

KEY DATA

CLUSTER MUNITION CONTAMINATION:

UNKNOWN, BUT VERY LARGE

SUBMUNITION CLEARANCE IN 2023

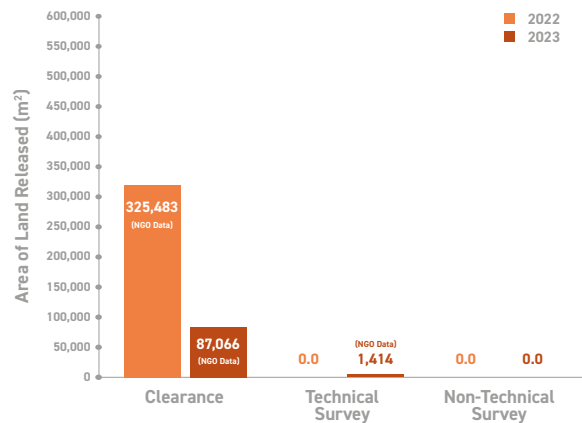
87,066m²
(NGO DATA)

SUBMUNITIONS DESTROYED IN 2023

UNKNOWN

TWO SUBMUNITIONS IDENTIFIED AND MARKED FOR DISPOSAL.

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

Extensive use of cluster munitions by Russian forces continued in 2023 along with widespread use by Ukraine, with the United States (US) announcing a fourth transfer of cluster munitions to Ukraine in March 2023. Limited clearance of cluster munition remnants (CMR) was reported for 2023, although capacity continued to expand, with more than 40 national and international mine action operators accredited as at July 2024. Three international demining NGOs were accredited during 2023 with at least one more seeking accreditation at the time of writing, some of whom would conduct CMR clearance. Ukraine has stated its intention to survey all accessible areas for contamination by the end of 2026; it was uncertain if CMR would be disaggregated from other explosive ordnance.

RECOMMENDATIONS FOR ACTION

- Ukraine should immediately halt all use of cluster munitions and accede to the Convention on Cluster Munitions (CCM) as a matter of priority.
- Ukraine should ensure that survey, clearance, and contamination data disaggregate CMR from other explosive remnants of war (ERW) and mines.
- Ukraine should facilitate and expedite its processes for permission to operators to use explosives in clearance and destruction operations as well as subsequent accreditation to conduct explosive ordnance disposal (EOD).

CLUSTER MUNITION SURVEY AND CLEARANCE CAPACITY

MANAGEMENT*

- Sectoral Working Group on Humanitarian Demining (SWG, under the Ministry of Economy)
- Centre of Humanitarian Demining (CHD, under the Economic and Financial Department of the Secretariat of the Cabinet of Ministers)
- National Mine Action Authority (NMAA, under the Ministry of Defence (MoD))
- Mine Action Centre (MAC, under MoD, at Chernihiv)
- Interregional Centre for Humanitarian Demining and Rapid Response of the State Emergency Service Of Ukraine (SESU) (at Merefa)
- Demining Center of Military Unit A2641 (at Kaminiets Podilsky)
- Social-Humanitarian Response Centre (under the Ministry for Reintegration of the Temporarily Occupied Territories)
- State Special Transport Service (SSTS)
- Military Engineering School

NATIONAL OPERATORS*

- State Emergency Services of Ukraine (SESU)
- Armed Forces of Ukraine
- National Police
- State Special Transport Service (SSTS)
- State Border Service
- Demining Solutions
- GK Group
- The Demining Team of Ukraine
- Ukrainian Deminers Association (UDA)
- Safe Path Group

INTERNATIONAL OPERATORS*

- DanChurchAid (DCA) – accredited in 2023
- Danish Refugee Council (DRC)
- FSD
- The HALO Trust (HALO)
- Humanity and Inclusion (HI) – seeking accreditation
- Mines Advisory Group (MAG) – accredited in 2023
- Norwegian People's Aid (NPA) – accredited in 2023

OTHER ACTORS*

- Chemonics
- East Europe Foundation
- Enhancing Human Security (ITF)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Organization for Security and Co-operation in Europe (OSCE)
- Mine Action Sub-cluster chaired by the United Nations Development Programme (UNDP)
- Tetra Tech
- UN Food and Agriculture Organisation (FAO)
- UN World Food Programme (WFP)

* Information based on data available at the time of writing. Due to the rapidly expanding mine action programme in Ukraine, there may be actors not included in this table.

UNDERSTANDING OF CMR CONTAMINATION

The extent of contamination from CMR in Ukraine is not known but is expected to be very large due to the widespread use of cluster munitions in the course of the Russian assault on Ukraine. As at the end of April 2024, over one third of Ukraine's territory had been affected by the current conflict with Russia but there is no reliable estimate for the amount of cluster munition-contaminated area. However, in terms of potentially contaminated agricultural land, Ukraine has estimated that just under half of hazardous areas are contaminated with submunitions.¹ Explosive ordnance (EO), including submunitions, are most highly concentrated in the east and south of Ukraine.² In 2023, The HALO Trust (HALO) conducted initial survey in 1,234 settlements, of which 710 were recorded as contaminated by some form of EO. Follow-up non-technical survey (NTS) was completed in 128

settlements, the results of which included the identification of ten previously unrecorded confirmed hazardous areas (CHAs) contaminated with CMR.³

Access by international operators to perform survey or clearance within 20km of the front lines of conflict and State borders was prohibited in 2023 and remained so at the time of writing.⁴ Outside this buffer zone international operators recorded areas of CMR contamination in 2023.⁵ However, even in areas that are accessible, there are still barriers to accurate survey. Some operators caution that resurvey will be necessary in many areas, either due to recontamination or due to the displacement of people leaving few or no witnesses to sources of new contamination. As such, some polygons will require further refinement once more data becomes available.⁶

1 'Restoring Livelihoods and revitalising Rural Communities through Mine Action', Food and Agriculture Organisation of the UN and World Food Programme, Presentation at side event, UN National Directors Meeting, Geneva, 29 April 2024 (hereafter, FAO and WFP Presentation, NDM, 2024).

2 Geneva International Centre for Humanitarian Demining (GICHD), "Ukraine faces massive explosive contamination one year into the conflict", 23 February 2023, at: <https://bit.ly/3KNEZVU>.

3 Emails from Michael Brown, Deputy Head Operations (Support), HALO, 29 May and 6 June 2024.

4 The Work Plan for Humanitarian Demining of De-occupied Territories of Ukraine for 2024, submitted to the Chair of the Committee on Article 5 Implementation under the Anti-Personnel Mine Ban Convention (APMBC), 30 April 2024, Annex 1.

5 Emails from Michael Edwards, HMA Operations Manager, DanChurchAid (DCA), 3 May 2024; Sophie Breinholdt Nielsen, HMA Programme Specialist, Danish Refugee Council (DRC), 10 May 2024; and Vanja Sikirica, Country Director, Norwegian People's Aid (NPA), 21 April 2024.

6 Emails from Michael Edwards, DCA, 3 May 2024; and Julie Bouvier, Armed Violence Reduction (AVR) Specialist, Humanity & Inclusion (HI), 16 May 2024.

It has been reported that at least 10 types of cluster munition and 3 types of submunition have been used in Ukraine since Russia's invasion began in February 2022. All are ground-launched in missiles, rockets, and mortars with the exception of the air-dropped RBK series cluster bomb. Aside from one Israeli-designed cluster munition, all cluster munitions falling within the scope of the CCM used in Ukraine were manufactured either in the Soviet Union prior to 1991 or in Russia, some as recently as 2021,⁷ or in the United States as outlined below.

From the outset of its attack against Ukraine that began in late February 2022, Russia's armed forces have used cluster munitions extensively against Ukrainian military objectives, as well as, in violation of international law, against the civilian population and civilian objects. The exact number of cluster munition attacks is unknown, but hundreds have been documented or reported, adding significantly to the existing contamination.⁸ Cluster munition attacks have been reported in at least 10 of Ukraine's 24 regions (known as oblasts): Chernihiv, Dnipropetrovsk, Donetsk, Kharkiv, Kherson, Luhansk, Mykolaiv, Odesa, Sumy, and Zaporizhzhia,⁹ with civilian casualties from Russian cluster munition attacks documented in Cherniv, Donetsk, Kharkiv, Kherson, and Mykolaiv.¹⁰

Ukraine's forces have also used cluster munitions in the current conflict. On 12 March 2024, the US Department of Defense announced security assistance for Ukraine with the provision of "artillery rounds, including High Explosive and Dual Purpose Improved Cluster Munitions (DPICM) rounds."¹¹ This is thought to be the fourth transfer of cluster munitions from the United States to Ukraine, following transfer of cluster munitions delivered by the Army Tactical Missile System (ATACMS) to Ukraine in October 2023 and transfer of cluster munitions delivered by 155mm artillery projectiles in July and September 2023.¹² Prior to July 2023, Ukrainian forces appear to have used cluster munitions at least three times in its fight against the Russian forces on Ukrainian territories.¹³

Supply of cluster munitions to Ukraine from countries other than the US was also reported in 2022 and 2023. Media sources reported that Turkey began sending cluster munitions to Ukraine, notably DPICMs, in late 2022,¹⁴ though Türkiye and Ukraine have denied the transfer.¹⁵ Several media outlets reported that Ukraine requested cluster munitions from Estonia and the US in 2022.¹⁶ Israeli-made (or copied) M971 120mm cluster munition mortar projectiles were photographed in the possession of the Ukrainian Armed Forces in December 2022. Each projectile delivers 24 M87 DPICM submunitions. It is not known how or from whom Ukraine acquired it.¹⁷

In January 2023, Estonian state media reported that Estonia was considering providing Ukraine with German-made 155mm DM632 cluster munition projectiles. Such a transfer would require approval from the German government. In February 2023, Germany's Minister of Defence Boris Pistorius said that "Germany will not authorize the transfer of cluster bombs to Ukraine." Use of a German-manufactured SMArt 155 artillery shell by Ukraine against two Russian tanks has also been documented, with these munitions reportedly first sent to Ukraine by Germany in March 2023. This weapon uses a pair of 'smart' anti-armour mines in a howitzer shell that flies submunitions to a target.¹⁸ It is believed to fall within the limited exception for sensor-fuzed weapons excluded from the prohibitions in the CCM under its Article 2(2)(c).¹⁹ A March 2023 Russian press article reported that the remains of a SMArt 155 (DM702 A1) submunition had been found at the position of a Russian battalion near the city of Kremennaya in Luhansk. The possibility was noted, however, that this submunition could have reached Ukraine via a State other than Germany.²⁰

In July 2023, Human Rights Watch reported that Ukrainian cluster munition rocket attacks on Russian-controlled areas in and around the city of Izium in eastern Ukraine during 2022 had caused many casualties among Ukrainian civilians.²¹ Ukraine has stated that it will record the location of any cluster munition use by its own forces, as well as adhering to

7 Landmine and Cluster Munition Monitor, "Ukraine 2023" accessed 19 May 2024, at <https://bit.ly/3wwcJUF>.

8 Human Rights Watch (HRW), "Ukraine: Civilian Deaths from Cluster Munitions", 6 July 2023, at <https://bit.ly/3V7hU6T>; Landmine and Cluster Munition Monitor, "Ukraine 2023" accessed 19 May 2024, at <https://bit.ly/3wwcJUF>.

9 HRW, "Growing Civilian Toll from Russian Cluster Munition Attacks", 25 August 2022, at <https://bit.ly/3mEd07C>; and *Cluster Munition Monitor 2022*, p. 14.

10 HRW, "Ukraine: Civilian Deaths from Cluster Munitions", 6 July 2023.

11 'Biden Administration Announces Urgent Security Assistance for Ukraine', US Department of Defense (US DoD), 12 March 2024, at <https://bit.ly/4aC6E77>.

12 'U.S. Cluster Munition Coalition Condemns Fourth Transfer of U.S. Cluster Munitions', Cluster Munition Coalition U.S., 13 March 2024, at <https://bit.ly/3V15ygx>.

13 "To Push Back Russians, Ukrainians Hit a Village With Cluster Munitions", *The New York Times*, 18 April 2022, at <https://bit.ly/41NMZgv>; HRW, "End Cluster Munition Attacks in Ukraine", 11 May 2022, at <https://bit.ly/3lx3cTX>; Office of the United Nations High Commissioner of Human Rights (OCHCR), "Situation of human rights in Ukraine in the context of the armed attack by the Russian Federation", Report, 29 June 2022, at <https://bit.ly/3AkenqJ>, p. 12.

14 "Turkey Is Sending Cold War-Era Cluster Bombs to Ukraine", *Foreign Policy*, 10 January 2023, at <http://bit.ly/3KwekwG>.

15 Landmine and Cluster Munition Monitor, "Ukraine 2023" accessed 19 May 2024, at <https://bit.ly/3wwcJUF>.

16 "Ukraine seeks US cluster bombs to adapt for drone use - lawmakers", Reuters, 7 March 2023, at <http://bit.ly/3GuBL8e>; "Estonia weighing giving Ukraine cluster munitions", *Estonian Public Broadcasting*, 26 January 2023, at <http://bit.ly/3GrCpTW>; "Exclusive: Biden administration weighs Ukrainian requests for access to US stockpile of controversial cluster munitions", CNN, 8 December 2022, at <https://bit.ly/3Ghwiv2>.

17 Landmine and Cluster Munition Monitor, "Ukraine 2023" accessed 19 May 2024, at <https://bit.ly/3wwcJUF>.

18 "Cluster Munitions for Ukraine: Everything You Need to Know About Washington's Green Light Decision", Kyiv Post, 7 July 2023, at <https://bit.ly/3www4VL>.

19 "A munition that, in order to avoid indiscriminate area effects and the risks posed by unexploded submunitions, has all of the following characteristics:

- (i) Each munition contains fewer than ten explosive submunitions;
- (ii) Each explosive submunition weighs more than four kilograms;
- (iii) Each explosive submunition is designed to detect and engage a single target object;
- (iv) Each explosive submunition is equipped with an electronic self-destruction mechanism;
- (v) Each explosive submunition is equipped with an electronic self-deactivating feature".

20 "The remains of a German guided anti-tank submunition from a SMArt 155 projectile were found near Kremennaya", Top War, 5 March 2023, at <https://bit.ly/4bFWNy0>.

21 HRW, "Ukraine: Civilian Deaths from Cluster Munitions", 6 July 2023.

certain other principles. Following the US announcement on 7 July 2023 that it would supply DPICMs to Ukraine, Ukraine's Minister of Defence Oleksii Reznikov presented five principles that he said the armed forces would respect upon receiving the cluster munitions:

- use them only in Ukraine;
- not use them in "urban areas (cities)" but only "in the fields where there is a concentration of Russian military";
- keep a strict record of where the munitions were used;
- conduct clearance activities after the de-occupation of the areas where the munitions were used; and
- report to partners on the use of the munitions and their efficiency.²²

Wherever possible, State Emergency Services of Ukraine (SESU) personnel have cleared the contamination resulting from the use of EO, including CMR, immediately after use.²³ Ukraine asserts that it is continuing to clear CMR following

de-occupation of areas²⁴ as well as undertaking rapid response to clear EO contamination in the buffer zone along the line of conflict.²⁵ Ukraine also has CMR contamination that predates the current conflict with Russia. Before 2022, Ukraine said that many unexploded submunitions contaminated the Donetsk and Luhansk regions,²⁶ with the most intensive use of cluster munitions said to have occurred in and around the city of Debalcevo in Donetsk region.²⁷

A total of 7.5km² of CMR contamination was recorded by international operators in 2023.²⁸ All of the newly identified contamination in 2023 has occurred since the beginning of Russia's invasion of Ukraine.²⁹ Ukraine's national mine action strategy includes a target to complete "initial non-technical survey in 100 per cent of the territories controlled by Ukraine, where it is possible to carry out humanitarian demining" by the end of 2026.³⁰ It is not yet clear if the survey will disaggregate contamination by weapon type, including CMR.

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Ukraine is also contaminated by huge quantities of other ERW as well as by anti-personnel and anti-vehicle mines used during the different conflicts (see Mine Action Review's *Clearing the Mines* report on Ukraine for further information on the mine problem). It is also affected by unexploded ordnance (UXO) and abandoned explosive ordnance (AXO) remaining from the First and Second World Wars³¹ and remnants of Soviet military training and abandoned stockpiles.

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

Since the invasion by Russia in February 2022, mine action has gained critical relevance in Ukraine's national plans for post-conflict recovery and development. This is illustrated by the inclusion of a dedicated session on humanitarian demining at the Ukraine Recovery Conference (URC) in June 2023, during which Ukraine's First Deputy Prime Minister and Minister of Economy declared Ukraine's intention to bring 80% of land potentially contaminated with EO back into productive use within ten years.³² It is in this context that Ukraine's National Mine Action Strategy, which covers 2024–2033, was approved by the Cabinet of Ministers on

28 June 2024, having been developed by the Ministry of Economy (MoE) in cooperation with the Ministry of Defence (MoD), the Ministry of Internal Affairs (Moi), and other central executive authorities, and with the involvement of national and international experts.³³

To help develop and steer a rapidly expanding national mine action programme with many national and international partners, the Sectoral Working Group on Humanitarian Demining (SWG) was introduced in September 2023. The SWG is an advisory body at the MoE, which "functions as a

22 Ibid.

23 "See how Kharkiv's bomb squad neutralizes cluster bombs in Ukraine", *National Public Radio (NPR)*, 24 April 2022, at: <https://n.pr/3NqnQ47>; and SESU Facebook page, 8 May 2022, at: <https://bit.ly/3G04DDJ>.

24 HRW, "Ukraine: Civilian Deaths from Cluster Munitions", 6 July 2023.

25 Interview with Colonel Ruslan Berehulia, Head of Secretariat of National Mine Action Authority, Ministry of Defence, Geneva, 1 May 2024.

26 National Security and Defence Council and SESU, "Humanitarian demining in Ukraine: current issues and challenges", APMB Fourteenth Meeting of States Parties (14MSP), Side event, Geneva, 2 December 2015.

27 Interview with Lt.-Col. Yevhenii Zubarevskiy, Mine Action Department, Ministry of Defence, in Geneva, 20 May 2016.

28 Emails from Vanja Sikirica, NPA, 21 April 2024; Sophie Breinholdt Nielsen, DRC, 10 May 2024; Michael Edwards, DCA, 3 May 2024; and Michael Brown, HALO, 29 May 2024.

29 Emails from Roxana-Cristina Boboticu, Head of Humanitarian Disarmament and Peacebuilding, Ukraine, DRC, 1 April 2023; and Denys Holovetskyi, HALO, 29 May 2023.

30 "Cabinet of Ministers of Ukraine order dated 28 June 2024, Order No. 616-p on approval of the National Mine Action Strategy for the period up to 2033 and approval of the operational action plan for its implementation in 2024–2026", section entitled "Strategic goals, objectives and expected results aimed at achieving the defined goals", at: <https://bit.ly/4cKpA5j>.

31 See, e.g., "During a Year in Kerch and Sevastopol neutralized 33,000 munitions", *Forum*, 4 December 2009.

32 "Our goal is to bring 80% of potentially contaminated land back into use in ten years: Yuliia Svyrydenko at the London conference", Ministry of Economy of Ukraine, 22 June 2023, at: <https://bit.ly/4dMpGu3>.

33 "Cabinet adopts changes to the Humanitarian Mine Action Architecture in Ukraine", *Special issue of DRC Legal Alert*, Issue 98, October 2023.

unified platform for coordinating and aligning cooperation efforts in the field of humanitarian demining between Ukrainian governmental authorities and development partners." The SWG held three meetings between September 2023 and May 2024. It is co-chaired by the Deputy Prime Minister (DPM), United Nations Resident Co-ordinator (UN RC), and the Ambassador of Japan.³⁴ The SWG makes major announcements on issues such as senior appointments or national strategy from the government to the international community. It has representation from several ministries, including the MoD and MoI, as well as other key national entities including the National Mine Action Authority (NMAA) Secretariat, the Mine Action Centre (MAC), the State Emergency Services of Ukraine (SESU), and the Centre of Humanitarian Demining (CHD).³⁵

This latter body, the CHD, was established in April 2023 as a State institution under the Economic and Financial Department of the Secretariat of the Cabinet of Ministers.³⁶ The CHD functions as a secretariat and think-tank, collecting and analysing information on demining needs from the MoD, MoI, SESU, regional military administrations, partner countries, and international organisations, with the aim of improving coordination and mobilising resources.³⁷ It is reported to take a leading role on fundraising and cooperation with donors.³⁸

There are nominally four national supervisory and management bodies in Ukraine: the MAC, located in Chernihiv, under the MoD (for operational matters, including co-ordination and tasking); the Interregional Center For Humanitarian Demining and Rapid Response of the SESU, located in Merefá (hereafter referred to as "the centre at Merefá"); the inter-ministerial NMAA, serviced by a secretariat; and, at the top of the hierarchy, an inter-ministerial committee on humanitarian demining.

Three bodies are responsible for certification of operators and processes:³⁹ the aforementioned centre at Merefá; the Demining Centre of Military Unit A2641, located in Kaminiets Podilsky; and the MAC in Chernihiv. These three bodies

are also responsible for quality management (QM) tasks. Ukraine's National Mine Action Strategy acknowledges that the ability of these institutions to carry out QM responsibilities "does not meet the needs of today" and that quality control (QC) and external monitoring require attention as part of systems improvement. It also cites the need for a "unified procedure" for certification of operators and processes.⁴⁰

The NMAA is the primary body responsible for developing and approving mid-term and long-term national plans for mine action, alongside operative plans,⁴¹ with the Cabinet of Ministers issuing final approval for Ukraine's National Mine Action Strategy and implementation plan on 28 June 2024.⁴² The secretariat of the NMAA has the responsibility of coordinating the work of the MAC and the centre at Merefá. These two Centres share the remits of information management (IM), quality assurance (QA), monitoring, planning, and certification of the operators.⁴³ The NMAA also coordinates the ministries, central and local state bodies, local government, and other organisations (including mine action operators). The NMAA approves and ensures State mine action policy; monitors and reports on State progress in fulfilling its obligations in mine action under international treaties; and coordinates the development and execution of mine action strategy, the national mine action programme, and action plans.⁴⁴ While the NMAA sits at a ministerial level, it is serviced by a secretariat that also has "some" managerial functions.⁴⁵

A national mine action law was adopted by Ukraine's parliament in 2018,⁴⁶ although the government did not proceed with its implementation on the grounds it was inconsistent with a number of other legal acts.⁴⁷ Amended legislation was passed in December 2020. The amended law created the two National Mine Action Centres (NMACs) now operating at Cherniv and Merefá.⁴⁸ In November 2021, the Cabinet of Ministers issued a resolution to provide the framework for an NMAA.⁴⁹ The NMAA was reported to be fully operational in 2022.⁵⁰ The MAC is said to play a pivotal role in ensuring effective planning and organisation of mine

34 "The Sectoral Working Group", Demining Ukraine, 2 July 2024, at: <https://bit.ly/3zUWlhA>.

35 Email from the GICHD, 23 July 2024.

36 "Center for Humanitarian Demining established in Ukraine", *Interfax Ukraine*, 7 April 2023, at: <https://bit.ly/3LDzj1g>; and "Cabinet adopts changes to the Humanitarian Mine Action Architecture in Ukraine", Special issue of DRC Legal Alert, Issue 98, October 2023.

37 "Humanitarian demining center to be established in Ukraine: Prime Minister", Government Portal of Ukraine, 11 February 2023, at: <https://bit.ly/3WgUVUG>.

38 "Ukraine: Strengthening national mine action capabilities", DRC, 9 February 2024, at: <https://bit.ly/3Sjnb9y>.

39 "Cabinet of Ministers of Ukraine Order dated 28 June 2024, No. 616-", section entitled "Analysis of the current state of affairs, trends and justifications for the need to solve the identified problems", at: <https://bit.ly/4cKpA5j>.

40 "Cabinet of Ministers of Ukraine Order dated 28 June 2024 No. 616-p", section entitled "Analysis of the current state of affairs, trends and justifications for the need to solve the identified problems", at: <https://bit.ly/4cKpA5j>. The document actually states that a fourth body is also responsible for quality management tasks, additionally naming the Humanitarian Demining Centre. However, it is not known if this is intentional, as the centre at Merefá (previously referred to as the HDC) is also listed.

41 "Ukraine: Strengthening national mine action capabilities", DRC, 9 February 2024, at: <https://bit.ly/3JY8f6c>.

42 "Government approves National Mine Action Strategy and Operational Plan for its implementation for the first 3 years", Government of Ukraine, 28 June 2024, at: <https://bit.ly/46iT1cj>.

43 The Law of Ukraine on Mine Action, No. 2642-VIII, Chap. III, Art. 23; DRC-DDG Legal Alert Special, "Mine Action Law Amendment", Issue 56, September 2020; and interview with Miljenko Vahtarić, OSCE, 13 February 2020.

44 The Law of Ukraine on Mine Action, No. 2642-VIII, Chap. III, Art. 23; and DRC Special Legal Alert - "NMAA Framework 2022", Issue 73, January 2022.

45 The Law of Ukraine on Mine Action, No. 2642-VIII, Chap. III, Art. 23; and email from the GICHD, 17 June 2022.

46 OSCE, "Ukrainian parliament adopts legal framework for mine action, with OSCE advice provided", 10 December 2018, at: <http://bit.ly/2QdTaQo>; and interview with Miljenko Vahtarić, OSCE, 7 February 2019; and email, 13 June 2019.

47 DRC-DDG Legal Alert Special, "Mine Action Law Amendment", Issue 56, September 2020.

48 The Law of Ukraine on Mine Action, No. 2642-VIII, Chap. III, Art. 23; DRC-DDG Legal Alert Special, "Mine Action Law Amendment", Issue 56, September 2020; and interview with Miljenko Vahtarić, OSCE, 13 February 2020.

49 Resolution No. 1207 "On Establishment of National Mine Action Authority".

50 Emails from Roxana-Cristina Bobolicu, DRC, 1 April 2023; and Denys Holovetskyi, HALO, 29 May 2023.

action, and, in the context of the current conflict, is the main coordination body for operations.⁵¹ Reporting by mine action operators and their interaction with the NMAA is managed through the MAC and the NMAA Secretariat.⁵²

Mine action stakeholders continued to meet regularly throughout 2023, with some meetings including discussion on progress, challenges, and support for survey and clearance of CMR contamination.⁵³ Several implementing partners describe the coordination challenge in Ukraine as significant, given the number of national and international actors involved.⁵⁴ Indeed, one of the pillars of the national mine action strategy is to refine institutional clarity as part of systems improvement.⁵⁵ It has been suggested, however, that coordination is improving, for example, with a recently implemented leading role for the Ministry of the Economy,⁵⁶ and the introduction of the SWG meetings.⁵⁷ The UN Mine Action Team claims improved coherence across the mine action sector as a key success of 2023, with all UN agencies now falling under one team. The Mine Action Area of Responsibility (AoR) was also re-launched in 2023, led by the United Nations Development Programme (UNDP)⁵⁸ and continued monthly mine action meetings. The NMAC also organised a few meetings of stakeholders on an ad hoc basis.⁵⁹

Overall, operators have reported a positive environment for mine action and facilitation of the operators' work by the Ukrainian government (e.g. granting of visas and collaboration on security matters).⁶⁰ The HALO Trust (HALO), the largest international operator working in Ukraine, reports to have a close working relationship with national and local authorities, but also continues to advocate for greater involvement in strategic planning.⁶¹ Ukrainian authorities are reportedly proactive when it comes to signing memoranda of understanding (MoUs) and facilitating cooperation with partners.⁶² But importation legislation has proven restrictive, as many types of mine action equipment (e.g. machines, detectors) are considered "military", which involves additional constraints. Further importation rules and documentation have also been recently introduced,

which apply to international NGOs,⁶³ though FSD notes that being registered as a "charitable fund" has removed these challenges with importing equipment, allowing FSD to, effectively, be treated as a national NGO.⁶⁴ Operators also note that visa restrictions can make it difficult for international staff from some countries to enter Ukraine.⁶⁵

Ukraine requires that the destruction of any ordnance that is identified by international operators be carried out by the Armed Forces of Ukraine, the State Special Transport Service (SSTS), and SESU.⁶⁶ Operators continued to face difficulties in 2023 in acquiring necessary permission regarding explosives, as had been the case in 2022.⁶⁷ Operators must obtain permission to use, transport, and store explosives as a prerequisite for undergoing the EOD accreditation process. These are two separate processes involving different stakeholders. The process for acquiring permission to use, transport, and store explosives is the same whether an organisation wishes to undertake demining or another relevant activity such as quarrying, and involves the Ministries of Labour and of the Economy. EOD accreditation, on the other hand, is implemented by the mine action centres. It is reportedly the permissions process regarding explosives that has caused difficulties, rather than the EOD accreditation process.⁶⁸ Without the necessary accreditation, international clearance teams must await the availability of SESU, or very occasionally police EOD teams, to attend to a disposal task. In some cases, this can delay further work at a site until the hazard is cleared. Operators do report some positive progress on the issue, with one international operator (HALO, securing such permission in 2023,⁶⁹ and good cooperation with SESU and Ukrainian Armed Forces in the process of demolition of items found during clearance.⁷⁰ In 2024, FSD also began the application process for certification to conduct demolitions.⁷¹

HALO eventually gained EOD accreditation in December 2023, after a ten-month, multi-stage process. However, challenges remain with the efficient management, storage, and transportation of explosives. Additionally, the current permission and simplified accreditation are only valid under

51 "Ukraine: Strengthening national mine action capabilities", DRC, 9 February 2024; and interview with Yevhenni Zubarevskiyi, Administrator, Information Management System for Mine Action, Ministry of Defence, in Geneva, 1 May 2024.

52 The Work Plan for Humanitarian Demining of De-occupied Territories of Ukraine for 2024, submitted to the Chair of the Committee on Article 5 Implementation, 30 April 2024, Annex 1.

53 Email from Michael Brown, HALO, 29 May 2024.

54 Emails from Vanja Sikirica, NPA, 21 April 2024; and Dino Šujak, Head of ITF Implementation Office – Ukraine, 16 May 2024.

55 Online interview with the GICHD, 13 May 2024.

56 Email from Vanja Sikirica, NPA, 21 April 2024.

57 Interview with Miljenko Vahtarić, OSCE, Geneva, 1 May 2024.

58 Presentation by Denise Brown, UN Resident Coordinator in Ukraine, and Paul Heslop, UNDP Senior Technical Advisor, NDM, Geneva, 29 April 2024.

59 Email from Michael Brown, HALO, 29 May 2024.

60 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO, 23 March 2022.

61 Email from Michael Brown, HALO, 29 May 2024.

62 Email from Dino Šujak, ITF Ukraine, 16 May 2024.

63 Emails from Jon Cunliffe, Country Director, Ukraine, Mines Advisory Group (MAG), 26 April 2024; and Julie Bouvier, HI, 16 May 2024.

64 Email from Tony Connel, FSD, 25 June 2024.

65 Emails from Michael Edwards, DCA, 3 May 2024; Julie Bouvier, HI, 16 May 2024; and Tony Connel, FSD, 25 June 2024.

66 The Work Plan for Humanitarian Demining of De-occupied Territories of Ukraine for 2024, submitted to the Chair of the Committee on Article 5 Implementation, 30 April 2024, Annex 1.

67 Emails from Roxana-Cristina Bobolicu, DRC, 1 April 2023; Denys Holovetskyi, HALO, 29 May 2023; Michael Brown, HALO, 29 May 2024; Vanja Sikirica, NPA, 21 April 2024; Jon Cunliffe, MAG, 26 April 2024; Sophie Breinholdt Nielsen, DRC, 10 May 2024; and Tony Connel, FSD, 25 June 2024.

68 Email from Emails Roxana-Cristina Bobolicu, DRC, 1 July 2024.

69 Emails from Sophie Breinholdt Nielsen, DRC, 10 May 2024; and Roxana-Cristina Bobolicu, DRC, 1 July 2024.

70 Email from Vanja Sikirica, NPA, 21 April 2024.

71 Email from Tony Connel, FSD, 25 June 2024.

martial law. Once martial law is lifted, all EOD operators will be required to meet the full list of accreditation requirements, which HALO states previously made it almost impossible to conduct EOD.⁷²

In 2023, the Geneva International Centre for Humanitarian Demining (GICHD) supported the development of the National Mine Action Strategy and continued to support the development and maintenance of the Information System for Mine Action (IMSMA) Core database. The GICHD also co-chaired technical working groups to update specific chapters of the National Mine Action Standards (NMAS) and continued to deliver training courses on issues such as QM and NTS.⁷³ The Organisation for Security and Co-operation in Europe (OSCE) is engaged in mine action systems building.⁷⁴ In December 2023, UNDP announced a new initiative with SESU to bolster Ukraine's capacity to manage mine action operations and provide demining equipment.⁷⁵

Danish Refugee Council's (DRC's) capacity building programme continued in 2023. Representatives from the NMAA, SESU, and MAC, underwent training in a range of activities, including EOD and NTS.⁷⁶ DRC also provided SESU and the MAC with various equipment including mine detection devices, EOD kits, and 14 vehicles.⁷⁷ DanChurchAid (DCA) is providing mentoring and feedback during EOD courses delivered by SESU staff.⁷⁸ Humanity & Inclusion (HI) has a land release innovation project in Ukraine named Odyssey 2025, through which it provides capacity building in the use of Unmanned Aerial Vehicles (UAVs).⁷⁹ In early 2024, Mines

Advisory Group (MAG) provided quality management systems (QMS) training for SSTS.⁸⁰

FSD did not conduct external capacity building with Ukrainian organisations in 2023. However, an internal capacity building programme was launched to bring selected national staff to a level of competency which will enable a reduction of supervisory international staff in 2024 and 2025.⁸¹

HALO delivered specialist training to several Ukraine state organisations, including training on NTS to SESU and SSTS, QM training to SESU and SSTS, deminer training to SSTS, and ordnance safety training to the National Police. HALO's donors also gifted a significant amount of equipment to SESU.⁸²

APOPO is engaged in training and deployment of technical survey dog (TSD) teams in Ukraine, working in cooperation with MAG. APOPO established a training facility and launched training of the first group of all-female handlers in 2023. The goal of the initiative is to survey at least 5km² using TSDs by the end of 2025,⁸³ though it is not clear if this will include survey of CMR. Norwegian People's Aid (NPA) provided six mine detection dogs (MDDs) to SESU and trained dog handlers. SESU obtained MDD accreditation in the first week of October and started deployment. By the end of the 2023 demining season, the dogs had processed a total of 9,100m² and found 40 items of EO. NPA also fully equipped ten SESU EOD/demining teams with technical and safety equipment.⁸⁴

GENDER AND DIVERSITY

Ukraine's National Mine Action Strategy includes some references to gender and diversity, stating that "certain social categories and groups", including women, veterans, persons with disabilities, and victims of EO, are of particular interest to the State with respect to their professional involvement in mine action and the systemic and inclusive communication regarding mine action.⁸⁵ One of the tasks identified in the

strategy's implementation plan in 2024–2026 is to increase the percentage that these previously stated social groups are "involved in mine action".⁸⁶ Women are said to comprise 30% of the sector in Ukraine, including in management and operational positions. Operator policies related to gender are reportedly given careful consideration before operators are accredited. The same considerations and recommendations

72 Email from Michael Brown, HALO, 29 May 2024.

73 Email from the GICHD, 23 July 2024.

74 "Support to Environmental Rehabilitation with Focus on Building National Humanitarian Mine Action Capacities of Ukraine", OSCE, accessed 15 April 2024, at: <https://bit.ly/4dHLoze>.

75 "UNDP and the Netherlands forge \$10 million partnership for mine action in Ukraine", UNDP, 16 December 2023, at: <https://bit.ly/44LLPoa>.

76 Emails from Sophie Breinholdt Nielsen, DRC, 10 May 2024; and Roxana-Cristina Bobolic, DRC, 1 July 2024; and "Ukraine: Strengthening national mine action capabilities", DRC, 9 February 2024.

77 Email from Sophie Breinholdt Nielsen, DRC, 10 May 2024; and "Ukraine: Strengthening national mine action capabilities", DRC, 9 February 2024, at: <https://bit.ly/3JY8fce>.

78 Email from Michael Edwards, DCA, 3 May 2024.

79 Email from Julie Bouvier, HI, 16 May 2024.

80 Email from Jon Cunliffe, MAG, 26 April 2024.

81 Email from Tony Connel, FSD, 24 June 2024.

82 Email from Michael Brown, HALO, 29 May 2024.

83 Email from Nick Guest, Programme Manager, APOPO, 24 June 2024; and "Flanders Government Grants APOPO €1 Million For Landmine Clearance In Ukraine", APOPO, accessed 18 July 2024 at: <https://bit.ly/4cLaZXm>.

84 Email from Vanja Sikirica, NPA, 21 April 2024.

85 "Cabinet of Ministers of Ukraine Order dated 28 June 2024 No. 616-p", section entitled "Analysis of the current state of affairs, trends and justifications for the need to solve the identified problems".

86 Ibid., section entitled "Strategic goals, objectives and expected results aimed at achieving the defined goals".

for equality of opportunity are applied by the national authorities to groups with disabilities, and steps are taken to promote equal access to employment in mine action for these groups. National operator demining units, for example, are required to employ war veterans and civilian mine victims.⁸⁷ Data on the gender split of national operator personnel was requested from the national authorities but not provided. However, Ukraine has stated that, as it expands mine action operational capacity in the MoD up to an estimated 5,000 personnel, it expects female specialists to form up to 30% of the units, although no time frame for this has yet been given.⁸⁸

In terms of taking steps to ensure that all sections of affected communities are consulted during survey and community liaison activities, Ukraine has recommendations on the use of gender-mixed teams for NTS and deploys some female-only teams where this is more likely to ensure access to affected sections of the community. Operators are required to provide gender and age-disaggregated beneficiary data.⁸⁹

DCA is actively seeking to increase the number of female staff at all levels, for example, through a recruitment campaign featuring existing female staff as role models. DCA's NTS teams are gender-mixed and four of the six teams have female team leaders. DCA recruits staff from the local area to help encourage engagement with all segments of the community, including ethnic and minority groups, and women and children. All DCA beneficiary data are disaggregated by sex and age.⁹⁰

DRC has a global gender and diversity policy, and a country-specific implementation plan.⁹¹ DRC conducted a perception survey in 2023, assessing attitudes towards women working in demining and distributed among male and female personnel from various mine action NGOs. The survey highlighted prevalent misconceptions, such as the belief that prior military experience is necessary, and perceived limitations on the demining positions women can apply for. Using these insights, DRC intends to refine its strategies for the recruitment and retention of women. To date in 2024, DRC has also implemented AGD (age, gender, disability) inclusion training and gender-based violence (GBV) training for all field staff.⁹² In 2023, the proportion of managerial or supervisory positions occupied by women in DRC more than doubled from 15% to 32%.⁹³ All DRC's mine action data are disaggregated by age, gender, and disability.⁹⁴

FSD is committed to providing an equal opportunity working environment. NTS, battle area clearance (BAC), and explosive ordnance risk education (EORE) teams are gender-mixed. In 2023–24, similarly to the previous reporting period, 29% of FSD's national staff in Ukraine were female.⁹⁵

Women, including four female national clearance team leaders, occupied 14% of national management positions,⁹⁶ a slight reduction on the 19% in 2022–23.⁹⁷ At the time of writing, people with disabilities made up 6% of personnel in FSD Ukraine.

HALO has a global equality and diversity policy, which it applies to its programme in Ukraine, with all programming to be delivered in a gender-inclusive manner and taking into account gender considerations. HALO has continued to expand the criteria for its childcare stipend programme for mothers and single fathers working in HALO, first introduced in 2021, and now also offers parental leave.⁹⁸ Having been the first operator in Ukraine to employ Ukrainian women as deminers in 2016, HALO planned to be the first operator to employ women as EOD team leaders and specialists, starting in 2024 and once its EOD certification was received. Over half (59%) of women employed are in supervisory positions and HALO is determined to continue efforts to achieve gender parity. In order to reach all sections of affected communities, HALO deploys mixed-gender, Ukrainian- and Russian-speaking NTS teams.

With regard to other aspects of diversity, HALO is an equal opportunities employer and recruits staff from conflict-affected communities, including many who have been displaced by the conflict. As of the end of 2023, HALO Ukraine employed nine persons with declared disabilities, though HALO states that, due to some level of stigma surrounding disability in Ukraine, the actual number of staff with disabilities may be higher.

HALO conducts pre- and post-clearance impact assessments in affected communities. The first post-clearance assessment was conducted in May 2023 and, as the data collected grows, HALO will use this to inform project design and planning. HALO disaggregates all data by sex and age and uses the Washington Group Short Set of questions to collect information about the number of beneficiaries with disabilities.⁹⁹

MAG works according to its organisational gender, diversity and inclusion policy and strives to ensure equal access for female and male candidates to all its positions. Measures to encourage equal access to employment include the use of interview panellists external to the organisation.¹⁰⁰ In 2023, the proportion of all staff positions and operational positions filled by women fell somewhat, from 52% in both cases to 37% and 38% respectively.¹⁰¹ MAG also prioritises access to employment opportunities for people with disabilities, aiming to reach the minimum target of 4% of the workforce, as set in Ukrainian labour law, and has created a task force with other humanitarian actors to pool vacancies and encourage

87 Interview with Yevhenni Zubarevskiy, Ministry of Defence, in Geneva, 1 May 2024.

88 Answers to additional questions of the Anti-Personnel Mine Ban Convention (APMBC) Committee on Article 5 Implementation on Ukraine's deadline extension request, 1 September 2023, p. 2.

89 Ibid.

90 Email from Michael Edwards, DCA, 3 May 2024.

91 Emails from Roxana-Cristina Boboticu, DRC, 1 April 2023; and Almedina Musić, DRC, 7 February and 13 June 2022.

92 Email from Sophie Breinholdt Nielsen, DRC, 10 May 2024.

93 Emails from Roxana-Cristina Boboticu, DRC, 1 April 2023; Almedina Musić, DRC, 7 February and 13 June 2022; and Sophie Breinholdt Nielsen, DRC, 10 May 2024.

94 Emails from Roxana-Cristina Boboticu, DRC, 1 April 2023; and Almedina Musić, DRC, 7 February and 13 June 2022.

95 Email from Tony Connel, FSD, 25 June 2024.

96 Ibid.

97 Email from Tony Connel, FSD, 26 June 2023.

98 Emails from Denys Holovetskyi, HALO, 29 May 2023; and Michael Brown, HALO, 29 May 2024.

99 Email from Michael Brown, HALO, 29 May 2024.

100 Email from Jon Cunliffe, MAG, 26 April 2024.

101 Emails from Nick Guest, MAG, 23 March 2023; and Jon Cunliffe, MAG, 26 April 2024.

and facilitate more applications from disabled people and war veterans.¹⁰² All MAG community liaison teams are gender-mixed and disaggregates mine action data by sex and age.¹⁰³

NPA Ukraine has a gender and diversity plan, is an equal opportunities employer, and disaggregates its mine action data by gender and age.¹⁰⁴ NPA continues to explore strategies to attract more women, aiming to create more gender-balanced teams, and successfully increased the proportion operational positions occupied by female staff from 13% in 2022 to 25% as at April 2024.¹⁰⁵ However, NPA

says the recruitment of women, for both operational and management positions, has been challenging. It continues to work with local partner organisations to implement targeted recruitment campaigns to attract more women from local communities in its areas of operation, for example, proactively inviting women to apply for operational roles through visits of female deminers to Women and Girls Safe Spaces (WGSS).¹⁰⁶ Staff are recruited from target communities and NPA strives to have a balance of staff with diverse ethnic backgrounds.¹⁰⁷

Table 1: Gender composition of mine action operators in 2023¹⁰⁸

Operator	Total staff	Total women employed	Managerial or supervisory staff	Women in managerial or supervisory positions	Operational staff	Women in operational positions
DCA	112	37 (33%)	35	13 (37%)	65	17 (26%)
DRC	274	75 (27%)	19	6 (32%)	192	39 (20%)
FSD	249	72 (29%)	68	35 (51%)	179	72 (40%)
HALO	1,165	341 (29%)	180	83 (46%)	985	258 (26%)
MAG	186	69 (37%)	37	12 (32%)	129	49 (38%)
NPA	231	62 (27%)	56	12 (21%)	194	48 (25%)
Totals	2,217	656 (30%)	395	161 (41%)	1,744	483 (28%)

ENVIRONMENTAL POLICIES AND ACTION

Ukrainian National Mine Action Standards (NMAS) include a chapter (11.2.9) on "Environmental regulations", and a section (12.6) on "Environment, occupational health and safety".¹⁰⁹ Some operator feedback suggests that this is in line with International Mine Action Standards (IMAS),¹¹⁰ but that it needs to be updated.¹¹¹ At the time of writing it was not clear if Ukraine has an environmental management policy for mine action. It was also not clear if the national authorities conduct environmental assessments. The OSCE is helping build the operational capacities of the Mine Action Centre and Humanitarian Demining Centre to systematically conduct "environmentally safe" demining.¹¹²

A government High-Level Working Group on the Environmental Consequences of War published a report in February 2024, recommending that Ukraine's Mine Action Strategy, at that time under development, "should explicitly

integrate environmental concerns" and incorporate the relevant guidance provided in the IMAS. The report also recommended that the Strategy should provide for close oversight of state and non-state operators involved in demining activities, with national legislation potentially needed to ensure that environmental protections are assured. Furthermore, the report recommended better coordination between demining actors and other organisations protecting the environment; the establishment of a national programme to address mine clearance in targeted forests, protected areas and other natural spaces; measures to encourage sustainable land use practices following clearance; and the embedding of climate change and climate-related hazards into decision-making on the prioritization of areas to be cleared.¹¹³ The National Mine Action Strategy, approved in June 2024, does, indeed, acknowledge the need for systemic consideration of the

102 Email from Jon Cunliffe, MAG, 26 April 2024.

103 Email from Nick Guest, MAG, 23 March 2023.

104 Email from Amela Batic, Deputy Programme Manager, NPA, 29 June 2023.

105 Emails from Alberto Rinaldo Serra, NPA, 15 March 2023; and Vanja Sikirica, NPA, 21 April 2024.

106 Email from Vanja Sikirica, NPA, 21 April 2024.

107 Ibid.

108 Emails from Vanja Sikirica, 21 April 2024; Jon Cunliffe, MAG, 26 April 2024; Sophie Breinholdt Nielsen, DRC, 10 May 2024, Michael Edwards, DCA, 3 May 2024; Michael Brown, HALO, 29 May 2024; and Tony Connel, FSD, 25 June 2024.

109 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO, 23 March 2022.

110 Email from Julie Bouvier, HI, 16 May 2024.

111 Email from Jon Cunliffe, MAG, 26 April 2024.

112 "Support to Environmental Rehabilitation with Focus on Building National Humanitarian Mine Action Capacities of Ukraine", OSCE, accessed 14 May 2024, at: <https://bit.ly/4dHLoze>.

113 "An Environmental Compact for Ukraine. A green future: recommendations for accountability and recovery", Andriy Yermak and Margot Wallström, Co-Chairs, High-level Working Group on the Environmental Consequences of War, Government of Ukraine, 9 February 2024, at: <https://tinyurl.com/2kbpmmr6>, p. 14.

environment in mine action and outlines tasks related to the environment under each of the strategy's three strategic goals. These tasks include reducing pollution caused by EO; consideration of the environment during task prioritisation; and application of "environmentally friendly demining methods", especially in protected and conservation areas.¹¹⁴

DCA has a Climate and Environment Policy and adopts a 'do-no-harm' approach to all its activities including when establishing and maintaining training centres, remote camps and task sites. DCA undertakes an initial environmental assessment prior to any technical survey (TS) or clearance, primarily to minimise the risk of adverse environmental impact from technological methods.¹¹⁵ DRC has an environmental management system in place, which is stipulated in its standing operating procedure (SOP) (1.13) on health, safety and environmental management¹¹⁶ and is in line with IMAS. DRC implements measures to prevent or minimise environmental harm, in accordance with its SOPs, and maintains contingency plans in case of unexpected weather or ground conditions.¹¹⁷

FSD has detailed SOPs on environmental management that are said to be in accordance with IMAS and with Ukrainian legal requirements¹¹⁸ and maintains an environmental policy for mine action in Ukraine. FSD states that, like other operators, it works on a "do no harm" basis, although the use of heavy machinery to conduct ground preparation can make this challenging.¹¹⁹

The HALO Trust seeks to minimise its environmental footprint.¹²⁰ HALO has an environmental policy and SOPs that outline the potential negative environmental impacts that could result from large-scale demining and EO operations. The SOPs prescribe measures to eliminate the consequences of negative impacts, such as activities to ensure the regeneration of vegetation, re-planting trees, and returning cultivated soils to work sites (soil that was mechanically sieved), among others.¹²¹ HALO is working on a framework to calculate and reduce greenhouse gas emissions from operations, although reducing travel distances to demining sites is not possible at present due to security risks. HALO has also begun to develop Ukraine-specific baseline environmental assessment procedures. It has implemented adaptation measures for climate-change related extreme weather, for example, equipping deminers appropriately for heat waves and heavy rain and having shorter working days during extremely high temperatures.¹²²

MAG has an environmental SOP in place in Ukraine.¹²³ It also conducts post-clearance environmental assessments in line with its global standards. NPA has a Climate and Environment Policy, as well as a Green Office tool, and is developing objectives and actions related to climate and the environment. NPA also has an environmental SOP that is said to comply with IMAS.¹²⁴

INFORMATION MANAGEMENT AND REPORTING

Ukraine is using IMSMA Core.¹²⁵ In 2022, the database was hosted on two separate servers, one owned by SESU and the other by the Ministry of Defence, but in 2023, IMSMA became cloud-based, with access rights and permissions to different datasets granted according to the requirements of the national authorities partners.¹²⁶ Mine action actors were invited early on to provide feedback on the database, and some operators note significant improvements, such as increased digitisation in the reporting process and minimal paperwork.¹²⁷ There are ongoing efforts to maintain and improve data quality through monthly or bi-monthly meetings

between the NMAC and operators to discuss and improve potentially erroneous data.¹²⁸

The IMSMA in Ukraine receives new information daily from operators that is shared across key partners¹²⁹ for use in their analysis and planning.¹³⁰ Ukraine states that access to Ukraine's IMSMA-Core portal is open to all certified operators "within the defined limits that do not contradict the privacy policy of sensitive data", as well as to executive authorities involved in mine action, local authorities, international organisations, and the public.¹³¹

114 "Cabinet of Ministers of Ukraine Order dated 28 June 2024 No. 616-p", section entitled "Strategic goals, objectives and expected results aimed at achieving the defined goals".

115 Michael Edwards, DCA, 3 May 2024.

116 Emails from Almedina Musić, DRC, 7 February and 13 June 2022.

117 Email from Sophie Breinholdt Nielsen, DRC, 10 May 2024.

118 Email from Tony Connell, FSD, 10 June 2022.

119 Email from Tony Connell, FSD, 25 June 2024.

120 Emails from Imogen Churchill, HALO, 23 March 2022; and Denys Holovetskyi, HALO, 29 May 2023.

121 Ibid.

122 Email from Michael Brown, HALO, 29 May 2024.

123 Email from Nick Guest, MAG, 23 March 2023.

124 Email from Vanja Sikirica, NPA, 21 April 2024.

125 Email from the GICHD, 26 May 2023.

126 Emails from the GICHD, 17 June 2022 and 26 May 2023.

127 Email from Sophie Breinholdt Nielsen, DRC, 10 May 2024.

128 Email from Michael Brown, HALO, 29 May 2024.

129 GICHD, "Ukraine faces massive explosive contamination one year into conflict", 24 February 2023.

130 Email from Michael Brown, HALO, 29 May 2024.

131 Answers to additional questions of the APMBC Committee on Article 5 Implementation on Ukraine's deadline extension request, 1 September 2023, p. 7.

Survey and clearance data that are entered into IMSMA are validated by the MAC.¹³² Operators report that IMSMA Core functions effectively, and all operators have been trained in its use.¹³³ They also report that the national database is up to date in so far as is possible in the context of the ongoing conflict.¹³⁴ All accredited operators are required to regularly submit reports, including for NTS, TS, and clearance.¹³⁵ In 2023, the NMAA requested operators to submit only approved reports,¹³⁶ to be validated by the NMAC before being entered into the national database.¹³⁷ Following development by the IM working group and successful trials, as at April 2023, data collection forms were using the Survey123 platform, and were being used by all accredited

operators.¹³⁸ Data collection forms are regularly discussed and agreed with operators.¹³⁹

At the time of writing, however, it was not clear to what extent data in the information management system in Ukraine are disaggregated by type of contamination and method of land release. But the national authorities did state that data, disaggregated by weapon type, are being collected by national operators working within the buffer zone, but remains classified at present.¹⁴⁰

PLANNING AND TASKING

Ukraine has developed a National Mine Action Strategy for 2024–33 as well as an implementation plan for the first three years. The strategy was endorsed by the NMAA in February 2024¹⁴¹ and both the strategy and implementation plan for the initial three years were adopted by Ukraine's Cabinet of Ministers on 28 June 2024.¹⁴² A workshop with government ministries and operators was held in November 2023 to review the text. The implementation plan was drafted soon thereafter and a review of the draft undertaken.¹⁴³ The strategy focuses on three strategic goals: "land release, protection of the people, and system improvement". Ukraine plans to update the implementation plan every three years.¹⁴⁴ An operational plan for the period 2024–2026 is attached to the strategy, though this is available only in Ukrainian. The strategy does not specifically address CMR, but rather refers throughout to "explosive ordnance".¹⁴⁵

With a view to the first goal—land release, a tripartite MoU was signed in April 2024 between Ukraine's Ministry of the Economy, the Food and Agriculture Organisation (FAO), and the World Food Programme (WFP). The initiative consists of three phases: identifying and prioritising households and land (Phase I: Prioritisation), surveying and clearing selected land (Phase II: Education and Mine Action); and restarting production (Phase III: Restoration).¹⁴⁶ The presence and

fear of UXO is preventing many Ukrainian farmers from cultivating their land, with significant implications for rural livelihoods and global food security. As such, mine action and the restoration of agricultural livelihoods have become highly integrated in Ukraine, with close collaboration between Ukraine's Ministry of the Economy, the FAO, WFP, and mine action implementing partners.¹⁴⁷

Broad priority areas for demining in Ukraine are listed as electricity infrastructure, water and heating infrastructure, residential areas, transport infrastructure, critical industries, and agricultural land. But no standardised criteria exist at national level for task prioritisation.¹⁴⁸ Ukraine has stated that it prioritises the clearance of critical infrastructure facilities and population centres, in order to ensure safe access of the population to their homes.¹⁴⁹

An annual plan for demining in 2023 was approved in early January by the Ministry of Defence.¹⁵⁰ In March, Ukraine approved an action plan to survey and clear, by the end of 2024, more than 4,700km² of agricultural land in nine regions (Cherkasy, Chernihiv, Dnipropetrovsk, Kharkiv, Kherson, Kyiv, Mykolaiv, Sumy, and Zaporizhzhia). Of this land, 1,650km² was to be released by the end of 2023 and the remaining 3,050km² by the end of 2024.¹⁵¹ Although CMR are not referred to specifically, this plan covers "demining

132 Emails from the GICHD, 19 April 2023; and Michael Brown, HALO, 29 May 2024.

133 Email from Sophie Breinholdt Nielsen, DRC, 10 May 2024.

134 Emails from Jon Cunliffe, MAG, 26 April 2024; Vanja Sikirica, NPA, 21 April 2024; Sophie Breinholdt Nielsen, DRC, 10 May 2024; and Michael Brown, HALO, 29 May 2024.

135 Emails from Michael Edwards, DCA, 3 May 2024; and Sophie Breinholdt Nielsen, DRC, 10 May 2024.

136 Email from Vanja Sikirica, NPA, 21 April 2024.

137 Michael Edwards, DCA, 3 May 2024.

138 Email from the GICHD, 19 April 2023.

139 Email from Michael Brown, HALO, 29 May 2024.

140 Interview with Yevhenni Zubarevskyi, Ministry of Defence, in Geneva, 1 May 2024.

141 Online interview with GICHD, 13 May 2024.

142 "Government approves National Mine Action Strategy and Operational Plan for its implementation for the first 3 years", Government of Ukraine, 28 June 2024, at: <https://bit.ly/46tT1cj>.

143 Email from Julie Bouvier, HI, 16 May 2024.

144 Presentation by Oleg Stoiev, Head Mine Action Office, Ministry of Economy, NDM, Geneva, 29 April 2024.

145 "Cabinet of Ministers of Ukraine Order dated 28 June 2024 No. 616-p".

146 FAO and WFP Presentation, NDM, 2024.

147 Presentation by Oleg Stoiev, NDM, Geneva, 1 May 2024.

148 Emails from Henry Leach, DDG Ukraine, 2 May 2019; Yuri Shahramanyan, HALO Ukraine, 16 May 2019; Almedina Musić, DRC, 7 February 2022; Julie Bouvier, HI, 16 May 2024; and Michael Brown, HALO, 29 May 2024.

149 Ukraine 2023 APMB Article 5 deadline Extension Request, p. 3.

150 Email from Roxana-Cristina Bobolicu, DRC, 1 April 2023.

151 Ukraine's Ministry of Economy website, 30 May 2023, accessed on 22 June 2023, at: <https://bit.ly/3NH0SbN>; and Ukraine's Ministry of Agrarian Policy and Food website, 21 March 2023, at: <https://bit.ly/3r0lphu>.

of agricultural territories contaminated by explosive objects".¹⁵² Ukraine has submitted an annual work plan for 2024 to the Anti-Personnel Mine Ban Convention (APBMC), in accordance with the decision of the Twenty-First Meeting of States Parties in response to its Article 5 clearance deadline extension request. The plan's first stated aim is to reduce the risks posed by "explosive ordnance", though the list of remaining contaminated areas refers only to AP mines. CMR are specifically referred to once in the document, under the provision for "Marking Potentially Contaminated Territories

/Contaminated Territories (PCT/CT)", which notes the mandatory marking requirements where there is "direct or indirect evidence of mines or CMR".¹⁵³

Ukraine's National Mine Strategy identifies a need for improved planning and tasking as part of systems improvement, citing "the formation of a system of prioritisation of tasks for mine action and the centralised distribution of relevant tasks by the authorised body" as prerequisites to effective, centralised task distribution in the country.¹⁵⁴

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

NMAS were finalised by the MoD in 2018.¹⁵⁵ The GICHD considered that these were in line with IMAS. Concerns, however, were raised by stakeholders that they did not contain sufficient detail in certain areas, and needed to be further refined and detailed. For example, the criteria for direct and indirect evidence needed to be tailored to the new operational context¹⁵⁶ and responsibilities for control and enforcement of marking systems remained inadequately defined.¹⁵⁷ In April 2023, Ukraine issued "improved" national standards covering NTS, TS, manual demining, clearance, mechanical demining, EO destruction, and EORE. These standards were developed with the involvement of the GICHD.¹⁵⁸ Co-led by the GICHD and the NMAA, a NMAS revision process was initiated in March

2023 during a stakeholder workshop.¹⁵⁹ Over the course of the rest of the year a technical working group (TWG), led by GICHD, focussed on land release (including clearance, reduction through TS, cancellation through NTS,¹⁶⁰ and the notions of "all reasonable effort" and "acceptable risk"¹⁶¹) and mechanical land release.¹⁶² Certain revised NMAS were due to come into effect on 1 June 2024.¹⁶³ The two chapters developed by the TWG (land release and mechanical land release) were submitted in Q1 2024 and were going through the national standardisation process as at July 2024. Standards on QM and IM (including cancellation criteria) were submitted separately and have been approved by the government.¹⁶⁴

OPERATORS AND OPERATIONAL TOOLS

The number of mine action operators in Ukraine has grown significantly since February 2022. During 2023, it increased to 29, including six from among the units of the MoD and SESU.¹⁶⁵ In total, 45 operators had been certified as at July 2024, eight of which were international operators, according to the national operator database updated by the NMAA.¹⁶⁶ The US Department of State has said that Ukraine and its partners deployed 3,000 deminers in liberated areas as at September 2023.¹⁶⁷ As at June 2024, total demining capacity in Ukraine reportedly exceeded this figure but was changing regularly.¹⁶⁸ The MoD and several other ministries

continue to deploy units that undertake clearance and destruction of mines and ERW. This includes the military engineering school, which has a licence to accredit operators; the National Guard of Ukraine; the Ministry of Interior, which conducts clearance through SESU and also has an engineering department that conducts EOD; the Security Service; the SSTS, which is responsible for demining national infrastructure; and the State Border Service, which conducts demining in areas under its control on land and in the sea.¹⁶⁹ The Armed Forces of Ukraine and police EOD teams are reportedly at the forefront of emergency response in

152 Answers to additional questions of the APBMC Committee on Article 5 Implementation on Ukraine's deadline extension request, 1 September 2023, p. 6.

153 The Work Plan for Humanitarian Demining of De-occupied Territories of Ukraine for 2024, submitted to the Chair of the Committee on Article 5 Implementation, 30 April 2024. CMR are referred to in annex 1, section 'h'. Remaining AP mined areas are given in Table 2.

154 "Cabinet of Ministers of Ukraine Order dated 28 June 2024 No. 616-p", section entitled "Analysis of the current state of affairs, trends and justifications for the need to solve the identified problems".

155 Emails from Gianluca Maspoli, GICHD, 25 September 2018; and Miljenko Vahtarić, OSCE, 25 September 2018; and interview, 7 February 2019.

156 Email from the GICHD, 19 April 2023.

157 Email from Michael Brown, HALO, 29 May 2024.

158 Answers to additional questions of the APBMC Committee on Article 5 Implementation on Ukraine's deadline extension request, 1 September 2023, p. 7.

159 Emails from the GICHD, 19 April 2023 and 23 July 2024.

160 Emails from Vanja Sikirica, NPA, 21 April 2024; and Michael Edwards, DCA, 3 May 2024.

161 Interview with Col. Ruslan Berehulia, Ministry of Defence, in Geneva, 1 May 2024.

162 Email from the GICHD, 23 July 2024.

163 Presentation by Col. Ruslan Berehulia, Ministry of Defence, NDM, Geneva, 29 April 2024.

164 Email from the GICHD, 23 July 2024.

165 "Cabinet of Ministers of Ukraine Order dated 28 June 2024 No. 616-p", section entitled "Analysis of the current state of affairs, trends and justifications for the need to solve the identified problems".

166 "List of Mine Certified Mine Action Operators", ArcGIS Web Application, accessed 23 July 2024, at: <https://bit.ly/3y9J58e>.

167 "To Walk the Earth in Safety, 23rd Edition, Fiscal Year 2023, Documenting the U.S. Commitment to Conventional Weapons Destruction", Bureau of Political-Military Affairs, US Department of State, at: <https://bit.ly/3wVINKT>, p. 32.

168 Email from Paul Hestop, UNDP, 7 June 2024.

169 Interview with Col. Oleksandr Shchebetiuk, Ukrainian Armed Forces, in Geneva, 26 June 2015; email from Anton Shevchenko, OSCE, 23 June 2015; "Mine Action in Ukraine", Side-event presentation by Lt.-Col. Yevhenii Zubarevskyi, Ministry of Defence, Geneva, 17 February 2016; APBMC Article 7 Report (covering 2018), Form F, and email from the GICHD, 17 June 2022.

disposing of ERW in newly accessible areas.¹⁷⁰ The OSCE and UNDP are engaged in a project to develop a unified national EOD training curriculum.¹⁷¹

Initial NTS of all types of ordnance in 2023 involved 103 teams of more than 350 personnel in total, although it was not stated which national or international operators this included. Clearance of all types of EO by government units in Ukraine in 2023 reportedly involved 384 teams of 1,503 personnel in total and 385 machines.¹⁷² This is approximately in line with Ukraine's previously stated plan to expand from 200 demining teams of more than 1,000 personnel in December 2022, to 400 teams of 2,000 personnel in 2023;¹⁷³ nearly four times the capacity available in 2020.¹⁷⁴

Multiple international demining organisations—including APOPO, DCA, DRC, FSD, HALO, MAG, and NPA—are

operating in Ukraine, with DCA, MAG and NPA first receiving accreditation during 2023.¹⁷⁵

HI, currently active in risk education, was undergoing accreditation for NTS as at May 2024.¹⁷⁶ National operator Demining Solutions received accreditation for NTS, TS, manual demining, clearance, and risk education in July 2023.¹⁷⁷ The NTS and TS project implemented by Ukrainian NGO, Safe Path Group (SPG) and supported by the ITF ended in August 2023.¹⁷⁸ While Mine Action Review made every effort to contact both international and national operators, due to the rapidly expanding nature of Ukraine's mine action programme in 2023, it has not been feasible to source and include information from all national operators who may have conducted survey and clearance of EO in 2023.

Table 2: Operational survey capacities deployed in 2023*¹⁷⁹

Operator	NTS teams	Total NTS/TS personnel*	Comments
DCA	6	24	
DRC	12	36	Deployed for NTS only.
FSD	12	36	
HALO	40	79	
MAG	6	18	Six teams at peak capacity, five at other times.
NPA	16	N/K	Deployed for NTS in Sumy, Mykolaiv, & Kherson regions.
SPG (partnered with ITF)	2	10	Deployed for NTS only. Completed project in August 2023.
Totals	94	203	

*Information based on data available at time of writing. Full information not available on the capacity of national operators.

Table 3: Operational clearance capacities deployed in 2023*¹⁸⁰

Operator	Manual teams	Mechanical teams	Multi-task teams (MTTs)	Total deminers**	Dogs and handlers	Machines***	Comments
DRC	N/R	0	15	75	0		Deployed for TS, BAC, and MMC.

170 "Ukraine: Strengthening national mine action capabilities", DRC, 9 February 2024.

171 Email from Miljenko Vahtarić, OSCE, 26 June 2024.

172 FAO and WFP Presentation, NDM, 2024.

173 US Department of State, "Demining Ukraine: A Pre-requisite for Recovery: Michael Tirre Remarks before the U.S. Helsinki Commission", 8 December 2022, at: <https://bit.ly/3KfDxZJ>.

174 APMB Article 5 deadline Extension Request, 2020.

175 Emails from Vanja Sikirica, NPA, 21 April 2024; Michael Edwards, DCA, 3 May 2024; Dino Šujak, ITF Ukraine, 16 May 2024; Jon Cunliffe, MAG, 26 April 2024; Sophie Breinholdt Nielsen, DRC, 10 May 2024; and Michael Brown, HALO, 29 May 2024; and FSD, "Ukraine", accessed 10 April 2024, at: <https://bit.ly/4bIMYPH>.

176 Email from Julie Bouvier, HI, 16 May 2024.

177 "DS successfully passed the certification process", Demining Solutions, 17 July 2023, at: <https://bit.ly/440NM37>.

178 ITF, *Annual Report 2023*, at: <https://bit.ly/3K3frUG>, p. 63.

179 Emails from Vanja Sikirica, NPA, 21 April and 5 June 2024; Michael Edwards, DCA, 3 May 2024; Dino Šujak, ITF Ukraine, 16 May 2024; Jon Cunliffe, MAG, 26 April 2024; Sophie Breinholdt Nielsen, DRC, 10 May 2024; Tony Connel, FSD, 24 June 2024; and Michael Brown, HALO, 29 May 2024; and FSD, "Ukraine".

180 Emails from Jon Cunliffe, MAG, 26 April 2024; and Vanja Sikirica, NPA, 21 April and 24 June 2024; Michael Brown, HALO, 29 May and 6 June 2024; Denys Holovetskyi, Head of Operations, HALO, 27 June 2024; and FSD, "Ukraine" and "Our Mine Action Programme in Ukraine, April 2024", FSD, accessed 10 April 2024, at: <https://bit.ly/3wsUdfS>, p. 11; presentation by SESU, "Innovation in Mine Action: Ukraine", side event, NDM, Geneva, 1 May 2024; and Presentation by MAG, "Animal Detection Systems Incorporation into Mine Action Programmes: Considerations from the Field", side event, NDM, Geneva, 29 April 2024.

Table 3 Continued

Operator	Manual teams	Mechanical teams	Multi-task teams (MTTs)	Total deminers**	Dogs and handlers	Machines***	Comments
FSD	12	2		120	8	1 x MV 4 1 x MV 10	
HALO	74	13		578		3 x Traxx 10 x T800 (Robocuts) 16 x S300 (Robocuts) 1 x AMTRAC	Deployed for TS and clearance of CMR, and AP and AT mines. Accreditation for remote mechanical clearance received in December 2023. Machines used for ground preparation only in 2023.
MAG	3		1	44	14		MDDs also used widely in 2023 to prove areas were free from contamination (no evidence of mines).
NPA	0	5	16	80	8	0	Conducting TS and clearance of CMR and AP and AV mines in Mykolaiv region. MDDs supporting clearance.
SESU	N/K	N/K	0	****1,700	*****5	38	Machines include 22 DOK-ING machine, 12 GCS machines 1 MineWolf, 1 Armtrak, 1 Revival P, and 1 digger.
Totals	89	20	32	897	35	70	

N/K = not known. *Information based on data available at time of writing. Full information not available on the capacity of national operators.** Excluding team leaders, medics, and drivers unless otherwise stated. *** Excluding vegetation cutters and sifters. ****Ukraine's APBMC Article 7 report (covering 2023) states that SESU personnel increased to 1,700 in 2023 but does not state how many were deployed specifically to clear EO.***** SESU had six MDDs and handlers in 2023, of which five MDDs were certified and operational from September 2023.

HALO more than doubled its overall capacity, from 550 personnel in the final quarter of 2022 to 1,165 in the same period in 2023, and planned to increase the number of the operational staff from 1,000 to 1,300 by the end of 2024. This will impact the amount of CMR-contaminated area cleared if high priority tasks, as defined by HALO's prioritisation matrix, contain CMR.¹⁸¹ NPA added one NTS team in 2024.¹⁸² DCA expected to increase TS and clearance capacity during 2024, with a significant impact on CMR clearance, given that the majority of CHAs in its areas of operations are contaminated with submunitions.¹⁸³

Ukraine has stated an intention to establish mine action operational capacity in the MoD with an estimated 5,000 personnel. As at September 2023, the MoD was forming ten battalions and three separate demining companies, which will consist of 4,750 people, as part of the SSTS and Support Forces Command, to be tasked exclusively with demining in accordance with NMAS and IMAS. The formation of two of these battalions was anticipated by the end of 2023, with operations to commence in 2024. It is not specified what level of this increased capacity will be available for the survey and clearance of CMR. However, the plan refers throughout to "mines and explosive remnants of war".¹⁸⁴

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2023

No areas contaminated with CMR were released through NTS in 2023. A total of 1,414m² was released through TS and 87,066m² was released through clearance.¹⁸⁵ The total number of submunitions destroyed in Ukraine in 2023, either through clearance or spot tasks, is unknown. However, two

submunitions were identified by HALO during clearance and marked for disposal by national operators.¹⁸⁶ A total of 51.2km² of previously unrecorded CMR contamination was recorded in the national database by international operators in 2023.¹⁸⁷ A total of 749,890 items of EO (not disaggregated by

181 Email from Michael Brown, HALO, 29 May 2024.

182 Email from Amela Balic, NPA, 5 June 2024.

183 Email from Michael Edwards, DCA, 3 May 2024.

184 Answers to additional questions of the APBMC Committee on Article 5 Implementation on Ukraine's deadline extension request, 1 September 2023, p. 2.

185 Email from Michael Brown, HALO, 29 May 2024.

186 Emails from Michael Brown, HALO, 29 May and 6 June 2024.

187 Emails from Vanja Sikirica, NPA, 21 April 2024; Amela Balic NPA, 5 June 2024; Sophie Breinholdt Nielsen, DRC, 10 and 29 May 2024; Michael Edwards, DCA, 3 May and 10 June 2024; Michael Brown, HALO, 29 May and 6 June 2024; and Tony Connell, FSD, 25 June 2024.

weapon type) were said to have been destroyed by Ukrainian government units, although it was unclear how many of these were destroyed in 2023.¹⁸⁸ Ukraine's most recent Convention on Conventional Weapons (CCW) Amended Protocol II report,

covering 2023, on the other hand, states 703,017 items of EO have been destroyed since the beginning of Russia's invasion, though it was not specified whether this was by national or international operators or both.¹⁸⁹

SURVEY IN 2023

One international operator, HALO, reduced 1,414m² through TS¹⁹⁰ (see Table 4), the first time in five years where there has been reduction of CMR hazardous areas in Ukraine. None of the international operators released any cluster munition-contaminated area through NTS in 2023, the fifth year in a row without cancellation.¹⁹¹ Reporting on cancellation was not accepted by the NMAA-MAC in 2023, as the draft NMAS for land release was still to be approved.¹⁹² Release of cluster munition-contaminated area by Ukrainian national bodies was again not reported in 2023. Ukraine has reported only on survey of contamination broadly, with data not disaggregated by weapon type or by type of hazardous area (i.e. suspected hazardous area (SHA) or CHA).

A total of 51.2km² of previously unrecorded CMR contamination was recorded by international operators in the national database in 2023,¹⁹³ of which DCA recorded one SHA and ten CHAs with a total area of 1,100,567m²,¹⁹⁴ DRC identified ten SHAs with a total area of 1,050,765m²,¹⁹⁵ FSD identified 322 SHAs with a total area of 32,181,625m² and 135 CHAs with a total area of 11,494,637m².¹⁹⁶ HALO identified ten CHAs with a total area of 759,820m²¹⁹⁷ and NPA recorded 59 CHAs and two SHAs, with a total of 4,585,363m².¹⁹⁸ The 51.2km² of previously unrecorded CMR contamination recorded in 2023 is a significant increase on the 2.2km² of previously unrecorded CMR contamination was discovered and added to the IMSMA database in Ukraine in 2022.¹⁹⁹

Table 4: Reduction through technical survey in 2023²⁰⁰

Operator	District, Sub-district, locality	Oblast	Areas reduced	Area reduced (m ²)
HALO	Broverskyi, Baryshivska, Peremoha	Kyivska	1	1,414
Totals			1	1,414

Table 5: Previously unrecorded CMR contamination recorded in Ukraine in 2023²⁰¹

Operator	SHAs recorded	Area of SHAs recorded (m ²)	CHAs recorded	Area of CHAs recorded (m ²)	Total size of area recorded (m ²)
DCA	1	110,583	10	989,984	1,100,567
DRC	10	1,050,765	0	0	1,050,765
FSD	322	32,181,625	135	11,494,637	43,676,262
HALO	0	0	10	759,820	759,820
NPA	59	4,382,264	2	203,099	4,585,363
Totals	392	37,725,237	157	13,447,540	51,172,777

CLEARANCE IN 2023

HALO released one area, measuring 87,066m², through clearance in 2023 (see Table 6). Two submunitions were identified and marked by HALO for disposal by the national authorities, as HALO did not have EOD teams at that time.²⁰² However, at the time

¹⁸⁸ FAO and WFP Presentation, NDM, 2024.

¹⁸⁹ CCW Amended Protocol II Report, (covering 2023), Form B.

¹⁹⁰ Email from Michael Brown, HALO, 29 May 2024.

¹⁹¹ Emails from Roxana-Cristina Bobolicu, DRC, 1 April 2023; Nick Guest, MAG, 23 March 2023; Alberto Rinaldo Serra, NPA, 15 March 2023; Tony Connell, FSD, 24 March 2023 and 24 March 2021; Almedina Musić, DRC, 7 February 2022 and 20 April 2021; Imogen Churchill, HALO, 23 March 2022; Ronan Shenhav, HALO, 20 April 2021; Michael Edwards, DCA, 3 May 2024; Sophie Breinholdt Nielsen, DRC, 10 May 2024; Vanja Sikirica, NPA, 21 April 2024; Jon Cunliffe, MAG, 26 April 2024; and Michael Brown, HALO, 29 May 2024.

¹⁹² Email from Vanja Sikirica, NPA, 21 April 2024.

¹⁹³ Emails from Vanja Sikirica, NPA, 21 April 2024 and Amela Balic NPA, 5 June 2024; Sophie Breinholdt Nielsen, DRC, 10 and 29 May 2024; Michael Edwards, DCA, 3 May and 10 June 2024; Michael Brown, HALO, 29 May and 6 June 2024; and Tony Connell, FSD, 25 June 2024.

¹⁹⁴ Emails from Michael Edwards, DCA, 3 May and 10 June 2024.

¹⁹⁵ Emails from Sophie Breinholdt Nielsen, DRC, 10 and 29 May 2024.

¹⁹⁶ Email from Tony Connell, FSD, 25 June 2024.

¹⁹⁷ Emails from Michael Brown, HALO, 29 May and 6 June 2024.

¹⁹⁸ Emails from Vanja Sikirica, NPA, 21 April 2024 and Amela Balic, NPA, 5 June 2024.

¹⁹⁹ Emails from Roxana-Cristina Bobolicu, DRC, 1 April 2023; and Denys Holovetskyi, HALO, 29 May 2023.

²⁰⁰ Email from Michael Brown, HALO, 29 May 2024.

²⁰¹ Emails from Michael Edwards, DCA, 3 May and 10 June 2024; Sophie Breinholdt Nielsen, DRC, 10 and 29 May 2024; Vanja Sikirica, NPA, 21 April 2024; Amela Balic, NPA, 5 June 2024; Michael Brown, HALO, 29 May and 6 June 2024; and Tony Connell, FSD, 25 June 2024.

²⁰² Emails from Michael Brown, HALO, 29 May and 6 June 2024.

of writing, Mine Action Review had requested but not received data on any submunitions destroyed by national operators during 2023. Aside from HALO, none of the other international operators released any cluster munition-contaminated area through clearance in 2023.²⁰³ In 2022, international operators cleared a considerably higher amount of 0.49km² of cluster-munition contaminated area, destroying in the process 70 submunitions.²⁰⁴ Clearance of cluster munition-contaminated area by Ukrainian national bodies was not reported for 2023 or for the previous year.

Table 6: Clearance in 2023*²⁰⁵

Operator	District, Sub-district, locality	Oblast	Hazardous areas reduced	Area cleared (m ²)
HALO	Broverskyi, Baryshivska, Peremoha	Kyivska	1	87,066
Totals			1	87,066

* Two submunitions were found during clearance and marked for disposal by the authorities. While it is believed that the submunitions were disposed of, this had not been confirmed at the time of writing.

HALO notes that the June 2023 explosion of the Kakhovska dam, which flooded territories and infrastructure in the south of Ukraine, hindered demining and had an adverse impact on land release output, as well as limiting the search for new areas of contamination, though overall HALO was able to increase capacity and expand its activities in six regions of Ukraine.²⁰⁶

DEMINER SAFETY

On 22 May 2023, a local administration building, located within 20 metres of the edge of a HALO clearance task (Chkalovske-1 task) in Chuhuiv, Kharkiv, was hit by two air strikes from two Russian S300 ballistic missiles. The strikes took place during stand-down, so no HALO staff were injured, though one Ukrainian soldier was killed and five others were injured and hospitalised. Through dialogue with the village mayor, HALO ascertained that the likely target was the site of the village council, where a small group of Ukrainian soldiers previously lived.²⁰⁷

PROGRESS TOWARDS COMPLETION

No target date has been set for the completion of CMR clearance in Ukraine, nor is it realistic to expect one for the foreseeable future given the ongoing hostilities. However, in June 2023 Ukraine's Ministry of Economy stated Ukraine's intention to bring 80% of all land potentially contaminated with ordnance back into productive use within ten years.²⁰⁸ The current conflict, ongoing since February 2022, has certainly resulted in massive new contamination. While initial estimates project a timeline of anything between five and twenty years to complete the CMR clearance, these remain pure speculation until Ukraine has conducted a national survey to assess the scale and nature of its new contamination.²⁰⁹

Both Ukraine and Russia have obligations under international human rights law to clear CMR as soon as possible, in particular by virtue of their duties to protect the right to life of

every person under their jurisdiction or effective control. Over the past five years, very few CMR-contaminated areas have been released through clearance or TS (and none through NTS) in Ukraine, nor has a baseline survey of contamination yet been undertaken. Land release efforts have of course been hugely impeded by the conflict with Russia. Hostilities are significantly adding to CMR contamination, with both sides using cluster munitions extensively. Against the incredibly challenging circumstances of war, Ukraine has been able to scale up operational capacity and technological innovation considerably and take significant steps towards improved national ownership and programme management, which had been lacking in the preceding years. The formal establishment of a National Mine Action Authority in 2022 was a significant step towards improved planning and coordination, as was the work undertaken in 2023 to finally develop a National Mine Action Strategy and implementation plan.

203 Emails from Roxana-Cristina Boboticu, DRC, 1 April 2023; Nick Guest, MAG, 23 March 2023; Alberto Rinaldo Serra, NPA, 15 March 2023; Tony Connell, FSD, 24 March 2023 and 24 March 2021; Almedina Musić, DRC, 7 February 2022 and 20 April 2021; Imogen Churchill, HALO, 23 March 2022; and Ronan Shenhav, HALO, 20 April 2021.

204 Email from Denys Holovetskyi, HALO, 29 May 2023.

205 Email from Michael Brown, HALO, 29 May 2024.

206 Ibid.

207 Emails from Michael Brown, HALO, 29 May 2024; and Denys Holovetskyi, HALO, 27 June 2024.

208 "Our goal is to bring 80% of potentially contaminated land back into use in ten years: Yuliia Svyrydenko at the London conference", Ministry of Economy of Ukraine, 22 June 2023, at: <https://bit.ly/4dMpGu3>.

209 Online presentation by Hannah Rose Holloway, DRC, CCM Intersessional Meeting, Geneva, 16 May 2022.