

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

BUT AT LEAST IN THE NORTH-EAST

17.75 KM²

AP MINE
CLEARANCE IN 2021

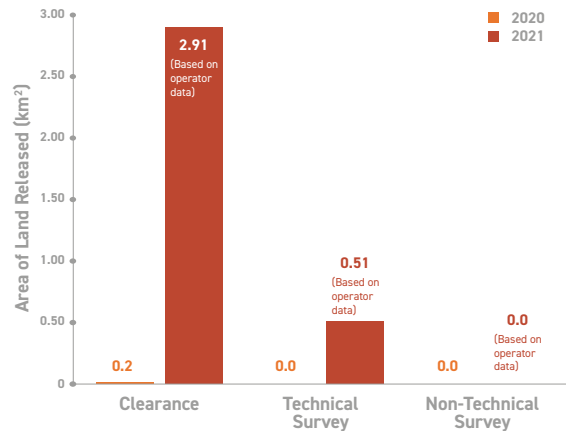
2.91 KM²

AP MINES
DESTROYED IN 2021

191

(INCLUDING 4 DESTROYED IN SPOT TASKS) OF THE 191 ANTI-PERSONNEL MINES, 177 WERE OF AN IMPROVISED NATURE (BASED ON OPERATOR DATA).

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

Humanitarian needs resulting from anti-personnel mine contamination remain very high against a backdrop of an underfunded and fragmented mine action programme. The United Nations Mine Action Service (UNMAS) has taken on the role of coordinating international mine action across Syria. Several actors, including international non-government organisations (NGOs), are present in areas not controlled by the government. In government-controlled areas, however, there is a critical lack of qualified clearance operators with only one international operator, the Armenian Centre for Humanitarian Demining and Expertise (ACHDE), accredited in 2020. In late December 2021, Norwegian People's Aid (NPA) signed a memorandum of understanding (MoU) with the Syrian government on the establishment of a mine action programme, and as at September 2022, was yet to be accredited for survey and clearance in Syria.

RECOMMENDATIONS FOR ACTION

- Syria should undertake never again to use anti-personnel mines and accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Syria should clear mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Syria should undertake a baseline survey of anti-personnel mine contamination in areas over which it has effective control.
- Syria should adopt national mine action standards (NMAS) that are in line with the International Mine Action Standards (IMAS).
- Syria should create the necessary structures to oversee an efficient mine action programme, namely, a national mine action centre (NMAC) and a national mine action authority (NMAA). The process should be underpinned by the adoption of mine action legislation and a multiyear strategic plan.
- Syria and the other parties present in the country should allow mine action operators to move freely across areas under their control and ensure their safety.
- A centralised mine action information management (IM) database should be established. All mine action operators in Syria should ensure that survey and clearance data are recorded and safeguarded in a digital format and in accordance with the IMAS.

DEMINING CAPACITY

MANAGEMENT CAPACITY

- The interministerial Mine Action Coordination Committee (headed by the Minister of Foreign Affairs)

NATIONAL OPERATORS

- Engineering Unit of the Syrian Army
- The Syria Civil Defence (SCD), or the White Helmets
- Roj Mine Control Organization (RMCÖ)
- iMFAD (based in Türkiye (formerly known as Turkey))

INTERNATIONAL OPERATORS

- The Armenian Centre for Humanitarian Demining and Expertise (ACHDE), operating in government-controlled areas.
- DanChurchAid (DCA), operating in the north-east
- Mines Advisory Group (MAG), operating in the north-east
- The HALO Trust, operating in the north-west

OTHER ACTORS

- Norwegian People's Aid (NPA), established in Damascus (December 2021)
- United Nations Mine Action Service (UNMAS), operating from Damascus

UNDERSTANDING OF AP MINE CONTAMINATION

Syria is heavily contaminated by mines and mines of an improvised nature used extensively by parties to the country's decade-old conflict. It also has mined areas left by a succession of Arab-Israeli wars since 1948. The Syrian government reportedly laid mines along borders with Türkiye (formerly known as Turkey) and Lebanon in 2012 and Turkish authorities subsequently claimed that between 613,000 and 715,000 mines had been planted along the Turkish-Syrian border, making clear they were not emplaced by Turkish forces.¹ Between mid 2020 and October 2021, the Landmine Monitor did not document or confirm any use of anti-personnel mines by the Syrian government or Russian forces participating in joint military operations in Syria, but reported unconfirmed allegations of new anti-personnel mine use by non-State armed groups (NSAGs).²

The full extent of anti-personnel mine contamination is unknown. To date, there has been no comprehensive countrywide survey to assess the contamination as access remains restricted by the ongoing conflict, the volatile situation, and the fragmented state of security. Yet, several localised community assessments and surveys consistently reveal large-scale contamination from anti-personnel mines and explosive remnants of war (ERW) as well as limited anti-vehicle mine contamination. Massive improvised explosive ordnance contamination, including landmines, has been found in areas liberated from Islamic State and its affiliated groups that controlled large swathes of north-east Syria until their defeat in 2018–19. The Syrian Observatory for Human Rights documented in 2021 the death of 300 civilians, including 28 women and 138 children, as a result of explosions of improvised explosive devices (IEDs) and

landmines.³ In 2021, Islamic State forces reportedly planted IEDs and landmines in the Syrian Democratic Forces (SDF)-controlled areas in the north and north-east of Syria.⁴

Rebel forces which subjected the towns of Foua and Kfraya to years of siege are said to have left hundreds of mines in surrounding fields as well as individual explosive devices in many homes.⁵ In Raqqa, where 80% of the city has been destroyed, the ground was littered with rubble mixed with ERW and booby traps left behind by the belligerent parties.⁶ From Raqqa, former capital of the self-proclaimed Islamic State caliphate, to Al-Hassakeh governorate in the north-east, and south to Deir Ezzor and Barchuz (the last remaining Islamic State stronghold overrun in May 2019), retreating Islamic States forces left huge numbers of mines of an improvised nature and other improvised devices. Humanity and Inclusion (HI) reported in May 2022 that contamination by IEDs, landmines, and other types of explosive ordnance (EO) continued to spread in Syria in 2021–22 as a result of the ongoing hostilities and criminal activities. Landmines, IEDs, and other ordnance were placed to impede military advances and deny access to the civilian population.⁷

According to the Syria Humanitarian Needs Overview (HNO), EO contamination affects one third of populated communities. Areas that experienced intense hostilities, including Aleppo, Daraa, Deir Ezzor, Idlib, Raqqa, and Rural Damascus, were found to be particularly hard hit.⁸ In 2020, the UN recorded an average of 76 explosions per day, equating to an explosion every 20 minutes.⁹ The extent of contamination disaggregated by type of device is not known. In 2021, the Office of the UN High Commissioner for Human Rights (OHCHR)

1 Human Rights Watch, "Syria: Army planting banned landmines", 13 March 2012, at: <http://bit.ly/2Ybz9rK>; "Thousands of landmines planted along Turkish-Syrian border", *Middle East Monitor*, 21 November 2013, at: <https://bit.ly/2Mt7efE>.

2 *Landmine Monitor Report 2021*, at: <https://bit.ly/3ybM7VD>, p. 16.

3 Syrian Observatory for Human Rights, "SOHR 2021 Booklet", 2 January 2022, at: <https://bit.ly/3PFM1x4>, p. 1.

4 *Ibid.*, p. 84.

5 "Inside Foua: A Shi'a town in the eye of the Syrian storm", *Middle East Eye*, 19 August 2018.

6 HI, "Syria: it will take at least two generations to rebuild", 25 February 2021, at: <https://bit.ly/3fPFoaF>.

7 Humanity and Inclusion, "Explosive ordnance in Syria: impact and required action", May 2022, at <https://bit.ly/3zCLJRK>, p. 5.

8 UN Office for the Coordination of Humanitarian Affairs (OCHA), Syria Humanitarian Needs Overview, March 2021, at: <https://bit.ly/3yu8Tar>, p. 10; and Syria Humanitarian Needs Overview, February 2022, at: <https://bit.ly/3RrcHmz>, p. 6.

9 UN Office for the Coordination of Humanitarian Affairs (OCHA), Syria Humanitarian Needs Overview, March 2021, at: <https://bit.ly/3yu8Tar>, p. 10;

documented 1,874 civilian casualties as a result of airstrikes, ground-based shelling, and armed clashes in north-west Syria, as well as EO incidents, including these involving IEDs and landmines. Most of these incidents occurred in Aleppo, Idlib, Raqqa, and Deir Ezzor governorates.¹⁰ Contamination is most frequently reported on agricultural land, on roads, on private property, as well as in and around schools, hospitals, and other public infrastructure.¹¹

The HALO Trust conducted an EO community contamination impact assessment in north-west Syria (in Aleppo and Idlib governorates) between 2018 and 2020. The assessment confirmed EO contamination in over 400 communities (equating to 41% of those assessed),¹² with 73% of affected communities reporting agricultural land was blocked, and 48% impeded from accessing housing.¹³ Landmines and IEDs combined accounted for only 4% of total contamination, submunitions accounted for 36%, while the remaining contamination was caused by a mixture of other unexploded ordnance (UXO).¹⁴ This assessment by HALO also revealed 113 suspected minefields (89 in northern Aleppo and 24 in Idlib) and 38 suspected IED fields (34 in northern Aleppo and 4 in Idlib). The types of identified mines and IEDs were not known

as data was collected in a rapid survey assessment without conducting full non-technical survey.¹⁵

The International Committee of the Red Cross (ICRC) and the Syrian Arab Red Crescent (SARC) also conducted a joint mine risk needs assessment of 573 communities in Al-Hassakeh, Aleppo, Daraa, Deir Ezzor, Hama, Homs, Idlib, Quneitra, and Sweida governorates. According to the assessment, 530 (92%) of the assessed communities reported the presence of ERW. Of the assessed communities, 57% reported the presence of anti-personnel mines, 46% of cluster munition remnants (CMR), and 25% of other explosive ordnance.¹⁶

Mines Advisory Group (MAG) has been conducting surveys across several governorates in the north-east of Syria since 2016. To date, MAG has registered approximately 64.92km² of mined area across a total of 830 suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs), which include areas contaminated with very large numbers of mines of an improvised nature. As at the end of 2021, MAG had released 72% of the area, leaving 17.75km² requiring further survey and clearance (see Table 1).¹⁷

Table 1: Anti-personnel mined area in north-east Syria surveyed by MAG (at end 2021)¹⁸

Governorate	CHAs	Area (m ²)	SHAs	Area (m ²)	Total SHA/CHA	Total area (m ²)
Aleppo	12	455,525	10	177,324	22	632,849
Al-Hassakeh	31	7,674,686	20	1,420,533	51	9,095,219
Deir Ezzor	7	161,310	4	627,000	11	788,310
Raqqa	77	5,370,103	70	1,863,491	147	7,233,594
Totals	127	13,661,624	104	4,088,348	231	17,749,972

Working from the Syrian capital, Damascus, UNMAS continued an explosive ordnance assessment team (EOAT) survey in Rural Damascus (South) that it had started in August 2020.¹⁹ The assessment locations were identified by UNMAS in line with the UN Humanitarian Response Plan (HRP) priorities and with the approval of the Syrian government. At the end of 2021, the EOAT surveyed 10km² in four locations in Daraya (Rural Damascus governorate), of which around 6km² were confirmed as hazardous. The EOAT also surveyed residential buildings in Yarmouk camp in Rural Damascus. Of the 423 buildings assessed, 88 were confirmed as contaminated. The EOAT survey was planned to continue throughout 2022.²⁰

The Syrian Civil Defence (SCD), better known as the White Helmets, did not record any mine or IED contamination through non-technical survey in the north-west of Syria 2021.²¹

Syria also has significant contamination from CMR and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Syria for further information).

10 Syria Humanitarian Needs Overview, February 2022, p. 14.

11 Ibid., p. 60.

12 The HALO Trust, "Syria, A Hidden Emergency", at: <https://bit.ly/3fD4w4x>, p. 3.

13 Ibid., p. 10.

14 Ibid., p. 7.

15 Email from Mairi Cunningham, Programme Manager, HALO Trust, 7 June 2021.

16 ICRC and SARC, Mine Risk Needs Assessment and Education, PowerPoint presentation to the 24th NDM, 25 May 2021, slides 7–8, at: <https://bit.ly/3zxKRRk>.

17 Email from Fabrice Martin, Country Director, MAG, 9 March 2022.

18 Ibid.

19 Syria Humanitarian Needs Overview, March 2021, at: <https://bit.ly/3vzUXwp>, p. 10.

20 Emails from UNMAS, 30 June 2021; and Francesca Chiaudani, Mine Action Coordinator, UNMAS, 31 March 2022.

21 Email from Michael Edwards, Explosive Hazard Operations Manager, SCD, 5 March 2022.

PROGRAMME MANAGEMENT

There is no national mine action authority (NMAA) in Syria. In government-controlled areas, an inter-ministerial National Mine Action Coordination Committee is said to have been formed by a presidential decree in 2019 and is chaired by the Minister of Foreign Affairs, Dr Faisal Mikdad.²² The Ministry of Foreign Affairs (MoFA) assigned a focal point for all liaison with UNMAS on mine action. UNMAS has been told that the committee meets on an ad-hoc basis as needed.²³

Mine action in Syria is coordinated by three response mechanisms:

- The Damascus-based Mine Action Sub-Cluster (MASC) coordinated by UNMAS;
- the north-west MASC co-chaired by UNMAS and The HALO Trust; and
- the north-east Mine Action Working Group (MAWG), which sits under the protection working group in the NGO forum-led response and is coordinated by iMMAP.²⁴

Coordinators of the three structures organise monthly meetings with the respective mine action actors.²⁵ In addition to the MAWG, in 2021, the Humanitarian Affairs Office (HAO) created a north-east Syria Mine Action Centre Office (NESMAO) to coordinate mine action activities.²⁶

In north-east Syria, a mine action centre (MAC), which was later named as NESMAO, was created in January 2021²⁷ by the HAO of the SDF. The NESMAO largely supports and facilitates mine action activities but does not maintain an updated database or task operators.²⁸

UNMAS continues to represent the mine action area of responsibility within the UN-led coordination mechanism for Syria, as well as supporting the hub-based coordination mechanisms. UNMAS provides technical expertise and support to the humanitarian clusters, sectors, and mine action partners. UNMAS has been encouraging safer programming for humanitarian workers, training security focal points in risk awareness, and integrating risk education into the programming of different humanitarian clusters and sectors to expand the operational scope and reach the people most in need.²⁹

Given the lack of critical national mine action structures, UNMAS liaises with the National Mine Action Coordination Committee chaired by the Syrian MoFA and accredits clearance operators on a *de facto* basis. UNMAS does not provide capacity-building support to the national authorities, but, as a mine action coordination body in 2020, UNMAS drafted national technical standards and guidelines for mine action and has provided them to the Syrian government for consideration.³⁰

The Damascus-based MASC meets on average once a month. The meetings are attended by UN agencies, the SARC, the ICRC, and other national and international organisations that deliver mine action activities.³¹

The north-east MAWG meets on a monthly and (otherwise) an ad hoc basis, whenever required. Coordination meetings were attended regularly by MAG, HI, DanChurchAid (DCA), ITF Enhancing Human Security (ITF) among others. The working group mainly discussed the coordination of explosive ordnance mine risk education (EORE), the sharing of detailed non-technical survey reports, and feedback on MoUs.³²

MAG reported the fragile security situation as a main challenge to an efficient mine action in the north-east. The border closure with Iraq impacted movement of staff and supplies critical for operations. Further, the lack of available trauma medical care within an hour's reach of its mine action operations has restricted MAG's ability to expand its work to other affected areas. The occasional lack of ownership documents of land and property is a concern that occasionally leads to disputes over clearance. MAG did not provide any capacity development in the north-east in 2021, but has secured funding for this purpose for 2022.³³

In the north-west of the country, mine action is coordinated by the MASC cross-border response from Gaziantep (Türkiye-based response) and is co-chaired by The HALO Trust and UNMAS. Some 25 partners attend its monthly meetings. HALO and its partners coordinate and receive approvals from the local Turkish authorities for its work across the border with Türkiye.³⁴ HALO reported generally good coordination with the local authorities when it comes to access and security, but the range of mine action activities has been limited and varied due to the complexities of the operating context.³⁵

22 Information provided on condition of anonymity.

23 Emails from UNMAS, 30 June 2021 and 31 March 2022.

24 Ibid.

25 iMMAP, Coordination Support to Humanitarian Mine Action, 2020, at: <https://bit.ly/3yGh9nQ>; and emails from Mairi Cunningham, HALO Trust, 7 and 17 June 2021; and UNMAS, 30 June 2021.

26 Email from Fabrice Martin, MAG, 9 March 2022.

27 Email from MAG, 24 May 2021.

28 Information provided on condition of anonymity.

29 Email from UNMAS, 31 March 2022.

30 Information provided on condition of anonymity.

31 Email from UNMAS, 22 September 2022.

32 Email from Fabrice Martin, MAG, 9 March 2022.

33 Ibid.

34 Emails from Mairi Cunningham, HALO Trust, 7 and 17 June 2021; and Damian O'Brien, Programme Manager, HALO Trust, 1 March 2022.

35 Email from Damian O'Brien, HALO Trust, 1 March 2022.

The monthly MASC coordination meetings include many organisations that are not operationally involved in mine action beyond risk education. According to SCD, limited funding and access along with difficulties in importing equipment constitute the main challenges to mine action operators in north-west Syria. SCD was able to secure funding for 2021 and already has sufficient stocks of equipment required to carry out its activities. However, other organisations have limited options for importing equipment and there is a continued decrease in available funding due to donor fatigue.³⁶

UNMAS was seeking US\$34 million for its mine action programme in Syria through to the end of 2022, but as at the end of 2021, the programme was facing a shortfall of US\$25.3 million.³⁷ In a statement to the 24th International Meeting of Mine Action National Directors and UN Advisors (24th NDM) in May 2021, Syria appealed to the international community to boost its financial support to UNMAS so the UN could expand its operation in Syria, provide equipment to the existing qualified national resources, and encourage international NGOs to step in and help Syria clear mines.³⁸

ENVIRONMENTAL POLICIES AND ACTION

The HALO Trust's environmental policy has been established by executive management at its headquarters. In line with this policy, HALO's activities seek to minimise negative environmental impacts wherever possible and enhance positive impacts in pursuit of improved lives and livelihoods. HALO complies with the international mine action standards (IMAS) to ensure that activities are conducted with appropriate measures in place to minimise environmental damage, and respect national laws and local needs. HALO has also established an Environment and Conservation Cross-Cutting Network to provide continued guidance on how environmental impacts can be reduced.

MAG's community liaison standing operating procedures (SOPs) include consultations with affected communities about the use of mechanical assets and the timing of clearance, to minimise impact on the environment, agricultural land, or other local activities, including consultations on water use, rubbish disposal, land erosion, and burning of vegetation.

UNMAS reports that it takes into consideration the impacts of assessing and removing EO on the landscape, for instance, when the removal of vegetation is a necessary precondition for the successful implementation of operations. As UNMAS is a secretariat entity, it globally refers to the environment strategy of the UN Department of Field Support (DFS). UNMAS also benefits from the United Nations Office for Project Services (UNOPS) environmental policies, of which the 2018–2021 strategic plan explicitly mentions "environmental respect" and "environmental impact". As such, UNMAS's partnership with implementing partners is governed by guidelines that refer to environmental requirements for task implementation.

GENDER AND DIVERSITY

The HALO Trust mainstreams gender, diversity and inclusion in its programme, and disaggregates all mine action data by sex and age. As part of its community liaison activities, HALO holds separate focus group sessions with women and children with the attendance of appropriate staff. HALO provides equal opportunities and encourages applications regardless of gender, race, religion, or ethnic background and is committed to increasing women's participation at all levels of the organisation and ensuring that its activities benefit women, girls, boys, and men equally. In 2021, women made up 41% of HALO's total number of employees, 23% of its managerial positions, and 32% of operational positions.³⁹

MAG has an institutional gender and diversity policy and implementation plan. MAG's community liaison, survey, and clearance activities take gender into account during the planning and implementation phases. These activities are guided by MAG's own SOPs and those of IMAS, and MAG has mixed gender community liaison teams that speak the local languages. All mine action data are disaggregated by sex and age.⁴⁰ In 2021, women made up 20% of MAG's total number of employees, 50% of its community liaison officers, and 26% of

the organisation's operational positions. MAG's national mine action strategy and annual work plans integrate gender and diversity on a programme and beneficiary levels. Guided by its SOPs, MAG consults with women, children, ethnic, and other minority groups in all its activities, and ensures these groups are consulted separately to identify different needs.⁴¹

SCD says it has a gender and a diversity strategy in place. Yet, in 2021, SCD's clearance and survey teams were exclusively male. SCD reports that it is actively working to improve the gender balance of the survey teams in order to ensure that all the members of the community, regardless of gender and age, are involved in information gathering. SCD was training 12 female volunteers on non-technical survey and was planning to deploy them with the survey teams in June 2022. About 9% of SCD's total employees are female, and 9% of managerial and operational positions are filled by women.

Teams are trained to gather information from a variety of sources and to interview and liaise with all segments within a community, including those from ethnic and minority groups. The names, gender, and age of each focal point and

³⁶ Email from Michael Edwards, SCD, 5 March 2022.

³⁷ Email from Francesca Chiaudani, UNMAS, 31 March 2022.

³⁸ Statement of Syria, 24th NDM Meeting, 25–27 May 2021, p. 3.

³⁹ Emails from Mairi Cunningham, HALO Trust, 7 June 2021; and Damian O'Brien, HALO Trust, 1 March 2022.

⁴⁰ Email from MAG, 24 May 2021.

⁴¹ Email from Fabrice Martin, MAG, 9 March 2022.

interviewee are recorded as part of the survey reporting process and are reviewed by the management team to ensure that the process remains as inclusive as possible. SCD volunteers are recruited from the very communities they serve and thus reflect the various ethnic and minority groups which reside in their area of operations. SCD reported that it has procedures and policies in place to ensure that individuals do not face discrimination due to their ethnicity, religion, or sex.⁴²

UNMAS has a gender and diversity strategy, and gender and diversity considerations are addressed in implementation of activities. During survey and liaison activities, UNMAS teams usually consult with community focal points or representatives from communities and interact with women and children leaving in close vicinity to the working sites.⁴³

UNMAS's risk education teams are fully gender balanced, and its clearance contractor, the ACHDE, has integrated gender

and diversity elements in its work. UNMAS reports that recruiting qualified females for technical roles at national level continues to be a challenge, but it continues to reach out to a diverse pool of applicants and create positive working conditions that enable women's participation. A diverse set of indicators, including sex and age of victims and beneficiaries, are used to evaluate prioritisation. As at March 2022, 40% of UNMAS Syria employees are women, with women in 30% of the employees in managerial or supervisory positions, and 26% of those in operational positions. UNMAS has deployed to communities with ethnic and minority groups (Druze in Sweida for instance), and engaged with all community members to gather feedback.⁴⁴

UNMAS's context analysis appeared to indicate that ethnic/minority groups are not affected by EO contamination differently, but rather that all population groups are vulnerable, regardless of ethnicity.⁴⁵

INFORMATION MANAGEMENT AND REPORTING

The HALO Trust uses the Information Management System for Mine Action (IMSMA) data collection forms and regularly reports to the north-west MASC and the Office of the UN High Commissioner for Refugees (UNHCR) in the UNHCR-led Gaziantep coordination response. HALO uses mobile-data collection tools and preserves data in Excel and Microsoft PowerBI databases.⁴⁶ In 2021, HALO sought to refine its quality assurance (QA) mechanisms through stronger integration of field teams using Kobo software for mobile data collection.⁴⁷

MAG uses the online server, SharePoint, to preserve its mine action data. MAG also continued sharing data with iMMAP and the protection sector, which can also preserve its mine action data if required.⁴⁸ MAG conducted multiple checks across all activities in 2021 in order to uphold data quality. MAG Syria is also in the process of establishing a global IM system, which was not possible before.⁴⁹

iMMAP provides technical IM services to the MAWG in north-east Syria through mobile data collection, geographic information systems (GIS), and maps of explosive hazard contamination, survey, and clearance progress. iMMAP also supports the north-east HAO in setting up its NESMAO. As at May 2021, the NESMAO did not have the capacity to manage an IMSMA database on its own. SCD uses Survey123

for data collection and IMSMA Core for data keeping and management,⁵⁰ while DCA uses Survey123.⁵¹

Despite concerted efforts to establish a centralised database representing the whole of Syria, SCD reported that its survey and clearance data continue not to be accepted in the north-west MASC mine action database and the 4W⁵² reporting mechanism. This is reportedly because SCD's application to join the protection coordination cluster had not yet been granted, with membership of the cluster a pre-condition for active membership in the MASC. SCD remains ready to provide data to the MASC, which it was unable to do under an observer status.⁵³ It is of course important that all relevant data on EO contamination, survey efforts, and clearance operations are captured in a central IM database.

To ensure or improve the quality of data in its mine action database in 2021, SCD continued to employ a multistage data verification system as part of its QA process. All activity reports were checked by three different individuals, at increasing levels of seniority, as part of SCD's operational oversight. Improvements and modifications are made to SCD's data collection and IM systems, as and when dictated by operational or donor requirements.⁵⁴

42 Emails from Michael Edwards, SCD, 5 March and 15 June 2022.

43 Email from UNMAS, 31 March 2022.

44 Ibid.

45 Ibid.

46 Emails from Mairi Cunningham, HALO Trust, 7 June 2021; and Damian O'Brien, HALO Trust, 1 March 2022.

47 Email from Damian O'Brien, HALO Trust, 1 March 2022.

48 Email from Fabrice Martin, MAG 9 March 2022.

49 Emails from MAG, 24 May 2021; and Fabrice Martin, MAG 9 March 2022.

50 Emails from Michael Edwards, SCD, 7 May 2021 and 5 March 2022.

51 Email from Lene Rasmussen, DCA, 13 April 2021.

52 The 4W is an Excel-based reporting matrix that feeds into the UN HRP. The term 4W stands for Who (which operator) is doing What, Where, and When. It is used as both a coordination and planning tool.

53 Email from Michael Edwards, SCD, 5 March 2022.

54 Ibid.

In 2021, UNMAS completed the installation of IMSMA Core as the national mine action IM system in Damascus, although it continues to have another IMSMA database outside of Damascus for reasons of data confidentiality.⁵⁵ UNMAS manages the database, collating EO data from partners

across Syria in a central database. Since its accreditation in 2020, the ACHDE has been providing monthly reports on areas worked and items found to UNMAS for entry into the IMSMA.⁵⁶ It is believed, however, that clearance by Syrian and Russian forces goes largely unreported.

PLANNING AND TASKING

Syria does not have a national mine action strategic plan. Mine action is fragmented and has a long way to develop into a coherent national response. Different actors have set different priorities for survey and clearance as dictated by the circumstances and the authorities under which they operate.

In the north-west, The HALO Trust uses data collected from its EO community contamination assessment survey to identify high-priority communities for explosive ordnance disposal (EOD), focusing on removing contamination that prevents access to basic services or livelihood resources. HALO Trust engages with communities where it conducts EOD to obtain their informed consent and considers requests from the local authorities for future interventions.⁵⁷

In the north-east, the mine action working group, with the support of iMMAP, participates in determining areas of operations as there is no tasking system in place. MAG's community liaison teams identify hazardous areas through non-technical surveys. They subsequently complete a clearance prioritisation matrix to assess the impact of EO contamination on communities and to provide data for the technical operations, including information on direct and indirect beneficiaries, infrastructure, natural resources, land use, and land ownership.⁵⁸ The NESMAO proposed to establish a clearance prioritisation system based on the priorities of civilian authorities in the north-east, which remained under discussion as of writing.⁵⁹

SCD prioritises tasks based upon a number of factors which ultimately determine the level of risk to the community. These factors include the type of item, its location (whether close to inhabited buildings or blocking vital infrastructure), the number of items, as well as logistical information, such as the location of the task relative to the clearance team, and whether there are multiple tasks within the same area. Following an assessment of these factors, tasks that are deemed to pose the highest risk to the community are prioritised. At present, the number of tasks identified through survey does not yet exceed the operational capacity of the clearance teams, meaning that once items are identified they are cleared within one or two days, thus reducing the need to prioritise.⁶⁰

UNMAS planned survey and clearance tasks in 2021 based on the agreed list of priority locations that it had discussed with partners and the Government of Syria. UNMAS also follows its own internal country programme strategy and annual work plans, which are done in consultation with its partners. Tasks are prioritised and selected based on a set of criteria that include the severity of humanitarian needs, the presence of humanitarian partners, delivery of humanitarian activities, internally displaced person (IDP) flows, and historic data on explosive incidents.⁶¹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There are no formal NMAS in Syria, but in 2020, UNMAS drafted NMAS and associated guidelines and submitted them to the Syrian government for its review and approval. Despite having received informal positive feedback, no official response had been given on the proposed NMAS as at April 2022. The NMAS will be reviewed annually to address new challenges and ensure the employment of best practices.

Due to the lack of NMAS, most of the operators work to their own SOPs. For example, DCA works in accordance with its global SOPs which derive from IMAS, and applies best practice guidelines from the Geneva International Centre for Humanitarian Demining (GICHD). DCA also offers guidance and advocates best practices to the NESMAO in the north-east of Syria. HALO increased its efforts to refine its QA mechanisms through stronger integration of field teams using Kobo software for mobile data collection. SCD teams also operate according to IMAS for clearance, survey, and risk education.

⁵⁵ Email from UNMAS, 31 March 2022.

⁵⁶ Emails from UNMAS, 30 June 2021.

⁵⁷ Emails from Mairi Cunningham, HALO Trust, 7 June 2021; and Damian O'Brien, HALO Trust, 1 March 2022.

⁵⁸ Emails from MAG, 24 May 2021; and Fabrice Martin, MAG, 9 March 2022.

⁵⁹ Email from Fabrice Martin, MAG, 9 March 2022.

⁶⁰ Email from Michael Edwards, SCD, 5 March 2022.

⁶¹ Email from Francesca Chiaudani, UNMAS, 31 March 2022.

MAG offered support to the NESMAO to develop NMAS. Such support would include an external consultant to develop mine action standards and overall capacity building, including on quality management (QM). MAG Syria continues to work to its own established SOPs which are in line with IMAS. MAG's own SOPs were updated in December 2021. The updates were designed to align with MAG's new Global Technical Standards.

OPERATORS AND OPERATIONAL TOOLS

Mine action in Syria has been conducted by a wide range of organisations, largely determined by the circumstances and forces controlling the region at a given time. In areas under government control these have included mainly Russian and Syrian military engineers and civil defence organisations.⁶²

DCA has been present in Syria since 2015. Due to the frequent shifts and outbreaks of violence, its Syria country offices have closed and reopened several times. Its staff were relocated to Türkiye, Iraq, and then back to Syria in 2020. As at May 2021, and due purely to issues of access, DCA's operations were confined to the parts of north-east Syria not controlled by the government.⁶³ Updates on DCA's operations in 2021 were not provided to Mine Action Review.

The HALO Trust, which has been present in Syria since 2016, is operational in the north-west of Syria in the opposition-controlled territories of Idlib and northern Aleppo. HALO conducted EOD, risk education, and victim assistance in 2021 in partnership with the following local NGOs: Shafak for risk education; iMFAD for EOD and risk education; and "Hand in Hand for aid and development" for victim assistance, in addition to implementing risk education directly. HALO's operational capacity in 2021 comprised one EOD team (iMFAD), six risk education teams (HALO Trust and iMFAD), and two victim assistance case teams (HALO). In 2022, HALO deployed two non-technical survey teams in Idlib and the western Aleppo countryside and subsequently began EOD operations in the same areas. Negotiations to conduct non-technical survey and resume EOD in northern Aleppo were ongoing as at September 2022.⁶⁴

MAG operated from Shaddadi, Markada, and Al-Hasakeh subdistricts in Al-Hassakeh governorate in north-east Syria, conducting survey, risk education, and clearance in Al-Hassakeh, Deir Ezzor, and Raqqqa governorates. In the first quarter of 2021, MAG partnered with two NGOs for risk education and community focal point (CFP) training in Deir Ezzor and Aleppo governorates: Action for Humanity (formerly known as Syria Relief) and Bahar. In 2021, as in the previous year, MAG deployed 10 community liaison teams who conduct non-technical survey, in addition to three mine action teams, and two multi-task teams for technical survey and clearance.⁶⁵

MAG was unable to set-up a training centre and a second line mechanical workshop as planned for in 2021, but hoped to do so in 2022.⁶⁶ In 2022, MAG had planned to upscale its community liaison capacity including work with partner organisations in eastern Aleppo and Deir Ezzor, but it was not able to take this forward. However, MAG continued deploying 10 community liaison teams in each of Al-Hasakeh and Raqqqa governorates as planned.⁶⁷ The COVID-19 pandemic caused operational delays due to reduced numbers of risk education beneficiaries, quarantine, and isolation measures.⁶⁸

In 2022, MAG had planned to upscale its community liaison capacity including work with partner organisations in Eastern Aleppo and Deir-Ez-Zor, but it was not able to take this forward. However, MAG is deploying its own community liaison capacity in Hasakeh and Raqqqa as planned, with 10 teams in each governorate.⁶⁹ For technical survey and clearance, MAG was planning to deploy six mine action teams, four multi-task teams, and two mechanical survey teams. MAG was unable to set-up a training centre and a second line mechanical workshop as planned for in 2021, but hoped to do so in 2022. The COVID-19 pandemic caused operational delays due to reduced numbers of risk education beneficiaries, quarantine, and isolation measures.⁷⁰

On 21 December 2021, NPA negotiated an MoU with the Syrian government for the establishment of a humanitarian mine action programme in Syria. In 2022, NPA will start the operational phase primarily focusing on survey and clearance of areas as identified under the UN Humanitarian Response Plan and Humanitarian Needs Overview. Initial capacity of three gender-balanced multi-skilled clearance teams and three non-technical survey teams, funded by the Norwegian Ministry of Foreign Affairs, will initially focus on the Yarmouk camp in the outskirts of the capital Damascus. They were expected to be operational during the last quarter of 2022. As at September 2022, NPA was awaiting the completion of training of its field teams before requesting accreditation by UNMAS.⁷¹

A small national organisation, Roj Mine Control Organization (RMCO), was established in 2016, and was conducting clearance in north-east Syria but reportedly sustained heavy casualties among its deminers attempting clearance of improvised devices.⁷² As at July 2021, RMCO was still operational and was being trained on EOD by the United States (US) forces.⁷³

62 "Russian military boosts qualified Syrian sappers to demine war-ravaged country", *TASS*, 9 January 2018.

63 Email from Lene Rasmussen, DCA, 13 April 2021.

64 Email from Damian O'Brien, HALO Trust, 29 September 2022.

65 Ibid.

66 Email from Fabrice Martin, MAG, 9 March 2022.

67 Email from Roxana Bobolicu, MAG, 29 September 2022.

68 Email from Fabrice Martin, MAG, 9 March 2022.

69 Email from Roxana Bobolicu, MAG, 29 September 2022.

70 Email from Fabrice Martin, MAG, 9 March 2022.

71 Emails from Claus Nielsen, Programme Manager, NPA, 9 and 27 September 2022.

72 S. Kajjo, "Landmine removal crucial in post-IS Syria", *Voice of America*, 3 April 2019; and interview with operators, Erbil, Iraq, May 2019.

73 This information is provided under the condition of anonymity.

SCD has been conducting clearance in the north-west of Syria since March 2016.⁷⁴ The SCD was operational in Aleppo, Hama, and Idlib governorates (in the north and north-west of the country),⁷⁵ and continued to conduct surface level battle area clearance (BAC), non-technical survey, EORE, and single item disposal. SCD encounters items that are predominantly CMR, but its teams also dispose of anti-personnel mines when they are encountered. SCD's operational capacity in 2021 was six non-technical survey and six clearance teams. All SCD teams are trained to deliver risk education.⁷⁶

UNMAS signed an MoU with the Syrian government in July 2018. After meeting the then Deputy Foreign Minister, Faisal Mikdad in Damascus in October 2019, UNMAS Director Agnes Marcaillou reported the government had agreed to the involvement of international demining organisations. They would be registered by the government and coordinated by UNMAS.⁷⁷

UNMAS reported the lack of qualified in-country operators as one of the major challenges to progress in mine action. This led UNMAS to hire its own UN personnel to conduct the EO assessment survey in the interim, which normally would be conducted through implementing partners.⁷⁸ To facilitate access for clearance operators, UNMAS conducted a global pre-qualification exercise for Syria. Ten mine clearance operators from a wide range of countries were pre-qualified to participate in UNMAS procurement for clearance operations.⁷⁹ As at September 2022, only the ACHDE had been accredited by UNMAS for conducting mine action activities in government-controlled areas. Another

group, The Social, Humanitarian, Economical Intervention for Local Development (SHEILD) Association, was undergoing the process of accreditation and only had desk accreditation.⁸⁰ SHEILD's Mine Action Unit, operating through its Damascus office and in cooperation with the SARC, began to conduct preliminary field visits to conduct non-technical survey in several regions in Ghouta area and Yarmouk camp.⁸¹

In late 2019, UNMAS identified 50 locations in Rural Damascus, Daraa, and Homs for survey and clearance operations. All areas were classified as level three or above on the humanitarian response plan and protection sector severity scale. In February 2020, UNMAS shared the list of these 50 recommended areas/sub-districts with the Syrian government for its acceptance and granting access for the EO assessment. Among the 50 locations, it was jointly agreed with government of Syria to start the assessment in eight locations of high humanitarian priority, also taking into consideration access and logistics questions in Rural Damascus and Homs.⁸² In December 2021, UNMAS started a pilot clearance project of the priority area of western Ghouta, in the outskirts of the capital Damascus.⁸³

At the end of 2021, UNMAS's operational capacity was two EO assessment teams, which consisted of seven technical survey personnel and two non-technical survey personnel. The ACHDE deployed two clearance teams of 12 deminers, in addition to two BAC teams. UNMAS opened a sub-office in Aleppo in 2021. UNMAS hoped to scale up clearance and survey activities in 2022, but this remained contingent on funding and operational capacity.⁸⁴

DEMINER SAFETY

SCD suffered one non-fatal accident in 2021, in which one assistant team leader was injured while disposing of an AO-2.5RT submunition. The operator received fragmentation injuries, which required hospital treatment. As at June 2022, the injured person had fully recovered and rejoined his team. An independent investigation of the incident was conducted and a refresher training provided to all teams.

Syrian state media reported in November 2021, that seven deminers of the Syrian army engineering units were killed and five injured while "dismantling" mines in the al-Qusour neighbourhood of Deir Ezzor governorate (north-east).⁸⁵

74 Email from Michael Edwards, SCD, 15 June 2022; and Mayday Rescue, "Syria Civil Defence, Explosive Hazard Mitigation Project Overview, Nov 2015–Mar 2018", 1 March 2018.

75 SCD worked in the following districts of north-west Syria in 2021, A'zaz, Afrin, Al'bab, Jebel Saman (Aleppo governorate), Al Ma'ra, Ariha, Harim, Idlib, Jisr-Ash-Shugur (Idlib governorate), and in As-Suqaylabiyah (Hama governorate); email from Michael Edwards, SCD, 5 March 2022.

76 Email from Michael Edwards, SCD, 5 March 2022.

77 Statement by Agnes Marcaillou, Director, UNMAS, to the UN Security Council, 24 October 2019.

78 Email from UNMAS, 30 July 2021.

79 The ten operators originate from Afghanistan, Croatia, Denmark, Norway, Russia, Switzerland, Ukraine, and the United Arab Emirates.

80 Email from UNMAS, 31 March and 22 September 2022.

81 SHEILD website, accessed on 1 July 2022, at: <https://bit.ly/3nyDVKd>.

82 Statement of Syria to the 24th NDM Meeting, 25–27 May 2021, p. 2.

83 Email from UNMAS, 31 March 2022.

84 Ibid.

85 "Seven members of engineering units martyred while dismantling mines in Deir Ezzor", *Syrian Arab News Agency (SANA)*, 22 November 2021, at: <https://bit.ly/3Bq98Hw>.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Syria's continuing instability prevented progress towards a coordinated national programme of mine action. Comprehensive information on outcomes of survey and clearance in any area was unavailable.

MAG reduced 508,519m² of anti-personnel mined area through technical survey in Al-Hassakeh in 2021. MAG also cleared 2.91km² of anti-personnel mine contamination in the same governorate in 2021. In total, 189 anti-personnel mines were destroyed, of which 177 were of an improvised nature and two were destroyed in spot tasks. Two areas of 0.68km² suspected of contamination that were cleared in 2021 proved to contain no anti-personnel mines. MAG substantially increased its clearance outputs in 2021 from 18,736m² in 2020 as it only reopened its programme in Syria in the last month of 2020, while was operational throughout the twelve months of 2021.⁸⁶

SCD teams located and disposed of two anti-personnel mines in 2021, which were abandoned ordnance in Idlib governorate without indication that a subsurface mine threat existed in the area.⁸⁷

In its statement as an observer to the 18th Meeting of States Parties (18MSP) of the Anti-Personnel Mine Ban Convention (APMBC), Syria stated that "the unilateral sanctions inflicted on the Syrian people pose challenges for the Syrian government to provide the financial, technical and logistical resources [required to clear the mines]". The statement called for an "unpoliticised" financial and technical assistance to the mine action sector in Syria, without pre-conditions and in coordination with the Syrian government.⁸⁸

⁸⁶ Email from Fabrice Martin, MAG, 9 March 2022.

⁸⁷ Email from Michael Edwards, SCD, 5 March 2022.

⁸⁸ Statement of Syria, APMBC 18MSP, Geneva, 16–20 October 2020.