁹ Of this total, LMAC reported that two people were killed by anti-personnel mines, both adult males, and a further eleven injured (one girl, one woman, two boys, and seven men).²⁰

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.²¹

LMAC, part of the LAF,²² is based in Beirut. Since 2009, the RMAC, based in Nabatiye, which is a part of LMAC, has overseen operations in south Lebanon and western Beqaa, under LMAC supervision.²³ 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 the potential to negatively affect the management of the two mine action centres. A new director of LMAC started in early 2017, while a new director of RMAC started in May of that year.²⁴

There is good coordination and collaboration between LMAC/RMAC and clearance operators. In south Lebanon, coordination meetings between RMAC and operators take place at least monthly, during which clearance operations, quality assurance (QA), and other operational issues are openly discussed.²⁵ LMAC also manages risk education and victim assistance.²⁶

UNDP personnel, funded by the European Union (EU), are also seconded to LMAC and RMAC, providing support towards capacity building, including for transparency reporting, strategic reviews, information management system for mine action (IMSMA) database entry, community liaison, and QA.²⁷ A donor support group meeting is convened annually, which brings together donors, operators, and the national authorities.²⁸

In 2015, the Lebanese 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 Arab Regional Cooperation Programme.²⁹ The role of the Programme includes support to the national authorities in mine action in the MENA region; technical assistance and training; the coordination and hosting of exchange visits; promotion of best practices and documentation of lessons learned; and the mobilisation of funding.³⁰ Planning, management, and coordination of the programme were handed over to LMAC at the beginning of 2017.³¹

In addition, a Regional School for Humanitarian Demining in Lebanon has been built in partnership between Lebanon and France, with technical mine action support provided by a French military officer dispatched to LMAC, to support the development of the curriculum on EOD disposal (levels 1, 2, and 3) in compliance with IMAS.³² In the second half of 2017, the Regional School became operational, enabling civilian and military personnel from Arab and other countries to benefit from a wide array of courses and workshops related to demining.³³ Training in 2017 addressed non-technical survey, EOD level 1, and gender and diversity in mine action in 2017.³⁴ Multiple further courses were planned for 2018.³⁵

In November 2016, a Lebanon-focused workshop on implementation of Convention on Cluster Munitions (CCM) Article 4, convened by Norway and the Netherlands, opened a direct line of dialogue between LMAC, donors, and clearance operators on best practices in land-release methodology and risk management, including the potential for enhanced operational efficiencies through better use of non-technical and technical survey, as well as to offer peer-to-peer advice for the ongoing revision of Lebanon's NMAS.³⁶ LMAC subsequently demonstrated a willingness to discuss changes to NMAS and ways in which to maximise operational efficiencies in the field. These included more appropriate clearance depths and adjustments to fade-out specifications for both mines and CMR, and the potential for enhanced use of evidence-based survey as part of the land release process. This approach of enhanced cooperation has been actively embraced by the new director of LMAC, who assumed his new post in early 2017.³⁷

On 17 January 2018, a follow-up workshop on survey and clearance was organised in Beirut by the Norwegian Embassy, again facilitated by the GICHD, and with active participation from national and international operators, donors, and representatives from UNDP and Mine Action Review.³⁸ During the workshop, Norway expressed its desire to establish a regular forum for LMAC to continue dialogue and collaboration with donors, clearance operators, and partner organisations, to discuss priorities and needs in cluster munition and landmine survey and clearance at the national level. This concept received wide-ranging support from the stakeholders who participated at the workshop, and it was agreed that an informal "Mine Action Forum" is established in Lebanon, which will meet twice a year. The Mine Action Forum concept underscores the importance of national ownership as the key to successful collaboration.³⁹ It is an example of what a "Country Coalition" under the CCM could look like, but in the case of Lebanon it was agreed the forum should be broadened to include landmines, and not just CMR.

Strategic Planning

In September 2011, LMAC adopted a strategic mine action plan for 2011–20.⁴⁰ 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,⁴¹ which will not be met.

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 (with consequently few operating teams), while previously unrecorded contaminated areas were also identified.⁴²

A second, mid-term assessment of the period 2014–16, undertaken in 2016, but only released in March 2018, came to similar conclusions. It highlighted the huge gap between actual mine clearance output and planned output (according to the original strategy). The second milestone assessment also reflected on the achievements, challenges, and lessons learned, offering recommendations that reflected available resources (financial and human), as well as a qualitative roadmap to target 2020.⁴³

Prior to 2016, demining along the border with Israel had been said to depend on “political developments”,⁴⁴ but the Lebanese government subsequently took the decision to initiate larger-scale, planned clearance on the Blue Line,⁴⁵ and clearance by humanitarian demining operators began in November 2016.⁴⁶

Lebanon has set four levels of priority regarding mine action. The first is to address infrastructure (housing, roads, hospitals, schools etc.); the second is to address facilities such as water, electricity, sewage, and landlines; the third is to release agricultural land, including livestock etc.; and the fourth is to release land for activities other than agriculture (e.g. nature reserves or areas used by wildlife).⁴⁷ Areas in which mine-related incidents occur are immediately designated high priority.⁴⁸

LMAC selects and assigns tasks for clearance based on the priorities set according to the initial survey, while updated information may lead to a change in priority for some areas. LMAC planned to survey all designated high-priority sites, to obtain accurate information, before tasking them for clearance.⁴⁹ Analysis during the 2016 second milestone review of the national strategic plan highlighted the importance of evidence-based decisions in prioritising and tasking clearance operations, bearing in mind the linkages between mine action and the sustainable development goals.⁵⁰

In 2017, LMAC organised a workshop on gender mainstreaming in mine action.⁵¹

Legislation and Standards

There is no national mine action law in Lebanon.⁵²

Lebanon developed its first NMAS in 2010.⁵³ Over the last couple of years, and throughout 2017, LMAC worked with UNDP and other partners, under a project funded by the EU, to revise the standards.⁵⁴ The revision took place with a view to enhancing efficiency by harmonising national standards with IMAS and international best practice, as well as to add new modules not present in the original NMAS.⁵⁵ LMAC adopted a consultative approach to the NMAS revision process, and liaised extensively with demining operators, who submitted recommendations and comments during the revision process.⁵⁶

In February 2018, the revised edition of Lebanon’s NMAS was sent to the Ministry of Defence for approval. In March, the new NMAS were presented to operators during a workshop at the Regional School, during which next steps were discussed for operationalising the new provisions.⁵⁷ The revised NMAS have a solid focus on land release and evidence-based decision-making, in line with the IMAS, and based on analysis of operational data collected by the implementing agencies and

recommendations from clearance operators. These include reduction of the required clearance depth of anti-personnel mine from 20cm to 15cm and revision of fade-out requirements for pattern minefield (see the *Land Release* section of this report for more information).⁵⁸

It is expected that these changes will dramatically improve efficiency,⁵⁹ and international clearance operators commended the constructive dialogue with LMAC and RMAC during the NMAS revision process.⁶⁰ LMAC views the NMAS as a living document, which will need updating regularly to ensure continued harmonisation with relevant developments in IMAS, and taking into consideration field experiences in Lebanon.⁶¹

NGOs are required to modify their SOPs according to the new NMAS. Pending updating and approval of their SOPs, however, operators can include relevant NMAS revisions in their clearance plans for each task, which are approved by LMAC.⁶²

Despite these very positive revisions to the NMAS, use of non-technical survey and technical survey to identify the presence or absence of threat could be strengthened further with respect to mined areas.⁶³ Historically, clearance tasks assigned to operators by LMAC tend to be deemed to already reflect survey data, and LMAC does not formally permit operators to conduct additional survey as standard matter of course, other than during pre-clearance assessments.⁶⁴ 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. Such discussions might result in the refining of the task size or approved land release specifications.⁶⁵ However, this approach is somewhat contingent on the decision of individual LMAC/RMAC officials, and the process would benefit from a more systematic approach that employs objective land release principles, including priority being given to use of non-technical and technical survey.

LMAC, in collaboration with the clearance operators, will continue to explore ways in which to improve operational efficiencies.⁶⁶

Quality Management

Between 10% and 40% sampling is conducted during clearance operations by the organisation site supervisor and QA officer; 10% sampling is conducted by the LMAC QA/QC (quality control) officer during work. Up to 30% sampling of a cleared area is conducted by LMAC’s sampling team at the end of the task, but the decision to conduct sampling is decided on a case-by-case basis, and not all released areas are sampled.⁶⁷ All areas released in 2017 were checked by QC teams beforehand.⁶⁸

Information Management

IMSMA is used by LMAC and RMAC to record contamination and land release in Lebanon. LMAC has reported that the system for database entry now more accurately reflects operational data, especially in instances where the task size/area of mine-contamination exceeds the original task size in the database.⁶⁹ 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.⁷⁰

As at April 2018, there were plans to integrate the RMAC information management database on the LMAC server. Full harmonisation and consolidation of the servers was expected in the course of 2018, which will facilitate synchronisation, as IMSMA reports will be sent directly to LMAC for approval, improving the accuracy and efficiency of the process. The integration will also help better protect data and decrease maintenance costs.⁷¹

Furthermore, LMAC has secured funding for the migration from its current version of IMSMA (IMSMA NG) to IMSMA Core, which it hopes will help facilitate the production of clearer reports that can be translated into dashboards for stakeholders, including donors, to monitor and follow.⁷² UNDP has executed an information technology (IT) assessment to determine the needs of LMAC; how to ensure harmonisation between RMAC and LMAC and enhance data security; explore the options for migration to IMSMA Core; and determine the financial costs of such projects.⁷³

Operators

In 2017, mine clearance was conducted by international operators DanChurchAid (DCA), Handicap International (HI), MAG, NPA, and by the Engineering Regiment of the LAF. Capacity of the NGOs totalled 11 teams,⁷⁴ with another two teams working for the LAF Engineering Regiment; five mechanical teams (four operated by the Engineering Regiment of the LAF and one by MAG); and seven MDD teams operated by the Engineering Regiment.⁷⁵ In addition, LMAC had four non-technical survey teams in 2017.⁷⁶ In addition, UNIFIL also has sufficient demining capacity to enable conduct its operations on the Blue Line.⁷⁷

MDDs and machines are mostly used as secondary assets to support the clearance teams, and in some cases for technical survey, based on needs and the terrain of the area. Machines are used for ground preparation, including rubble removal and vegetation cutting.⁷⁸ However, often the terrain is not suitable for MDDs or machines.

In 2017, DCA deployed two manual mine clearance teams.⁷⁹

HI deployed four mine clearance teams in north Lebanon in 2017,⁸⁰ totalling 28 deminers, plus supervisors, team leaders, and support staff.⁸¹ This represents the same capacity as the previous year. HI's mine clearance operations in north Lebanon and the Mount Lebanon area are determined by seasonal factors: clearance of minefields below 1,000 metres occurs during winter (October to April), and then clearance tasks above 1,000 metres begin in April and continue through the summer, depending on snow.⁸² Most of the remaining demining tasks in the area in which HI has been operating since 2011 are in contaminated cedar forests at high altitude.⁸³ HI expected its demining capacity to remain the same in 2018.⁸⁴

The number of manual clearance teams deployed by MAG in 2017 varied from three to six (averaging 85 personnel across the year), in addition to one mechanical team.⁸⁵ MAG reported an increase in funding for its operations on the Blue Line, mainly due to donors switching from CMR clearance to mine clearance, most notably Japan and the United States. Furthermore, MAG expected an expansion of five demining teams in 2018, under several donors including the United Kingdom and Sweden.⁸⁶ In 2018, MAG planned to improve operational efficiency by trialling new methodologies and technologies, including dual sensor technology to reduce the amount of excavation needed on scrap metal.⁸⁷

Prior to 2017, NPA, had only conducted CMR operations in Lebanon, but in January 2017 it expanded the scope of its operations to include mine clearance operations in southern Lebanon along the Blue Line.⁸⁸ NPA deployed two manual mine clearance teams in 2017,⁸⁹ totalling 18 personnel, including a medic and driver. It expected to maintain this capacity in 2018.⁹⁰

The 2017 capacity of the Engineering Regiment (for combined mine and CMR operations) was said to comprise two mine clearance teams, four mechanical demining teams, and seven MDD teams.⁹¹

UNIFIL was established in 1978⁹² 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.⁹³ 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 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.⁹⁴ UNIFIL coordinates demining activities with the LAF and LMAC.⁹⁵ The UN Mine Action Service (UNMAS) continues to engage with UNIFIL regarding the possibility of UNIFIL re-engaging in humanitarian mine action.⁹⁶ LMAC reported that it held a meeting with UNIFIL in April 2018 to discuss a memorandum of understanding (MoU) for cooperation on demining.⁹⁷ UNMAS reported that Lebanon and UNIFIL has discussed the topic of UNIFIL tasking assets for humanitarian mine clearance, but as at August 2018, no agreement had been signed.⁹⁸

In 2017, operational assets were provided by two UNIFIL Troop Contributing Countries: Cambodia and China. Operational capacities and capabilities of UNIFIL are determined by operational need, and capacity as at August 2018 comprised five manual clearance teams, two EOD teams, and one mechanical team.⁹⁹

UNMAS trains UNIFIL demining units and conducts QA and monitoring of UNIFIL demining to ensure compliance with NMAS and IMAS.¹⁰⁰

LAND RELEASE

Total mined area released by clearance in 2017 was just below 0.51km²,¹⁰¹ slightly less than the 0.55km² of mined area released by clearance in 2016, but with significantly more anti-personnel mines destroyed during the year (8,847 anti-personnel mines in 2017, compared to 417 in 2016). This is due to clearance of high-density mapped minefields on the Blue Line in the South and clearance undertaken by the LAF as part of operation "fajr-al-jouroud", to re-capture Lebanese territory from Islamic State, in outskirts of Ras Baalbek and al-Qaa [towns] on the Syrian Border in August 2017.¹⁰²

A further 0.1km² of mined area was reduced by technical survey. Most notably, over 1.2km² was cancelled by non-technical survey – a significant increase on 2016.

Survey in 2017

In 2017, 99,694m² of mined area was reduced by technical survey and 1,219,025m² of mined area was cancelled through non-technical survey by the LAF, in 23 areas (see Table 2).

In addition, a further 8,000m², in one dangerous area was cancelled, for which the specific type of contamination was not disaggregated.¹⁰³

A total of 221,062m² was confirmed as mined.¹⁰⁴

Table 2: LAF landmine survey in 2017¹⁰⁵

Province	SHAs cancelled	Area cancelled (m ²)	Areas confirmed as mined	Area confirmed (m ²)	Area reduced by TS (m ²)
Al Janoub (south Lebanon)	10	397,000	0	0	0
Al Nabatiyeh (south Lebanon)	6	818,875	24	218,662	0
Jabal Loubnan (Mount Lebanon)	4	3,100	3	2,400	87,316
Al Shimal (north Lebanon)	3	50	0	0	12,378
Totals	23	1,219,025	27	221,062	99,694

TS = Technical survey

Clearance in 2017

LMAC reported clearance of almost 0.51km² in 2017, with the destruction of 9,205 anti-personnel mines, 184 anti-vehicle mines, and 302 other items of UXO (see Table 3).¹⁰⁶

Table 3: Mine clearance in 2017¹⁰⁷

Region	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Mount Lebanon	DCA	18,940	55	0	1
South Lebanon	MAG	48,022	3,166	37	105
North Lebanon	HI	128,904	2,163	0	157
South Lebanon	NPA	42,295	3,463	0	0
	LAF	267,008	358	147	*39
Totals		505,169	9,205	184	302

AP = Anti-personnel AV = Anti-vehicle

*Number of items of UXO destroyed during clearance in minefields and dangerous areas

In addition, national NGO, Peace Generation Organization for Demining (POD), which conducts CMR clearance in Lebanon, destroyed one anti-personnel mine during its 2017 operations.¹⁰⁸ Furthermore, UNIFIL reported destruction of 317 anti-personnel mines during its 2017 operations on the Blue Line.¹⁰⁹

HI's clearance output increased by 18% in 2017, compared to the previous year, and the daily productivity of the deminers increased by 20%. HI attributed this increase to the experience of the HI teams; good collaboration with LMAC, especially on the allocation and management of tasks; and to regular internal and external QC visits.¹¹⁰

HI reported that of the 16 tasks it cleared in 2017, 5 were found not to contain anti-personnel mines, representing 12% of HI's total clearance output.¹¹¹ Due to the nature of the militia minefields in north Lebanon, there is sometimes a lack of clearly defined CHAs. Accordingly, in certain areas, additional non-technical survey and technical survey could help to more accurately define areas of actual contamination. As at August 2018, non-technical survey by LMAC in north Lebanon was ongoing (since 2016), and HI was awaiting the final results of the non-technical survey in order to define its strategy for the coming years.¹¹² 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.¹¹³

MAG reported that it cleared one Blue Line minefield, in Meiss El-Jabal (MF1526), in the course of which no anti-personnel mines were found.¹¹⁴

The CHAs tasked by LMAC to clearance operators do not include obligatory fade-out distances, which can considerably increase the overall size of the task.¹¹⁵

Mined areas in pattern minefields/along the Blue Line have been reclassified into high-threat hazardous area (HTHA) and low-threat hazardous area (LTHA). The use of technical survey, instead of full clearance, is permitted for some parts of the CHA based on discussion and agreement between LMAC/RMAC operations officers and clearance operators.¹¹⁶ Previously, full clearance had been required for 15 metres from the mine rows, but in the revised NMAS this has been changed to a required fadeout of 5 metres from the mine rows, and technical survey (with a minimum of 30% area covered by technical assets, including mechanical assets) from the edge of the 5-metre fadeout up to the minefield fence. If there is no fence, 10 metres of technical survey is required from the edge of the 5-metre fadeout. Furthermore, the required fadeout for anti-vehicle mines has been reduced from 20 metres to 10 metres.¹¹⁷ Previously, operators have been required to fully clear the area between the mine-rows and the minefield fence, plus an additional 2 metres outside the fence, with one asset.¹¹⁸

Clearance operators expected the enhancements in methodology to result in increased land release output and cost savings in 2018.¹¹⁹ MAG and NPA also noted that to further enhance efficiencies, fadeout requirements

at the Blue Line could be further assessed based on empirical evidence. Evidence from clearance operations on the Blue Line to date reveals that no mines have been found outside of 5-metres from the outer mine row. In the operators' opinion, technical survey beyond the 5-metre fadeout (up to the minefield fence or for 10-metres in the absence of a fence) should only be required if there is sufficient evidence to suggest mines have migrated from the mine rows to beyond the edge of the 5-metre fadeout (e.g. where there are missing mines or evidence of soil movement) and not as standard.¹²⁰ Furthermore, in MAG's opinion, LMAC could consider adjusting the 5-metre fade-out to 3-metres.¹²¹

In other positive developments, NPA reported that it was now permitted for its clearance teams to breach directly from the safe area to the mine row, in its demining operations on the Blue Line.¹²² In addition, MAG was given permission by LMAC to use mechanical assets for missing mine excavations in 2017, which reportedly saves considerable time.¹²³ Typically, MDDs and mechanical assets are only used as a secondary asset or for fadeout,¹²⁴ and furthermore, 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.¹²⁵ MAG, however, believes that mechanical assets could also usefully be deployed as a primary asset in South Lebanon, when the terrain permits.¹²⁶

MAG also reported that permission had now been granted for team leaders and deputy team leaders to prepare mine demolitions, rather than just site supervisors as was the required permission system before. This allows for greater flexibility in work planning and operations. At present, mines are destroyed in batches of seven mines per demolition. Operators believe that the number of mines per demolition could be increased to ten or more to further improve efficiency.¹²⁷

All updates are reflected in the NMAS and SOPs, and operators expected these enhancements in methodology to result in increased land release output and cost savings in 2018.¹²⁸

Deminer Safety

One deminer from the Engineering Regiment of the LAF was injured during anti-personnel mine clearance operations in 2017.¹²⁹

ARTICLE 5 COMPLIANCE

Lebanon is not a state party to the APMBC, but nonetheless has obligations under international human rights law to protect life, which requires the clearance of mines in areas under its jurisdiction or control as soon as possible.

It has also been stated that "While Lebanon is not signatory to the Ottawa Convention, LMAC works in spirit of the treaty",¹³⁰ and that LMAC adheres to its noble causes and tries to work along with the Maputo Action Plan.¹³¹

Clearance of mined areas was originally expected to be completed by the end of 2020, in accordance with the 2011–20 national strategy, but meeting the target was contingent on deployment of considerable resources: 125 manual clearance teams (45 for minefields excluding the Blue Line and 80 for the Blue Line), 2 mechanical teams, and 9 two-strong MDD teams.¹³² Current mine clearance capacity is far lower.

The second mid-term review, conducted in 2016, and finally released in March 2018, confirmed that progress against the strategy has fallen well behind schedule, and that significant increased capacity would be required to bridge the gap. LMAC calculates that with a constant capacity of 45 demining teams, supported by two mechanical teams and nine MDD teams, mine clearance (excluding the Blue Line) could be completed within 10 years. Current capacity is however, far lower.¹³³

Lebanon has cleared less than 4km² of mined area in the last five years, as detailed in Table 4. Based on the reported 20km² of total mined area as at the end of 2017, and average clearance rates of less than 1km² per year, it will take many years for Lebanon to become mine-free. However, there is the potential for operational efficiencies and swifter progress through reduction of the mine clearance depth from 20cm to 15cm and adjustment of fade-out requirements as enshrined in the new NMAS, along with LMAC's stated commitment to promote effective use of non-technical and technical survey in its operations.¹³⁴

Table 4: Mine clearance in 2013–17¹³⁵

Year	Area cleared (km ²)
2017	0.51
2016	0.55
2015	0.92
2014	1.28
2013	0.54
Total	3.80

LMAC reported that rocky and forested terrain continued to pose a challenge to demining operations, in addition to lack of minefield records for much of the contamination (especially in the North), and lack of funding.¹³⁶

As in the previous year, Lebanon reported contributing US\$9 million annually in 2017 towards mine action in Lebanon (including both mine and CMR-related work), to support costs associated with the running of LMAC (facilities and staff); and the LAF Engineering Regiment companies to cover rapid response call-outs; risk education, and emergency assistance and hospitalisation for victims.¹³⁷

LMAC expected to receive additional funding in 2018 to help address the contamination on the north-east border with Syria and for Blue Line mine clearance in the south. LMAC was optimistic that its adoption of the revised NMAS, in alignment with IMAS, would help improve the credibility and efficiency of demining operations in Lebanon.¹³⁸

During the January 2018 workshop, in which the Mine Action Forum was established, it was agreed that international donors should strive for more clarity, transparency, and information sharing on how mine action funds are being spent in Lebanon, where potential funding gaps exist, and how funding can be better coordinated. It was also agreed that clearer cost calculations (both anticipated and actual) for survey and clearance operations should be established by LMAC, to help with analysis and work planning.¹³⁹

LMAC recognises the value of enhanced cooperation, communication, sharing of information, and establishment of partnerships, and plans to embrace this throughout the implementation of the remainder of its National Mine Action Strategy.¹⁴⁰ At present, EU funding for UNDP support to LMAC is due to end by 2019, which would leave a funding gap for this support between 2019 and 2021.¹⁴¹

- 1 Email from Brig.-Gen. Ziad Nasr, Director, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 12.
- 2 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 31.
- 3 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; LMAC, "Annual Report 2017", p. 38; and "Recap Day 1: Army launches Fajr al-Joroub operation against Daesh, *The Daily Star*, 19 August 2017.
- 4 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; LMAC, "Annual Report 2017", p. 38; and Statement of Lebanon, APMBSC Sixteenth Meeting of States Parties, Geneva, 20 December 2018.
- 5 Email from Ali Nasreddine, Programme Officer, MAG, 24 August 2018.
- 6 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 12.
- 7 Interview with Brig.-Gen. Elie Nassif (then) Director, and Brig.-Gen. Fakh, then Head of Operations, LMAC, Beirut, 18 April 2016.
- 8 Ibid.
- 9 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 10 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2018; and LMAC, "Annual Report 2017", p. 14. Contamination includes the Blue Line.
- 11 Emails from Brig.-Gen. Ziad Nasr, Director, LMAC, 24 April and 17 October 2017.
- 12 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 13 Email from Brig.-Gen. Ziad Nasr, LMAC, 28 September 2018.
- 14 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakh, LMAC, Beirut, 11 April 2016.
- 15 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2018.
- 16 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; and Brig.-Gen. Ziad Nasr, LMAC, 24 April 2018.
- 17 Email from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016.
- 18 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.
- 19 LMAC, "Annual Report 2017", p. 6.
- 20 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 21 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014, pp. 4–5.
- 22 LMAC, "2012 Annual Report Lebanon Mine Action Centre", March 2013.
- 23 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.
- 24 Email from Brig.-Gen. Ziad Nasr, LMAC, 22 June 2017.
- 25 Interview with Col. Pierre Bou Maroun, Director, RMAC, Nabatiyeh, 16 November 2016.
- 26 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.

- 27 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016; and LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018; and "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018".
- 28 Interview with Lt.-Col. Henry Edde, then Director, RMAC, Nabatiyeh, 12 April 2016; and Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 18 May 2016; and LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 29 Email from Anna-Lena Schluchter, containing data from Rana Elias, Focal point for Lebanon, GICHD, 21 June 2017.
- 30 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 31 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "2017 Annual Report Lebanon Mine Action Centre", undated.
- 32 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 33 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; CCM Article 7 Report (for 2017), Form I; and Statement of Lebanon on International Cooperation and Assistance, CCM Seventh Meeting of States Parties, Geneva, 4–6 September 2017.
- 34 CCM Article 7 Report (for 2017), Form I.
- 35 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 36 Expert workshop under the framework of supporting Lebanon in meeting its CCM Article 4 obligations, attended by Lucy Pinches, Project Manager and Senior Researcher, Mine Action Review, Beirut, 17 November 2016.
- 37 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 38 Expert workshop on cluster munition and landmine survey and clearance in Lebanon, Beirut, 17 January 2018.
- 39 Ibid.
- 40 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, p. 4.
- 41 Response to Cluster Munition Monitor questionnaire by Brig.-Gen. Imad Odiemi, LMAC, 2 May 2014.
- 42 LMAC, "Mid-term Review to Strategy 2011–2020, Milestone 2013", August 2014.
- 43 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018; LMAC, "2017 Annual Report", undated; and email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 44 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.
- 45 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 46 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.
- 47 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 16.
- 48 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.
- 49 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 50 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 51 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 52 Email from Brig.-Gen. Ziad Nasr, LMAC, 14 September 2018.
- 53 Email from Brig.-Gen. Elie Nassif, LMAC, 17 June 2015.
- 54 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Rory Logan, then Programme Manager, NPA, 20 April 2015; Statement of Lebanon, First CCM Review Conference, Dubrovnik, 7–11 September 2015; and email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 55 Emails from Brig.-Gen. Elie Nassif, LMAC, 7 July 2015; and Rory Logan, NPA, 20 April 2015.
- 56 Interviews with Bekim Shala, MAG, Nabatiyeh, 14 April 2016; and Craig McDiarmid, NPA, Tyre, 12 April 2016; and email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.
- 57 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Dave Wiley, MAG, 27 April 2018.
- 58 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.
- 59 "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018"; LMAC, "2017 Annual Report Lebanon Mine Action Centre", undated; and emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.
- 60 "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018"; LMAC, "2017 Annual Report Lebanon Mine Action Centre", undated; and emails from Dave Wiley, MAG, 27 April 2018; and Craig McDiarmid, NPA, 17 April 2018.
- 61 Expert workshop on cluster munition and landmine survey and clearance in Lebanon, Beirut, 17 January 2018; and LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 62 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 63 Emails from Dave Wiley, MAG, 27 April 2018; and Craig McDiarmid, NPA, 17 April 2018.
- 64 Emails from Bekim Shala, MAG, 21 June 2016, and Craig McDiarmid, NPA, 30 March 2017.
- 65 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 66 "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018".
- 67 Email from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017.
- 68 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 69 Interview with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhri, LMAC, Beirut, 11 April 2016.
- 70 Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.
- 71 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 72 Ibid.; email from LMAC Operations Department, 28 June 2018; and "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018".
- 73 "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018".
- 74 LMAC, "Annual Report 2017", p. 11.
- 75 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April and 14 September 2018; and LMAC, "Annual Report 2017", pp. 11 and 12.
- 76 Email from Brig.-Gen. Ziad Nasr, LMAC, 14 September 2018.
- 77 Email from Alan Macdonald, Programme Director, UNMAS, 24 August 2018.
- 78 Emails from Brig.-Gen. Elie Nassif, LMAC, 21 May 2016; Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017; Samuel Devaux, HI, 4 April 2017; and Dave Wiley, MAG, 25 April 2017.
- 79 LMAC, "Annual Report 2017", p. 11.
- 80 Ibid.
- 81 Email from David Ligneau, HI, 29 August 2018.
- 82 Email from Chris Chenavier, HI, 7 April 2016.
- 83 Email from David Ligneau, HI, 29 August 2018.
- 84 Ibid.
- 85 LMAC, "Annual Report 2017", pp. 11 and 12; and emails from Ali Nasreddine, MAG, 24 July and 24 August 2018.
- 86 Email from Ali Nasreddine, MAG, 24 July 2018.
- 87 Ibid.
- 88 Emails from Craig McDiarmid, NPA, 30 March 2017 and 17 April 2018.
- 89 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 11.
- 90 Email from Craig McDiarmid, NPA, 17 April 2018.
- 91 Emails from Brig.-Gen. Ziad Nasr, LMAC, 24 April 2017 and 14 September 2018; and LMAC, "Annual Report 2017", p. 11.
- 92 UN Security Council Resolutions 425 (1978) and 426 (1978).
- 93 UNIFIL, "UNIFIL Mandate", at: <http://unifil.unmissions.org/Default.aspx?tabid=11553&language=en-US>.
- 94 Presentation by Maj. Pierre Bou Maroun, RMAC, Nabatiye, 4 May 2012; and emails from Henri Francois Morand, UNMAS, 2 October 2015 and 18 September 2017.
- 95 Email from Alan Macdonald, UNMAS, 24 August 2018.
- 96 Emails from Henri Francois Morand, UNMAS, 18 September 2017; and Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.

- 97 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 98 Email from Alan Macdonald, UNMAS, 24 August 2018.
- 99 Ibid.
- 100 Ibid.
- 101 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 12.
- 102 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; LMAC, "Annual Report 2017", pp. 11 and 38; and "Recap Day 1: Army launches Fajr al-Joroub operation against Daesh", *The Daily Star*, 19 August 2017.
- 103 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and LMAC, "Annual Report 2017", p. 13.
- 104 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 105 Ibid.; and LMAC, "Annual Report 2017", pp. 12 and 13.
- 106 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 107 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Ali Nasreddine, MAG, 24 July 2018; Craig McDiarmid, NPA, 17 April 2018; and David Ligneau, Mine Action Programme Manager, HI, 29 August 2018; and LMAC, "Annual Report 2017", pp.11 and 12. There were some discrepancies between data reported by LMAC and what was reported by HI, MAG, and NPA. HI reported destroying 2,168 (rather than 2,163) anti-personnel mines and 179 (rather than 157) other items of UXO during mine clearance in 2017. MAG recorded clearing a total of 131,351m² of mined area in 2017 (far more than the 48,022m² reported by LMAC, which referred to the manual clearance), and 106 (rather than 105) other items of UXO during mine clearance in 2017. NPA reported destroying three items of UXO, in addition to 3,463 anti-personnel mines. DCA did not provide clearance data to Mine Action Review, so cross-verification was not possible.
- 108 LMAC, "Annual Report 2017", p. 11.
- 109 Email from Alan Macdonald, UNMAS, 24 August 2018.
- 110 Email from David Ligneau, HI, 29 August 2018.
- 111 Ibid.
- 112 Ibid.
- 113 Interview with Chris Chenavier, HI, Toula, 18 April 2016.
- 114 Email from Ali Nasreddine, MAG, 24 July 2018.
- 115 Interview with Chris Chenavier, HI, Toula, 18 April 2016.
- 116 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 117 Emails from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.
- 118 Email from Ali Nasreddine, MAG, 24 July 2018.
- 119 Emails from Craig McDiarmid, NPA, 17 April 2018; and Ali Nasreddine, MAG, 24 July 2018.
- 120 Emails from Ali Nasreddine, MAG, 24 July 2018; and Craig McDiarmid, NPA, 17 April 2018.
- 121 Email from Ali Nasreddine, MAG, 24 July 2018.
- 122 Email from Craig McDiarmid, NPA, 17 April 2018.
- 123 Email from Ali Nasreddine, MAG, 24 July 2018.
- 124 Interviews with Brig.-Gen. Elie Nassif and Brig.-Gen. Fakhir, LMAC, Beirut, 11 and 18 April 2016; and Bekim Shala, MAG, Nabatiyeh, 14 April 2016.
- 125 Interview with Chris Chenavier, HI, Toula, 18 April 2016.
- 126 Interview with Bekim Shala, MAG, Nabatiyeh, 14 April 2016.
- 127 Emails from Ali Nasreddine, MAG, 24 July, 24 and 29 August 2018; and interview with Craig McDiarmid, NPA, 31 September 2018.
- 128 Emails from Craig McDiarmid, NPA, 17 April 2018, and Ali Nasreddine, MAG, 24 July and 24 August 2018.
- 129 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 130 LMAC, "Annual Report 2017", Foreword.
- 131 Statement of Lebanon, APMBC Sixteenth Meeting of States Parties, Geneva, 20 December 2018.
- 132 LMAC, "Lebanon Mine Action Strategy 2011–2020", September 2011, pp. 16 and 17.
- 133 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 134 Ibid.; and LMAC, "Annual Report 2017", p. 12.
- 135 See Mine Action Review and Landmine Monitor reports on clearance in Lebanon covering 2013–17.
- 136 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 137 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018; and CCM Article 7 Report (for 2017), Form I; and LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018.
- 138 Email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 139 Expert workshop on cluster munition and landmine survey and clearance in Lebanon, Beirut, 17 January 2018.
- 140 LMAC, "Lebanon Mine Action Strategy. Second Milestone Review 2014–2016", March 2018; and email from Brig.-Gen. Ziad Nasr, LMAC, 27 April 2018.
- 141 "Mine Action Forum: Action Points 1st Quarter Progress Report, March 2018".