

ARTICLE 5 DEADLINE: 1 DECEMBER 2023
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: UNKNOWN

AP MINE CLEARANCE IN 2021

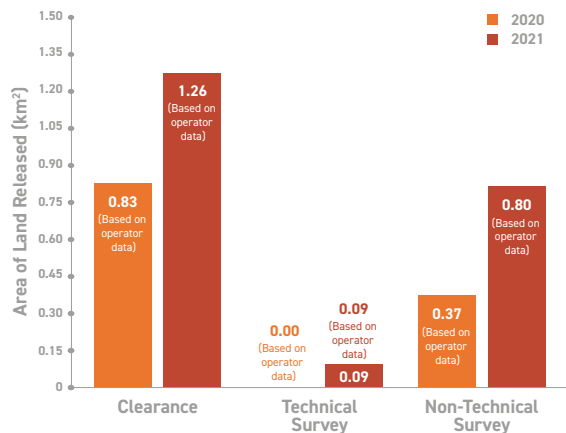
1.26 KM²

AP MINES DESTROYED IN 2021

11

(BASED ON OPERATOR DATA)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET (as per the Oslo Action Plan commitment): LOW

KEY DEVELOPMENTS

In February 2022, Russia launched a military assault and invaded large parts of Ukraine. Heavy combat continues in the east and south of the country, involving large-scale use of mines. Russia have used anti-personnel mines since the beginning of its attack including a recently developed variant that is very difficult to clear safely. Russian forces have also emplaced mines of an improvised nature as they have retreated from their early positions in the war.¹ The Ukrainian authorities have been clearing some contamination swiftly after use,² and by May 2022, the authorities reported disposal of tens of thousands of mines and other explosive ordnance.³

Ukraine appears to have respected its obligations to the Anti-personnel Mines Ban Convention (APMBC) and there was no reliable evidence of it having used anti-personnel mines in the course of the recent conflict. Both Ukraine and Russia have used anti-vehicle mines extensively.⁴ In November 2021, the Ukrainian Cabinet of Ministers issued a long-awaited resolution on the establishment of the national mine action authority (NMAA), which was hoped to progress into a stronger and more coordinated mine action sector in Ukraine. This is the first step in what will be a long process. Ukraine was not on track to meet its extended APMBC Article 5 deadline of 1 December 2023 even before the renewed use of anti-personnel mines. The new contamination and ongoing hostilities mean that Ukraine will face many years of clearance in order to fulfil its treaty obligations.

1 Human Rights Watch, "Landmine Use in Ukraine", Report, 15 June 2022, at: <https://bit.ly/3P03Yss>, p. 1; Amnesty International, "Anyone can die at any time", Report, 13 June 2022; at: <https://bit.ly/3B139Zn>; and "Land Mines on a Timer, Scattered Over a Ukrainian Town", *New York Times*, 8 April 2022, at: <https://nyti.ms/3KwWV6A>.
 2 Ukraine's State Emergency Service Facebook page, 8 May 2022, at: <https://bit.ly/3G04DDJ>; and Online presentation by Hannah Rose Holloway, Danish Refugee Council (DRC), to the Convention on Cluster Munitions (CCM) Intersessional Meetings, Geneva, 16 May 2022.
 3 Geneva International Centre for Humanitarian Demining (GICHD), Press release, 13 May 2022, at: <https://bit.ly/3ArDfwb>.
 4 Human Rights Watch, "Landmine Use in Ukraine", Report, 15 June 2022, p. 1.

RECOMMENDATIONS FOR ACTION

- As soon as conditions allow, Ukraine should undertake a baseline survey to understand the extent and nature of anti-personnel mine contamination in areas to which it has effective access.
- Ukraine should clear anti-personnel mines on territory under its jurisdiction or control as soon as possible.
- Ukraine should revise its national mine action standards (NMAA), taking into careful consideration the recommendations of the technical working group.
- Ukraine should expedite the implementation of its new mine action legislation and finalise the creation of the necessary structures and procedures to facilitate systematic mine clearance.
- Ukraine should elaborate a national strategic plan for mine action.
- Ukraine should report on contamination, survey, and clearance in a manner consistent with the International Mine Action Standards (IMAS).

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	4	3	The extent of anti-personnel mine contamination in Ukraine is not known but has certainly increased during the 2022 conflict. Surveys were conducted in 2021, but Ukraine did not report on their results.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	6	5	In November 2021, Ukraine passed a resolution that sees for the creation of the long-awaited NMAA, which was in the early stages of development when the conflict erupted. In December 2020, Ukraine created two mine action centres: a national mine action centre (NMAC) technically falling under the NMAA but chaired by the Ministry of Defence (MoD), and a humanitarian demining centre (HDC) sitting under the Ministry of Interior (MoI). The two mine action centres were in different stages of development. On 29 September 2022, the MoD MAC received its official certification.
GENDER AND DIVERSITY (10% of overall score)	2	2	Ukraine does not have a gender policy for mine action and does not report on whether gender and diversity is mainstreamed within its programmes. No reference was made to gender or diversity in its 2020 Article 5 deadline extension request or in its Article 7 report covering 2020 (the latest submitted as of writing).
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	5	4	Ukraine uses the International Management Systems for Mine Action (IMSMA) Core database. In 2021, the database was housed in two separate servers, one owned by the State Emergency Service of Ukraine (SESU) and the other by the MoD. Both entities collect and analyse contamination and land release data using the harmonised forms and reporting systems. Since April 2022, the IMSMA database has been backed up on a single secure cloud-based system, but both MoD and SESU had access to and control over their own data systems. In response to the 2022 conflict, the Geneva International Centre of Humanitarian Demining (GICHD)-supported IMSMA database was incorporated into the emergency coordination platform allowing real-time access and exchange of data. Ukraine's Article 7 reports are often delayed and do not present data in accordance with the best practices of international mine action standards (IMAS). As at September 2022, Ukraine had yet to submit its Article 7 report covering 2021.
PLANNING AND TASKING (10% of overall score)	3	3	Ukraine does not have a national mine action strategy, nor are there standardised criteria at national level for task prioritisation. As at June 2022, the NMAA secretariat had set as a priority the creation of a "national programme".
LAND RELEASE SYSTEM (20% of overall score)	5	5	National mine action standards (NMAA) were published in April 2019 but were not fully applied in practice. In July 2021, the technical working groups submitted recommendations of NMAA improvements to the MoD for its consideration. International operators do not consider that the current NMAA in Ukraine are fit for purpose for the mine action sector.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	5	5	Ukraine is not on track to meet its Article 5 deadline of 1 December 2023 and needs to submit a request for extension. It is not known how much anti-personnel mined area is being cleared across the whole country as Ukraine does not exercise effective control over all the territory. The scale of anti-personnel mine contamination and extent of areas no longer under control of the Ukrainian government have increased significantly since February 2022. Based on operator data, only 11 anti-personnel mines were found and destroyed in the area reported as cleared during 2021.
Average Score	4.4	4.0	Overall Programme Performance: POOR

DEMINEING CAPACITY

MANAGEMENT CAPACITY

- The National Mine Action Authority (NMAA)
- The Secretariat of the NMAA (under the Ministry of Defence, MoD)
- The Mine Action Centre (under the MoD and managed by the State Special Transport Services (SSTS))
- The Humanitarian Demining Centre (HDC, under SESU)
- Social-Humanitarian Response Centre (under the Ministry for Reintegration of the Temporarily Occupied Territories) – not yet created as of September 2022.

NATIONAL OPERATORS

- State Emergency Services of Ukraine (SESU)
- Armed Forces of Ukraine
- National Guard
- Security Service
- State Special Transport Service (SSTS)
- State Border Service
- Demining Solutions
- The Demining Team of Ukraine
- The Ukrainian Deminers Association (UDA)

INTERNATIONAL OPERATORS

- Danish Refugee Council's (DRC's) Humanitarian Disarmament and Peacebuilding sector (formally known as Danish Demining Group (DDG) and hereafter referred to as DRC)
- Swiss Foundation for Mine Action (FSD) – operations resumed in 2020 following suspension in 2019
- The HALO Trust
- Humanity and Inclusion (HI)
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- Organisation for Security and Co-operation in Europe (OSCE)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Mine Action Sub-cluster chaired by United Nations Development Programme (UNDP)

UNDERSTANDING OF AP MINE CONTAMINATION

The extent of anti-personnel mined area in Ukraine is not known, but has certainly increased due to the use of anti-personnel mines in the course of the Russian military assault on Ukraine. In April 2022, Ukraine's government said that its teams were removing almost 6,000 explosive devices a day across the country, including from homes and businesses, and especially in the countryside.⁵ Humanitarian organisations and media outlets indicate that Russian forces have scattered mines in a haphazard and disorganized fashion across civilian areas.⁶

Human Rights Watch (HRW) has documented use of at least seven types of anti-personnel mines (MON-50, MON-100, OZM-72, PMN-4, POM-2/POM-2R, and POM-3), in at least four of Ukraine's 24 regions (oblasts): Donetsk, Kharkiv, Kyiv, and Sumy. All manner of delivery methods have been documented: hand-emplaced, mechanically-laid, and remotely delivered. Several new landmines have made their combat debut in this armed conflict. This includes the remotely delivered POM-3 anti-personnel mine, also known as the "medallion". The mine is typically aerially launched from a rocket, falling back to earth by parachute. It is equipped with a seismic proximity sensor that picks up on approaching footsteps, and is said to be able to distinguish between humans and animals, making efforts to locate and destroy it far deadlier and more complicated. The POM-3 has

self-destruct features that set the mine to explode after a certain period.⁷

Amnesty International has reported that, between March and April 2022, Russian forces fired rockets to disperse PTM-1S scatterable mines on residential neighbourhoods in Kharkiv killing at least three civilians. This type of attack combines the attributes of cluster munitions and anti-personnel mines.

Russian forces have also emplaced many victim-activated booby traps as they retreated from positions taken during the initial phase of the invasion, a considerable portion of which are anti-personnel mines under the APMBC. In mid-April 2022, Ukrainian police and emergency services distributed numerous images of victim-activated booby-traps, including hand grenades with an attached trip wire, and booby-traps placed on dead bodies.⁸

In 2017, Ukraine estimated, highly improbably, that total contamination by mines and explosive remnants of war (ERW) could extend over 7,000km².⁹ In fact, Ukraine cannot reliably estimate the overall extent of mine contamination until it has regained control over all its territory and relevant surveys have been completed.¹⁰ Before the 2022 conflict, surveys had taken place in the government-controlled areas and on the Ukrainian side of the buffer zone: the 15km-wide

5 "Ukraine's efforts to remove booby traps left behind by Russian troops", *CBC News*, 21 April 2022, at: <https://bit.ly/3ckM1nS>.

6 "Land mines create a deadly legacy for Ukraine and possibly beyond", *The Washington Post*, 12 April 2022, at: <https://wapo.st/3e2X9WP>.

7 Human Rights Watch, "Landmine Use in Ukraine", Report, 15 June 2022, at: <https://bit.ly/3P03Yss>, pp. 4, 7, and 8; and "New Russian Land Mine Poses Special Risk in Ukraine", *The New York Times*, 6 April 2022, at: <https://nyti.ms/3TgF9bL>.

8 Human Rights Watch, "Landmine Use in Ukraine", Report, 15 June 2022, p. 16.

9 "Measures to ensure compliance", Presentation by Col. Viktor Kuzmin, Deputy Chief, Engineer Troops, Armed Forces of Ukraine, at the APMBC Intersessional Meetings, Geneva, 9 June 2017, at: <http://bit.ly/2Zk2MUj>.

10 "Mine Action in Ukraine", Side-event presentation by Lt.-Col. Yevhenii Zubarevskyi, MoD, at the 19th International Meeting of National Directors, Geneva, 17 February 2016; and Statement of Ukraine, Intersessional Meetings, Geneva, 19 May 2016.

non-delineated areas on either side of the line of contact (i.e. 30km in total). Due to insecurity, survey was not possible inside the grey zone: the sliver of territory separating the positions of the two sides, which varies in width from several hundred metres to two kilometres. Additionally, the territory stretching 2–3km from the line of contact was off-limits due to insecurity.¹¹ Prior to the 2022 conflict, the heaviest mine and ERW contamination was believed to be inside the buffer zone.¹² Ukraine has indicated that nationwide non-technical and technical survey could only be possible once its sovereignty has been fully restored over all territory under

its jurisdiction.¹³

As at September 2022, Ukraine had yet to submit its Article 7 report to the APMBC, but stated in its latest transparency report (covering 2020) that non-technical survey was conducted between 2016 and 2018 by The HALO Trust and the Danish Refugee Council (DRC), with suspected hazardous areas (SHAs) identified in four districts (see Table 1). Ukraine did not provide information on the number or estimated area of these SHAs.

Table 1: Anti-personnel mined area region (at end 2020)¹⁴

Region	District	Location
Donetsk	Sloviansk	Semenovka-1, and Rai-Oleskandrivka
	Lyman	Ozerne-2
	Bakhmut	Novoluhansk-5, and Novoluhansk-13
Luhansk	Stanichno-Luhansk	Chervona Talokva-7, and Chervona Talokva-6

Both DRC's and HALO Trust's non-technical survey teams continued survey throughout 2021 to determine the actual extent of contamination more accurately. DRC's teams identified 24 new polygons of a total size of 22km² of anti-personnel mine contamination. DRC also resurveyed some areas due to the extended period of time since the initial survey and as these areas were being cultivated by farmers.¹⁵ Survey and clearance by The HALO Trust on the Ukrainian-controlled side of the buffer zone in 2021 confirmed the presence of a combination of anti-personnel mines, cluster munition remnants (CMR), and other ERW.¹⁶

A total area of 3.7km² across 34 confirmed hazardous areas (CHA) and 1 SHA of previously unrecorded anti-personnel mined area was discovered by HALO Trust and added to the database in 2021. Of these areas, 34 contained a mix of explosive ordnance while the remaining area contained only anti-personnel mines. According to information collected during the survey, the mines were laid during the peak of the 2014–15 conflict, when the two opposing sides were moving positions across Donetsk and Luhansk regions.¹⁷

Most anti-personnel mines found in Ukraine are bounding mines, such as the OZM series; directional fragmentation mines, such as the MON-50; and fragmentation stake mines, such as the POMZ. There has been little evidence of blast mines, although some have reportedly been removed by the military. Grenades laid on tripwires, meeting the definition of anti-personnel mines, are also common, and account for a lot of the casualties reported in Ukraine. These are generally located in woods or areas of dense vegetation. The HALO Trust has also reported having encountered improvised

explosive devices (IEDs), some of which are victim-activated, during clearance or explosive ordnance disposal (EOD) call-outs in 2020 and 2021.¹⁸

Ukraine is contaminated by anti-personnel mines as a result of the conflict which broke out in 2014 with the Russian-backed self-proclaimed Donetsk and Luhansk republics, and more recently, the Russian military assault in February 2022. Both conflicts saw repeated use of anti-personnel mines. The full nature and extent of contamination will remain unclear until an effective cessation of hostilities and a comprehensive survey has been completed. Prior to these conflicts, Ukraine was affected by residual contamination of mines and other ordnance, mostly as a result of heavy fighting between German and Soviet forces in the Second World War, but also from combat in the First World War. Ministry of Defence (MoD) engineering units partially cleared affected areas in the mid-1970s, suggesting that a problem may remain, but the location and extent of any mine threat is not known.

Over the last few years, the Organisation for Security and Co-operation in Europe (OSCE)'s Special Monitoring Mission (SMM) in Ukraine has frequently reported on the use of both anti-personnel and anti-vehicle mines.¹⁹ A December 2017 report from the Office of the United Nations High Commissioner for Human Rights (OHCHR), stated that: "The parties to the conflict continued the practice of placement of IEDs and anti-personnel mines in populated areas and near objects of civilian infrastructure."²⁰ In 2018, the OHCHR called on all parties involved in hostilities to "cease the use of victim-activated devices".²¹

11 Email from Imogen Churchill, Senior Programme Officer, HALO Trust, 21 September 2022.

12 Email from Yuri Shahrmanyan, Programme Manager, HALO Trust Ukraine, 5 July 2018.

13 2020 Article 5 deadline Extension Request, Additional Information received on 27 August 2020, p. 98 (numbered page 3 in the document).

14 Article 7 Report (covering 2020), Form C.

15 Email from Almedina Musić, Head of Humanitarian Disarmament and Peacebuilding, DRC, 7 February 2022.

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

17 Email from Imogen Churchill, HALO Trust, 23 March 2022.

18 Emails from Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March and 21 September 2022.

19 See: "Daily and spot reports from the Special Monitoring Mission to Ukraine", at: <http://bit.ly/2K4IFms>.

20 OHCHR, "Report on the human rights situation in Ukraine 16 August to 15 September 2017", December 2017, p. 5.

21 OHCHR, "Report on the human rights situation in Ukraine 16 February to 15 May 2018", June 2018, p. 29.

At the APMBBC Intersessional Meetings in May 2019, Ukraine claimed that it had not used anti-personnel mines since it acceded to the Convention in June 2006, but accused Russia of having used anti-personnel mines in its territory since 2014. According to Ukraine, these mines have been emplaced by Russia-backed illegal armed groups in the Donetsk and Luhansk regions and it said that Russia has also put mines on the administrative border between Crimea and the rest of Ukraine.²² The mines allegedly used by separatist groups include PMN-1, PMN-2, PMN-4, POM-2R, OZM-72, MES type mines, and MON-50 mines with tripwire.²³ In the past, Ukraine has reiterated that its armed forces are authorised to use

MON-series and OZM-72 mines only in command-detonated mode (through electrical initiation), which is not prohibited under the APMBBC. According to Ukraine, all mines planted in command-detonated mode are recorded and secured, and access to the area is restricted.²⁴

Ukraine is also contaminated with CMR, the extent of which is not known but has also seen renewed use, as well as with considerable quantities of other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Ukraine for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

National bodies involved in mine action in Ukraine include the MoD, under which sits the State Special Transport Services (SSTS); the Ministry of Interior (MoI), under which sits the State Emergency Service of Ukraine (SESU); the Ministry for Reintegration of the Temporarily Occupied Territories; the National Police; and the State Border Service.

Ukraine's national mine action legislation (Law No. 2642), was originally adopted by parliament on 6 December 2018 and signed into law by the President on 22 January 2019.²⁵ However, the government did not proceed to implement the Law on the grounds that it was inconsistent with a number of other legal acts. None of the institutions was created and the national mine action response in Ukraine has remained uncoordinated as a consequence. In addition to the lack of implementation, the Law also had gaps and weaknesses in its regulation of the safety and efficiency of mine action operators.²⁶

In June 2020, the "Law on the Amendments to the Law on Mine Action in Ukraine" passed its first reading. Following this, the UN Development Programme (UNDP), the OSCE Project Coordinator in Ukraine (PCU), The HALO Trust, and DRC came together to prepare an explanatory note suggesting further amendments.²⁷ The amendments to the Law on Mine Action in Ukraine was finally signed off by the president in December 2020 and the recommendations of the working group were broadly taken into account. Yet, the new law fell short of addressing two major concerns of the mine action community, namely: operators' licence to carry out disposal, destruction, and transportation of explosive

items for EOD procedures, and operators' permits for the importation and use of so-called dual-use items. Additional legislative amendments are required to resolve these two concerns,²⁸ which as of writing, remained unresolved.²⁹

The approved law established a framework for humanitarian demining, dividing responsibilities among State institutions, and foresaw the creation of an NMAA. However, it had a peculiarity in that it envisaged the creation of two mine action centres: one National Mine Action Centre (NMAC) under the MoD and a Humanitarian Demining Centre (HDC) under SESU (which sits under the MoI).³⁰ The two centres share the remits of information management, quality assurance (QA), monitoring, planning, and certification of the operators and their responsibility is divided territorially.³⁰ The decision to create two mine action centres as opposed to one comes as a compromise after competition between the MoD and MoI on who takes the lead on mine action.³¹ But it does not augur well for either efficient or effective mine action.

The authorities reported during an online subcluster meeting that, by the end of 2021, the HDC had been created in Merefa (in eastern Ukraine) and the MoD MAC was in an advanced stage of development in Chernihiv (in northern Ukraine) with 100% of senior management fully recruited and 70% of overall personnel recruitment completed.³² Both Centres have been established within already existing structures belonging to SESU and SSTS, respectively. The MoD MAC received its accreditation in September 2022, while the HDC already had a pre-existing certification.³³ The Ministry for Reintegration of the Temporarily Occupied Territories was

22 Statement of Ukraine, Committee on Article 5 implementation, Geneva, 22 May 2019.

23 Government of Ukraine, "Measures to ensure compliance", Geneva, 9 June 2017; Statement of Ukraine on Article 5, APMBBC 15th Meeting of States Parties, Santiago, 29 November 2016; and Preliminary observations of the committee on cooperative compliance, "Ukraine", Intersessional Meetings, Geneva, 8-9 June 2017.

24 Preliminary observations of the committee on cooperative compliance, "Ukraine", Intersessional Meetings, Geneva, 8-9 June 2017.

25 OSCE, "Ukrainian parliament adopts legal framework for mine action, with OSCE advice provided", 10 December 2018, at: <http://bit.ly/2QdTa9q>; interview with Miljenko Vahtarić, OSCE PCU, 7 February 2019; and email, 13 June 2019.

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

27 Email from Almedina Musić, DRC, 20 April 2021.

28 Email from Ronan Shenhav, HALO Trust, 20 April 2021.

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

30 DRC-DDG Legal Alert Special, "Mine Action Law Amendment", Issue 56, September 2020; and interview with Miljenko Vahtarić, OSCE PCU, 13 February 2020.

31 Interview with Miljenko Vahtarić, OSCE PCU, 10 May 2021.

32 Email from Almedina Musić, DRC, 7 February 2022.

33 Email from GICHD, 20 October 2022.

planning to set up a Social-Humanitarian Response Centre, which will coordinate victim assistance and explosive ordnance risk education (EORE). As at September 2022, however, this centre was not yet created and was unlikely to be operational in the foreseeable future.³⁴

In November 2021, the Cabinet of Ministers issued Resolution No. 1207 "On Establishment of National Mine Action Authority", providing the framework for the future NMAA. It was defined as an interagency State body acting on an advisory and collegial basis under the chairmanship of the Minister of Defence. The chairmanship of the NMAA will be transferred to the head of the ministry responsible for formulating and implementing State policy in civil protection and emergency response (which is currently a remit of the MoI), once Ukraine restores territorial integrity over its internationally recognised borders by decision of the Cabinet of Ministers.³⁵ Under the new Resolution, NMAA coordinates the ministries, local self-government, central and local state bodies, and other organisations (including mine action operators). It forms and ensures national mine action State policy; monitors and reports on the State's progress in fulfilling its obligations in mine action taken under international treaties; and coordinates the development and execution of mine action strategy, national mine action programme, and action plan.³⁶ While the NMAA sits at a ministerial level, it is serviced by a secretariat that also "has some managerial functions".³⁷

Operators participate in monthly mine action sub-cluster meetings, which are attended by representatives of the MoD, SESU, the Ministry of Reintegration of the Temporarily Occupied Territories, and which are chaired by UNDP. There are also regular roundtable meetings organised by the OSCE PCU on specific mine action topics and other sectoral relevant discussions.³⁸ The Geneva International Centre for Humanitarian Demining (GICHD) convened an NMAS working group and an International Management Systems for Mine Action (IMSMA) working group,³⁹ to add to the information management working group established in 2020 and which has remained active during the 2022 conflict.⁴⁰

There is an overall positive environment and facilitation of the operators' work by the Ukrainian government (e.g., granting of visas, collaboration on security matters).⁴¹

But operators continue to face difficulties importing armoured equipment and dual-use items.⁴²

Since the 2022 conflict, all operators, including those yet to be certified, have supported Ukraine in demining, EORE, and support for the enhancement of national capacities.⁴³ DRC has supported the SESU while also conducting technical and non-technical survey and clearance in Chernihiv district with 50 deminers, and plans to deploy 30 more in Kyiv district in October 2022. DRC has also been providing risk education and training in EOD.⁴⁴ In 2021, DRC supported or equipped 13 SESU demining teams, 2 non-technical survey teams, and 1 EOD team; trained 60 information management personnel from 25 regional centres; trained 35 deminers on mechanical mine clearance, battle area clearance (BAC), and technical survey; revised and adapted standard operational procedures (SOPs) to be compliant with the international mine action standards (IMAS); equipped the SESU training centre in Merefa and the regional coordination cell in Rubizne; procured metal detectors and protective personal equipment (PPE); and provided 10 new vehicles, including an armoured vehicle for the EOD team.⁴⁵

In 2021, the GICHD led or co-led various capacity building efforts for the Ukrainian authorities: a non-technical survey training course delivered in two parts, an operational efficiency roundtable discussion led by the GICHD-OSCE in September, and a training on IMAS and land release in October 2021.⁴⁶ The HALO Trust provided further training and workshops to national mine action stakeholders.⁴⁷

Norwegian People's Aid (NPA) has provided SESU with EOD clearance equipment, PPE, medical supplies, and communication equipment. NPA has also been engaging directly with SESU with a view to future cooperation in the fields of EORE and mine detection dogs (MDD).⁴⁸

The OSCE PCU organised two regional roundtables on strategic planning and land release. In addition, together with the GICHD and the Swiss Foundation of Mine Action (FSD), OSCE organised a series of trainings on non-technical survey, and several workshops on topics including NMAS, IMAS, risk education, and geographic information systems (GIS). In addition, the OSCE sponsored the participation of the Ukrainian delegation in the 25th meeting of mine action

34 Emails from Imogen Churchill, HALO Trust, 23 March and 21 September 2022; and Almedina Musić, DRC, 7 February 2022.

35 DRC Special Legal Alert – "NMAA Framework 2022", Issue 73, January 2022; and email from Miljenko Vahtarić, OSCE PCU, 1 July 2022.

36 DRC Special Legal Alert – "NMAA Framework 2022", Issue 73, January 2022.

37 Email from GICHD, 17 June 2022.

38 Emails from Toby Robinson, HALO Trust, 27 April 2020; Almedina Musić, DDG, 23 April 2020; and GICHD, 13 May 2020.

39 Email from Imogen Churchill, HALO Trust, 23 March 2022.

40 Email from GICHD, 18 May 2022.

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

42 Emails from GICHD, 13 May 2020; Almedina Musić, DRC, 20 April 2021; and Tony Connell, Country Director, Swiss Foundation for Mine Action (FSD), 24 March 2021.

43 Email from Miljenko Vahtarić, OSCE PCU, 1 July 2022.

44 Online presentation by Hannah Rose Holloway, DRC, to the CCM Intersessional Meetings, Geneva, 16 May 2022; and email from Almedina Musić, DRC, 14 September 2022.

45 Email from Almedina Musić, DRC, 7 February 2022.

46 Email from GICHD, 18 May 2022

47 Email from Imogen Churchill, HALO Trust, 23 March 2022.

48 Email from Alberto Serra, Programme Manager, NPA, 5 July 2022.

national directors (NDM) in June 2022, and donated four vehicles and 20 electronic tablets for non-technical survey and quality control teams of the NMAC, in addition to personal medical kits, metal detectors, hand-held UXO detectors, and large-loop detectors, along with analytical units, equipment for underwater demining, and protection equipment.⁴⁹

According to media reports, a senior United States (US) Department of State official said that the Biden administration will provide US\$89 million to help Ukraine clear land mines that now "litter huge swathes of Ukraine" since Russia's invasion.⁵⁰

ENVIRONMENTAL POLICIES AND ACTION

The current Ukrainian NMAS include a chapter (11.2.9) on "Environmental regulations", and a section (12.6) on "Environment, occupational health and safety".⁵¹

DRC has an environmental management system in place, which is stipulated in its SOP (1.13) on health, safety and environmental management. The SOPs were approved by Ukraine's military unit acting in accordance with the regulations of the certification body.⁵² FSD has detailed SOPs on environmental management (SOP 17.0) and work safe practices (SOP 02). These SOPs are in accordance with IMAS and comply with Ukrainian legal requirements.⁵³

The HALO Trust works in line with the IMAS and is accredited to the ISO 14001:2015 environmental standards, aiming to adhere to or exceed their requirements. HALO's SOPs aim to leave the environment in a state equivalent to or better than prior to the completion of demining operations. The HALO Trust aligns its environmental management policy with NMAS as well as national laws on environmental protection and any other relevant regulations or guidelines in the country of operation. HALO's SOPs contain recommendations on the environmental protection measures that should be taken to ensure that environments affected by survey and clearance operations are not degraded by the work, and, once demining is completed, are fit for their intended use.⁵⁴

GENDER AND DIVERSITY

As at May 2021, no information had been provided on whether there is a gender policy and associated implementation plan for mine action in Ukraine. No reference was made to gender or diversity in Ukraine's Article 5 deadline extension request submitted in 2020 or in Ukraine's latest Article 7 report covering 2020.

DRC has a global gender and diversity policy, and a country-specific implementation plan. Following an assessment conducted by the GICHD of DRC's Ukraine's mission in 2021, the programme was evaluated as very strong in all age, gender, and diversity mainstreaming aspects. Some of the strengths assessed were: integrated and inclusive community liaison and needs assessments, deployment of mixed gender humanitarian demining teams, gender-sensitive human resources practices, a positive and encouraging work culture, and an excellent awareness of the safeguarding system. All DRC's mine action data are disaggregated by age, gender, and disability. In 2021, of the total 114 staff members, 20 women were employed in operations positions and 8 in managerial/supervisory positions, making a total of 25% of the workforce of DRC's Humanitarian Disarmament and Peacebuilding Sector in Ukraine.

The FSD uses mixed gender non-technical survey and manual clearance teams and employs women in management roles within its country office. In 2021, the Deputy Country Director, Senior Finance Officer, Operations Coordinator,

two risk education team leaders, one non-technical survey team leader, and one Support to Education team leader were women. FSD states that it is a strong advocate of promoting talent and recognising skills regardless of gender. At the end of 2021, 29% of FSD's national staff were female, of whom 24% were in operational roles.

The HALO Trust uses mixed gender non-technical survey and community liaison teams. HALO seeks to increase the number of women employed in operational roles and improve gender balance in these roles. It has an equality and diversity policy and is working globally on a gender and diversity implementation plan. In September 2021, HALO introduced a new benefit for female employees and single fathers to reimburse childcare costs for children aged three to six. HALO continues to tailor job adverts towards women, and ensures that voices of women are heard in case they have differing accounts of contamination and its effects during non-technical surveys. As at December 2021, 25% of HALO's national staff and 22% of its operational staff were women. In addition, 18% of international and cross-posted staff were women.

The OSCE PCU translated into Ukrainian two GICHD brochures: "Recruitment and Training Guidelines" and "Gender and Priority Setting". It subsequently distributed the translated brochures to partners and government officials.

49 Emails from Miljenko Vahtarić, OSCE PCU, 1 July and 15 September 2022.

50 "U.S. announces \$89 million to help Ukraine clear land mines", *Politico*, 9 August 2022, at: <https://politi.co/3AVo5R6>; and "US Unveils \$89 Million Package to Help Ukraine Clear Russian Mines", *VOA News*, 9 August 2022, at: <https://bit.ly/3pP4Dzi>.

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

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

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

54 Email from Imogen Churchill, HALO Trust, 23 March 2022.

INFORMATION MANAGEMENT AND REPORTING

Ukraine uses the IMSMA Core database. In 2021, the IMSMA database was housed on two separate servers, one owned by SESU and the other by the MoD.⁵⁵ The main server at SESU was subject to cyberattacks shortly before the Russian military offensive on 24 February, which meant that the GICHD and the information management working group subsequently needed to re-establish large amounts of data. The IMSMA database became “cloud”-based and data were stored in a single secure location. According to the GICHD, since April 2022, the IMSMA system, which meets the IMAS minimum data requirements, has been restored and is functional. Incident reports have been captured since April 2022, and data related to non-technical surveys and other field activities inputted. As at October 2022, IMSMA was being used to collect data from a variety of sources, including reports submitted by accredited international operators.⁵⁶

The GICHD has continued supporting SESU and the MOD to establish their respective IMSMA databases, which is a key pillar of its work in Ukraine.⁵⁷ In the course of 2022, IMSMA has been incorporated into the emergency coordination platform, allowing the information management cell to aggregate, interpret, and share the data across partners and sources, in order to map areas where threats exist and define possible actions. During the emergency phase, the coordinated access to up-to-date data was helping the Ukrainian national authorities target resources and take actions strategically. Over the longer term, the GICHD hopes that this data-driven mapping of contaminated areas will build the foundation for effective and efficient demining operations and speed the recovery process.⁵⁸ In collaboration with the OSCE, the GICHD also provided training on IMAS and land release in October 2021, which was attended by representatives of SESU, the HDC, the MAC, the SSTS, and the Ministry for Reintegration of the Temporarily Occupied Territories. Since the end of 2020, the GICHD has dedicated an Information Management (IM) advisor for Ukraine, and maintained a pool of consultants who can provide additional ad-hoc support on information management.⁵⁹

According to DRC, all data collection forms both in hard copy and online format cover the key qualitative and quantitative

indicators of mine action activities and meet minimum data requirements in accordance with IMAS 05.10.⁶⁰

DRC delivered an IM workshop for 60 key IM SESU personnel from 25 regional departments and five central SESU offices. The trainees also received courses on MS Excel, MS Access with data management, data analysis, GIS, and aeronautical reconnaissance coverage geographic information system (ArcGIS).⁶¹ During further workshops, all SESU staff installed the application ArcGIS Survey123 on their mobile devices and computers; received access to IMSMA Core mobile data collection forms; and tested IMSMA Core. DRC also supported SESU to information management SOPs for the first time. The SOPs are based on the ones of DRC which are IMAS compliant.⁶²

FSD conducted initial trials of Survey123 in conjunction with the GICHD during 2021, before the system was subject to further development.⁶³

The GICHD continued to chair the information management working group, which met on a regular basis in 2021. The group was attended by information management personnel from DRC, FSD, HALO Trust, NPA, MoD, the Ministry for Reintegration of the Temporarily Occupied Territories, and SESU as well as the GICHD.⁶⁴ The group discussed substantive data that should be recorded in the national database, and minimum reporting requirements for data collection forms. The following reports were agreed and started being used: the risk education data collection form, cancellation report, completion report, and non-technical survey forms.⁶⁵

While the quality of official reporting was expected to improve markedly in light of all the capacity development support that Ukraine has received on information management, the new large-scale contamination and the need to focus on emergency clearance means that Ukraine will now require more time to translate this capacity building support into quality information management and reporting.

PLANNING AND TASKING

Ukraine does not have a national mine action strategy, but as of June 2022, the NMAA secretariat has set as a priority the creation of a “national programme”, and asked the GICHD and the OSCE to support its drafting.⁶⁶

55 Email from GICHD, 17 June 2022.

56 Emails from GICHD, 17 June and 20 October 2022.

57 Emails from GICHD, 18 May 2022; and Imogen Churchill, HALO Trust, 23 March.

58 GICHD press release, 13 May 2022, at: <https://bit.ly/3ArDfwb>.

59 Email from GICHD, 18 May 2022.

60 Email from Almedina Musić, DRC, 7 February 2022.

61 Ibid.

62 Ibid.

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

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

65 Ibid.

66 Email from GICHD, 17 June 2022.

There are currently no standardised criteria at national level for task prioritisation.⁶⁷ The MoD does not issue task dossiers but approves an annual plan with the list of all known locations planned by an operator for either clearance or survey.⁶⁸ Local government have been helping the MoD to prioritise tasks based on humanitarian criteria.⁶⁹ Operators prioritise clearance according to humanitarian impact and in discussion with the local community.⁷⁰

DRC continues to prioritise areas for survey and clearance according to its integrated mine action and development programming, and as defined by communities or local officials during non-technical survey.⁷¹ DRC began in 2021 an in-depth consultation process with conflict-affected communities in order to prioritise and plan its mine activities, and to advocate for tasking with the NMAA. DRC's area-based development approach begins with a stakeholder mapping exercise, following which, field visits are conducted to consult

with all major local-level stakeholders, with gender, age, disability, and displacement representation considerations, using integrated needs assessment forms to collect data on the socio-economic interactions with explosive ordnance contamination. Further community consultation feeds back into decision-making on the targeting of clearance, survey, and risk education.⁷²

HALO uses its "internal prioritisation matrix", which takes into account different humanitarian factors such as number of people who use the area of the task, proximity to settlements, proximity of schools and hospitals, number of accidents recorded, as well as threat type, balancing these considerations with security and access considerations.⁷³

Mines Advisory Group (MAG), which set up a programme in Ukraine in March 2022, prioritised areas of work on the basis of access, security, and coverage by other actors.⁷⁴

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

NMAS were finalised by the MoD in September 2018 after multi-year input and review from key stakeholders.⁷⁵ However, the NMAS did not consider all the inputs from the mine action stakeholders and they have not been updated regularly to address new challenges and ensure employment of best practices.⁷⁶ In May 2020, representatives from the GICHD, the OSCE PCU, DRC, and The HALO Trust formed a working group with the objective of revising NMAS to better align it with the IMAS. The working group submitted its recommendations to the MoD, the acting NMAA at that time.⁷⁷ According to DRC, the Ukrainian government had set a deadline to finalise the NMAS by August 2021,⁷⁸ which was then postponed to April 2023 due to delays in establishing the NMAA.⁷⁹ In January 2022, HALO received information from the MoD saying that, while in waiting for professional support from the GICHD to develop national standards, amendments to the national standards were not to be expected before April 2023.⁸⁰

DRC, FSD, and HALO consider that the current NMAS are yet to be fully developed to meet the needs of the mine action sector in Ukraine.⁸¹ On 19 July 2021, the GICHD submitted the recommendations on behalf of the technical working group to the MoD for its consideration.⁸² The recommendations suggested improvements on the liability clause, monitoring of land release operations, and considerations on all reasonable efforts. According to the GICHD, Ukraine has developed NMAS that are in line with IMAS with GICHD support in the past. Now with the conflict unfolding, review and application of standards have become important topics in need of further support. The GICHD intends to continue its work supporting the national authorities in developing NMAS once the conditions are right.⁸³

In April 2019, the Cabinet of Ministers approved Resolution 372 on "Regulations on marking mine and ERW hazards", which are said to follow the provisions in the IMAS.⁸⁴

67 Emails from Henry Leach, DRC Ukraine, 2 May 2019; Yuri Shahramanyan, HALO Trust Ukraine, 16 May 2019; and Almedina Musić, DRC, 7 February 2022.

68 Email from Almedina Musić, DRC, 7 February 2022.

69 Interviews with Lt.-Col. Yevhenii Zubarevskiy, MoD, in Geneva, 20 May 2016; and Maksym Komisarov, MoD, in Geneva, 8 June 2018.

70 Emails from Almedina Musić, DRC, 23 April 2020; and Toby Robinson, HALO Trust, 27 April 2020.

71 Email from Almedina Musić, DRC, 7 February 2022.

72 Ibid.

73 Email from Imogen Churchill, HALO Trust, 23 March 2022.

74 Email from Helena Derwash, Country Director, Mines Advisory Group (MAG), 27 September 2022.

75 Email from Gianluca Maspoli, GICHD, 25 September 2018; and Miljenko Vahtarić, OSCE PCU, 25 September 2018; and interview with Miljenko Vahtarić, OSCE PCU, 7 February 2019.

76 Email from GICHD, 30 April 2021.

77 Emails from Almedina Musić, DRC, 20 April 2021; and Ronan Shenhav, HALO Trust, 20 April 2021.

78 Email from Almedina Musić, DRC, 26 July 2021.

79 Email from Almedina Musić, DRC, 7 February 2022.

80 Email from Imogen Churchill, HALO Trust, 23 March 2022.

81 Emails from Almedina Musić, DRC, 7 February 2022; Imogen Churchill, HALO Trust, 23 March 2022; and Tony Connell, FSD, 10 June 2022.

82 Email from Almedina Musić, DRC, 7 February 2022.

83 Email from GICHD, 18 May 2022.

84 Email from Miljenko Vahtarić, OSCE PCU, 13 June 2019; and Ministry for Temporarily Occupied Territories and Internally Displaced Persons, "Danger! Mines! Cabinet of Ministers of Ukraine Approved Regulations of Marking Mine and ERW Hazards, Developed By MTOT", 4 May 2019, at: <http://bit.ly/2l06vCA>.

DRC has been working with the military unit "A2641" acting in accordance with the regulations of the certification body, and was officially requested to submit its application for accreditation in February 2021. The process was completed at the end of 2021 with a physical inspection, and DRC received its certificates of conformity for manual mine clearance, battle area clearance (BAC), risk education, and technical and non-technical survey. According to DRC, the establishment of the NMAA in November 2021 will help to tackle delayed accreditations that resulted from the lack of fully functioning mine action structures.⁸⁵

OPERATORS AND OPERATIONAL TOOLS

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 MoI, 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.⁸⁶

Three international demining organisations—DRC, FSD, and The HALO Trust—were operating in Ukraine in 2021.⁸⁷ Since the February 2022 conflict, both NPA and MAG have also set up programmes in Ukraine.⁸⁸

In 2019, the Ukrainian organisations Demining Team of Ukraine and Demining Solutions were active in demining in the east of the country.⁸⁹ It not known whether they remained operational in 2021. The national operator, Ukrainian Deminers Association (UDA), has been active in Ukraine since 2018 conducting survey and clearance with a team of 61 deminers.⁹⁰ In 2022, UDA partnered with MAG on conducting EORE.⁹¹ Its 2020 Article 5 deadline extension request, Ukraine reported that 41 demining "groups" with a total of more than 500 people were involved in mine action from these organisations.⁹² Since the beginning of the conflict in 2022, SESU reportedly deployed more than 600 deminers across the country, and was rushing to hire more. One SESU unit cleared approximately 30 items of unexploded ordnance (UXO) per day.⁹³

Table 2: Operational clearance capacities deployed in 2021⁹⁴

Operator	Manual teams	Total deminers*	Dogs and handlers	Machines**	Comments
DRC	8	60	0	0	Five teams (41 deminers) between January and May 2021, then increased to eight teams (60 deminers) for the remaining of 2021.
HALO	23	299	0	3	1x JCB excavator 1x Case frontloader 1x Volvo frontloader Initial trials of a tractor with harrow magnet attachment started. ⁹⁵
FSD***	3	20	0	0	One clearance team operated with only six deminers. Medics and drivers are cross-trained as deminers, and have therefore been included.
Demining Solutions***	1	7	0	0	
UDA ⁹⁶		61			
Totals	35	447	0	3	

* Excluding team leaders, medics, and drivers unless otherwise stated. ** Excluding vegetation cutters and sifters. *** Data correct at end 2020.

85 Email from Almedina Musić, DRC, 13 July 2022.

86 Interview with Col. Oleksandr Shchebetiuk, Ukrainian Armed Forces, in Geneva, 26 June 2015; emails from Anton Shevchenko, OSCE, 23 June 2015; and GICHD, 17 June 2022; "Mine Action in Ukraine", Side-event presentation by Lt.-Col. Yevhenii Zubarevskiyi, MoD, Geneva, 17 February 2016; Article 7 Report (covering 2018), Form F.

87 2020 Article 5 deadline Extension Request; and Article 7 Report (covering 2018), Form F.

88 Emails from Roxana Bobolicu, International Policy Manager, MAG, 21 September 2022; and Alberto Serra, Programme Manager, NPA, 5 July 2022.

89 Email from Gianluca Maspoli, GICHD, 20 June 2017; "Tightening with the process of mine clearance in the East of Ukraine can lead to a new crisis", *Military Informant*, 25 July 2016, at: <http://bit.ly/2Qf1jeg>; and "Presentation of the Demining team of Ukraine", *SD Crisis*, 26 April 2017, at: <http://bit.ly/2wb6DG7>.

90 Ukrainian Deminers Association (UDA) website, accessed on 28 September 2022, at: <https://bit.ly/3fsdPb0>.

91 Email from Helena Derwash, MAG, 27 September 2022.

92 2020 Article 5 deadline Extension Request.

93 "Clearing the deadly litter of unexploded Russian bombs in Ukraine", *The Washington Post*, 15 April 2022, at: <https://wapo.st/37XmuPc>.

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

95 The harrow magnet system combines a power harrow with a large, fixed magnet pulled by an armoured tractor. The system is designed to improve productivity on heavily metal-contaminated hazardous areas that do not contain landmines (battle areas or unplanned explosions at munitions sites). The harrow breaks up the soil and the magnet collects metal which can then be inspected for any hazardous items. A metal detector can then rapidly clear the land for any remaining EO once the majority of metal has been removed. This is a technique pioneered by HALO in Afghanistan, which has been shown to speed up clearance significantly. Emails from Imogen Churchill, HALO Trust, 23 March and 17 June 2022.

96 Ukrainian Deminers Association (UDA) website, accessed on 28 September 2022, at: <https://bit.ly/3fsdPb0>.

In 2021, DRC deployed two non-technical survey personnel in one team, then, in July 2021, increased this to four non-technical survey personnel in two teams. All of DRC's technical survey teams are trained and equipped to conduct manual mine clearance and BAC. This is double the technical and demining capacity deployed in 2020. The number of DRC's clearance teams (including technical survey) increased by three in 2021 compared to the previous year, reaching eight at the end of 2021, thanks to renewed donor funding. DRC considered creating a further clearance and non-technical survey team in 2022, contingent upon funding, but as at June 2022, the Russian military offensive meant that DRC was reassessing the need to step up its capacity.⁹⁷

FSD suspended demining operations in 2019 due to lack of funding but later secured additional funds and restarted its programme in 2020.⁹⁸ As at June 2022, FSD had started both non-technical survey and risk education activities in Chernihiv, and was recruiting additional staff from Chernihiv and Kyiv regions in preparation for a rapid response and BAC tasking by August 2022. FSD plans to deploy seven clearance teams, three non-technical survey, and three risk education teams, and was waiting for an import clearance from the Ukrainian authorities to deploy an MV4, armoured front-end loaders, armoured excavators, and tipper trucks. FSD also plans to increase its international staff from one to nine, and its national staff from 53 to 105.⁹⁹

The HALO Trust deployed 12 non-technical survey personnel across three teams until October 2021, then increased by one additional four-strong non-technical survey team until the end of the same year thanks to additional secured funding. Similar to the previous year, HALO deployed three technical survey teams with a total of 18 personnel. Apart from an increase of one-technical survey team, HALO has maintained the same survey and clearance capacity in 2021 compared to the previous year. In early 2022, The HALO Trust planned to increase its non-technical survey capacity by one more team, and to increase its clearance teams by reducing their size but augmenting their number, in line with HALO's global practices.¹⁰⁰ Later in 2022, HALO reported that these plans have substantially changed due to the new operating environment, and the need to further expand and respond to the increasing needs. For example, as at September 2022, HALO deployed 16 non-technical survey teams in Ukraine.¹⁰¹

The HALO Trust used Minehound detectors in combination with rapid excavation drills on appropriate tasks in the first half of 2021. It also changed its approach to the use of remote vegetation-cutting devices, which enabled more efficient manual clearance. HALO also started increasing the scope

of the types of tasks (threat types) where these machines can be deployed. Initial trials started on the use of a harrow magnet, but conclusions were yet to be drawn.¹⁰²

The COVID-19 pandemic had a direct impact on DRC's Ukraine operations mainly due to the three-month lockdown and procurement challenges. DRC had to postpone some compulsory pre-deployment training courses. Local restrictions in place also lead to a reduction of training attendees and demining operations.¹⁰³ HALO reported that COVID-19 reduced efficiency due to mitigation measures such as limits on the number of people in a vehicle and deployment of staff from home. In addition, working time was lost because precautionary isolation of staff who were on contact with positive cases.¹⁰⁴

On 19 May 2022, the GICHD issued a first edition of an explosive ordnance guidance for Ukraine. The guidance aimed to assist qualified personnel conducting survey and EO reconnaissance work to correctly identify explosive ordnance and understand some of the associated hazards.¹⁰⁵ In June 2022, the GICHD was preparing for a second edition of the guide and intended to collaborate with SESU on reviewing the technical terminology of the Ukrainian version.¹⁰⁶

MAG deployed to Ukraine in March 2022 and was establishing a coordination and operational hub in Kyiv with a view to expanding its operations to other areas of the country. MAG signed MoUs with the SESU and the Ministry of Reintegration for Temporarily Occupied Territories. MAG also partnered with UDA in the areas of capacity building and EORE, and expected to start survey and clearance in the last quarter of 2022 once it has completed all the certification procedures.¹⁰⁷

Following the decision by NPA's management board to initiate a humanitarian response in Ukraine, NPA has been working to establish a mine action programme based out of Kyiv with funding from the Norwegian Ministry of Foreign Affairs (MoFA). Since 15 May 2022, NPA has a country office with three international staff, and has been seeking registration and accreditation. NPA has also had discussions with the national operator, Ukrainian Deminer's Association (UDA), on the possibility of partnership in EORE, and conflict preparedness and protection (CPP).¹⁰⁸ NPA's plans for the immediate future focused on reducing the humanitarian impact of explosive ordnance and weapons through a combination of survey, clearance, and risk education. NPA planned to recruit, train, equip, and deploy four non-technical teams and two multi-task teams conducting EOD, clearance, and BAC by the end of 2022. UDA is operating in several regions conducting non-technical survey, risk education, EOD, and area clearance.¹⁰⁹

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

98 Email from Tony Connell, FSD, 24 March 2021.

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

100 Emails from Ronan Shenhav, HALO Trust, 20 April 2021; and Imogen Churchill, HALO Trust, 23 March 2022.

101 Email from Imogen Churchill, HALO Trust, 25 September 2022.

102 Ibid.

103 Email from Almedina Musić, DRC, 7 February 2022.

104 Email from Imogen Churchill, HALO Trust, 23 March 2022.

105 GICHD publication, "Explosive Ordnance Guide for Ukraine", 9 May 2022, at: <https://bit.ly/3a4d70j>.

106 Email from GICHD, 17 June 2022.

107 Email from Helena Derwash, MAG, 27 September 2022.

108 Email from Alberto Serra, NPA, 5 July 2022.

109 Ibid.

DEMINER SAFETY

The SESU reported to the media that, as at 15 April 2022, 29 deminers had been killed while on duty, and 73 had been injured. Demining teams have had to work under the assumption that any object could have a mine attached.¹¹⁰

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

As at September 2022, Ukraine had yet to submit its Article 7 report covering 2021 and had not reported on survey and clearance of mined areas in 2021. According to data provided by DRC and HALO Trust, a total of 2.1km² of mined area was released in 2021, of which, 1.26km² was cleared, 0.09km² was reduced through technical survey, and 0.8km² cancelled through non-technical survey.¹¹¹ A total of 11 anti-personnel mines were destroyed by The HALO Trust.¹¹²

In addition, 3.7km² of previously unrecorded anti-personnel mine contamination was discovered and added to the database by HALO.¹¹³

SURVEY IN 2021

According to operator data only, in 2021, DRC cancelled 798,207m² of land through non-technical survey (see Table 3). A total of 86,819m² of mined land was reduced through technical survey in 2021, of which DRC reduced 60,612m² and the HALO Trust 26,207m² (see Table 4).¹¹⁴

Table 3: Cancellation through non-technical survey in 2021 (operator data)¹¹⁵

Region	District	Village	Operator	Area cancelled (m ²)
Luhansk	Sievierodonetskyi	Myrna Dolyna	DRC	798,207
Total				798,207

Table 4: Reduction through technical survey in 2021 (operator data)¹¹⁶

Region	District	Village	Operator	Area reduced (m ²)
Luhansk	Sievierodonetskyi	Myrna Dolyna	DRC	60,612
Donetsk	Pokrovskyi	Novomykhailivka	HALO	109
Donetsk	Kramatorskyi	Ozerne	HALO	14,132
Luhansk	Shchastynskyi	Shyrokivska	HALO	82
Donetsk	Bakhmutskyi	Siverska	HALO	11,884
Total				86,819

110 "Clearing the deadly litter of unexploded Russian bombs in Ukraine", *The Washington Post*, 15 April 2022.

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

112 Email from Imogen Churchill, HALO Trust, 23 March 2022.

113 Ibid.

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

115 Email from Almedina Musić, DRC, 7 February 2022.

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

In 2021, the HALO Trust did not cancel land through non-technical survey, but reduced 354m² of anti-personnel mined area through technical survey.¹¹⁷ This marked a significant increase in the area reduced by the HALO Trust in 2021 compared to 2020. According to HALO, this increase may have been a result of slightly more teams or more efficient clearance as HALO adjusted its use of remote vegetation-cutting devices to increase efficiency gains in manual clearance during technical survey work.

In 2021, DRC did not reduce land through technical survey, but cancelled 365,061m² of anti-personnel mined area through non-technical survey.¹¹⁸ DRC survey operations saw a significant increase in 2021 compared to the previous year thanks to secured funding in 2020, which allowed DRC to import all necessary demining equipment and tools, and to train three additional demining teams.¹¹⁹

As noted above, a total of 3.7km² of previously unrecorded anti-personnel mine contamination was discovered by HALO Trust and added to the database. Of this total area, 34 areas were CHAs and one was a SHA. All but one of these areas contained mixed threats with the other containing only anti-personnel mines.¹²⁰ The information collected during survey reveals that the mines were laid during the peak of the conflict in 2014–15 when the warring parties were moving positions across Donetsk and Luhansk regions.¹²¹

CLEARANCE IN 2021

According to operator data only, a total of 1,259,000m² of mined land was cleared in Ukraine in 2021 (see Table 5). In addition to what is being cleared by international operators, substantial clearance is being undertaken by the MoD and the SESU, some of which is conducted immediately after contamination has occurred. However, as at September 2022, clearance conducted by Ukrainian national bodies in 2021 had not yet been reported.

DRC cleared 85,227m² of land in 2021. DRC did not encounter any anti-personnel mines during the clearance but destroyed in the process 12 items of UXO.¹²² In 2020, DRC cleared 58,298m² of anti-personnel mined area and destroyed two items of UXO.¹²³ DRC attributes the increase of its clearance outputs to funding secured in 2020, which allowed DRC to import all necessary demining equipment and tools, and to train three additional demining teams.¹²⁴

The HALO Trust cleared 1,173,773m², destroying in the process 11 anti-personnel mines, four anti-vehicle mines,

and 78 items of UXO. Of the anti-personnel mines destroyed, six were of an improvised nature (i.e. grenades laid with tripwires). In 2019, HALO cleared 772,179m², destroying four anti-personnel mines and 35 items of other UXO. The increase in clearance output in 2021 is possibly a result of more teams or more efficient clearance as HALO adjusted its use of remote vegetation-cutting devices to increase efficiency gains in manual clearance.¹²⁵ The eleven anti-personnel mines found by HALO were reported to the Ukrainian authorities for removal and destruction in situ. Operators are not authorised to conduct EOD in Ukraine.¹²⁶

The number of anti-personnel mines found during clearance continues to be very low and, in 2021, the HALO Trust cleared a total of 901,113m² in 47 areas that proved to contain no anti-personnel mines. However, it should be noted that anti-personnel mines were found on seven of these 47 areas in previous years' clearance and clearance was not completed on all tasks worked on in 2021. DRC cleared two mined areas that proved to have no anti-personnel mines.¹²⁷

117 Email from Ronan Shenhav, HALO Trust, 20 April 2021.

118 Email from Almedina Musić, DRC, 20 April 2021.

119 Email from Almedina Musić, DRC, 7 February 2022.

120 Email from Imogen Churchill, HALO Trust, 23 March 2022.

121 Emails from Ronan Shenhav, HALO Trust, 20 April 2021; and Imogen Churchill, HALO Trust, 23 March 2022.

122 Email from Almedina Musić, DRC, 7 February 2022.

123 Email from Almedina Musić, DRC, 20 April 2021.

124 Ibid.

125 Email from Imogen Churchill, HALO Trust, 23 March 2022.

126 Emails from Toby Robinson, HALO Trust, 27 April 2020; Almedina Musić, DRC, 7 February 2022; and Imogen Churchill, HALO Trust, 23 March 2022.

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

Table 5: Mine clearance in 2021 (operator data)¹²⁸

Region	District	Village	Operator	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	UXO destroyed
Luhansk	Sievierodonetskyi	Myrna Dolyna	DRC	26,394	0	0	11
Luhansk	Sievierodonetskyi	Viktorivka	DRC	40,174	0	0	0
Luhansk	Sievierodonetskyi	Orikhove	DRC	14,975	0	0	1
Luhansk	Sievierodonetskyi	Zolote	DRC	3,684	0	0	0
Donetsk	Bakhmutskyi	Kodema	HALO	165,145	2	0	2
Donetsk	Bakhmutskyi	Novoluhanske	HALO	274,628	4	4	3
Donetsk	Bakhmutskyi	Spirne	HALO	11,485	1	0	0
Donetsk	Bakhmutskyi	Riznykivka	HALO	19,237	0	0	0
Donetsk	Kramatorskyi	Ozerne	HALO	15,816	0	0	0
Donetsk	Kramatorskyi	Andriivka	HALO	2,306	0	0	0
Donetsk	Kramatorskyi	Rai-Oleksandrivka	HALO	384	0	0	1
Donetsk	Kramatorskyi	Sloviansk	HALO	1,250	0	0	0
Donetsk	Kramatorskyi	Yampil	HALO	37,753	0	0	2
Donetsk	Mariupolskyi	Hnutove	HALO	6,744	0	0	0
Donetsk	Pokrovskyi	Slavne	HALO	2,931	0	0	1
Donetsk	Pokrovskyi	Novomykhailivka	HALO	23,702	0	0	0
Luhansk	Shchastynskyi	Dmytrivka	HALO	287,272	0	0	57
Luhansk	Shchastynskyi	Kolesnykivka	HALO	21,884	3	0	4
Luhansk	Shchastynskyi	Komyshne	HALO	97,686	1	0	2
Luhansk	Shchastynskyi	Krasna Talivka	HALO	80,068	0	0	2
Luhansk	Shchastynskyi	Krasnyi Derkul	HALO	2,084	0	0	0
Luhansk	Shchastynskyi	Shyrokyi	HALO	6,900	0	0	0
Luhansk	Starobilskyi	Pervomaisk	HALO	99,118	0	0	1
Luhansk	Shchastynskyi	Stepove	HALO	17,380	0	0	3
Totals				1,259,000	11	4	90

AP = Anti-personnel AV = Anti-vehicle

ARTICLE 5 DEADLINE AND COMPLIANCE



128 Ibid.

Table 6: Five-year summary of anti-personnel mine clearance

Year	Area cleared (m ²)
2021	1,259,000
2020	830,477
2019	697,012
2018	391,819
2017	220,887
Total	3,399,195

Under Article 5 of the APMBC (and in accordance with its latest extension), Ukraine is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 December 2023. It will not meet this new deadline and will have to request another extension. In 2020, Ukraine stated that the fulfilment of its deadline was dependent upon “completion of hostilities, restoration of the constitutional order and gaining the full control over the occupied territories, including over the state border between Ukraine and the Russian Federation”.¹²⁹

While full-scale demining is impossible due to the ongoing conflict, coordination to support the Ukrainian authorities to locate, identify, and when possible, remove explosive ordnance is underway.¹³⁰ In addition to what is being cleared by international operators, substantial clearance is being undertaken by the MoD and the SESU, some of which is conducted immediately after contamination has occurred.

The clearance conducted by Ukrainian national bodies was not being reported. The 2022 conflict has certainly resulted in new contamination, the scale of which is unknown. The time needed to clear anti-personnel mines in Ukraine can only be estimated once hostilities have ended and a national contamination survey has been completed.¹³¹

The amount of area cleared in 2021 was higher than the amount of clearance reported in 2020, though this data is only based on information provided by the HALO Trust and DRC as Ukraine did not report clearance data for 2021 or in previous years in a manner consistent with the IMAS to make comparable clearance and survey figures. Additionally, the number of anti-personnel mines found and destroyed during planned clearance is very small – eleven in 2021, four in 2020, and eight in 2019 – with both HALO Trust and DRC clearing large areas without finding any anti-personnel mines. Clearance data are not available from areas outside of government control, though it is believed that, at least in earlier years, pro-Russian rebels conducted some ad hoc clearance.¹³²

A step forward in 2021 saw the establishment of a long-awaited NMAA in November 2021 and the continued development in mine action structures, namely, SESU and MoD NMACs, although neither was fully functional at the end of 2021.

While Russia is not a State Party or signatory to the APMBC it also has obligations under international human rights law to clear anti-personnel mines as soon as possible in any areas of Ukraine over which it exercises effective control, by virtue of its duty to protect the right to life of every person under its jurisdiction.

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION.

Ukraine has not provided information on whether it has a plan in place for dealing with residual risk post completion.

129 2020 Article 5 deadline Extension Request, p. 5.

130 GICHD press release, 13 May 2022, at: <https://bit.ly/3ArDfwb>.

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

132 Side-event presentation by Mark Hiznay, Human Rights Watch, in Geneva, February 2015; and interview, 18 February 2015.