





KEY DEVELOPMENTS

A ceasefire agreement brokered in March 2020 between Türkiye and Russia, which support opposing sides in the Syrian conflict, has brought a tenuous calm to the country. But Syria registered, for the second year in a row, the highest number of mine casualties worldwide. Despite the urgent need for mine action, efforts remain fragmented and underfunded with financial support to the sector dropping for the fourth consecutive year. Only one operator, Mines Advisory Group (MAG), which is working in the north-east of Syria, was able to report land release through technical survey (TS) and area clearance in 2022. The HALO Trust (HALO), which operates in the north-west, received permission to carry out non-technical survey (NTS) in Idlib governorate and in the west of Aleppo governorate, as well as a long-awaited authorisation to carry out explosive ordnance disposal (EOD). In government-controlled territory, Norwegian People's Aid (NPA) received operational accreditation in early 2023.

RECOMMENDATIONS FOR ACTION

- Syria should undertake never again to use anti-personnel (AP) 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 AP mine contamination in areas it controls.
- Syria should formally establish a national mine action centre and national mine action authority.
- A centralised mine action information management 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 in accordance with the International Mine Action Standards (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), also known as the White Helmets, operating in the north-west
- Roj Mine Control Organization (RMCO), operating in the north-east
- iMFAD (based in Türkiye)

INTERNATIONAL OPERATORS

- DanChurchAid (DCA), operating in the north-east
- Enhancing Human Security (ITF), operating in the north-east

- HAMAP Humanitaire, operating in the north-east until the closure of its programme in August 2022
- Humanity & Inclusion (HI), operating in the north-west through implementing partners
- Mines Advisory Group (MAG), operating in the north-east
- The HALO Trust (HALO), operating in the north-west
- The Armenian Centre for Humanitarian Demining and Expertise (ACHDE), operating in government-controlled areas

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 12-year-old conflict. It also has mined areas left by a succession of Arab-Israeli wars since 1948. The Syrian government laid mines along borders with Türkiye and Lebanon in 2012 with Turkish authorities claiming that up to 715,000 mines had been planted along Syria's border with Türkiye.¹ Syrian government forces also placed landmines with a view to obstructing the advance of opposition fighters; on illegal migration routes; and in areas it subjected to siege, such as in Madaya and al-Zabadani (Rural Damascus).

Non-State armed groups (NSAGs) also laid mines, including around besieged towns such as Kafarayya and al-Fouaa in 2015–18.² In Raqqa, where 80% of the city has been destroyed, rubble was mixed booby-traps left by the parties to the armed conflict.³ Retreating Islamic States forces emplaced huge numbers of AP mines of an improvised nature and other improvised explosive devices (IEDs).

Humanity & Inclusion (HI) claimed in May 2022 that improvised AP mines and other explosive ordnance continued to be laid in Syria in 2021–22 as a result of ongoing hostilities and criminal activities.⁴ In contrast, DanChurchAid (DCA) reported that most of the improvised mines it encountered during spot tasks were anti-vehicle (AV) mines.⁵ From the middle of 2020 and through October 2022, Landmine Monitor reported allegations of new AP mine use by NSAGs but did not believe that the Syrian authorities had laid new mines.⁶

Data on the types of destroyed mines provided by operators indicates that the vast majority of AP mines used in Syria are of an improvised nature. For example, from the 103 AP mines discovered and destroyed by MAG, 98 were improvised.⁷ Many improvised AP mines have acquired local names from the way they were handcrafted (e.g., the ruler, the rosary, the stone). Other organisations or media outlets documented use of mostly Russian-made PMN-2 and POMZ AP mines.⁸

The full extent of AP mine contamination is unknown. No countrywide survey of contamination has yet been conducted with access restricted in many areas by the fragmented state of security, although the north-east has seen more extensive survey with several organisations having undertaken NTS since 2016 across four governorates under the control of the Syrian Defence Forces.⁹ However, intensive mine-use has resulted in significant humanitarian impact across the country. The Syrian Network for Human Rights (SNHR) has reported that as at April 2023, 3,353 civilians, including 889 children, had been killed by landmines in Syria since 2011. Two thirds of all landmine-related deaths were documented in the governorates of Aleppo (26%), Raqqa (22%), and Deir Ezzor (17%). It is estimated that a further 10,400 civilians have been injured by mines since the beginning of the uprising in 2011.10

- 3 Humanity and Inclusion (HI), "Syria: it will take at least two generations to rebuild", 25 February 2021, at: https://bit.ly/3fPFoaF.
- 4 HI, "Explosive ordnance in Syria: impact and required action", May 2022, at https://bit.ly/3zCLJRK, p. 5.
- 5 Email from Kevin Starker, Humanitarian Mine Action Operations Manager, DCA, 28 June 2023.
- 6 Landmine Monitor Report 2021, at: https://bit.ly/3s67WXC, p. 16.
- 7 Email from Akram Alsaeedi, Country Director, MAG, 24 March 2023.
- 8 SNHR, "On the International Day for Mines Awareness and Assistance in Mine Action: Landmines Continue to Plague Large Areas of Syria and Threaten the Lives of Millions", Report, p. 6; See also The Euro-Mediterranean Human Rights Monitor, "Syria's Landmines: Silent Killing", Report, April 2021, pp. 11–15.
- 9 Email from Greg Crowther, MAG, 4 October 2023.
- 10 SNHR, "On the International Day for Mines Awareness and Assistance in Mine Action: Landmines Continue to Plague Large Areas of Syria and Threaten the Lives of Millions", Report, p. 23.

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 The Syrian Network for Human Rights (SNHR), "On the International Day for Mines Awareness and Assistance in Mine Action: Landmines Continue to Plague Large Areas of Syria and Threaten the Lives of Millions", Report, at: https://bit.ly/43Vp2UQ, pp. 3 and 17; and "Inside Foua: A Shi'a town in the eye of the Syrian storm", Middle East Eye, 19 August 2018.

In 2021 and 2022, the Landmine Monitor reported that Syria had the highest number of recorded casualties worldwide (2,729, and 1,227, respectively). The casualties reported for 2020 were the highest the Monitor ever reported in a single year since it began reporting in 1999. Moreover, due to inconsistency in data availability, mine and explosive remnants of war (ERW) casualties in Syria may even be a considerable undercount.¹¹

SYRIAN EARTHQUAKE

On 6 February 2023, Syria was struck by a devastating 7.8 magnitude earthquake followed by a series of more than 14,000 aftershocks. The tremors severely affected the north-west of Syria, most notably, the governorates of Idlib, Aleppo, and to a lesser extent, Lattakia and Hama in the north-west and Raqqa and Al-Hassakeh in the north-east. HALO conducted a rapid assessment in February-March 2023, which identified explosive ordnance in 42 earthquake-affected communities affecting 730,000 people. According to HALO, the earthquake may have led explosive items to move or resurface, possibly necessitating resurvey in impacted communities.¹² Weapons and ammunition stored in houses may have been buried under the rubble. Returnees expose themselves to danger by returning to their destroyed homes to gather belongings, or by starting to remove the rubble to try and rebuild their homes.13

Before the earthquake, the 2023 Syria Humanitarian Needs Overview, which was published in December 2022, estimated that a third of communities across Syria were affected by some form of explosive contamination, with the highest percentages being in Aleppo, Damascus, Daraa, Quneitra, Raqqa, Rural Damascus, and Sweida.¹⁴ In 2020, an average of 76 explosive incidents per day were recorded in Syria.¹⁵

HALO obtained permission to conduct NTS in Idleb and Western Aleppo in February 2022 in areas controlled by the Syria Salvation Government (an alternative opposition authority). HALO's NTS teams assessed 25 communities and identified 158,000m² of hazardous areas across six confirmed hazardous areas (CHAs) and six suspected hazardous areas (SHAs). Of this total are, 138,000m² were mined areas and the remaining 20,000m² contained a mix of explosive ordnance.¹⁶ Earlier assessment by HALO in 2018–20 in Aleppo and Idlib governorates found 113 suspected mined areas (89 in northern Aleppo and 24 in Idlib) and 38 suspected areas containing IEDs (34 in northern Aleppo and 4 in Idlib). During this earlier exercise, the extent to which the devices amounted to mines was not known as data were collected in a rapid assessment without full NTS.¹⁷

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%) communities reported the presence of ERW. Of the assessed communities, 57% reported the presence of AP mines, 46% reported cluster munition remnants (CMR), and 25% other explosive ordnance.¹⁸

MAG has been conducting surveys across several governorates in the north-east of Syria since 2016. In 2022, MAG registered 2.57km² of previously unknown AP mined area in the north-east: in Aleppo, Al-Hassakeh, Deir Ezzor, and Raqqa governorates. Of this total, MAG estimates that 95% are victim-activated IEDs that meet the definition of an AP mine.¹⁹ Previously, at the end of 2021, MAG had registered 17.75km² of mined area in the same governorates.²⁰

Working from the Syrian capital, Damascus, the United Nations Mine Action Service (UNMAS) continued an explosive ordnance assessment team (EOAT) survey in Rural Damascus (South) it started in August 2020.²¹ 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 2022.²²

In 2021, mine action funding channelled to Syria decreased for the fourth consecutive year. Syria received US \$1.9 million less than in 2020 (a 7% decrease). Previously, in 2020, support to mine action activities in Syria fell more steeply, by US \$16.4 million, or a decrease of 39%, than in 2019.²³

- 11 Landmine Monitor Report 2021, pp. 2, 42, and 45; and Landmine Monitor Report 2022, pp. 3 and 20. See also Human Rights Watch, "It Was Really Hard to Protect Myself", 8 September 2022, at: https://bit.ly/43VM1PU.
- 12 Email from Damian O'Brien, Programme Manager, HALO, 10 April 2023.
- 13 HI, "Safety messages in the wake of the earthquake", accessed on 3 July 2023, at: https://bit.ly/3pwz05R.
- 14 Syria 2023 Humanitarian Needs Overview, 22 December 2022, at: https://bit.ly/3NcDL9l, p. 81.
- 15 Syria 2022 Humanitarian Needs Overview, March 2021, at: https://bit.ly/43biWQZ, p. 10.
- 16 Email from Damian O'Brien, HALO, 10 April 2023.
- 17 Email from Mairi Cunningham, Programme Manager, HALO, 7 June 2021.
- 18 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/3zxkRk.
- 19 Email from Akram Alsaeedi, MAG, 24 March 2023.
- 20 Email from Fabrice Martin, Country Director, MAG, 9 March 2022.
- 21 Syria Humanitarian Needs Overview, March 2021, at: https://bit.ly/3vzUXwp, p. 10.
- 22 Emails from United Nations Mine Action Services (UNMAS), 30 June 2021; and Francesca Chiaudani, Mine Action Coordinator, UNMAS, 31 March 2022.
- 23 Landmine Monitor Report 2022, p. 103.

OTHER EXPLOSIVE ORDNANCE CONTAMINATION

Syria also has significant contamination from CMR and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants 2023* report on Syria for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

There is no national mine action authority in Syria. In government-controlled areas, an Interministerial National Mine Action Coordination Committee is said to have been formed by presidential decree in 2019 and is chaired by the Minister of Foreign Affairs and Expatriates (MoFA).²⁴ MoFA assigned a focal point for liaison with UNMAS for all mine action.²⁵

Mine action in Syria is coordinated by three response mechanisms:

- Damascus-based Mine Action Sub-Sector (MASS) coordinated by UNMAS;
- The north-west Mine Action Sub-Cluster (MASC) coordinated by HALO; and
- The north-east Mine Action Working Group (MAWG), which sits under the protection working group in the non-governmental organisation (NGO), forum-led response coordinated by iMMAP.²⁶ Coordinators of the three structures organise monthly meetings with the respective mine action actors,²⁷ but in November 2022, the MAWG's monthly meetings were temporarily suspended.²⁸ The Damascus-based MASS meets on a monthly basis, and is attended by a variety of mine action partners, including UN agencies, NGOs, and the ICRC.²⁹

The local authorities of the north-east of Syria established a north-east Syria Mine Action Office (NESMAO) in 2022. NESMAO introduced the signature of an memorandum of understanding (MoU) for all humanitarian mine action operators as a prerequisite to continuation of field operations. This led to the suspension of all humanitarian demining for up to four months in 2022.

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.³⁰ Given the lack of national mine action structures, UNMAS grants de facto accreditation to clearance operators. UNMAS does not provide capacity building to the national authorities, but operating as a mine action coordination body in 2020, UNMAS drafted national technical standards and guidelines for mine action and provided them to the Syrian government for its consideration.³¹

Until November 2022, the north-east MAWG coordination meetings were held on monthly and ad-hoc basis, and attended regularly by MAG, HI, DCA, and ITF Enhancing Human Security (ITF) among others.³² In 2023, IMMAP, in collaboration with DCA, HI, MAG, and ITF, initiated an NTS project, prioritising communities across the north-east of the country.³³

In the north-east of the country, the sector faced particular operational challenges in late 2021 and early 2022. The continuation of operators' activities in the north-east was contingent on the signature of an MoU with the NESMAO, the provisions of which were said to include taxations on salaries of the national staff and a pre-defined list of names for organisations to recruit from.

Discussions about the MoU between NESMAO and mine action actors, which were facilitated by iMMAP, reached a stalemate, forcing the mine action actors to cease operating for almost two months at the beginning of 2022.³⁴

According to iMMAP, mine action actors face a drastic reduction in funding for the north-east of Syria as more donors are withdrawing from mine action support. This affects the crucial need to clear water sources and agricultural land due to the ongoing drought and increasing food prices.³⁵

24 This information was provided on condition of anonymity.

- 26 Emails from UNMAS, 30 June 2021; and Francesca Chiaudani, UNMAS, 31 March 2022 and 30 April 2023.
- 27 iMMAP, Coordination Support to Humanitarian Mine Action, 2020, at: https://bit.ly/3yGh9nQ; and emails from Mairi Cunningham, HALO, 7 and 17 June 2021; and UNMAS, 30 June 2021.
- 28 Emails from Akram Alsaeedi, MAG, 24 March 2023; Najat El Hamri, MAG, 3 July 2023; and Kevin Starker, DCA, 28 June 2023.
- 29 Email from Francesca Chiaudani, UNMAS, 30 April 2023.
- 30 Email from Francesca Chiaudani, UNMAS, 31 March 2022.
- 31 Email from UNMAS, 30 June 2021.
- 32 Emails from Fabrice Martin, MAG, 9 March 2022, and Akram Alsaeedi, MAG, 24 March 2023.
- 33 Email from Kevin Straker, DCA, 28 June 2023.
- 34 iMMAP, "Northeast Syria: Progress, Challenges, and Forecast of Humanitarian Mine Action", September 2021–April 2022, p. 15.
- 35 Ibid., p. 4.

²⁵ Emails from UNMAS, 30 June 2021; and Francesca Chiaudani, UNMAS, 31 March 2022 and 30 April 2023. According to Syria's statement to the APMBC 20MSP, a "National Committee on Demining was established in June [of 2022] under the chairmanship of the Minister of Foreign Affairs and Expatriates". Mine Action Review believes that the committee Syria refers to is the same Interministerial Committee that was established in 2019, and that Syria has incorrectly indicated the formation date of the committee.

MAG is providing capacity-building support both to NESMAO and to other organisations present in the north-east, such as the Syria Justice and Accountability Centre (SJAC). In collaboration with NESMAO, MAG has constructed two explosives' storehouses and was planning for the construction of one more, to help operators store recovered explosives until their demolition.³⁶ DCA also reported a cooperative relationship with NESMAO. In April 2023, NESMAO representatives took part in DCA's NTS training course as part of the NTS project in the north-east of Syria. DCA intends to continue capacity building support the NESMAO. The main challenges reported by DCA were the absence of national standards, the lack of formal tasking and prioritisation, and the need to align mine action with humanitarian needs and development projects.³⁷

In the north-west, mine action was coordinated by the MASC cross-border response from Gaziantep (the Türkiye-based response), a body co-chaired for a time by HALO and UNMAS. In May 2022, HALO started chairing the meetings from Amman,³⁸ and UNMAS stopped co-chairing the MASC due to lack of personnel and funding. Some 15 partners attend the MASC monthly meetings, with SCD attending as observers.³⁹ HALO and its partners coordinate and receive approvals from the local Turkish authorities for its work across the border with Türkiye.⁴⁰ 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

ENVIRONMENTAL POLICIES AND ACTION

DCA's global strategy seeks to advance its climate and sustainability work in fragile contexts and crisis. DCA is exploring greener approaches to its activities across all of its mine action country programmes.⁴⁷ HALO'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 has also established an Environment and Conservation Cross-Cutting Network to provide continued guidance on how environmental impacts can be reduced.⁴⁸ MAG's community liaison standing operating procedures (SOPs) include consultations with limited by the complexities of the operating context.⁴¹ For example, the Turkish authorities do not permit the export of some EOD materials such as T-jets, nor will it authorise operators to conduct NTS or EOD in northern Aleppo.⁴²

According to HALO, coordination of mine action in the aftermath of the earthquake has been challenging. The immediate needs of the affected population were very high with priority given to the provision of food and shelter. Mine action operators redirected activities to respond. For example, HALO had bought a tracked excavator in January 2023 and had begun modifying it for mine clearance when the earthquake struck. In coordination with local authorities, the excavator was temporarily deployed on rubble removal in earthquake-impacted communities.⁴³

UNMAS was seeking US\$25 million for its mine action programme in Syria through to the end of 2023.⁴⁴ UNMAS expects a further drop in mine action funding, particularly in the aftermath of the February 2023 earthquake, as most of the humanitarian response is focused on shelter and health. A progressive inclusion of mine action in damage assessment and rubble removal work is, though, expected.⁴⁵ SCD was able to secure funding for 2022 and early 2023, and, at the time of writing, was in the process of negotiating funding until the end of 2024. However, other organisations have limited options for importing equipment and there is a continued decrease in available funding due to donor fatigue.⁴⁶

affected communities about the use of mechanical assets and the timing of clearance, with consultations concerning water use, rubbish disposal, land erosion, and burning of vegetation.⁴⁹ MAG conducts demolitions in remote areas of Al-Hassakeh governorate, far from animal movement or farming.⁵⁰

UNMAS takes into consideration the impacts of removing explosive ordnance on the landscape, for instance, when vegetation removal is necessary. UNMAS's partnership with implementing partners is governed by guidelines that refer to environmental requirements for task implementation.⁵¹

- 36 Email from Akram Alsaeedi, MAG, 24 March 2023.
- 37 Emails from Kevin Straker, DCA, 15 March and 28 June 2023.
- 38 Email from Damian O'Brien, HALO, 10 April 2023.
- 39 Email from Francesca Chiaudani, UNMAS, 30 April 2023.
- 40 Emails from Mairi Cunningham, HALO, 7 and 17 June 2021; and Damian O'Brien, HALO, 1 March 2022.
- 41 Emails from Damian O'Brien, HALO, 1 March 2022 and 10 April 2023.
- 42 Email from Damian O'Brien, HALO, 10 April 2023.
- 43 Ibid.
- 44 UNMAS website, Syria programme, accessed on 19 May 2023, at: https://bit.ly/3uCibON.
- 45 Email from Francesca Chiaudani, UNMAS, 30 April 2023.
- 46 Emails from Michael Edwards, SCD, 5 March 2022 and 27 March 2023.
- 47 Email from Kevin Straker, DCA, 28 June 2023.
- 48 Email from Damian O'Brien, HALO, 1 March 2022.
- 49 Email from Fabrice Martin, MAG, 9 March 2022.
- 50 Email from Akram Alsaeedi, MAG, 24 March 2023.
- 51 Emails from Francesca Chiaudani, UNMAS, 31 March 2022 and 30 April 2023.

GENDER AND DIVERSITY

There is no national gender and diversity policy for the mine action programme.

DCA has a country-specific gender and diversity policy and implementation plan. All national staff recruitment is done through candidate lists put forward by NESMA0 as specified in the MoU. Although DCA asks for gender-balanced candidate lists for all positions, such conditions are seldom met. In 2022, 20% of DCA's employees were women, with 19% and 36% of operational positions and managerial positions, respectively, filled by women.⁵²

In Syria, access to female beneficiaries has long been challenging because of the lack of women in the workforce. Employing women not only allows HALO to empower them, but also to ensure their interventions are inclusive and gender sensitive. HALO field teams include at least two women each for better access to women and girls. Women staff have access to female-friendly spaces in the office as per local cultural norms. HALO provides women with opportunities to be trained in technical field roles to recognised international standards, offering transferable and skills and qualifications that enhance their earning potential. By doing so, HALO empowers women and contributes to shifting gender norms in the north-west. In 2022, 43% of HALO's employees were women, with 38% of operational positions and 54% of managerial positions filled by women.⁵³

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 are implemented by gender- and language-balanced community liaison teams. All mine action data are disaggregated by sex and age.⁵⁴ In 2022, 18% of MAG's employees were women, with 17% of operational positions and 22% of managerial positions filled by women.⁵⁵ MAG is using mine action as a tool to advocate gender importance and encourage the employment of women in mine action. While still very low, the number of female staff members has increased compared to previous years.⁵⁶

Women made up 45% of the total NPA Syria programme workforce in 2023. $^{\rm S7}$

SCD has a gender and a diversity strategy in place. In 2022, SCD successfully trained and deployed 12 female survey operators, with two volunteers joining one of each of the six SCD NTS teams. In 2023, SCD was planning to train and deploy at least six women deminers in three of SCD's six clearance teams. In 2022, about 11% of SCD's total employees were female, and 11% of managerial and operational positions were filled by women.⁵⁸ The names, gender, and age of each community interviewee are recorded as part of survey reporting and are reviewed by the management team to ensure the process remains as inclusive as possible. SCD volunteers are recruited from the communities they serve and thus reflect the various ethnic minority groups in their area of operations.⁵⁹

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 living in close vicinity to the working sites.⁶⁰ In 2022, women made up 57% of all UNMAS Syria staff, with 57% of operational and 33% of managerial positions.⁶¹ UNMAS has deployed to communities with ethnic and minority groups (Druze in Sweida for instance), and engaged with all community members to gather feedback.⁶²

Operator	Proportion of women of total employees	Proportion of women in operational positions	Proportion of women in manageria position:
DCA	20%	19%	369
HALO	43%	38%	549
MAG	18%	17%	229

Table 1: Gender composition of mine action operators in 202263

52 Email from Kevin Straker, DCA, 15 March and 28 June 2023.

- 53 Email from Damian O'Brien, HALO, 10 April 2023.
- 54 Email from MAG, 24 May 2021.
- 55 Email from Akram Alsaeedi, MAG, 24 March 2023.
- 56 Ibid.
- 57 Email from Claus Nielsen, Programme Manager, NPA, 30 June 2023.
- 58 Email from Michael Edwards, SCD, 27 March 2023.
- 59 Emails from Michael Edwards, SCD, 5 March and 15 June 2022.
- 60 Email from Francesca Chiaudani, UNMAS, 31 March 2022.
- 61 Email from Francesca Chiaudani, UNMAS, 30 April 2023.
- 62 Email from Francesca Chiaudani, UNMAS, 31 March 2022.

63 Emails from Kevin Straker, DCA, 28 June 2023; Damian O'Brien, HALO, 10 April 2023; Akram Alsaeedi, MAG, 24 March 2023; Claus Nielsen, NPA, 30 June 2023; Michael Edwards, SCD, 27 March 2023; and Francesca Chiaudani, UNMAS, 30 April 2023.

Table 1 Continued

Operator	Proportion of women of total employees	Proportion of women in operational positions	Proportion of women in managerial positions
NPA	45%	N/R	N/R
SCD	11%	11%	11%
UNMAS	57%	5%	33%

UNMAS's context analysis appeared to indicate that ethnic minority groups are not affected by explosive contamination differently, but rather that all population groups are vulnerable regardless of ethnicity.⁶⁴ But Mine Action Review believes that minority groups loyal to the Syrian government are significantly less affected by mine and other explosive ordnance contamination by virtue of their lesser exposure to the attacks by Syrian and Russian armed forces.

INFORMATION MANAGEMENT AND REPORTING

DCA employs an information management (IM GIS coordinator and an officer, using Aeronautical Reconnaissance Coverage Geographic Information (ArcGis), Environmental Systems Research Institutions (ESRI), and Survey123 for its information management. Survey and clearance data is collected using Information Management System for Mine Action (IMSMA) data collection forms and shared monthly with iMMAP, which helps build a clear and accurate contamination mapping across the north-east of Syria. The ongoing IMMAP NTS project is expected to improve the accuracy of existing explosive ordnance contamination data, enabling better prioritisation of subsequent clearance activities.⁶⁵

HALO uses the IMSMA data collection forms and regularly reports to the north-west MASC and the Office of the UNHCR-led Gaziantep coordination response. HALO uses Kobo to collect NTS data and from 2023, Kobo forms will be used for pre- and post-clearance survey to measure the impact of mechanical clearance. Data collection tools are reviewed regularly by HALO's Syria IM staff and the HALO global monitoring, evaluation, and learning (MEAL) team. At the MASC level, HALO collects data from operators through forward planning and the 4W tools,⁶⁶ using protection cluster templates. In 2023, the 4Ws data collection tool became the 5Ws⁶⁷ tool as more data and details have been added to the template.⁶⁸

MAG continues to use the online server, SharePoint, to preserve and archive its mine action data. In October 2022, MAG established the Global MAG Operational Management Information System (OMIS). Data is collected from the field through the Survey123 mobile data application, using the IMSMA form then verified by technical managers through the online OMIS portal, which is linked to the ArcGis maps, and then validated by the IM department. MAG continues to develop and improve OMIS, and started to use the satellite imagery for more accurate coordinates of the identified hazardous areas in 2023. MAG shares its data with the iMMAP on monthly basis, which is part of the protection working group coordination tools. MAG also shares its operations plans with road maps with NESMAO on a weekly basis.⁶⁹

SCD uses Survey123 for data collection IMSMA Core for data keeping and management. At the end of each month, data for all tasks is compiled and a final check carried out to ensure no errors are present.⁷⁰ Despite concerted efforts to establish a centralised database representing the whole of Syria, SCD reported its survey and clearance data continue not to be accepted in the north-west MASC mine action database and the 4W 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 its observer status.⁷¹

UNMAS completed the installation of IMSMA Core as the national mine action information management system in Damascus in 2021, although it continues to have another IMSMA database outside Damascus for reasons of data confidentiality.⁷² UNMAS manages the database, collating explosive ordnance data from partners across Syria. UNMAS also collects mine action data through the Office of Coordination of Humanitarian Affairs (OCHA)-led humanitarian response tracking.⁷³ Clearance by Syrian and Russian forces goes largely unreported.

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

- 65 Emails from Kevin Straker, DCA, 15 March and 28 June 2023.
- 66 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.
- 67 The 5W is the same as the 4W with an additional dimension of information (by whom).
- 68 Email from Damian O'Brien, HALO, 10 April 2023.
- 69 Emails from Akram Alsaeedi, MAG, 24 March 2023; and Najat El Hamri, MAG, 3 July 2023.
- 70 Ibid.
- 71 Emails from Michael Edwards, SCD, 5 March 2022 and 27 March 2023.
- 72 Email from Francesca Chiaudani, UNMAS, 31 March 2022.
- 73 Email from Francesca Chiaudani, UNMAS, 30 April 2023.

PLANNING AND TASKING

Syria does not have a national mine action strategic plan and mine action remains fragmented across the country.

In the north-east, there is neither a central tasking and prioritisation body to issue tasks nor a strategic mine action plan, so operators develop and apply their own plans.⁷⁴ DCA has a five-year global and country office strategy, which is reviewed annually.⁷⁵ In 2022, following the capacity building provided by MAG, NESMAO started to follow MAG's prioritisation criteria: persons or animals injured or killed by the detonation of mines or unexploded ordnance (UXO) during the past 24 months; IEDs, landmines, or UXO found; blocked irrigated agricultural fields, pasture lands, non-agricultural areas, housing, roads, or infrastructure; the number of the population using the land; and the presence of persons with disabilities among the population who use the land.⁷⁶

The north-west of Syria has no central tasking or prioritisation body. HALO uses data collected from its previous community assessments and NTS to identify high-priority communities for EOD, focusing on removing contamination from agricultural areas to support economic activities, sustainable livelihoods, and mitigate food insecurity. Incident data shows that a large percentage of detonations affect men and that two of the highest risk occupations are farming and herding. HALO engages with communities where it conducts EOD to obtain their informed consent and considers requests from the local authorities for future interventions.⁷⁷

SCD prioritises tasks based upon a number of risk factors such as 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. Since the number of tasks identified through survey does not yet exceed operational capacity, once items are identified they are cleared within one or two days.⁷⁸

UNMAS continued its survey and clearance in 2022 in high-priority areas in Rural Damascus based on the list of priority locations agreed with partners and the Government of Syria. Tasks are prioritised and selected based on a set of criteria, including severity of humanitarian need, the presence of humanitarian partners, the delivery of humanitarian activities, flows of displaced persons, and historic data on explosive incidents.⁷⁹

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

There are no formal national mine action standards (NMAS) in Syria, but in 2020, UNMAS drafted NMAS and associated guidelines and submitted them to the Syrian government for its approval. Despite positive feedback, no official response had been received as at July 2023.⁸⁰ In its statement as an observer to the APMBC Twentieth Meeting of State Party (20MSP) in 2022, Syria stated that: "Technical standards and guidelines have been developed that will define the operational framework for all mine action activities in Syria, in line with the International Mine Action Standards."⁸¹

In the non-government-controlled north-east and north-west of Syria, local authorities do not endorse the Damascus-developed NMAS. As a result, 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).⁸² In the absence of a formal land release policy, a signing of a handover land-release certificate happens between DCA, the landowner, and NESMAO in a process introduced to NESMAO by DCA.⁸³

MAG Syria continues to work to its own established SOPs, which were last updated in December 2021 and were developed in line with MAG's Global Technical Standards. MAG said its SOPs are reviewed and amended as and when necessary, but that no amendments were made in 2022.⁸⁴ MAG started a capacity-building plan on NMAS development for NESMAO and plans to elaborate NMAS in the long-term.⁸⁵ HALO increased its efforts to refine its quality assurance (QA) mechanisms through stronger integration of field teams using Kobo software for mobile data collection.⁸⁶ SCD teams also operate according to IMAS for clearance, survey, and risk education.⁸⁷

- 74 Emails from Akram Alsaeedi, MAG, 24 March 2023; and Kevin Straker, DCA, 15 March 2023.
- 75 Email from Kevin Straker, DCA, 15 March 2023.
- 76 Email from Akram Alsaeedi, MAG, 24 March 2023.
- 77 Emails from Mairi Cunningham, HALO, 7 June 2021; and Damian O'Brien, HALO, 1 March 2022 and 10 April 2023.
- 78 Emails from Michael Edwards, SCD, 5 March 2022 and 27 March 2023.
- 79 Emails from Francesca Chiaudani, UNMAS, 31 March 2022 and 30 April 2023.
- 80 Ibid.
- 81 Statement of Syria, APMBC Twentieth Meeting of States Parties, Geneva, 21–25 November 2022.
- 82 Email from Lene Rasmussen, DCA, 13 April 2021.
- 83 Email from Kevin Straker, DCA, 15 March 2023.
- 84 Email from Greg Crowther, MAG, 4 October 2023.
- 85 Emails from Fabrice Martin, MAG, 9 March 2022; and Akram Alsaeedi, MAG, 24 March 2023.
- 86 Email from Damian O'Brien, HALO, 1 March 2022.
- 87 Email from Michael Edwards, SCD, 5 March 2022.

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.⁸⁸

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 2020.89 In January 2022, DCA consolidated its mine action capacity in Ragga governate and continues survey and clearance operations from its established Forward Operating Base in Ragga city, but did not report any land release of AP contaminated areas through TS or area clearance in 2022. In 2023, DCA has tentatively extended its outreach to Deir Ezzor where previous humanitarian interventions have been hindered by security and other political, social, and economic obstacles. DCA's manual teams cover both TS and NTS, supported by a mechanical team. Between February and September 2022, the number of clearance teams was reduced to two due to a drop in funding.90

DCA continues its localisation efforts, extending the agreement with its local partner, Roj Mine Control Organisation (RMCO), a partnership that has enabled access to sensitive locations. In 2022, the partnership was centred on risk education but in mid 2023, focus shifted to implementing the iMMAP NTS project in hard-to-access areas of Deir Ezzor and Kobani. Much of DCA's work in 2022 was limited to conducting spot tasks due to a period of gap funding between February and September 2022.⁹¹

Operating in the north-east, ITF, which started Phase I of its explosive hazards clearance and risk education programme with agricultural recovery in the north-east in 2021, completed the second phase of the programme in August 2022. Clearance was conducted in the north-east, particularly in contaminated agricultural land that was no longer being used due to contamination.⁹²

HAMAP Humanitaire has been operating in Raqqa governorate in the north-east conducting NTS, clearance, risk education, assistance, and capacity building of local organisations since 2017. The programme closed down in August 2022.⁹³

HALO, which has been present in Syria since 2016, is operational in the north-west of Syria in the opposition-controlled territories of Idlib and Aleppo. HALO conducts NTS, EOD, risk education, and victim assistance. In July 2022, after receiving permission to conduct NTS and EOD for the first time in Idlib and western Aleppo in areas controlled by the Syria Salvation Government, HALO trained and deployed two teams composed of four members, including two women, for NTS and EOD spot tasks in July 2022. In February 2023, HALO's EOD teams received authorisation to use explosives for demolitions. This is a major step forward in operational capacity as previously HALO had to rely on burning techniques, which limited the types and quantity of devices that could be tackled.

HALO did not conduct TS or clearance activities in the north-west in 2022, but is planning to conduct mechanical clearance using an excavator in the north-west. As at August 2023, HALO had completed armouring an excavator and a team of six was starting mechanical clearance of an AP minefield in Idlib. HALO did not conduct TS or clearance activities in the north-west in 2022.⁹⁴

HI operates through implementing partners in the north-west of Syria, providing rehabilitative psychosocial support to persons with disabilities and those injured by violence. An HI implementing partner also conducts clearance and risk education,⁹⁵ but did not report any land release of AP contaminated areas through TS or clearance in 2022.

MAG has been operational in the north-east since 2016. Following a forced suspension of its activities in October 2019, it resumed activities in late 2020.[%] In 2022, MAG operated in Al-Hassakeh (north-east) and Raqqa governorates, conducting general survey, NTS, TS, risk education, training of community focal points, and clearance. MAG operated with six mine action teams, four multi-task teams, twenty community liaison teams, and two mechanical teams with seven machines in 2022. MAG demining capacity remained unchanged for 2023.⁹⁷

Following the signature of an MoU with the Syrian government in 21 December 2021,⁹⁸ NPA completed its inception phase in 2022 and received accreditation in 2023. Operational training took place in Damascus and Rural Damascus governorates, and as at April 2023, NPA was deploying four multi-skilled clearance teams and NTS teams in these governorates.⁹⁹ In July 2023, NPA was deploying two multi-skilled operational teams and two NTS teams within the Palestinian refugee camp of Yarmouk (in the outskirts of Damascus), and two multi-skilled operational teams and three NTS teams in the subdistrict of Al-Nashrabiyeh (Rural Damascus).¹⁰⁰

- 88 "Russian military boosts qualified Syrian sappers to demine war-ravaged country", Tass, 9 January 2018, at: https://bit.ly/3QcRKvA.
- 89 Email from Lene Rasmussen, DCA, 13 April 2021.
- 90 Emails from Kevin Straker, DCA, 15 March and 28 June 2023.
- 91 Email from Kevin Straker, DCA, 28 June 2023.
- 92 ITF, "Annual Report 2022", at: https://bit.ly/3o5uIMO, p. 134.
- 93 HAMAP Humanitaire website, accessed on 5 August 2023, at: https://bit.ly/45dzqse.
- 94 Emails from Damian O'Brien, HALO, 1 March 2022 and 10 April and 13 August 2023.
- 95 HI website, accessed on 13 August 2023, at: https://bit.ly/3Yxt0C8.
- 96 Email from MAG, 24 May 2021.
- 97 Emails from Akram Alsaeedi, MAG, 24 March 2023; and Najat El Hamri, MAG, 3 July 2023.
- 98 NPA, New Humanitarian Mine Action in Syria, at: https://bit.ly/3MHNXTF.
- 99 Email from Claus Nielsen, NPA, 12 April 2023.
- 100 Emails from Claus Nielsen, NPA, 12 April and 30 June 2023.

SYRIA

A local organisation, RMCO, established in 2016, and was conducting clearance in the north-east but is said to have sustained heavy casualties when its deminers were clearing improvised devices.¹⁰¹ In 2022, RMCO partnered with DCA for the provision of risk education. As noted above, the two organisations extended their partnership in 2023 with the focus on NTS activities in hard-to-reach areas.¹⁰²

SCD was operational in Aleppo and Idlib governorates in the north and north-west of the country, continuing to conduct surface battle area clearance (BAC), NTS, and EOD spot tasks. SCD encounters mostly CMR, but its teams also dispose of AP mines on occasion. SCD maintained its operational capacity of six NTS and six clearance teams in 2022.¹⁰³ SCD mine action activities were temporarily suspended in the aftermath of the earthquake as SCD staff assisted in the wider response. SCD teams participated in urban search and rescue operations, provided medical care and specialist support when hazardous items were discovered or suspected to be present.¹⁰⁴ To facilitate access for clearance operators in government-controlled areas, 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. ¹⁰⁵ As at April 2023, two operators—the Armenian Centre for Humanitarian. Demining and Expertise (ACHDE) and NPA—had been accredited by UNMAS for mine action in government-controlled areas. Another three organisations (DRC, SHIELD, and Global Clearance Solutions) were undergoing desk accreditation as at May 2023.¹⁰⁶

UNMAS's operational capacity for the first half of 2022 was two explosive ordnance assessment teams, which consisted of seven TS personnel, and two NTS personnel. Following the completion of project funding in June 2022, the teams' work was discontinued. UNMAS did not expect changes in its operational capacity in 2023. UNMAS opened a sub-office in Aleppo in 2021, which closed in May 2022 due to lack of funding. The ACHDE deployed two clearance teams with a total of eighteen deminers.¹⁰⁷

DEMINER SAFETY

None of the operators reported demining related incidents in 2022. Media reported a Syrian army demining specialist being killed while attempting to dispose of a mine in Deir Ezzor city in April 2023.¹⁰⁸

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

Syria's continuing instability and the dwindling funds for mine action prevented progress towards a coordinated national programme of mine action. Comprehensive country-wide information on outcomes of survey and clearance in any area was unavailable. Only MAG conducted and reported release of AP mined area through TS and area clearance in 2022.

MAG released a total of 3.64km² of AP mined area in north-east Syria in 2022 in Al-Hassakeh and Raqqa governorates. Of this, 2.49km² was reduced through TS (see Table 2) and 1.15km² was cleared (see Table 3). A total of 78 AP mines, 3 AV mines, and 180 items of UXO were destroyed in the process. In addition, MAG destroyed 25 AP mines in spot tasks.

DCA, which only conducted spot tasks in 2022 due to shortages in funding, destroyed 7 AP mines and 144 items of UXO during spot tasks. Of the total 110 AP mines found and disposed of in 2022, 105 were of an improvised nature. None of the operators reported cancelling AP mined area through NTS.¹⁰⁹

- 103 Emails from Michael Edwards, SCD, 5 March 2022 and 27 March 2023.
- 104 Email from Michael Edwards, SCD, 27 March 2023.
- 105 The ten operators are from Afghanistan, Croatia, Denmark, Norway, Russia, Switzerland, Ukraine, and the United Arab Emirates.
- 106 Email from Francesca Chiaudani, UNMAS, 30 April 2023.
- 107 Emails from Francesca Chiaudani, UNMAS, 31 March 2022 and 30 April and 30 June 2023.
- 108 SOHR, "Attempting to dismantle landmines | Regime soldier killed in Deir Ezzor city", 14 April 2023, at: https://bit.ly/3Ks3Zm5.
- 109 Emails from Akram Alsaeedi, MAG, 24 March 2023; and Kevin Straker, DCA, 15 March 2023.

¹⁰¹ S. Kajjo, "Landmine removal crucial in post-IS Syria", Voice of America, 3 April 2019; and interview with operators, Erbil, Iraq, May 2019.

¹⁰² Emails from Kevin Straker, DCA, 15 March and 28 June 2023.

Table 2: Release of mined area through TS in 2022¹¹⁰

Province	Operator	Area reduced (m²)
Al-Hassakeh	MAG	2,256,498
Ragga	MAG	233,358
Total		2,489,856

MAG cleared 0.12km² of areas suspected of contamination which proved to contain no AP mines (compared to 0.68km² in the previous year). MAG's TS outputs increased fivefold in 2022 compared with 2021 when MAG reduced 0.5km² of AP mined area through TS. MAG's clearance outputs have decreased in 2022, down from the 2.91km² it cleared in 2021.¹¹¹

Neither HALO nor SCD encountered AP mines during EOD tasks in the north-west in 2022, and neither undertook technical survey or area clearance activities during the year.

Table 3: Mine clearance in 2022¹¹²

Governate	Operator	Area reduced (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Al-Hassakeh	MAG	991,503	71	1	146
Ragga	MAG	160,168	7	2	34
Spot Tasks	MAG	N/A	25	N/A	N/A
Spot Tasks	DCA	N/A	7	N/A	N/A
Total		1,151,671	110	3	180

N/A = not applicable

¹¹⁰ Email from Akram Alsaeedi, MAG, 24 March 2023.

¹¹¹ Ibid.

¹¹² Emails from Akram Alsaeedi, MAG, 24 March 2023; and Kevin Straker, DCA, 15 March 2023.