

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION: UNKNOWN

NATIONAL ESTIMATE AT APRIL 2021,
INCLUDING ANTI-VEHICLE MINE
CONTAMINATION

287 KM²

AP MINE
CLEARANCE IN 2021

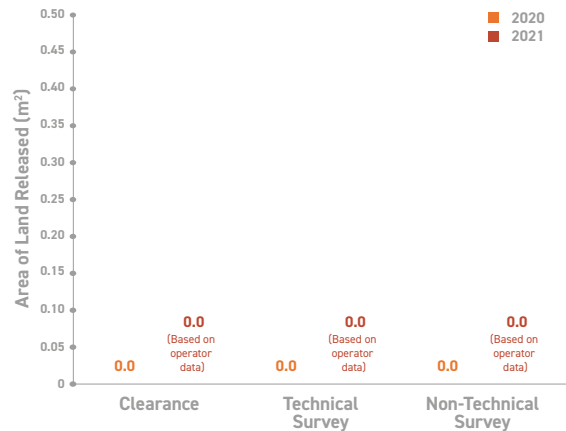
0 M²

AP MINES
DESTROYED IN 2021

0

(BASED ON OPERATOR DATA)

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- All parties to the conflict in Libya should cease the use anti-personnel mines, including these of improvised nature.
- Libya should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Libya should clear anti-personnel mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Libya should conduct a national baseline survey to identify the extent of contamination from anti-personnel mines.
- Libya should ease bureaucratic hurdles to efficient importation of mine action equipment and granting of visas for international staff. Libya should expedite accreditation of mine clearance operators.
- Libya should strengthen the Libyan Mine Action Centre (LibMAC)'s leading role as a coordinator of the mine action programme in close consultation with the national and international operators.
- Libya should channel the funds and capacity building support offered by the international community to better recruit, train, and equip its national resources and enhance the safety its deminers.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- The Libyan Mine Action Centre (LibMAC)

NATIONAL OPERATORS

- Free Field Foundation – 3F) - accredited
- The Safe Trust Non-governmental organisation (NGO): (Al-Thiqa al-Am-na) - accredited
- The Communication NGO (Al-Tawa-ol) - accredited
- Libyan Peace Organisation – (accredited for non-technical survey)

INTERNATIONAL OPERATORS

- DanChurchAid (DCA)
- Danish Refugee Council Humanitarian Disarmament and Peacebuilding sector (formally known as Danish Demining Group (DDG). Hereafter referred to as DRC)
- The HALO Trust
- Humanity and Inclusion (HI)

OTHER ACTORS

- United Nations Mine Action Service (UNMAS)

UNDERSTANDING OF AP MINE CONTAMINATION

There is no accurate figure for the extent of mined area in Libya. Mine contamination is a legacy of the Second World War (mainly in the east and mostly anti-vehicle mine contamination), as well as subsequent armed conflict with Egypt in 1977 (pattern minefields mapped, fenced and marked), with Chad in 1978–87, which resulted in mines being laid on Libya's borders with these two neighbours, and the Libya uprising of 2011 and subsequent armed conflicts.¹ The border with Tunisia is also believed to be affected. During Colonel Muammar Qaddafi's four decades in power, mines were emplaced around a number of locations, including military facilities and key infrastructure.

Mines were used by both the government and the opposition forces during the 2011 conflict leading to Colonel Qaddafi's overthrow. According to the Libyan Mine Action Centre (LibMAC), around 30,000–35,000 mines were laid in five regions and cities, but were "largely cleared" after the downfall of the Gaddafi regime by volunteers with previous military experience.² In the course of the Libyan conflict, the Gaddafi regime lost control over large parts of its conventional weapons arsenal. Weapons storage sites were accessible to opposition fighters, civilians, and soldiers alike. Since the end of the fighting, central control over the weapons arsenal has not been re-established and has led to widespread use and trafficking of arms.³ Since the overthrow of Qaddafi in 2011, Libya has remained mired in conflict as tribal and armed groups struggle for power.

Since February 2014, Libya's governance has been divided between two main entities: the United Nations (UN)-recognised Government of National Accord (or GNA) and the self-styled Libyan National Army (LNA), led by commander Khalifa Haftar. After a long negotiation process in 2015, a political agreement was signed in December 2015 under UN supervision. Clashes in Tripoli between rival militias escalated again in 2019, and the LNA surrounded Tripoli in January 2020 launching constant artillery and rocket attacks. In June 2020, LNA forces withdrew 600km east of Tripoli leaving behind an unknown number of improvised explosive devices (IEDs).⁴ Many of these fall within the scope of the APMBC. The fighting ended with parties to the conflict signing an agreement of "complete and permanent" ceasefire in October 2020 in Geneva under the UN auspices.⁵

In March 2021, the Tripoli-based Government of National Unity (GNU), headed by Abdelhamid Dabeida, replaced these

former eastern- and western-based authorities. However, the relationship with Haftar's LNA remained fraught. The same month, Libya's House of Representatives allied with Khalifa Haftar endorsed a second rival administration, the Government of National Stability headed by Fathi Bashagha. It is unclear where the new authority will be based and if it will operate in parallel to the GNU.⁶

According to multiple reports, fighters affiliated with the group commanded by Khalifa Haftar, and foreign fighters from Russia emplaced antipersonnel mines, including victim-activated IEDs and booby traps in Tripoli's southern suburbs as they withdrew.⁷ Human Rights Watch said that between April 2019 and June 2020, Haftar and affiliated forces, including the Wagner Group, a Russian government-linked private military security contractor, left behind "enormous" amounts of ordnance in Tripoli's southern districts. Some of these were hidden inside homes and other structures, in some cases inside furniture. They were often activated with invisible tripwires.⁸ The Independent Fact-Finding Mission on Libya, established by the UN Human Rights Council in June 2020 with a mandate to investigate violations of International Human Rights Law and International Humanitarian Law committed in the country since 2016, reported that the LNA and the Wagner group "may have violated... International Humanitarian Law obligations to minimise the indiscriminate effects of landmines and to remove them at the end of active hostilities".⁹

Danish Church Aid (DCA), which has been operating in Libya since 2010, confirmed the presence of anti-personnel tripwire mines, bounding mines, and ant-lift devices in Tripoli, and legacy IEDs in Benghazi and Sirte.¹⁰ There were no reports of new use of anti-personnel mines in Libya since the end of hostilities in October 2020.

The UN Mine Action Service (UNMAS) similarly reported that after the withdrawal of LNA forces in May 2020, explosive ordnance (booby-traps, landmines, and IEDs) was scattered across southern Tripoli. Sophisticated tactics were deployed to hinder demining efforts and target deminers, including placement of low-metal-content anti-personnel mines next to anti-vehicle mines and the use of anti-lift devices. In addition, UNMAS reported extensive use of booby-traps and victim-activated IEDs in civilian houses that served no military purpose but rather inflicted high civilian casualties.¹¹ The HALO Trust reported that it had found ML-7/8 anti-lift

1 Interview with Col. Turjoman, Director, Libyan Mine Action Centre (LibMAC), in Geneva, 7 February 2019; and "Libya: The Toxic and Explosive Legacy of Modern Conflict", Presentation by United Nations Mine Action Service (UNMAS), UN National Directors Meeting, Geneva, 12 February 2020.

2 Interview with Col. Turjoman, LibMAC, in Geneva, 7 February 2019.

3 ITF Enhancing Human Security, Annual Report 2020, at: <http://bit.ly/3t8SbcV>, p. 78; and email from Catherine Alice Smith, Programme Manager, DRC, 20 April 2021.

4 ITF Enhancing Human Security, Annual Report 2020, p. 78.

5 UN Support Mission in Libya (UNSMIL), Agreement for a complete and permanent ceasefire in Libya, Geneva, 23 October 2022, at: <https://bit.ly/3Bunnej>.

6 Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022, at: <https://bit.ly/3nkVPju>.

7 Human Rights Watch, "Libya: Landmines left after armed group withdraws", 3 June 2020, at: <http://bit.ly/2DIE5AM>; and "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022, at: <https://bit.ly/3nkVPju>.

8 Human Rights Watch, "Libya: Russia's Wagner Group Set Landmines Near Tripoli", 31 May 2022, at: <https://bit.ly/3xRfzQy>.

9 Ibid.

10 Email from Graeme Ogilvie, Programme Manager, DCA, 1 April 2022.

11 Presentation by UNMAS and LIBMAC to the 24th NDM meeting, 26 May 2021.

devices being laid underneath OZM-72 anti-personnel bounding fragmentation mines.¹² In Tripoli, there has been evidence of conventional munitions being repurposed to operate in an improvised manner as landmines (projectiles containing a Soviet MUV fuze, which are tripwire initiated).¹³

In June 2020, the President of the Anti-Personnel Mine Ban Convention (APMBC) Nineteenth Meeting of States Parties issued a press release expressing concern at reports of the use of anti-personnel mines of an improvised nature in and around Tripoli. In his November 2021 report on Libya to the UN Security Council, the Prosecutor of the International Criminal Court (ICC) said that his office continued "to gather evidence related to alleged crimes committed during the April 2019 attack on Tripoli", but did not announce the nature of these investigations.¹⁴ Amnesty International, however, has evidence that LNA-affiliated forces have laid extensive tripwire-activated anti-personnel mines and booby-traps in homes and other civilian objects.¹⁵

Multiple types of anti-personnel mines: (T-AB-1, NR-413, NR-442), were used or left behind as part of abandoned stockpiles across the country at the start of the conflict in 2011.¹⁶ Since then, Human Rights Watch has identified 10 anti-personnel mines of Soviet and Russian origin in Libya: PMN-2, OZM-72, MON-50, MON-90, MON-100, POM-2S, POM-2R, MS-3, ML-7, and ML-8. Other anti-personnel mines (GYATA-64) and anti-vehicle mines (TM-62M, TM-62P3 and TM-83) have also been reported. Four types of anti-personnel mine of Russian origin had not been previously documented in Libya. Explosive devices of an improvised nature were assembled and used in a manner intended to be detonated by

the presence, proximity, or contact of a person, meeting the definition for an anti-personnel mine.¹⁷

LibMAC told Human Rights Watch that, between May 2020 and March 2022, 130 people died and 196 were injured by mines and explosive devices across Libya, mostly in southern Tripoli. Of the total casualties, 78 (24%) were specialists in mine action, none of whom was able to return to work.¹⁸

Many suspected hazardous areas (SHAs) have not been surveyed. According to the latest updates at April 2021, national data from the LibMAC database suggested total contamination of 287km² of landmines (61km² of confirmed hazardous areas (CHAs) and 226km² of SHAs), distributed over seven localities.¹⁹ The data provided by LibMAC indicate mostly mixed contamination and are not disaggregated by contamination type. LibMAC data from 2017 indicate that the SHA of 223km² in Sirte is suspected to contain only anti-vehicle mines.²⁰

It is likely that further survey will drastically reduce these figures. Moreover, the contamination data of Sirte do not reflect the clearance that has been ongoing in 2017–20 and are therefore believed to be outdated. A non-technical survey to assess the scale of contamination that resulted from the 2019–20 conflict in southern Tripoli is said to have concluded in March 2021 but its results were not reported to Mine Action Review by LibMAC. In July 2022, LibMAC told Human Rights Watch that since 2019, landmines and other ordnance are said to have contaminated 720km² of the southern Tripoli districts alone.²¹ In the absence of systematic survey efforts, however, this figure is thought to be significantly inflated.

Table 1: Anti-personnel mined area by locality (at end 2020)²²

Locality	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHAs/CHAs	Total area (m ²)
Al Jifarah	0	0	1	5,280	1	5,280
Al Jufrah	0	0	1	408,572	1	408,572
Benghazi	16	12,382,269	4	1,564,907	20	13,947,176
Jabal Nafusa	1	0	1	604,139	2	604,139
Misratah	3	3,387,431	0	0	3	3,387,431
Sabha	2	3,990,067	0	0	2	3,990,067
Sirte	3	40,747,944	1	222,934,834	4	263,682,778
Greater Tripoli	41	654,576	14	131,990	55	786,566
Totals	66	61,162,287	22	225,649,722	88	286,812,009

12 Email from Lucy Reeve, Programme Manager, HALO Trust, 12 May 2021.

13 Email from Zita Andrassy, Programme Officer Libya, HALO Trust, 27 February 2022.

14 Statement of International Criminal Court (ICC) Prosecutor, Karim A.A. Khan QC, to the UN Security Council on the Situation in Libya, pursuant to UNSCR 1970 (2011), November 2021, at: <https://bit.ly/3vtpDyS>.

15 "Libya: shocking new evidence of retaliatory attacks on civilians", Amnesty International UK, 5 June 2020, at: <http://bit.ly/3f9WiPN>.

16 Landmine and Cluster Munition Monitor, "Libya", accessed 27 June 2022, at: <https://bit.ly/3y0blpF>.

17 Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022, at: <https://bit.ly/30rfUqS>.

18 Ibid.

19 Email from Col. Adel Elatwi, Operations, LibMAC, 22 April 2021.

20 Emails from Abdullatif Abujarida, LibMAC, 20 February and 9 March 2017.

21 Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022.

22 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

According to DCA, conventional minefields are rare in the west and central coastal area of Libya, and there has been no direct evidence of anti-personnel mines in Tripoli. According to HALO, the contamination of mines across Tripoli featured a mix of previously unseen items, and a possible distribution and laying of mines from the former Gaddafi stockpiles, such as the Belgian PRB-M3 anti-vehicle mines. There have been reports of mines causing fatalities in the west of Sirte, but no organisation has been permitted to conduct a baseline survey of mine contamination there.²³

Libya is also contaminated by cluster munition remnants (CMR) (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Libya for further information), and ongoing conflict has left quantities of other explosive remnants of war (ERW) in cities across Libya.²⁴

PROGRAMME MANAGEMENT

Mine action exists in a fragmented and occasionally violent political context. In February 2021, a new interim government was chosen following UN-sponsored talks in Geneva. In March, the GNU became the new UN-supported authority in Libya and replaced both eastern- and western- governments, although the relationship with the LNA remained fraught.²⁵

LibMAC was mandated by the Minister of Defence to coordinate mine action back in December 2011.²⁶ Operating under the UN-backed GNU, LibMAC's headquarters are in Tripoli, in the west of the country, and it also has offices in Benghazi²⁷ and Misrata.²⁸ National capacity to address explosive hazards remains largely insufficient. While the necessary managerial and coordination capacity is in place, governmental and non-governmental actors lack qualified personnel, equipment, and expertise to meet the demand for survey and clearance.²⁹

ITF Enhancing Human Security (ITF) started its capacity-building project in Libya since January 2014. It paid the salaries of 21 LibMAC employees in 2021, and covered the day-to-day costs of LibMAC.³⁰

The HALO Trust trained and accredited two technical survey teams and one explosive ordnance disposal (EOD) team in 2021. It also provided EOD Level 3 training to several non-governmental organisations (NGOs).³¹

UNMAS, which is an integral part of the UN Support Mission in Libya (UNSMIL), has largely been operating from Tunis since November 2014.³² UNMAS returned with international personnel to Libya in 2018, and since then has maintained permanent presence of critical operational and technical staff.³³ UNMAS prioritises the capacity enhancement of Libyan mine action actors, supports LibMAC in accreditation processes for mine action organisations, and facilitates coordination with international stakeholders and implementing partners.³⁴ UNMAS also acts as the mine action lead, providing non-technical coordination through information sharing, and represents the mine action sector in various fora, including the UN protection cluster and the inter-sectoral coordination group.³⁵ UNMAS and LibMAC chair monthly mine action sub-cluster working groups, with participation from mine action stakeholders and donor states.³⁶

The UNMAS mine action programme sought a budget of US\$2.58 million for the mine action sector in Libya, but, as at June 2022, the protection sector, including mine action, was facing a shortfall of 50% in funding.³⁷

23 Emails from Zita Andrassy, HALO Trust, 27 February 2022, and Graeme Ogilvie, DCA, 1 April 2022.

24 UNMAS, "Programmes: Libya", accessed 23 March 2020, at: <http://bit.ly/2WMTzTk>.

25 "Libya elections: Presidential poll postponed", BBC News, 23 December 2021, at: <https://bbc.in/39ohwez>; and Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022.

26 LibMAC website, accessed 20 March 2020, at: <http://bit.ly/2JqVr0S>.

27 Email from Jakob Donatz, Associate Programme Officer, UNMAS, 21 June 2018.

28 Email from Roman Turšič, Head of Implementation Office Libya/Afghanistan, ITF, 26 February 2017; and interview with Brig. Turjoman, LibMAC, in Geneva, 10 January 2017.

29 OCHA, Libya Humanitarian Response Plan, January 2021, p. 74–75, at: <https://bit.ly/3F9eCWU>.

30 ITF, "Annual Report 2021", pp. 107108, at: <https://bit.ly/3FeE39S>.

31 Email from Zita Andrassy, HALO Trust, 27 February 2022.

32 ²³ UNMAS, "Programmes: Libya", accessed 14 May 2022, at: <http://bit.ly/31tU1tB>.

33 Email from Samir Becirovic, UNMAS, 2 March 2022.

34 UNMAS, "Programmes: Libya", accessed 14 May 2022.

35 Email from Samir Becirovic, UNMAS, 2 March 2022.

36 Email from Samir Becirovic, UNMAS, 10 June 2022.

37 Email from Samir Becirovic, UNMAS, 2 March 2022; and the humanitarian dashboard for Libya 2022, last updated 26 June 2022, at: <https://bit.ly/3HQFQ66>.

ENVIRONMENTAL POLICIES AND ACTION

Libya does not have national mine action standards (NMAS) or a policy on environmental management.³⁸

DCA has an environmental management system and standard operational procedures (SOPs) in place. It takes into account the impacts of the destruction of ERW prior to any battle area clearance (BAC) or EOD spot task, and puts in place mitigation measures. DCA considers that the removal of ERW from farmland and topsoil that could be used in food production in itself contributes significantly to environmental preservation. This is because ERW leaks nitrates into the soil and depletes its ability to absorb methane. Removal of ERW also prevents overcultivation of land. DCA assesses that the potential damage caused by uncleared ERW leaking toxins into the soil largely outweighs the damage resulting from their demolition.³⁹

Danish Refugee Council (DRC) does not have an environmental management system, but one was planned for 2022. DRC takes into account “do-not-harm” elements in consideration of environmental impact and policy when planning its operations.⁴⁰

The HALO Trust does not have an environmental management system, but since January 2022 it has employed a global environment advisor to support progress in this regard. HALO’s work in Libya is focused on urban clearance and therefore has little impact on biodiversity and vegetation. Environmental considerations in the HALO Libya programme in the future will focus on effective use of resources, especially fossil fuels, and effective waste management. As mitigation measures, HALO provides bins and reusable water bottles to reduce litter and minimise plastic waste.⁴¹

GENDER AND DIVERSITY

LibMAC does not have a gender and diversity policy for mine action in place. LibMAC disaggregates mine action data by sex and age.⁴²

DCA’s Libya programme has an active policy of employing women into programme roles to increase their financial independence and teach them transferable skills that they may use beyond their current employment with DCA.⁴³ Gender mainstreaming and mainstreaming of marginalised groups form part of the programme’s core policies. DCA also employs all-women teams, including three explosive ordnance risk education (EORE) and two multitask teams, to be able to engage with female-headed households. DCA engages early with municipal councils, civil society organisations, community leaders and representatives of groups working for the rights of minorities. These engagements drive project design and ensure community ownership. In 2021, 39% of DCA’s employees were women. The numbers were even higher for women in operational positions (40%) and in managerial positions (55%).⁴⁴

DRC takes into consideration gender and age factors when collecting information on how contamination impacts different groups. DRC adopts a transparent and inclusive recruitment process to ensure that staff as much as possible originate from the area of operations and are representative of the local social context. DRC employed mixed gender

teams in the field in 2021. Women made up 31% of DRC employees overall in 2021: 27% of operational, and 40% of managerial staff.⁴⁵

The HALO Trust’s community liaison officers in Libya are all women who can engage with both men and women. As of writing, HALO staff were not specifically trained to work directly with children, but rather to ask parents for specific considerations for vulnerable persons under their responsibility, including children, elderly, and persons with disabilities. Data collected are disaggregated by gender and age so that representation can be targeted in a proportionate manner. HALO community liaison activities are performed at the same time as surveys, including focus group discussions when applicable, ensuring that women’s voices are also heard. HALO staff are required to complete the online “Gender and Diversity in Mine Action” training module developed by the Geneva International Centre for Humanitarian Demining (GICHD) after their recruitment. HALO, however, reported difficulty in hiring women for operational roles. Of a total of 77 national staff in 2021, 10 (13%) were women, of whom four were in managerial positions and one in an operational position.⁴⁶

38 Emails from Graeme Ogilvie, DCA, 1 April 2022; Alessandro Di Giusto, Head of Humanitarian Mine Action, DRC, 7 March 2022; and Zita Andrassy, HALO Trust, 27 February 2022.

39 Email from Graeme Ogilvie, DCA, 1 April 2022.

40 Email from Alessandro Di Giusto, DRC, 7 March 2022.

41 Email from Zita Andrassy, HALO Trust, 27 February 2022.

42 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

43 Email from Graeme Ogilvie, DCA, 20 April 2021.

44 Email from Graeme Ogilvie, DCA, 1 April 2022.

45 Email from Alessandro Di Giusto, DRC, 7 March 2022.

46 Email from Zita Andrassy, HALO Trust, 27 February 2022.

INFORMATION MANAGEMENT

LibMAC receives technical support for the national Information Management System for Mine Action (IMSMA) from the GICHD and UNMAS. With support from the GICHD, LibMAC planned to transition from IMSMA New Generation (NG) to IMSMA Core in 2020.⁴⁷ As at February 2022, HALO reported that the data transition was almost complete, and was planning to take part in a workshop organised by LibMAC in Tunis to finalise the data flow process.⁴⁸

IMSMA is accessible to clearance organisations and data collection forms are reported to be consistent and enable collection of necessary data,⁴⁹ although DRC reported that the system requires updated information, capacity building for operator staff, and easier access.⁵⁰ Operators have internal quality control (QC) systems prior to submitting data to LibMAC for further QC. HALO Trust reported that the LibMAC regularly updates the IMSMA database to a high standard.⁵¹

The IMSMA NG relies on manual data extraction, which can result in a delay between the time information is received and when it is acted upon. This is hoped to be resolved once the transition to IMSMA Core is completed.⁵²

LibMAC reports that it checks the quality of the reports, sometimes requesting modification of or elaboration on some of the information reported. The HALO Trust noted that task site visits and feedback from LibMAC were useful to strengthen the quality of the data it has submitted. The revision of data flow mechanisms should enable operators to provide more precise inputs and to increase the standard and quality of data.⁵³

PLANNING AND TASKING

There is no national mine action strategy for Libya.⁵⁴ LibMAC does, however, have a national short-term operational plan.⁵⁵ LibMAC prioritises survey and clearance operations based on humanitarian, security, and development indicators,⁵⁶ and is responsible for issuing task orders. DCA considers that LibMAC is doing its best to issue task orders in a timely and effective manner within its limited capacity and resources, and that more capacity building and funding is required to allow the Centre to become more effective.⁵⁷ According to DRC, LibMAC issues clearance and survey task dossiers in a timely fashion and prioritises tasks according to the urgency of the need.⁵⁸

DCA continues to clear ERW in support of electricity and water supply facilities, and to survey and clear schools, medical facilities, and housing so that internally displaced people (IDPs) can return safely. This approach is in line with the triple nexus approach, linking humanitarian action to development projects and contributing to stability and peace.⁵⁹ Mine action operators liaise with the municipal councils, community leaders, and security providers to build a picture of priority areas for survey and follow-on clearance.

Operators then apply for task orders through the LibMAC. Due to the small number of clearance teams and personnel in Libya, the priority is responding to call-outs, particularly from returning IDPs. Therefore, much of the clearance is reactive EOD spot tasks in order to minimise an immediate threat to life.⁶⁰

HALO Trust responds to the tasks as issued by LibMAC.⁶¹ HALO's prioritisation criteria for non-technical survey are: number of conflict events, population density, critical infrastructure, duration of active fighting in a given area, recorded mines removed, and explosive ordnance accidents. For technical survey and clearance, HALO's criteria are: access, land use, number of beneficiaries, and direct evidence of contamination.⁶²

While the above considerations are integrated in the assessment of contamination impact, survey, and community liaison activities, both DRC and HALO reported that final decisions on task prioritisation are owned by the LibMAC, which ultimately issues task orders based on its set of criteria, plans, and engagement with local authorities.⁶³

47 Email from Nicholas Torbet, HALO Trust, 14 April 2020.

48 Emails from Zita Andrassy, HALO Trust, 27 February and 19 June 2022.

49 Email from Catherine Smith, HI, 12 March 2019.

50 Email from Alessandro Di Giusto, DRC, 7 March 2022.

51 Emails from Lucy Reeve, HALO Trust, 23 April 2021; and Zita Andrassy, HALO Trust, 27 February 2022.

52 Emails from Zita Andrassy, HALO Trust, 27 February and 19 June 2022.

53 Emails from Zita Andrassy, HALO Trust, 27 February and 19 June 2022.

54 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

55 Ibid.

56 Ibid.

57 Email from Graeme Ogilvie, DCA, 1 April 2022.

58 Email from Alessandro Di Giusto, DRC, 7 March 2022.

59 Email from Graeme Ogilvie, DCA, 1 April 2022.

60 Email from Graeme Ogilvie, DCA, 20 April 2021.

61 Email from Zita Andrassy, HALO Trust, 27 February 2022.

62 Emails from Lucy Reeve, HALO Trust, 23 April 2021; and Zita Andrassy, HALO Trust, 27 February 2022.

63 Emails from Alessandro Di Giusto, DRC, 7 March 2022; and Zita Andrassy, HALO Trust, 27 February 2022.

Since 2020, HALO developed a Tripoli ERW Hazard Mapping and Information Management Project, which used open-source data collation and geolocation techniques to map potential ERW contamination along the Tripoli frontlines. The online data collection portal, linked to a live database that was shared with LibMAC and other stakeholders, was used to track historical data starting from April 2019.⁶⁴ While the project ended in January 2021, HALO continues to take internal efforts to keep track of the accidents happening in Tripoli.⁶⁵

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There is no national mine action legislation in Libya, but national mine action standards (LibMAS) have been elaborated in Arabic and English with the support of the GICHD and UNMAS, and were approved by the GNA in August 2017. The LibMAS are available on the LibMAC website.⁶⁶ According to international clearance operators, the NMAS are aligned to the International Mine Action Standards (IMAS), reproducing it word-for-word in many parts.⁶⁷ Further, while the Arabic version of the LibMAS is largely accurate, the English version misstates the issue of liability after land release.⁶⁸ The LibMAS have not been updated since being approved in 2017.

LibMAC and The HALO Trust are collaborating on how best to establish land release principles for urban clearance. In the interim, LibMAC accepts completion reports detailing the outputs of mechanical BAC as mechanical clearance.⁶⁹

OPERATORS AND OPERATIONAL TOOLS

Table 2: Operational survey capacities deployed in 2021

Operator	NTS teams	Total NTS personnel	TS teams	Total TS personnel	Comment
3F ⁷⁰	2	6	0	0	
Libya Peace Organization ⁷¹	2	6	0	0	
HALO Trust ⁷²	5	20	0	0	Reduced to 3 teams/12 personnel by the end of 2021
DCA ⁷³	4	40	4	40	Multi-task teams (conducting both TS and clearance – also reported in Table 3)
DRC ⁷⁴	2	6	0	0	
Totals	15	78	4	40	

NTS = Non-technical survey TS = Technical survey

Table 3: Operational clearance capacities deployed in 2021⁷⁵

Operator	Manual clearance teams	Total deminers*	Dog teams (dogs and handlers)	Mechanical assets/machines
DCA	4	40	0	4
HALO Trust	2	12	0	5
Totals	6	52	0	9

* Excluding team leaders, medics, and drivers.

64 Email from Nicholas Torbet, HALO Trust, 14 April 2020.

65 Email from Zita Andrassy, HALO Trust, 27 February 2022.

66 LibMAC website, accessed 20 May 2022 at: <https://bit.ly/3ldhvx2>. Report of the Secretary-General on UNSMIL, UN doc. S/2018/140, 12 February 2018, p. 12; and UNMAS, "Programmes: Libya", accessed 14 May 2022 at: <http://bit.ly/31tU1tB>.

67 Emails from Catherine Smith, HI, 12 March 2019; and Nicholas Torbet, HALO Trust, 14 April 2020.

68 Email from Graeme Ogilvie, DCA, 1 April 2022.

69 Emails from Zita Andrassy, HALO Trust, 27 February and 19 June 2022.

70 Email from Col. Adel Elatwi, LibMAC, 22 April 2021. The data might not be up to date as at August 2022.

71 Ibid.

72 Email from Zita Andrassy, HALO Trust, 27 February 2022.

73 Email from Graeme Ogilvie, DCA, 1 April 2022.

74 Email from Alessandro Di Giusto, DRC, 7 March 2022.

75 Emails from Graeme Ogilvie, DCA, 1 April 2022; and Zita Andrassy, HALO Trust, 27 February 2022.

Mine action operations have been conducted by the army engineers, a police unit, and the Ministry of Interior's national safety authority (NSA), also known as Civil Defence.⁷⁶ Military engineers reportedly lack mine detectors and are working with basic tools.⁷⁷ The NSA is mandated to conduct EOD in civilian areas.⁷⁸ These institutions liaise with LibMAC but are not tasked or accredited by them, nor do they provide clearance reports to the Centre.⁷⁹

The national operator 3F continued to be operational in 2021, working with both DRC and UNMAS,⁸⁰ and is accredited to conduct clearance and EOD tasks.⁸¹ In 2020, LibMAC reported having accredited two additional local operators: The Safety Trust NGO (Al-Thiqa al-Amena) and the Communication NGO (Al-Tawasol).⁸² Another national operator, the Libyan Peace Organisation, was present in Libya in 2022, and is accredited for non-technical survey.⁸³

DCA is operational in Libya conducting risk education, clearing residential, commercial, education, medical, and agricultural sites of mines and ERW, and providing training in clearance, search, and EOD, to help strengthen the capacity of national authorities.⁸⁴ Now in its twelfth year of working in Libya, DCA currently has offices in Benghazi, Misrata, Sirte, and Tripoli, and is accredited to conduct clearance and EOD tasks.⁸⁵ In 2021, DCA's main clearance operations were in the south and western Tripoli, Sirte, and Benghazi. There was a significant uplift in the number of survey and clearance personnel deployed by DCA in 2021 due to increased funding. A further increase was expected in 2022 as more funds have been secured from the European Union (EU), the United Kingdom (UK), and the Danish Ministry of Foreign Affairs (MoFA).⁸⁶

According to DCA, the advice from UNMAS, LibMAC, and the national authorities has been for international operators to only report encountered IEDs for subsequent removal by the national police or army, which do not have the sufficient number of trained personnel to respond. As noted above, this resulted in terrible human losses of national deminers during the largescale uncovering of IEDs in 2020,⁸⁷ many of which were laid in sophisticated techniques to maximise harm.

DRC set up in Libya since 2017 and has three offices in Benghazi, Sabha, and Tripoli. Its offices in Misrata and Zwara were closed at the end of 2020, and its Sabha office closed on 31 December 2021, resulting in the reduction of the number

of EOD, non-technical survey, and EORE teams. DRC was planning to establish a new EOD team in Tripoli in 2022. In 2021, DRC performed EOD, non-technical survey, and EORE operations in Benghazi, and expected to conduct EOD and EORE activities in Tripoli in 2022. DRC continued to partner with 3F and is planning to invest in the partnership capacity with support to other national and local operators in the coming years.⁸⁸

The HALO Trust has been present in Libya since November 2018, and has offices in Misrata, Sirte, and Tripoli. HALO first deployed survey personnel in Tripoli in July 2020 following the cessation of fighting in southern Tripoli in the summer of that year. HALO was able to use data gathered during an information management project that mapped reports of conflict events, to prioritise areas for survey. HALO accredited one EOD team in Tripoli, but due to all international staff having to leave Libya during a period of visa blockade, the team was not deployed. HALO's clearance teams in Sirte were supported by a DCA EOD team.⁸⁹

In 2021, HALO trained and accredited two teams to conduct technical survey, in addition to one EOD team. HALO conducted non-technical, technical survey, and EOD operations in Tripoli; non-technical survey and mechanical clearance in Sirte; and delivered an EOD Level 3 training course to several NGOs, including the local NGOs, Tawasol, Safety Trust, and the Libyan Peace Organisation, the first training of its kind to take place in Libya. The HALO Trust's output in 2021 saw a decrease in non-technical survey, but a growth in technical survey capacity. This was to pivot towards clearance of hazards.⁹⁰ In 2022, HALO deployed an accredited EOD/non-technical survey team in Sirte.⁹¹

In 2021, HALO Trust introduced tripwire clearance drills to the sector in Tripoli, and continued to pioneer mechanical clearance of rubble piles in Sirte. In both locations, HALO pioneered the use of the differential global positioning system (DGPS) to increase the precision of geodata. As of writing, HALO was also trialling Libya's first hybrid thermal lance but had not yet used it operationally.⁹² HALO also trained teams to use mechanical methods to clear anti-vehicle mines from road tasks, and large loop detector to find metal anti-vehicle mines. These methods are not used by any other operators and HALO was the first organisation to train Libyan staff to use them.⁹³

76 Interview with Brig. Turjoman, LibMAC, in Geneva, 10 January 2017.

77 "Mine still claim legs and lives in Libya's Benghazi, months after war ceased", *Reuters*, 21 January 2018.

78 Email from Diek Engelbrecht, UNMAS Libya, 20 July 2013.

79 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

80 Emails from Alessandro Di Giusto, DRC, 7 March 2022; and Samir Becirovic, UNMAS, 2 March 2022.

81 Email from Graeme Ogilvie, DCA, 1 April 2022.

82 Email from Col. Adel Elatwi, LibMAC, 22 April 2021.

83 Email from Samir Becirovic, UNMAS, 10 June 2022.

84 DCA website, accessed 3 May 2021, at: <http://bit.ly/2vYatmb>.

85 Email from Graeme Ogilvie, DCA, 1 April 2022.

86 Ibid.

87 Ibid.

88 Email from Alessandro Di Giusto, DRC, 7 March 2022.

89 Emails from Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

90 Email from Zita Andrassy, HALO Trust, 27 February 2022.

91 Email from Charles Fowle, Libya Programme Manager, HALO Trust, 8 September 2022.

92 Emails from Zita Andrassy, HALO Trust, 27 February 2022; and Charles Fowle, HALO Trust, 8 September 2022.

93 Email from Zita Andrassy, HALO Trust, 27 February 2022.

Humanitarian access to Libya for survey and clearance operations remains challenging for all operators. DCA, DRC, and HALO experienced delays in the granting of multiple-entry visas, which led in the case of HALO Trust to suspension of its operations between August and October 2021.⁹⁴ Other administrative procedures such as importing equipment often lead to delays. HALO Trust, for example, saw its detectors held at customs for over six months. Additional challenges are linked to the Libyan banking regulations that make it hard to open bank accounts, access funds, or pay suppliers in local bank accounts.⁹⁵

In Libya, the provision of security is highly localised; tribe-affiliated armed groups, with oftentimes shifting allegiances, control cities and towns down to neighbourhood level. This in turn requires humanitarian actors to have a good knowledge of armed group dynamics on the one hand while liaising with many interlocutors on the other. The risk of arbitrary detention of national staff is high, either due to tribal background or due to suspected affiliation with opposing armed groups.⁹⁶ The prevalent insecurity and

shifting frontlines throughout 2021 has caused operational delays and limited access to certain locations.

According to HALO, non-technical survey in Ain Zara (Tripoli area) was difficult due to tensions in the vicinity. Sirte was entirely off-limits for international staff in 2021, and operations in Sirte were suspended between June and October 2021 due to the establishment of a new frontline in Abu Grain (west of Sirte), and the presence of fighters in and around Sirte.⁹⁷ Operators reported varying levels of disruption by the COVID-19 pandemic in 2021, ranging from minor impact for HALO and DCA, despite some positive cases among staff, to major impact in the case of DRC, leading to teams to stand down for several periods.⁹⁸

In 2021, LibMAC personnel opened 87 tasks mostly for EORE, EOD, and non-technical survey activities performed by international and national NGOs in Tripoli, Sirte, Tawargha and Benghazi. In addition, LibMAC personnel conducted 68 QC and quality assurance (QA) missions.⁹⁹

DEMINER SAFETY

International operators did not report demining accidents in 2021,¹⁰⁰ but LibMAC told Human Rights Watch that 78 deminers either died or sustained serious injuries between May 2020 and March 2022 while on duty. The novelty of many of the sophisticated explosive devices left by retreating foreign and Libyan fighters, compounded by the lack of adequate training and specialised equipment for mine clearance specialists stand behind this high causality rate. For example, a demining incident occurred while a team of demining specialists were picking up a handgun lying on a desk that had been booby-trapped and tied to a string wire. The explosion instantly killed one deminer and injuring four others.¹⁰¹

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

According to data provided by international operators, no mined area was released through non-technical survey, technical survey, or clearance in 2021, and no anti-personnel mines were destroyed.¹⁰² DRC disposed of two anti-vehicle mines during spot tasks.¹⁰³ The national authorities and/or operators have been conducting non-technical survey and EOD in 2021 as reported by the international mine action stakeholders, but the results of these surveys have not been shared by LibMAC.

According to ITF's annual report, LibMAC personnel opened 87 tasks mostly for EORE, EOD, and non-technical survey by international and local NGOs in southern Tripoli, Sirte, Tawargha, and Benghazi. In addition, LibMAC personnel conducted 68 QA and QC missions.¹⁰⁴

UNMAS reported, highly improbably, that mine action teams in Libya technically surveyed 514km² in 2021. EOD spot tasks and BAC teams removed or destroyed 13,988 explosive items.¹⁰⁵ It is not known how many of these, if at all, were anti-personnel mines.

94 Emails from Graeme Ogilvie, DCA, 1 April 2022; Alessandro Di Giusto, DRC, 7 March 2022; and Zita Andrassy, HALO Trust, 27 February 2022.

95 Emails from Zita Andrassy, HALO Trust, 27 February 2022; and Charles Fowle, HALO Trust, 9 September 2022.

96 Email from Nicholas Torbet, HALO Trust, 14 April 2020.

97 Email from Zita Andrassy, HALO Trust, 27 February 2022.

98 Emails from Alessandro Di Giusto, DRC, 7 March 2022; Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

99 ITF, "Annual Report 2021", at: <https://bit.ly/3FeE39S>, p. 107.

100 Emails from Alessandro Di Giusto, DRC, 7 March 2022; Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

101 Human Rights Watch, "Libya: Russia's Wagner Group Set Landmines Near Tripoli", 31 May 2022.

102 Emails from Alessandro Di Giusto, DRC, 7 March 2022; Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

103 Email from Alessandro Di Giusto, DRC, 7 March 2022.

104 ITF, "Annual Report 2021", at: <https://bit.ly/3FeE39S>, p. 107.

105 Email from Samir Becirovic, UNMAS, 2 March 2022.

SURVEY IN 2021

International operators did not report releasing anti-personnel mined land through survey in Libya in 2021. Non-technical survey to map new contamination in Tripoli was concluded in March 2021.¹⁰⁶ But HALO has reported that resurvey in Tripoli has been conducted in some areas, with a view to cancelling tasks rather than to identify new ones.¹⁰⁷ Many areas have been cancelled by 3F, but it was not clear whether "all relevant information sources" were consulted as per LibMAS and IMAS.

UNMAS reported, highly improbably, that mine action teams in Libya technically surveyed 514km² in 2021,¹⁰⁸ without further elaboration.

CLEARANCE IN 2021

There was no clearance of anti-personnel mined area in Libya by international operators in 2021,¹⁰⁹ but DRC destroyed two anti-vehicle mines during spot tasks.¹¹⁰ As noted above, international operators were advised by the national authorities, UNMAS, and LibMAC to report encountered IEDs for subsequent removal by the national police or army personnel.¹¹¹

UNMAS reported that EOD spot tasks and BAC teams removed or destroyed 13,988 explosive items in 2021.¹¹² It is not known how many of these, if at all, were anti-personnel mines.

PROGRESS TOWARDS COMPLETION

LibMAC describes the following challenges to implementation of mine action operations: the high level of contamination; ongoing conflict and the continued presence of Islamic State; the difficulty in convincing IDPs to delay their return until the ERW threat is addressed; security and access to priority areas; the limited ERW and EOD capacity in Libya; the vast geographical area; and limited governmental and international support.¹¹³ Security conditions continued to pose a challenge to mine action in Libya. Libya needs a major shift to move mine clearance from an ad-hoc response to a systematic development tool. Part of this process involves the strengthening of LibMAC as a mine action coordination entity in Libya, and continued efforts to capacity build and enhance its resources.

Officials from the government, the UN, and civic groups said that impediments to clearing contaminated areas included fragmented governance and insufficient coordination among government agencies and humanitarian groups. Efforts have also been hindered by the lack of a centralised data-gathering system, inadequate capacities among some deminers, and funding shortfalls for equipment and training.¹¹⁴

106 Email from Graeme Ogilvie, DCA, 20 April 2021.

107 Email from Zita Andrassy, HALO Trust, 27 February 2022.

108 Email from Samir Becirovic, UNMAS, 2 March 2022.

109 Emails from Alessandro Di Giusto, DRC, 7 March 2022; Zita Andrassy, HALO Trust, 27 February 2022; and Graeme Ogilvie, DCA, 1 April 2022.

110 Email from Alessandro Di Giusto, DRC, 7 March 2022.

111 Email from Graeme Ogilvie, DCA, 1 April 2022.

112 Email from Samir Becirovic, UNMAS, 2 March 2022.

113 PowerPoint presentation by Brig. Turjoman, LibMAC, UN National Programme Directors' Meeting, Geneva, 8 February 2017.

114 Human Rights Watch, "Libya: Landmines, Other War Hazards, Killing Civilians", 27 April 2022.