

KEY DATA

CLUSTER MUNITION CONTAMINATION:

NATIONAL ESTIMATE

11.36 km²

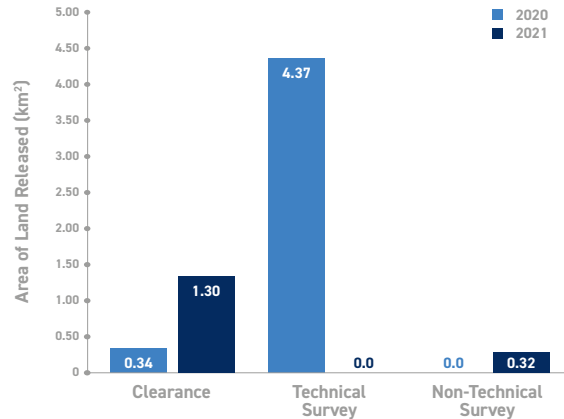
SUBMUNITION CLEARANCE IN 2021

1.30 km²

SUBMUNITIONS DESTROYED IN 2021

43

LAND RELEASE OUTPUT



RECOMMENDATIONS FOR ACTION

- While formal accession to the Convention on Cluster Munitions (CCM) is not currently possible for Kosovo, as it is not yet recognised as a State by the depositary of the Convention, Kosovo should submit a letter to the UN Secretary-General pledging to fully comply, on a voluntary basis, with the CCM.
- Kosovo should reconsider its decision not to submit a voluntary CCM Article 7 report on an annual basis, and instead act in line with its Mine Action Strategy 2019–2024.
- The Kosovo Mine Action Centre (KMAC) should seek to complete clearance of cluster munition remnants (CMR) at the latest by the end of 2024, in line with the objectives in its mine action strategy.
- Local mine action standards need to be updated in accordance with the International Mine Action Standards (IMAS), in particular on land release, to enhance the efficiency of demining operations.
- The Information Management System for Mine Action (IMSMA) should be updated to the latest version, to have accurate and up-to-date information for the review of the mine action strategy and for the future strategy on clearance of residual CMR contamination.

CLUSTER MUNITION SURVEY AND CLEARANCE CAPACITY

MANAGEMENT

- Kosovo Mine Action Centre (KMAC)

NATIONAL OPERATORS

- Kosovo Security Force (KSF)

INTERNATIONAL OPERATORS

- The HALO Trust
- Norwegian People's Aid (NPA)
- The Kosovo Force (KFOR), a NATO-led international peacekeeping force

OTHER ACTORS

- Geneva International Centre for Humanitarian Demining (GICHD)

UNDERSTANDING OF CMR CONTAMINATION

At the end of 2021, Kosovo reported 11.36km² of CMR contamination across 44 confirmed hazardous areas (see Table 1).¹ This is a small reduction from a year earlier when contamination was estimated to cover a total of more than 11.36km² across 44 areas.² It is inconsistent with clearance of almost 1.3km² recorded for 2021. It also appears to be inconsistent with data reported by operators.³ KMAC has been unable to explain the discrepancies.

Kosovo has a reasonable if imperfect understanding of CMR contamination remaining on its territory as a result of two decades of mine action, including surveys in 2013 and 2015. By 2019, the location of most of the contamination was well known across Kosovo's seven districts with the exception of the northern district of Mitrovica, where Norwegian People's Aid (NPA) was in the process of conducting technical survey of all tasks to convert suspected hazardous areas (SHAs) into confirmed hazardous areas (CHAs), based systematically on evidence points. But technical survey of 17 tasks in the northern municipalities, planned for 2021, did not happen, with NPA focusing instead on clearing CHAs defined in previous years. KMAC believes that once these surveys are completed the baseline of contamination in the northern municipalities will be finalised.⁴ NPA is considering starting the resurvey in 2023, and expects it to result in reduction in the size of existing polygons.⁵

The HALO Trust believes Kosovo's current baseline reflects a relatively accurate picture of the remaining contamination but suggests that it would benefit from a critical review and further assessment of the 2013 survey data. For HALO, the ongoing 2021–22 non-technical survey project, which transfers current re-survey tasks into CHAs for CMR has helped to improve the understanding of the existing contamination and the organisation expected to have a much clear and precise picture of the remaining contamination by the end of 2022. This non-technical survey project was designed to create CHAs and SHAs, as this was not done during the 2013 Survey; prior to the non-technical survey project there was no classification of CHAs and SHAs in Kosovo. HALO Trust also highlights that their standing operating procedures (SOPs) only allow the creation of CHAs for CMR tasks; SHAs can only be created for mine threats in line with SOPs.⁶ In HALO Trust's area of operations, 31 CHAs containing CMR contamination have been identified, covering

3,674,188m² (see Table 2).⁷

The HALO Trust believes that access to North Atlantic Treaty Organization (NATO) bombing data is critical to the sector as a means of verifying clearance, without the requirement for costly, extensive re-survey, but has experienced challenges in obtaining it.⁸ The NATO official bombing database is still not available to HALO Trust, the organization reports.⁹ The information that HALO Trust has access to are minefields maps from the Yugoslav Army (handed over to NATO as part of the Military – Technical Agreement, also known as the Kumanova Agreement). The information HALO is missing on CMR concerns: location of strikes, types of cluster munitions deployed, direction of the strikes, release altitude, and the fuze and time delays set. HALO believes this information would help significantly in identifying the remaining uncleared strike areas during the current non-technical survey project in order to have an updated picture of the remaining contamination levels in Kosovo.¹⁰

Contamination is primarily a result of conflict between the Federal Republic of Yugoslavia (FRY) and the Kosovo Liberation Army (KLA) in the late 1990s; and between the FRY and NATO in 1999. During Operation Allied Force, NATO aircraft bombed 333 locations between 24 March and 10 June 1999, dropping 1,392 bombs that released more than 295,700 submunitions.¹¹ FRY forces also used cluster munitions during the 1998–99 conflict in Kosovo.¹² A large clearance programme followed in 1999 under a UN mandate, but this ended prematurely in 2001, leaving many CMR-contaminated areas still needing to be cleared.¹³

In 2013, HALO Trust and KMAC conducted a joint non-technical survey of cluster munition strikes and minefields across Kosovo, with the exception of four municipalities in the north. The survey identified 130 CHAs: 51 cluster munition strikes, covering 7.63km², and 79 mined areas over 2.76km².¹⁴ In 2015, NPA, in coordination with KMAC and local municipality authorities, conducted non-technical survey of the four northern municipalities.¹⁵ The NPA survey confirmed 8.9km² of CMR contamination in three of the four municipalities surveyed (Leposavic, Zubin Potok, and Zvecan). No CMR contamination was found in the fourth (Mitrovica North). NPA believes that 83 cluster bombs were dropped in this region, dispersing a total of 17,041 submunitions.¹⁶

1 Email from Ahmet Sallova, Head, KMAC, 24 May 2022.

2 Email from Ahmet Sallova, KMAC, 28 April 2021.

3 At the end of 2021, NPA, in their area of operations (Mitrovica and Pristina districts) reported 13 CHAs covering 3.65km² and 8 SHAs covering 5.80km². Email from Vanja Sikirica, Country Director, NPA Kosovo, 30 June 2022; and telephone interview, 30 June 2022. As illustrated in Table 2, The HALO Trust, which operates in the districts of Ferizaj, Gjakove, Peje, Pristina, and Prizren, has reported 31 CHAs containing CMR, covering an area of 3.67km². Email from Wilko Dirks, Acting Programme Manager, HALO Trust, 23 June 2022.

4 Email from Ahmet Sallova, KMAC, 24 May 2022.

5 Email from Vanja Sikirica, NPA Kosovo, 1 June 2022.

6 Email from Wilko Dirks, HALO Trust, 23 June 2022.

7 Ibid.

8 Email from Megan Dwyer, Programme Manager, HALO Trust, 23 April 2021.

9 Email from Megan Dwyer, HALO Trust, 11 May 2022.

10 Email from Wilko Dirks, HALO Trust, 23 June 2022.

11 ICRC, *Explosive Remnants of War, Cluster Bombs and Landmines in Kosovo*, rev. June 2001, pp. 4 and 6; and The HALO Trust, "Action on cluster munitions in Kosovo", 10 September 2015, at: <https://bit.ly/30P1X70>.

12 Human Rights Watch (HRW) and Landmine Action, *Banning Cluster Munitions Government Policy and Practice*, Mines Action Canada, Ottawa, 2009, p. 238.

13 A. Moore, The HALO Trust, "Action on cluster munitions in Kosovo", Side event, First CCM Review Conference, Dubrovnik, 10 September 2015.

14 Ibid.

15 NPA, *Cluster Munition Remnants in Northern Kosovo: non-technical survey of contamination and impact*, September 2015; and email from Goran Peršić, NPA Bosnia and Herzegovina, 13 May 2016.

16 NPA, *Cluster Munition Remnants in Northern Kosovo: non-technical survey of contamination and impact*, September 2015.

Table 1: Cluster-munition contaminated areas as reported by KMAC (at end 2021)

	CHAs containing CMR	Area (m ²)	SHAs that may contain CMR	Area (m ²)
Totals	44	11,367,061	0	0

Table 2: HALO Trust data on cluster-munition contaminated area by district and municipality in its area of operations (at end 2021)

District	Municipality	CHAs containing CMR	Area (m ²)
Ferizaj	Shtime	3	263,468
Gjakove	Gjakove	5	470,000
Gjakove	Junik	2	161,028
Peje	Peje	8	1,044,218
Pristina	Drenas	2	169,474
Pristina	Fushe Kosove	1	50,000
Pristina	Prishtine	2	450,000
Prizren	Dragash	2	331,000
Prizren	Prizren	6	735,000
Totals		31	3,674,188

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Kosovo is also contaminated with anti-personnel mines (see Mine Action Review's *Clearing the Mines* report on Kosovo for further information). It remains affected by explosive remnants of war (ERW) other than CMR. Most ERW consists of unexploded aircraft bombs and items of abandoned explosive ordnance (AXO) from the conflicts in the 1990s. However, explosive ordnance disposal (EOD) teams continue to encounter items of unexploded ordnance (UXO) dating back to World War II.¹⁷ The Kosovo Force (KFOR) and Kosovo Security Force (KSF) EOD teams regularly dispose of ERW in response to information provided by the public and demining organisations.¹⁸

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

KMAC is responsible for managing survey and clearance of mines and ERW throughout Kosovo. The Centre prepares an annual work plan in cooperation with the international demining NGOs and coordinates their operations along with the national demining teams of the KSF. It also coordinates survey, quality assurance (QA), risk education, public information, and victim assistance.¹⁹ KMAC's role and responsibilities as head of the national mine action programme under the auspices of the Ministry of Defence were established and institutionalised by Kosovo's 2012 Law on Humanitarian Demining.²⁰

Kosovo's mine action programme is fully nationally owned. In 2021, KMAC had five staff: a Director, a Senior QA Officer, a QA Inspector, a Mine Risk Education (MRE) Officer, and a Public Information Officer.²¹ NGO operators in Kosovo report a constructive and proactive working relationship with KMAC.

In 2021, the Kosovo Government provided €995,000 in financial support to KMAC and to the KSF for mine and CMR clearance.²² Kosovo's current Mine Action Strategy, for 2019–24, sets an objective of ensuring greater financial stability through intensified fundraising efforts.²³ In 2021, the United States (US) Department of State's Office of Weapon Removal and Abatement (WRA) approved a grant to NPA for land release of cluster munition-contaminated areas in northern Kosovo and for the Merdare Tunnel Project.²⁴ HALO Trust was also able to secure further funding, in May 2021, for three years from the US Government with support from KMAC.²⁵ A joint project proposal from NPA and HALO Trust to the European Union (EU) was pending approval as of writing.²⁶

17 UNMIK, "OKPCC EOD Management Section Annual Report 2008", Pristina, 12 January 2009, p. 4.

18 Email from Ahmet Sallova, KMAC, 1 August 2012.

19 Ibid.

20 Emails from Ahmet Sallova, KMAC, 16 June and 3 July 2017; and Ministry of Defence, "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.

21 Email from Ahmet Sallova, KMAC, 24 May 2022.

22 Email from Ahmet Sallova, KMAC, 8 June 2022.

23 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 14.

24 Email from Ahmet Sallova, Head, KMAC, 24 May 2022.

25 Email from Megan Dwyer, HALO Trust, 11 May 2022.

26 Email from Ahmet Sallova, KMAC, 24 May 2022.

Although there is no in-country platform for dialogue among all mine action stakeholders, in September 2022, a mid-term review of the latest five-year strategy was due to take place, supported by the Geneva International Centre for Humanitarian Demining (GICHD).²⁷

GENDER AND DIVERSITY

Gender and Diversity continued to be taken into account in 2021 as per Kosovo's mine action strategy for 2019–24.²⁸ The Strategy stipulates that all mine action activities and assistance must reflect the needs of different ages and gender in a targeted and non-discriminatory manner, and that mine action and community liaison data are to be collected and systematically disaggregated according to sex and age.²⁹

Both KMAC and KSF have gender policies in place. KMAC reported that the KSF's gender policy aims to facilitate the consultation of all groups affected by mines and ERW, expressly women and children. Within KMAC, one of its five staff (the Risk Education Officer) is a woman.³⁰ A total of 5% of KSF staff employed in operational mine action roles were women, but none is in a managerial or supervisory position.³¹

Kosovo's mine action strategy recognises the barriers that exist against equal employment in Kosovo society, including significant differences in employment levels between men and women, despite the number of men and women of working age being broadly similar. The Strategy notes that, as at 2019, more than four-fifths of women of working age were not employed in Kosovo's labour market, and less than one in eight has been employed annually over the past five years. The primary reasons given for female unemployment are child- and family-care obligations, which traditionally in Kosovo society fall on women.

The Strategy notes the efforts of mine action operators to overcome these challenges and barriers to employment, such as through the provision of childcare and parental leave, and gender-sensitive recruitment practices that encourage women to apply for positions traditionally seen as jobs for men. It further recalls the importance of employment of not only multi-gender, but also multi-ethnic survey and clearance teams and the particular benefits of recruitment in areas affected by high unemployment and poverty.³²

In 2018, The HALO Trust developed a gender policy in consultation with the Kosovo Women's Network, an advocacy network of more than 140 member organisations, including women's organisations of all ethnic backgrounds from throughout Kosovo, which was adopted in February. The policy aims at both increasing the recruitment of women and at retaining existing female employees. In 2019, HALO further

developed this policy to include provision for increased family leave and child-care allowances for those taking care of children, in order to remove barriers to women's employment. Through the Dutch Government, HALO Trust contracted the Gender and Mine Action Programme (GMAP, a part of the GICHD) to conduct gender sensitivity and leadership training in July 2019 to more than 20 operation and support management staff in the Kosovo programme, to address issues of unconscious bias and inclusion.³³

In 2021, HALO Trust continued to implement the Gender and Diversity Policy and conducted an annual refresher training for management, support and operational staff. HALO Trust continues to ensure that as many as possible of household members are consulted during pre- and post-clearance surveys. It stated that it continues to ensure inclusion of women, children, and ethnic minorities in community liaison (CL) activities; there is always a CL Officer woman supporting the non-technical survey teams, and senior management staff who are fluent in relevant languages are deployed for CL activities.³⁴

New funding in 2021 provided new job opportunities. By the end of 2021, women's employment in the organisation increased from 17% (in 2020) to 24%, with three women in operational management roles and two in support management roles. HALO Trust expected to promote more women to assistant team leader and team leader roles. In 2021, 4% of managerial/supervisory positions were filled by women; in operations 20% of the positions were held by women.³⁵

NPA reported that a target of 25% female staff was in place, and in 2019, 21% of its total staff were women, including one of four team leaders, two of six medics, and one of four staff in the management team.³⁶ The proportion of women subsequently increased to 24% in 2020, with two women promoted to positions of leadership within the clearance teams.³⁷ Women were especially encouraged to apply for staff positions, and given priority over male applicants with equivalent skills and experience. In 2021, the overall target was almost achieved (it was at 24.7% in 2022) and 60% of managerial supervisory positions are held by women, a substantial increase from the 12% recorded in 2020. A decrease from 21% women in 2020, to 19.3% in 2021, was recorded for operations positions.³⁸

27 Emails from Megan Dwyer, HALO Trust, 11 May 2022; and Vanja Sikirica, NPA Kosovo, 1 June 2022.

28 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 8.

29 Ibid.; and email from Megan Dwyer, HALO Trust, 11 May 2022.

30 Email from Ahmet Sallova, KMAC, 24 May 2022.

31 Ibid.

32 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, pp. 8–9.

33 Email from Olivia Meader, HALO Trust, 22 May 2020.

34 Email from Megan Dwyer, HALO Trust, 11 May 2022.

35 Ibid.

36 Email from Terje Eldøen, NPA, 25 April 2019.

37 Email from Terje Eldøen, NPA, 1 September 2020.

38 Email from Vanja Sikirica, NPA Kosovo, 1 June 2022.

NPA confirmed its survey and community liaison teams were gender balanced and ensured that the participation of all relevant social groups is always taken into account when conducting activities in local communities. The NPA Impact assessment team comprises two women: one Serbian and one Albanian speaker.³⁹ NPA's efforts to recruit and train multi-ethnic survey and clearance teams have also been a critical factor in allowing the deployment of teams in areas of particular ethnic and political sensitivities, extending the reach of mine action operations in northern Kosovo, while also building bridges and friendships between the individual staff members and through their community liaison activities.⁴⁰ NPA has reported that in its areas of operations both Albanian and Serbian communities have been previously surveyed and NPA teams conducted clearance in all communities based on the approved annual operational plan.⁴¹

INFORMATION MANAGEMENT AND REPORTING

KMAC uses the Information Management System for Mine Action (IMSMA) New Generation version for its national mine action database. Data are disaggregated between mines, CMR, and other ERW.⁴² Operators were positive in their assessments of the quality and accessibility of data contained in the database and of KMAC's information management systems in general.

Operators report to KMAC on a weekly basis; NPA reported all data collected forms are consistent and they enable collection of the necessary data and that there were no efforts to improve the database in 2021.⁴³ HALO Trust reported in a similar manner, and added that the database, kept and maintained by KMAC is checked in comparison to HALO's about once every quarter; once every task is completed or when KMAC agrees and signs off on a re-survey or survey conducted by a non-technical survey team, the data is fed into IMSMA.⁴⁴

The land release data reported to Mine Action Review by clearance operators and the KMAC were more or less aligned. This is an improvement compared to previous years' reports, which typically contained greater discrepancies.

KMAC reconfirmed to Mine Action Review that Kosovo would only start submitting Article 7 reports when it becomes a member of the UN.⁴⁵

PLANNING AND TASKING

The GICHD supported the development of Kosovo's new Mine Action Strategy for 2019–24. The strategy, which was launched by the Ministry of Kosovo Security Services on 4 April 2019, has three broad "goals":

- Mine/ERW threats managed and reduced
- Communication and awareness raising
- Management of residual contamination.

The strategy declares that all known mined and CMR-contaminated areas will be addressed by the end of 2024, leaving only residual contamination to be managed accordingly. It contains annual projections for CMR clearance, including:

- all high-priority CMR tasks (four as at October 2018) would be cleared by 2020;
- all medium-priority CMR tasks (30 as at October 2018) will be cleared by 2022; and
- all low-priority CMR tasks (16 as at October 2018) will be completed by 2024.⁴⁶

39 Email from Terje Eldøen, NPA, 25 April 2019.

40 Emails from Terje Eldøen, NPA, 25 April 2019 and 1 September 2020.

41 Email from Vanja Sikirica, NPA Kosovo, 1 June 2022.

42 Email from Ahmet Sallova, KMAC, 30 April 2019.

43 Emails from Olivia Meader, HALO Trust, 1 May 2019; Terje Eldøen, NPA, 25 April 2019; and Vanja Sikirica, NPA Kosovo, 1 June 2022.

44 Email from Megan Dwyer, HALO Trust, 11 May 2019.

45 Email from Ahmet Sallova, KMAC, 24 May 2022.

46 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 12.

The strategy is explicitly based on a number of assumptions, including that the necessary funding will be secured and that no new mined or CMR-contaminated areas are identified. It notes, however, that “so far each year 3–4 different affected areas have been reported” and that should this trend continue, capacity and progress will need to be reassessed with regards to the 2024 deadline.⁴⁷ KMAC reported two new unknown CHAs in 2021, one reported by HALO of 56,000m² and the Merdare Tunnel by NPA of 38,744m².⁴⁸ HALO Trust identified two new BAC tasks and were approved by KMAC, whose total size was 115,921m².⁴⁹

As per the strategy, KMAC will develop annual operational work plans to implement the strategy's goals.⁵⁰ KMAC has already requested an external mid-term review of the strategy in 2022 to evaluate progress and make any adaptations according to contextual changes if required. The GICHD were due to conduct the review in September 2022. Thereafter, new plans will be set to achieve the goals of the Strategy.⁵¹

KMAC's national operational work plan for 2021 aims to ensure BAC is conducted on 10 tasks clearing a total of 650,000m².⁵² KMAC considers that the 2021 plan was achieved with clearance even higher due to more resources

for KSF and HALO Trust used for BAC.⁵³ This was in addition to NPA concentrating on clearance rather than survey. The mine action strategy for 2019–24 is in aligned with the objectives of Kosovo's National Development Strategy 2016–2021.⁵⁴

In 2019, The HALO Trust developed a new prioritisation system that considers the “community profile” for a task. This system draws on several factors, such as socio-economic status, planned land use, government development plans, and demographics. All information is collected from government and public data as well as from extensive community survey. This continued to be implemented throughout 2021. New prioritisation information was added during 2021 and early 2022 through the non-technical survey project by providing an individual rank for prioritisation based on set parameters.⁵⁵

For 2021, NPA concentrated on clearing high-impact areas both in ethnic Serbian and Albanian areas. Most of the tasks in NPA's area of responsibility are at high altitude, only allowing work from May to September. KMAC offers other tasks to NPA in locations where weather conditions are more favourable between October and December.⁵⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

National mine action standards for land release in Kosovo are due to be updated to be in accordance with IMAS, including the IMAS 07.13 on environmental management in mine action.⁵⁷

The HALO Trust considers that Kosovo's NMAS do not currently reflect IMAS, in particular as the NMAS include outdated land release procedures. Only two partial cancellations of battle area resurvey polygons were approved by KMAC in 2021. There are no specific SOPs for the environment but HALO's head office is working on creating policies and environmental SOPs which will be implemented across all HALO programmes when they are ready. HALO Trust in Kosovo was working on developing local SOPs.⁵⁸

Kosovo's national mine action standards set the standard clearance depth for battle area clearance (BAC) at 50cm.⁵⁹ A reduction to 30cm in certain forested and stony areas has

been proposed, which would enable detectors to be set to a medium- rather than high-sensitivity setting and result in fewer false indicators needing to be investigated.⁶⁰ In 2019, KMAC informed Mine Action Review that the depth of 50cm is necessary as many of the areas targeted with cluster munitions were especially wet and muddy, and because the bombing campaign took place during a period of heavy rain, making it possible for submunitions to penetrate to greater than normally expected depths.⁶¹ It did, though, state that on certain tasks where the ground was entirely stony, a reduction in search depth could be considered.⁶²

Data from operators tend, overall, to support KMAC's caution. The HALO Trust's analysis of devices found by depth in 2008–18 show that 22% of all items found by HALO Trust teams were at a depth of 30cm or more. This included buried cluster bomb units with submunitions still inside.⁶³ When removing full containers

47 Ibid., pp. 9–10.

48 Emails from Ahmet Sallova, 24 May and 8 June 2022.

49 Email from Megan Dwyer, HALO Trust, 11 May 2022.

50 Mine Action Strategy 2019–2024 in Republic of Kosovo”, 4 April 2019, pp. 9–10.

51 Ibid., p. 16; and email from Ahmet Sallova, Head, KMAC, 24 May 2022.

52 Email from Ahmet Sallova, KMAC, 28 April 2021.

53 Email from Ahmet Sallova, KMAC, 24 May 2022.

54 “Mine Action Strategy 2019–2024 in Republic of Kosovo”, 4 April 2019, p. 1.

55 Emails from Olivia Meader, HALO Trust, 22 May 2020; and Megan Dwyer, HALO Trust, 11 May 2022.

56 Email from Vanja Sikirica, NPA Kosovo, 1 June 2022.

57 Email from Ahmet Sallova, Head, KMAC, 24 May 2022.

58 Email from Megan Dwyer, HALO Trust, 11 May 2022.

59 Email from Ahmet Sallova, KMAC, 4 May 2018.

60 Ibid.

61 Interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.

62 Ibid.

63 Email from Olivia Meader, HALO Trust, 21 June 2019.

from the analysis, however, HALO found that 96% of items were found at a depth of 30cm or less, with the average depth of items found through clearance at 12.4cm.⁶⁴ NPA's clearance statistics show that 12% of all submunitions found in its operations were found at depths greater than 30cm. At the same time, NPA raised the issue of the potential threat that explosive items located deeper than 30cm below the surface might pose and whether the expected future ground use could be considered when setting the search depth.⁶⁵ HALO, which agrees with this approach, has collected data on planned post-clearance land use, including the depth needed for crop cultivation.⁶⁶

Both The HALO Trust and NPA were using large-loop detectors on certain CMR tasks, which increases clearance productivity.⁶⁷

In 2018, in another significant advance in land release efficiency, KMAC formally approved the implementation of Cluster Munition Remnants Survey (CMRS) methodology by NPA to carry out technical survey activities on CMR-contaminated areas in Kosovo. According to this methodology, which NPA has modified to reflect the specific conditions in Kosovo (and in line with the IMAS), operators are permitted to enter a cluster munition strike area and to walk on ground with subsurface contamination, increasing the efficiency of the survey process and offering the ability to accurately define confirmed hazardous areas.⁶⁸

HALO Trust, which was reluctant to implement a CMRS approach in 2017, reported in 2019 that it was interested in defining evidence-based clearance standards and felt there could be scope to explore and improve survey and clearance standards for addressing CMR, especially in regard to recent developments with the implementation of CMRS methodology in South-East Asia.⁶⁹ It believed, however, that as general survey has already been conducted in HALO Trust's areas of operations, implementing CMRS would duplicate work already carried out to define confirmed hazardous areas.⁷⁰

In 2020, HALO Trust introduced new SOPs for BAC, which were formally accredited by KMAC in September 2020, and subsequently rolled out in November 2020 at a task in Komogllavë, a village in Ferizaj municipality. The main changes include the ability for operators to walk on uncleared area to conduct activities such as vegetation clearance, and to enable clearance to begin at an evidence point and expand outwards, rather than spending time breaching towards the

contamination from the outer boundary of the polygon. The systematic deployment of vegetation clearance will enable wider and more extensive use of the large-loop detectors, which are expected to increase productivity, especially on tasks where heavy vegetation is present.⁷¹ The new SOPs are all now used in all BAC clearance, and increased productivity in 2021 by 32% in comparison to 2020. In fact, the gain is even greater as the tasks worked on in 2021 were on hard-to-access terrain and tough vegetation.⁷²

The HALO Kosovo Programme continues to conduct its research and development activities to increase safety and operational efficiency and share innovative technological means. In 2019, the programme was used as a testing ground for the Scorpion detection system from US Night Vision and Electronic Sensors Directorate (NVESD), which was bound for Afghanistan. The success of the trial allowed the system to be used in the Kosovo programme, which is now deployed to support BAC tasks. The Scorpion detector integrates a large-loop electromagnetic induction (EMI) sensor and caesium vapour total-field magnetometer and applies differential global positioning system (DGPS) for centimetre accuracy in targeting. It is essentially two integrated detectors mounted on a trolley, which can be deployed over an open task to identify desired magnetic anomalies in the ground.

The Scorpion system has the potential to significantly improve BAC productivity in certain areas.⁷³ The system was not deployed in 2021 due to constraints in the programme's capacity, the need for additional training, and hardware updates. HALO Trust planned to deploy the Scorpion for 2022 and anticipates additional productivity gains where it can be deployed.⁷⁴

For 2021, NPA reported that Kosovo's NMAS are reasonably appropriate in their area of operations and do not pose significant restrictions on any type of activity. It reports that the Kosovo Guidelines and Technical Standards for Mine/UXO clearance on chapter 19 refer to Environmental Management. NPA also amended its SOPs on fade-out distances and the quality management (QM) system was improved. An environmental management system is in place in the NPA SOP on Health, Safety and the Environment module and a separate SOP module on Environment was set to be produced in 2022.⁷⁵

64 Email from Olivia Meader, HALO Trust, 3 September 2020.

65 Emails from Terje Eldøen, NPA, 25 April 2019; and Olivia Meader, HALO Trust, 1 May 2019.

66 Email from Olivia Meader, HALO Trust, 3 September 2020.

67 Emails from Olivia Meader, HALO Trust, 1 May 2019; and Terje Eldøen, NPA, 25 April 2019.

68 Interview with Terje Eldøen, NPA, Pristina, 5 April 2019; and email, 25 April 2019.

69 Emails from Ash Boddy, HALO Trust, 5 May 2017; and Olivia Meader, HALO Trust, 1 May 2019.

70 Email from Olivia Meader, HALO Trust, 21 June 2019.

71 Email from Megan Dwyer, HALO Trust, 23 April 2021.

72 Email from Megan Dwyer, HALO Trust, 11 May 2022.

73 Email from Megan Dwyer, HALO Trust, 23 April 2021.

74 Email from Megan Dwyer, HALO Trust, 11 May 2022.

75 Email from Vanja Sikirica, NPA Kosovo, 1 June 2022.

OPERATORS AND OPERATIONAL TOOLS

In 2021, Kosovo's national mine action programme's capacity consisted of two international operators, The HALO Trust and NPA, and a national operator, the KSF. The KSF, also provided a round-the-clock EOD emergency response.⁷⁶ KFOR also supports the KSF and Kosovo Police with EOD response tasks and organising mine and ERW demolitions in Mitrovica and the north of Kosovo, including in NPA's areas of operations.⁷⁷ During 2021, NPA focused on clearance in two districts (Leposavic, in Mitrovica, and Zubin Potok, Zvecan) and in Podujevo municipality in Pristina district.⁷⁸

Table 3: Operational clearance capacities deployed in 2021

Operator	Manual CMR clearance teams	Total deminers*	Dog teams (dogs and handlers)	Mechanical assets/machines**	Comments
KSF	3	50	0	0	
KFOR	N/K	N/K	N/K	N/K	Nothing reported
HALO	***6	48	0	0	BAC Technicians
NPA	9	58	0	0	As of end 2021. Includes 49 BAC Operators and 9 Deputy Team Leaders who conduct clearance and stand in for Team Leaders when needed.
Totals	18	156	0	0	

N/K = Not known

* Excluding team leaders, medics, drivers. ** Excluding vegetation cutters and sifters *** Average over the course of the year.

The HALO Trust's operational personnel are cross-trained for mine clearance and BAC and can move readily between activities. On average, in 2021, HALO Trust deployed six clearance teams totalling 48 BAC Technicians to CMR clearance tasks and two survey teams with eight personnel in total. No major changes in personnel are expected for 2022 unless a new grant is approved.⁷⁹

NPA's area of operations in Kosovo cover the five northern municipalities of Leposavic, Mitrovica, Podujevo, Zubin Potok, and Zvecan.⁸⁰ In 2021, NPA deployed nine teams with 58 deminers. NPA deploys local teams of mixed ethnicities, making it possible for NPA to work in previously inaccessible areas in north Kosovo and deploy teams to both ethnic Serbian and ethnic Albanian areas through the multi-ethnic composition of the teams. NPA and Halo Trust submitted a joint proposal to the EU (IPA III), they anticipate the grant might be approved in 2022 and it would result in an increase of survey/clearance staff.⁸¹

KSF operated three manual clearance teams in 2021, totalling 50 deminers, a considerable increase from 2020 when it had reported two teams with 20 deminers.⁸² NPA has no EOD capacity in Kosovo, so all demolitions of ordnance found during NPA operational activities are carried out by KFOR and KSF with EOD support to NPA coordinated by KMAC.⁸³

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2021

For 2021, KMAC and the international operators reported release of 3.27km² of CMR-contaminated land.⁸⁴ But this amount included release by KSF of 1.97km², which involved the destruction of a single submunition and this has been deducted from the total considered cleared by Mine Action Review (almost 1.30km²; see Table 4).

76 Email from Ahmet Sallova, KMAC, 16 April 2020; and "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 3.

77 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 4; and interview with Ahmet Sallova, KMAC, Pristina, 5 April 2019.

78 Email from Vanja Sikirica, NPA Kosovo, 1 June 2022.

79 Email from Megan Dwyer, HALO Trust, 11 May 2022.

80 Email from Terje Eldøen, NPA, 26 August 2020.

81 Email from Vanja Sikirica, NPA Kosovo, 1 June 2022.

82 Email from Ahmet Sallova, KMAC, 24 May 2022.

83 Email from Vanja Sikirica, NPA Kosovo, 1 June 2022.

84 Email from Ahmet Sallova, KMAC, 24 May 2022.

SURVEY IN 2021

In 2021, no technical surveys were conducted in Kosovo. This is a major drop from the previous year when 4.37km² of CMR-contaminated area was released through technical survey, most by NPA.⁸⁵

HALO Trust cancelled through non-technical survey a total of 320,804m² in the districts of Pristina and Ferizaj⁸⁶ in 2021, whereas in 2020 no land was cancelled through non-technical survey.

One new unknown CHA in Peje municipality was reported by HALO Trust, covering 56,000m², as well as the Merdare tunnel in Livadica, Podujevo, reported by NPA on the border between Kosovo and Serbia with a size of 38,744m².⁸⁷ Both areas were added to IMSMA database in 2021.⁸⁸

CLEARANCE IN 2021

A total of 43 submunitions were destroyed during clearance of cluster munition-contaminated area totalling almost 1.30km² in 2021 (see Table 4).⁸⁹ The boost in clearance (up from 0.34km² the year before) is due to the increase in resources and demining personnel with NPA concentrating on clearance and not survey.⁹⁰

HALO Trust cleared 438,873m², destroying 18 submunitions and 1 item of UXO.⁹¹ NPA cleared 645,554m² of cluster munition-contaminated area, finding 22 submunitions.⁹² NPA also cleared three other battle area tasks (in Dyç and Batllava) in Pristina district, Podujevo municipality, in 2021, covering a further 214,000m². Although no submunitions were found, NPA teams did find 327 CMR fragments.⁹³

Table 4: CMR clearance in 2021⁹⁴

District	Operator	Area cleared (m ²)	Submunitions destroyed*
Ferizaj	HALO	314,806	12
Peje	HALO	123,867	6
Prizren	HALO	200	0
Mitrovica	NPA	645,554	22
Pristina	NPA	213,940	0
	KSF		3
Totals		1,298,367	43

* Figures include items destroyed during technical survey and EOD.

The KSF, with support from KFOR in northern Kosovo, carries out demolition of CMR and items of UXO found by The HALO Trust and NPA.⁹⁵ In 2021, three submunitions were destroyed by KSF during EOD and BAC tasks.⁹⁶

85 Email from Charles Frisby, NPA, 27 April 2021.

86 Email from Megan Dwyer, HALO Trust, 11 May 2022.

87 The Merdare Tunnel is a key component of the normalisation agreements between Kosovo and Serbia signed in September 2020 in Washington DC, whereby both sides agreed to operationalise the "Peace Highway", of which the tunnel is a part.

88 Emails from Ahmet Sallova, KMAC, 24 May and 8 June 2022.

89 Email from Ahmet Sallova, KMAC, 24 May 2022.

90 Ibid.

91 Email from Megan Dwyer, HALO Trust, 8 June 2022.

92 Emails from Vanja Sikirica, NPA Kosovo, 1 and 14 June 2022.

93 Email from Vanja Sikirica, NPA Kosovo, 14 June 2022.

94 Ibid.; and emails from Megan Dwyer, HALO Trust, 8 June 2022; and Ahmet Sallova, KMAC, 24 May 2022.

95 Email from Ahmet Sallova, KMAC, 24 May 2022.

96 Ibid.

PROGRESS TOWARDS COMPLETION

Kosovo cannot formally adhere to the CCM and therefore does not have a specific clearance deadline under Article 4. Nonetheless, it has obligations under international human rights law to clear CMR as soon as possible.

Kosovo's Mine Action Strategy 2019–24 aims to complete mine and cluster munition clearance by the end of 2024.⁹⁷ The year 2021 saw increased funding for new teams for all operators; additional funding is expected to be provided by the EU in 2022. As of June 2022, HALO Trust, KMAC, and NPA all believed that the target date of 2024 can be met based on the new grants already in place and others expected to be approved in 2022.⁹⁸ So far, just over 5km² of CMR contamination has been cleared in the last five years (see Table 5), but if the rate of clearance continues as in 2021, the target might be achieved, leaving large residual contamination.

To meet the 2024 target, however, The HALO Trust emphasises the importance of applying efficient land release methodologies and updating the NMAS on land release, as well as finalising the resurvey project.⁹⁹

Assuming the target is met, completion of CMR clearance in 2024 would be 25 years after the end of the conflict between the FRY forces and NATO and more than 20 years after the UN claimed that area clearance was largely done.

Table 5: Five-year summary of CMR clearance

Year	Area cleared (km ²)
2021	1.30
2020	0.34
2019	1.26
2018	1.24
2017	0.88
Total	5.02

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

According to Kosovo's Mine Action Strategy 2019–24, a separate national strategy on the management of residual contamination will be developed by KMAC for 2023, in collaboration with other national actors. This will clarify roles and responsibilities in order to manage what is expected to be a long-term residual contamination problem.¹⁰⁰ The HALO Trust highlighted the importance of establishing a common definition for residual risk – a priority for KMAC that is due to be addressed by a strategy review scheduled for September 2022.¹⁰¹

97 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 6.

98 Emails from Ahmet Sallova, KMAC, 24 May 2022; Megan Dwyer, HALO Trust, 11 May 2022; and Vanja Sikirica, NPA Kosovo, 1 June 2022.

99 Email from Megan Dwyer, HALO Trust, 11 May 2022.

100 "Mine Action Strategy 2019–2024 in Republic of Kosovo", 4 April 2019, p. 15.

101 Emails from Olivia Meader, HALO Trust, 22 May 2020; and Ahmet Sallova, KMAC, 24 May 2022.