

ARTICLE 4 DEADLINE: 1 AUGUST 2025

FIVE-YEAR EXTENSION REQUESTED TO 1 AUGUST 2030

LAO PDR WILL REQUIRE MULTIPLE EXTENSIONS BEFORE REACHING COMPLETION

KEY DATA

CLUSTER MUNITION CONTAMINATION:

MASSIVE. NO RELIABLE ESTIMATE OF THE EXTENT OF CONTAMINATION

SUBMUNITION CLEARANCE IN 2023

56.67 km²

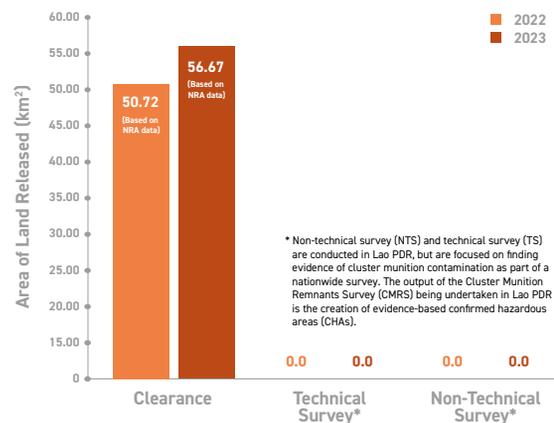
(BASED ON NRA DATA)

SUBMUNITIONS DESTROYED IN 2023

58,382

(BASED ON NRA DATA)

LAND RELEASE OUTPUT



KEY DEVELOPMENTS

Clearance output in Lao People's Democratic Republic (Lao PDR) in 2023 was again higher than the previous year. This was largely the result of the continued shift towards clearance since 2021, which has seen the United States (US) increase its funding for clearance capacity to address the confirmed hazardous areas (CHAs) identified through the ongoing Cluster Munition Remnants Survey (CMRS). US funding has also seen progress made in historical data correction and an improvement of the quality of data in IMSMA. Lao PDR's 2024 request for a five-year extension

to its deadline was due to be considered at the Twelfth Meeting of States Parties to the Convention on Cluster Munitions (CCM) in September. It predicts total clearance of an estimated 325km² of CHA and identification of a further 1,000km² of CHA during the extension period. With a view to strengthening programme coordination, in September 2023, the chairing of the National Regulatory Authority (NRA) moved from the Ministry of Labour and Social Welfare (MoLSW) to the Ministry of Foreign Affairs (MoFA).

RECOMMENDATIONS FOR ACTION

- The NRA should, as a matter of urgency, develop a national planning and prioritisation system to support survey and clearance of cluster munition remnants (CMR).
- Procedures for issuing, amending, or renewing memoranda of understanding (MoUs) should be streamlined. Lao PDR should also consider permitting longer-term MoUs to help attract more investment into the sector.
- The NRA should review national standards to ensure best practices are being applied.
- The NRA should continue efforts to ensure the Information Management System for Mine Action (IMSMA) database is accurate and up to date. Historical operational data not already in the database should be available to operators engaged in survey and clearance.
- The NRA should take on board the recommendations of the international clearance NGOs and allow use of mine/explosive detection dogs (MDDs/EDDs) and drones in order to increase operational efficiency.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2023)	Score (2022)	Performance Commentary
UNDERSTANDING OF CMR CONTAMINATION (20% of overall score)	7	7	Lao PDR does not yet have a reliable estimate of CMR contamination, but is undertaking a nationwide survey of populated areas. As at end 2023, almost 1,996km ² of CHA had been identified through survey. Systematic CMRS of assigned villages from the official list has been concluded in five of the six most contaminated provinces and is ongoing in the most heavily contaminated province, Xiengkhouang. CMRS is also being undertaken in five other provinces, although not systematically, as funding has been sporadic in these provinces. Of the remaining seven provinces, four are known to have contamination but do not currently have funding for CMRS. The other three are thought to have no or very little contamination from CMR. Since 2021, a greater focus has been placed on clearance rather than survey, to address the CHAs generated through CMRS.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	7	6	There is strong national ownership from the NRA. A fully functioning national mine action platform, the Sector Working Group, brings all stakeholders together on a regular basis. In September 2023, the NRA was brought under the aegis of MoFA with a view to strengthening programme coordination. Preliminary reports suggest the MoU process has been streamlined under the MoFA. Nonetheless, MoU procedures remained complex, causing delays and impeding implementation and expansion of survey and clearance, and in some cases preventing the use of international funding.
GENDER AND DIVERSITY (10% of overall score)	7	7	In its new "Safe Path Forward III" strategy (2021–30), the NRA states that gender mainstreaming is important for the national strategic plan and work plans, that data need to be disaggregated by sex and age, and that women must be engaged in work planning and the implementation of projects. In 2023, the NRA elaborated a Gender and Inclusion Code of Conduct, due to be approved by the MoFA in 2024, together with a gender-sensitive human resources policy for the NRA. Clearance operators report having gender policies in place and also putting measures in place to take into account diversity considerations in their survey and clearance programming, such as inclusion of minority ethnic groups and language groups, older people, and persons with disabilities.
ENVIRONMENTAL POLICIES AND ACTION* (10% of overall score)	6	Not Scored	Lao PDR has a national mine action standard (NMAS) on Environmental Management (chapter 21), but it is out of date and was being reviewed in 2024. The new Safe Path Forward III strategy says that climate change is a challenge to addressing unexploded ordnance (UXO) in the country. It reiterates that mine action activities have to be compliant with both the national standard and the Environmental Protection Law. Clearance operators are undertaking a range of measures to assess and mitigate the environmental impact of survey and clearance operations, and to reduce waste and greenhouse gas emissions.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	6	Efforts to correct historical data in IMSMA and improve data collection forms and other information management systems are ongoing. In 2023, a common approach and methodology for addressing UXO historical data correction was established. A tracking system was set up to reflect the progress of the data correction by relevant operators. International operators reported a noticeable improvement in addressing the quality of data in IMSMA, including with respect to accuracy and timeliness. Furthermore, the database is now fully accessible to all operators via a virtual private network (VPN).
PLANNING AND TASKING (10% of overall score)	6	6	The new national strategy for the UXO Sector, "Safe Path Forward III" (2021–30) was adopted in January 2023. The targets in the strategy are very ambitious, far exceeding current survey and clearance outputs. Since 2021, there has been a shift towards increasing clearance capacity and reducing survey capacity. There is not yet a comprehensive national-level prioritisation matrix of clearance tasks, but Tetra Tech is supporting the NRA to remedy this.

Criterion	Score (2023)	Score (2022)	Performance Commentary
LAND RELEASE SYSTEM** (10% of overall score)	8	8	Lao PDR's UXO Survey Standards, which specify the minimum standards and requirements for the survey of all cluster munition-contaminated areas, were due for review in 2024. While survey and clearance operations are adapted to the local threat and context and adopt an evidence-based land release methodology, there is still room for improvement, such as through the use of drones and MDDs, which are not currently permitted. Clearance capacity of international organisations, in particular HALO and NPA, has increased as part of the national strategy to address a greater proportion of the CHAs already generated through CMRS.
LAND RELEASE OUTPUTS AND ARTICLE 4 COMPLIANCE (20% of overall score)	8	8	Lao PDR is continuing the nationwide CMRS of cluster munition contamination, with the amount of CHA continuing to increase each year as the survey progresses. In 2023, CMR clearance output increased compared to the previous year, as a result of increased clearance capacity and a continued focus to address more CHAs already identified through CMRS.
Average Score	7.1	7.1	Overall Programme Performance: GOOD

* New criterion introduced in 2024 to assess performance.

** The weighting of this criterion was previously 20% of overall performance score, but is now given a 10% weighting.

CLUSTER MUNITION SURVEY AND CLEARANCE CAPACITY

MANAGEMENT

- National Regulatory Authority (NRA) Board
- National Regulatory Authority (NRA) Office

NATIONAL OPERATORS

- UXO Lao
- Humanitarian teams of the Lao People's Army (Unit 58)
- Commercial operators

INTERNATIONAL OPERATORS

- The HALO Trust (HALO)

- Humanity and Inclusion (HI)
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)
- Commercial operators

OTHER ACTORS

- Asian Regional Mine Action Center (ARMAC)
- Geneva International Centre for Humanitarian Demining (GICHD)
- United Nations Development Programme (UNDP)
- Tetra Tech

UNDERSTANDING OF CMR CONTAMINATION

Lao PDR has the world's highest level of contamination by unexploded submunitions as a result of the Indochina War of the 1960s and 1970s. The United States conducted one of the heaviest aerial bombardments in history, dropping more than two million tonnes of bombs between 1964 and 1973, including more than 270 million submunitions (known locally as bombs).¹ The failure rate is not known, but Lao PDR reports it may have been as high as 30 per cent,² and an estimated 80 million submunitions are thought to have remained unexploded at the end of the war.³

Lao PDR does not yet have a reliable estimate of CMR contamination. Its initial estimation of 8,470km² of total CMR contamination was based on 70,000 individual US

cluster munitions target locations⁴ with each cluster munition strike producing an estimated footprint of up to 12 hectares (0.12km²). These calculations gave a very broad understanding of the extent of contamination, but were, obviously, based on assumptions.⁵ Efforts to determine the extent of CMR contamination are ongoing through the CMRS of affected villages that should produce a more evidence-based assessment of the extent of CMR contamination in populated areas.⁶ According to Lao PDR's 2024 Article 4 extension request, 15 of its 18 provinces are contaminated with CMR.⁷ The nine provinces most heavily affected by CMR are Attapeu, Champassak, Houaphanh, Khammouane, Luang Prabang, Saravan, Savannakhet, Xekong, and Xiengkhouang.⁸

1 2024 CCM Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 3.

2 Ibid.

3 2019 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 1.

4 "US bombing records in Laos, 1964-73, Congressional Record", 14 May 1975; and 2024 Article 4 deadline Extension Request, Part A, Executive Summary.

5 2024 Article 4 deadline Extension Request, Part A, Executive Summary; and Part B, Detailed Narrative, p. 7; and email from Chanmy Keodara, International Cooperation and Treaty Officer, NRA, 25 May 2024.

6 2024 Article 4 deadline Extension Request, Part A, Executive Summary; and Part B, Detailed Narrative, p. 7.

7 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 4.

8 Ibid.; and National Strategic Plan for the UXO Sector in the Lao PDR 2021-2030, "Safe Path Forward III" (hereafter, Lao PDR, "Safe Path Forward III"), p. 4.

In 2015, new survey procedures were approved and Lao PDR initiated systematic technical survey (TS) using the CMRS methodology to determine the extent of contamination in populated areas.⁹ "Proactive" CMRS (i.e. the systematic village-by-village CMRS of all villages assigned to clearance operators using the NRA's list of contaminated villages) is only focused on populated areas. But with a low population density and villages and settlements often isolated and hard to reach, much of the country is relatively untouched by human activity. There are therefore large areas of CMR contamination in parts of the country with no human activity, notably forested and mountainous areas. Such areas are deprioritised for survey and clearance, as contamination in populated areas takes precedence.¹⁰

The "proactive" phase of survey has now been completed in the populated areas of five of the six most heavily contaminated provinces in Lao PDR, namely Attapeu, Champassak, Saravan, Savannakhet, and Xekong.¹¹ These five provinces, all located in the south of the country, are now in a "reactive" phase of survey where CMRS is only conducted in response to *ad hoc* requests when evidence of CMR is found by villagers outside of previously established CHAs.¹² Considering the high level of CMR contamination in Lao PDR, previously unknown CMR evidence points will continue to be discovered outside of the existing CHA, even after completion of systematic CMRS of villages. Adequate TS capacity has been maintained by Norwegian People's Aid (NPA) and The HALO Trust (HALO) to respond to new evidence points.¹³ The completion of proactive survey in these five southern provinces is notwithstanding the fact that survey of some villages or parts of villages in Lao PDR were not assigned for systematic survey by operators, as they are restricted, often for reasons of national security. Furthermore, it is unclear to what extent survey of villages assigned to UXO Lao has been fully "completed" in these five provinces, as UXO Lao does not complete survey of entire villages in the same way that HALO, Mines Advisory Group (MAG), and NPA do.

In the sixth, and most heavily contaminated, province of Xiengkhouang located in the north of the country, systematic village-to-village CMRS (proactive survey phase) is still underway.¹⁴ Completion of proactive CMRS in Xiengkhouang has yet to be achieved due to the extent of contamination and the frequent overlapping of cluster munition strikes, which has meant that operators often have to arbitrarily end CHAs and start new ones, due to the massive size of the CHAs being identified.¹⁵

CMRS is also being undertaken in five other CMR-contaminated provinces (Bolikhambai, Houaphanh, Khammouane, Luang Prabang, and Vientiane province), although not systematically, as funding for TS/CMRS has been sporadic in these provinces and undertaken according to operator budget availability, rather than targeted for the completion of CMRS of all villages.¹⁶ Of Lao PDR's remaining seven affected provinces, four (Oudomxay, Phongsaly, Vientiane Capital, and Xaisomboun) are known to have CMR contamination but do not currently have funding for systematic TS/CMRS,¹⁷ although HI began CMRS in two districts of Phongsaly at the start of 2023.¹⁸

According to data provided to Mine Action Review by the NRA, as at the end of 2023, a total of almost 1,996km² of CHA had been identified through survey (see Table 1);¹⁹ an increase on the 1,745km² of CMR-contaminated area as at the end of 2022.²⁰ The amount of CHA will continue to increase as CMRS continues to identify CHA, although since 2021, there has been a shift towards increasing clearance capacity and reducing survey capacity, in order to clear a greater proportion of the CHAs already identified during the CMRS up to now.

Table 1: Cluster munition-contaminated area confirmed through survey (at end 2023)²¹

Province	Villages	CHAs	Total area (km ²)
Attapeu	125	1,633	153.13
Bolikhambai	70	43	2.37
Champassak	141	520	28.92
Houaphanh	119	487	47.79
Khammouane	115	769	150.97
Luang Prabang	55	286	28.31
Phongsaly	5	6	0.53
Saravan	369	2,612	131.30
Savannakhet	428	5,146	223.93
Vientiane	25	7	0.48
Xekong	151	1,371	95.94
Xiengkhouang	274	2,074	1,132.17
Totals	1,877	14,954	1,995.84

9 Article 7 Report (covering 2023), Form F; and email from Olivier Bauduin, UXO Program Advisor, US Embassy Vientiane, 21 July 2023.

10 2024 Article 4 deadline Extension Request, Part A, Executive Summary; Part B, Detailed Narrative, p. 21; and Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (covering 2023), Form A.

11 2024 Article 4 deadline Extension Request, Part B; Detailed Narrative, pp. 8 and 18; and Article 7 Report (covering 2023), Form F.

12 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, pp. 8 and 18.

13 Emails from Olivier Bauduin, US Embassy Vientiane, 21 July 2023; and Katherine Harrison, NPA, 9 May 2023.

14 2024 Article 4 deadline Extension Request, Part A, Executive Summary; and Part B, Detailed Narrative, p. 9; and Article 7 Report (covering 2023), Form F.

15 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 9.

16 Article 7 Report (covering 2023), Form F.

17 Ibid.

18 Email from Alexandra Letcher, Regional Armed Violence Reduction (AVR) Specialist – Mekong and Myanmar-Thailand, HI, 6 April 2023.

19 Email from Chanmy Keodara, NRA, 13 July 2024. This differs from data reported in Lao PDR's 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, pp. 11 and 17, which recorded that a total of 1,957km² of CHA had been identified through survey as at the end of 2023. The Table on p. 8 of the extension request indicates that almost 1,844 CHAs had been identified as at the end of 2023. There is also a discrepancy compared to the Article 7 report (covering 2023), which reported that almost 196,378 hectares (1,964km²) had been confirmed as containing CMR as at the end of 2023.

20 Email from Khammoungkhoun Southivong, Information Management Officer, NRA, 8 June 2023.

21 Email from Chanmy Keodara, NRA, 13 July 2024.

The current baseline of CMR contamination is being established through inclusive consultation with women, girls, boys, and men, including, where relevant, from minority groups, during non-technical survey (NTS) at the village level.²²

OTHER EXPLOSIVE REMNANTS OF WAR AND LANDMINES

Lao PDR also has extensive contamination from other explosive remnants of war (ERW), including both air-dropped and ground-fired UXO, though the extent of contamination is not known. An online reference manual compiled by Humanity and Inclusion (HI), documenting all types of explosive ordnance found in Lao PDR, has reported the presence of at least 214 types of munition.²³ These range from 20lb fragmentation bombs to 3,000lb general-purpose bombs, as well as artillery shells, grenades, mortars, rockets,²⁴ cluster munitions, air-dropped mines (such as the BLU 42, BLU 43, and BLU 45), and other miscellaneous items of explosive ordnance.²⁵ HI also reported discovering M83 submunitions with airburst/impact, time-delay, or

anti-handling fuzes; other items such as XM 146 sensors that are equipped with an explosive charge; and several items of UXO fitted with hazardous types of fuzes such as all-ways acting fuzes (AWF) in BLU 26 submunitions and M74 incendiary 10lb submunitions. In steep mountainous areas these UXO can easily roll downhill during clearance and detonation. Items of explosive ordnance with cocked strikers and time-delay or anti-withdrawal fuzes present a particular hazard and they cannot be moved, so have to be destroyed in situ.²⁶ Lao PDR is also contaminated, but to a much lesser extent, by anti-personnel and anti-vehicle mines (See Mine Action Review's *Clearing the Mines* report on Lao PDR for more information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The NRA, created by government decree in 2004 and active since 2006, has an inter-ministerial board composed of representatives from government ministries. Since 1 September 2023, the NRA has been chaired by the MoFA, having previously been chaired by the Ministry of Labour and Social Welfare.²⁷ The move to bring the NRA under the Ministry of Foreign Affairs was part of measures taken by the Laos government in 2023 to strengthen coordination systems among various agencies including government and operators.²⁸ On 27 June 2024, the Deputy Prime Minister/Foreign Minister, who chairs the NRA, led a special session of the UXO Sector Working Group demonstrating the high-level commitment of the Lao government.²⁹

A 2018 decree, "On the Organisation and Operations of the National Regulatory Authority for UXO in Lao PDR" defines the position, role, duties, rights, organisational structure, and the working principles and methods of the NRA.³⁰ A further national decree on UXO management was endorsed by the government in 2022.³¹ The NRA acts as the coordinator for national and international clearance operators and serves as the national focal point for the sector. This includes overall management and consideration of policy, planning, projects, accreditation, quality management (QM), and coordination

of the implementation of the national strategy nationwide, as well as NRA planning and coordination functions at the provincial and district levels.³² As at time of writing, an acting Director of the NRA was in post, pending appointment of a permanent NRA Director to replace the previous director who had been in post since June 2019.

According to Lao PDR's Article 7 report for 2023, the Laos government allocated US\$5,000 for administration and facilitation, including funding through the MoLSW and the NRA for explosive ordnance disposal (EOD) tasks for provinces in which there were no operators in 2023.³³ Lao PDR also makes in-kind contributions to mine action including the salaries of the NRA staff (at provincial and district level) and the humanitarian clearance teams of the Lao People's Army (Unit 58), administrative support, and infrastructure in collaboration with funding provided by KOICA and coordinated by the United Nations Development Programme (UNDP).³⁴ Salaries of NRA personnel at central level in Vientiane are paid by international donors, with funding channelled through UNDP.³⁵ In addition, the government provides in-kind contributions such as for UXO Lao facilities, and through tax exemptions for equipment for humanitarian operators.³⁶ Clearance operators are, however, required to pay visa

22 Emails from Mark Frankish, UNDP, 26 August 2020; Chomyaeng Phengthongsawat, Director General, NRA, 21 June 2021; and Douangsy Thammavong, Deputy Director, NRA, 20 June 2022.

23 Email from Yvon Le Chevanton, Technical Survey/Clearance Operations Manager, HI, 24 July 2024.

24 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 4.

25 Email from Yvon Le Chevanton, HI, 13 July 2024.

26 Emails from Alexandra Letcher, HI, 6 April and 28 June 2023; and Yvon Le Chevanton, HI, 13 and 24 July 2024.

27 Article 7 Report (covering 2023), Form J.

28 Ibid.

29 Email from Olivier Bauduin, US Embassy Vientiane, 24 July 2024.

30 Government Decree No. 67, dated 12 February 2018; 2019 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 17; and Statement of Lao PDR on National Implementation Efforts, CCM Eighth Meeting of States Parties, Geneva, 3 September 2018.

31 Government Decree No. 210, dated 29 July 2022. Presentation by Chomyaeng Phengthongsawat, NRA, minutes of the UXO Sector Working Group meeting, 16 September 2022.

32 2019 Article 4 deadline Extension Request, Part B, Detailed Narrative, pp. 14, 15, and 18.

33 Article 7 Report (covering 2023), Form I.

34 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 13; CCW Protocol V Article 10 Report (covering 2023), Form I; and email from Chanmy Keodara, NRA, 13 July 2024.

35 Email from Olivier Bauduin, US Embassy Vientiane, 24 July 2024.

36 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 13; CCW Protocol V Article 10 Report (covering 2023), Form I; and email from Chanmy Keodara, NRA, 13 July 2024.

fees for expatriates and the previous tax concession of tax exemption for international experts was removed from all MoUs after 2018.³⁷ In addition, changes to the law mean that international NGO staff have paid income tax since 2021.³⁸

Lao PDR's Article 7 report said that it requires US\$50 million annually for clearance and mine risk education,³⁹ and its 2024 Article 4 extension request puts the amount of international funding required at US\$45 million per year. The NRA planned to produce a resource mobilisation strategy in 2024, which will detail activities to maintain donor interest and also explore alternative funding avenues. These include exploring diversified sources of funding, such as working to attract smaller donors.⁴⁰

During the Association of Southeast Asian Nations (ASEAN) summit in September 2016, Lao PDR launched sustainable development goal (SDG) 18, "Lives Safe from UXO", which focuses on freeing the country from UXO. The inclusion of UXO as a specific output in the National Socio-Economic Development Plan (NSEDP) for 2021–2025, launched in April 2021, demonstrates Lao PDR's commitment to removing UXO as a barrier to development.⁴¹

UNDP provides programmatic and technical support to the NRA focusing on areas such as quality management (QM), policy, and support with national standards and treaty compliance. UNDP also supports UXO Lao with funding and capacity building support.⁴²

Further capacity development in information management (IM), QM, and operations support is provided, primarily to UXO Lao, and to a lesser extent the NRA, through a US-funded contractor, Tetra Tech.⁴³ In 2023, NPA conducted a Capacity Needs Assessment workshop for the NRA, within the framework of the NPA IM Capacity Development project, funded by the US State Department Bureau of Political-Military Affairs, Office of Weapons Removal and Abatement (PM/WRA).⁴⁴ The national mine action authority in Lao PDR also receives capacity development support in IM, clearance, explosive ordnance risk education (EORE), and victim assistance (VA), including training and support from the Geneva International Centre for Humanitarian

Demining (GICHD) and the Japan International Cooperation Agency (JICA).⁴⁵

In 2019, Lao PDR had begun to create a Country Coalition, but progress was then delayed by the outbreak of COVID-19.⁴⁶ In May 2022, Lao PDR announced that a Country Coalition had been set up under the existing name of the "UXO Sector Working Group" (SWG). The new SWG is chaired by the Minister/Vice Minister of Foreign Affairs, and co-chaired by UNDP and by donor countries (with co-chairs rotated alphabetically). It meets twice a year.⁴⁷ Its main objective is to promote the efficiency and transparency of mine action in Lao PDR and increase funding opportunities. In 2023, the government announced plans to strengthen the SWG, both in terms of its technical function and its coordination/strategic function. The SWG consists of five sub-sector Technical Working Groups (TWGs): survey and clearance; VA; EORE; IM; and a new TWG established in 2023 on coordination of policy and funding strategy.⁴⁸ The TWGs are tasked by the SWG on specific issues and report back to the SWG regularly.⁴⁹

International clearance operators continued to have good cooperation and coordination with the NRA at the national, provincial, and district levels,⁵⁰ but the multiple layers of bureaucracy in Lao PDR remain a challenge.⁵¹ While international operators were notified of Lao PDR's CCM 2024 extension request, they were not involved in its elaboration.⁵² Lack of resources and capacity of some of the provincial NRAs can impact their ability to fulfil their roles.⁵³

The 2023 shift in line ministry of the NRA from the MoLSW to the MoFA in late summer led to a transition period and a change of directorship at the NRA. However, overall, the move has been viewed as positive and operators had already started to benefit from the streamlining and shortening of the paperwork process, including for MoUs.⁵⁴ Nonetheless, the procedure for MoUs remains lengthy, complex, and labour-intensive, and is still one of the biggest challenges encountered by operators in Lao PDR at each level (district, provincial, and central). It can cause significant delays and can impede the implementation and expansion of survey and clearance, including by preventing the procurement and import of equipment.⁵⁵ Historically, it typically takes a

37 Emails from Katherine Harrison, NPA, 9 September 2020; Cameron Imber, Programme Manager, HALO, 11 June 2021; Julien Kempeneers, Regional Armed Violence Reduction and Humanitarian Mine Action Specialist, HI, 16 June 2021; and Rebecca Letven, Country Director, MAG, 19 June 2021.

38 Emails from Cameron Imber, HALO, 11 June 2021; and Katherine Harrison, NPA, 19 June 2021.

39 Article 7 Report (covering 2023), Form I.

40 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, pp. 14, 24, and 25.

41 Email from Olivier Bauduin, US Embassy Vientiane, 6 July 2021.

42 Email from Rupert Leighton, Chief Technical Advisor, UNDP, 14 August 2023.

43 Email from Nigel Orr, Technical Advisor Survey and Clearance, Tetra Tech, 14 June 2019; and "US Renews Partnership with Lao PDR to Build Capacity in UXO Sector", US Embassy in Lao PDR, 31 January 2020, at: <http://bit.ly/2LzmG8J>.

44 Email from Aubrey Sutherland, Country Director, NPA, 18 May 2024.

45 Email from Chanmy Keodara, NRA, 13 July 2024.

46 Statement of Lao PDR on International Cooperation and Assistance, Second CCM Review Conference (Part 1, virtual meeting), 25–27 November 2020.

47 Article 7 Report (covering 2023), Form J; and email from Chanmy Keodara, NRA, 13 July 2024.

48 CCW Protocol V Article 10 Report (covering 2023), Form D.

49 Article 7 Report (covering 2023), Form J.

50 Emails from Yvon Le Chevanton, HI, 8 May 2024; William Hunter, Programme Manager, HALO, 30 May 2024; Aubrey Sutherland, NPA, 18 May 2024; and Katherine Harrison, MAG, 8 May 2024.

51 Emails from Simon Rea, Regional Director, South and South East Asia, MAG, 17 June 2020; Katherine Harrison, NPA, 6 May 2020 and 31 March 2021; Rebecca Letven, MAG, 30 March 2022; Cameron Imber, HALO, 31 March 2022; and Alexandra Letcher, HI, 6 April 2023.

52 Emails from William Hunter, HALO, 30 May 2024; Katherine Harrison, MAG, 8 May 2024; and Aubrey Sutherland, NPA, 18 May 2024.

53 Emails from Julien Kempeneers, HI, 30 March 2022; Rebecca Letven, MAG, 30 March 2022; Cameron Imber, HALO, 31 March 2022; and Katherine Harrison, NPA, 6 May 2020 and 31 March 2021.

54 Emails from Aubrey Sutherland, NPA, 18 May 2024; William Hunter, HALO, 30 May 2024; and Katherine Harrison, MAG, 8 May 2024.

55 Interviews with international operators, Lao PDR, 1–12 May 2018; and emails from Fiona Kilpatrick, HALO, 29 March 2019; Blossum Gilmour, MAG, 21 March 2019; Rebecca Letven, MAG, 26 March 2021; Katherine Harrison, NPA, 6 May 2020 and 31 March 2021; and Julien Kempeneers, HI, 16 March 2021.

minimum of six months for an MoU to be approved, but it may even take years, sometimes resulting in donor funding not being spent and being returned.⁵⁶ That said, UXO Sector MoUs are regularly approved quicker than most of the other sectors of Development Cooperation in Lao PDR.⁵⁷ Every year the NRA, in collaboration with MoFA, organises a meeting on MoU procedures for the UXO Sector. The last one was on 20 June 2024.⁵⁸ The current procedure does not favour integrated approaches or partnerships, as according to MoFA rules, it is not possible to present a consortium of international organisations in the same MoU.⁵⁹ Furthermore, even after formal approval of an MoU, operators may still experience challenges importing necessary equipment⁶⁰ or small items of additional equipment, which require time-intensive MoU amendments.⁶¹

In the new Safe Path Forward III strategy, the NRA says that it has made progress in simplifying the MoU procedures in the UXO sector, but acknowledged that they remain slow and this that impacts operational efficiency and may impact

sector funding. It said that alternative MoU modalities that simplify management, both by NRA and the operators, may increase operational efficiency and funding.⁶²

All of HALO's MoUs approved in 2023 were delayed, one up to seven months. Delays resulted in significant shifts in deployment plans and postponed the importation of equipment and vehicles. That said, HALO's most recently approved MOU, for funding from the UK Foreign, Commonwealth and Development Office (FCDO), took two months to organise and sign – a significant improvement over previous FCDO projects.⁶³ MAG and NPA also reported an improvement to the MoU process in 2023, following the change in line ministry.⁶⁴ MAG believed the procedure for MoUs has been streamlined, resulting in shorter and simpler procedures, making it easier and more efficient for MAG to obtain MoUs.⁶⁵ Despite improvements to the process, NPA's 2023 MoU was still late by three months, although NPA was allowed to continue operations thanks to interim permission from MoFA.⁶⁶

GENDER AND DIVERSITY

The NRA has integrated gender into all core UXO documents including work plans and the national strategy, and relevant mine action data are disaggregated by sex and age. Women are consulted in group discussions as part of survey and clearance activities, but the needs of women and children have yet to be fully taken into account in prioritisation and planning. Lao PDR's 2024 Article 4 deadline extension request makes reference to a new Gender and Inclusion Code of Conduct, which aims to establish a minimum standard and targets for all operators, to ensure workforces are representative of the population and that redress mechanisms are set up for any complaints.⁶⁷ In July 2024, the NRA informed Mine Action Review that a gender-sensitive human resources policy supplement and a Code of Conduct for the NRA office were expected to be approved by the MoFA in the third quarter of the year, and that these two documents were not yet sector-wide policies.⁶⁸

In its new Safe Path Forward III strategy, the NRA states that gender mainstreaming is important for the national programme and that women must be involved in both work planning and project implementation.⁶⁹ The NRA has pledged to continuing mainstreaming gender in the national programme by increasing cooperation with concerned stakeholders to make progress towards gender equality a more visible part of the UXO Sector. This is evidenced by efforts in 2024, which include a Training of Trainers Workshop on Gender Mainstreaming in February, organised by the NRA in conjunction with UNDP and the Lao Women's Union, and with support from Ireland; appointment by the MoFA in March 2024 of a Gender Coordination Committee for the UXO Sector, composed of representatives from the NRA Office, Unit 58, UXO Lao, and the Lao Women's Union; and appointment by the NRA in April of Gender Focal Points for the TWGs on survey and clearance, EORE, VA, and IM. The

⁵⁶ Email from Katherine Harrison, NPA, 9 September 2020.

⁵⁷ Email from Olivier Bauduin, US Embassy Vientiane, 21 July 2023.

⁵⁸ Email from Olivier Bauduin, US Embassy Vientiane, 24 July 2024.

⁵⁹ Emails from Julien Kempeneers, HI, 16 June 2021 and 30 March 2022.

⁶⁰ Interviews with international operators, Lao PDR, 1–12 May 2018.

⁶¹ Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020.

⁶² Lao PDR, "Safe Path Forward III", p. 12.

⁶³ Email from William Hunter, HALO, 30 May 2024.

⁶⁴ Emails from Aubrey Sutherland, NPA, 18 May 2024; and Katherine Harrison, MAG, 8 May 2024.

⁶⁵ Email from Katherine Harrison, MAG, 8 May 2024.

⁶⁶ Email from Aubrey Sutherland, NPA, 18 May 2024.

⁶⁷ 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 29.

⁶⁸ Email from Chanmy Keodara, NRA, 13 July 2024.

⁶⁹ Lao PDR, "Safe Path Forward III", p. 17.

Gender Focal Points, who come from the NRA, HALO, HI, MAG, and UXO Lao, provide updates on gender mainstreaming during quarterly TWG meetings.⁷⁰

Of the 69 employees at the NRA (including the national training centre), 19 (28%) were women, including 13% (2) of the 15 managerial or supervisory positions and 35% (19) of the 54 operational positions.⁷¹

Table 2: Gender composition of operators in 2023⁷²

Operator	Total staff	Women staff	Total managerial or supervisory staff	Women in managerial or supervisory positions	Total operational staff	Women in operational positions
HALO	1,403	702 (50%)	105	52 (50%)	1,267	650 (51%)
HI	46	19 (41%)	12	6 (50%)	30	16 (53%)
MAG*	1,221	448 (37%)	217	87 (40%)	1,005	361 (36%)
NPA	805	313 (39%)	77	11 (14%)	728	293 (40%)
UXO Lao	1,460	398 (27%)	261	44 (17%)	1,250	314 (25%)
Totals	4,935	1,880 (38%)	672	200 (30%)	4,280	1,634 (38%)

* Average during the year, to reflect reduction of MAG clearance capacity from June to December 2023.

HALO, HI, MAG, and NPA all reported having gender and diversity policies in place, and that they disaggregate mine action data by gender and age, and consult with women and girls during survey and clearance operations.⁷³

As per Table 2, of the humanitarian clearance operators in Lao PDR, HALO had the highest overall proportion of female staff, including in operational positions. This was achieved by setting quotas during recruitment drives. HALO continued to prioritise the hiring of women into operational roles during recruitment, particularly at the technician/deminer level. The programme also ensured representation from across the province and, in particular, individuals from minority ethnic groups, as well as employing eight staff with disabilities, two of whom are UXO victims.⁷⁴

HI provides equal opportunities to employment for qualified women and men in its survey and clearance teams in Lao PDR and it trains and promotes women to managerial positions. HI has mixed NTS teams, with employees of different ethnic origins and persons with disability, including UXO survivors. It has developed marker tools to support the mainstreaming of gender and diversity into projects, and encourages women and persons with disabilities to apply to all positions.⁷⁵ In 2022–23, HI, together with the MoLSW, organised an Annual Disability Policy Dialogue in which 60% of the panellists were women from government ministries, UN agencies, donor agencies, and NGOs. The focus of the discussion was on how the 9th NSEDP can be inclusive

for persons with disabilities, including those impacted by UXO.⁷⁶ HI considers older persons with disabilities as one of the underrepresented groups and efforts are made to collaborate with local partners to ensure the rights of older persons with disabilities are appropriately addressed.⁷⁷ In 2023, HI created an all-female EOD multi-task team (MTT) supervised by two women, one EOD level 3-qualified and the other EOD level 2-qualified. HI also provided two trainings to its staff in its operating districts in 2023, on HI's code of conduct that includes gender and diversity, as well as violence, corruption, bribery, child protection, integration of persons with disability, and human rights.⁷⁸

In 2023, MAG conducted two internal training workshops on gender and disability mainstreaming and inclusion, one in Khammouane province and the other in Vientiane, with funding support from the Australian Embassy. The disability mainstreaming components were delivered by the Disability Services Centre – a local Organisation for Disabled People.⁷⁹

NPA has had a programme-specific gender strategy in place since 2018. As a result of gender mainstreaming, NPA increased the percentage of female staff from 34% in 2022 to 39% by the end of 2023.⁸⁰ In September 2023, a national staff member was recruited and assigned as the NPA Gender, Diversity, and Safeguarding Programme Officer (GDSP Officer). The GDSP Officer conducted various training sessions in late 2023 and early 2024 for personnel from NPA's four southern provinces.⁸¹

70 Email from Chanmy Keodara, NRA, 13 July 2024.

71 Ibid.

72 Emails from William Hunter, HALO, 30 May 2024; Yvon Le Chevanton, HI, 8 May 2024; Katherine Harrison, MAG, 8 May 2024; Aubrey Sutherland, NPA, 18 May 2024; and Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

73 Emails from Fiona Kilpatrick, HALO, 29 March 2019; Blossum Gilmour, MAG, 21 March 2019; Aubrey Sutherland, NPA, 25 March 2019; Julien Kempeneers, HI, 22 March 2019; and Saomany Manivong, Chief of Programme Office and Public Information, UXO Lao, 10 May 2019.

74 Email from William Hunter, HALO, 30 May 2024.

75 Emails from Julien Kempeneers, HI, 25 March 2020 and 30 March 2022; and on behalf of Minla Nanthavong, HI, 16 March 2021.

76 Emails from Julien Kempeneers, HI, on behalf of Pradeep Bagival, HI Inclusive Governance Specialist, 30 March 2022; and Alexandra Letcher, HI, 6 April 2023.

77 Email from Alexandra Letcher, HI, 6 April 2023.

78 Email from Yvon Le Chevanton, HI, 8 May 2024.

79 Email from Katherine Harrison, MAG, 8 May 2024.

80 Email from Aubrey Sutherland, NPA, 18 May 2024.

81 Ibid.

UXO Lao ensures that all groups affected by CMR contamination, including women and children, are consulted during its survey and community liaison activities. This requirement is included in its standing operating procedures (SOPs). UXO Lao also ensures its survey and community liaison teams are inclusive and mixed gender, to facilitate

access and participation from all groups.⁸² While UXO Lao has yet to determine a mainstreaming gender and diversity policy, it advocates for equality in the workplace and its human resource policies encourage female applicants at all levels.⁸³ It aims to increase the number of females employed, which currently stands at 27% of its workforce.⁸⁴

ENVIRONMENTAL POLICIES AND ACTION

Lao PDR has a NMAS on Environmental Management (chapter 21), but it is in need of revision. The NMAS refers to outdated 1999 national laws on environmental protection, rather than the current national environmental legal framework.⁸⁵ The new Safe Path Forward III strategy says that climate change is a challenge to addressing UXO and reiterates that mine action activities have to be compliant with national standards and environmental protection law.⁸⁶ Lao PDR was planning to review the compatibility of its National Standard on Environmental Management in 2024 with IMAS 7.13 on Environmental Management in Mine Action.⁸⁷ The NRA said revision of NMAS chapter 21 was ongoing as at July 2024. It also said it takes into account climate-related or extreme weather risks when planning and prioritising survey and clearance.⁸⁸

HALO Laos said it is committed to minimising environmental harm and reducing greenhouse gas emissions across all its operations. It prioritises fuel-efficient vehicles and utilises solar panels on its VHU to supply electricity to all fleet buildings. All drivers have recently undergone eco-driving training to reduce fuel consumption, and supervisors now use motorcycles instead of Land Cruisers or Land Rovers to further cut emissions. At HALO's Sepon headquarters, a reverse osmosis system is used to produce drinking water, which is delivered to field teams, significantly reducing plastic waste.⁸⁹

In June 2023, HI completed the development of a dedicated environment SOP for its operations in Lao PDR. HI does not cut trees over a certain. The SOP also covers management of temporary facilities in the field; protection of water courses and ground water; and protection of wildlife, including through a ban on hunting during HI field deployment.⁹⁰

MAG globally adopted a new strategy in 2024 which highlights the environment as one of its key focus areas over the next five years. MAG Laos has an SOP on Environmental Management in place. In its task assessment/planning, MAG takes into consideration environment-related factors,

such as erosion of site access tracks/land and interference with natural water courses. MAG does not conduct open burning/open detonation as a method of disposal in Laos. Where demolitions must take place, MAG teams always take protective measures to reduce the spread of fragmentation and noise pollution. During ground preparation, MAG predominantly uses manual vegetation cutting that does not disturb soil and root structures. Trees whose trunk diameter is greater than 6cm are protected and MAG does not engage in the removal/disposal of vegetation by burning.⁹¹

NPA has an annex on environmental management in its SOP on UXO clearance operations.⁹² In 2023, NPA Laos recruited a dedicated Environmental Protection and Awareness Coordinator. Several activities were conducted in 2023 by the new coordinator and/or through NPA's cooperation with the national youth volunteer NGO, Zero Waste Laos (ZWL). NPA has promoted and implemented waste separation, recycling, composting, and banned the burning of garbage in NPA workplaces and sites. In addition, NPA is assessing ways to reduce its annual carbon footprint. In 2023, ZWL delivered three environmental awareness trainings for 375 EOD level one trainees and provided a separate training for 25 staff from NPA's four southern offices – all aimed at fostering a sense of responsibility for environmental protection and equipping individuals with knowledge and skills on resource and energy efficiency, climate change, sustainable lifestyles, and waste management. ZWL also developed online environmental training modules. Since November 2023, NPA Lao PDR has integrated environment and climate policies into the contracts of all new staff in the four southern provinces.⁹³

NPA Head Office has developed a Green Field Tool to assess and manage environmental impacts from mine action activities and better understand increasing climate risks for mine action programmes. The tool was trialled by NPA Vietnam in 2023 and is now being rolled out in NPA Lao PDR.⁹⁴ In September 2023, NPA joined with ZWL to organize the planting of over 6,000 seedlings of fruit trees at the Nursery of Champasak University.⁹⁵

82 Email from Saomany Manivong, UXO Lao, 10 May 2019.

83 Email from Vilaivanh Thongmanivong, UXO Lao, 25 May 2023.

84 Email from Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

85 Email from Katherine Harrison, NPA, 9 May 2023.

86 Lao PDR, "Safe Path Forward III", pp. 12 and 17.

87 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 28.

88 Email from Chanmy Keodara, NRA, 13 July 2024.

89 Email from William Hunter, HALO, 30 May 2024.

90 Email from Yvon Le Chevanton, HI, 8 May 2024.

91 Email from Katherine Harrison, MAG, 8 May 2024.

92 Email from Katherine Harrison, NPA, 9 May 2023.

93 Email from Aubrey Sutherland, NPA, 18 May 2024.

94 Ibid.

95 Ibid.

As per UXO Lao's SOP for vegetation cutting, the operations team is not allowed to burn forest or cut down trees with a diameter of over 60cm. If the vegetation cutting team needs to conduct any demolition or dig holes, they are required to return soil to the area after clearance.⁹⁶

All clearance operators plan annual survey and clearance operations with consideration of seasonal weather patterns (rainy/dry season) and conditions and the impact on accessibility of tasks, for example working on areas prone to flooding during the dry season.⁹⁷ According to Lao PDR's 2024 Article 4 extension request, the movement of ordnance

through flooding or landslides is increasing due to climate change. The functioning of local coordinators (at province and district levels) allows the government of the Lao PDR to react to localised challenges and humanitarian needs resulting from such incidents.⁹⁸ MAG is currently working with Khammouane authorities to clear task sites for villages that often get flooded annually so that they can safely move to pre-cleared safer ground and/or establish new villages in less-flood prone areas that have been pre-cleared by MAG.⁹⁹ HALO Laos has conducted emergency clearance for villages which were relocated due to major flooding.¹⁰⁰

INFORMATION MANAGEMENT AND REPORTING

The national IMSMA database has several problems, including incorrect or incomplete historical data (mainly that of UXO Lao data stored as hard-copy documents in provincial UXO Lao offices); missing data resulting from the migration to IMSMA; and delays in entering corrected data into the database.¹⁰¹ The National Decree on UXO management, endorsed by the government in July 2022, was being revised to adapt to changes in Quality Management for data entry to the IMSMA system.¹⁰² A TWG on IM meets quarterly, with meetings in 2023 reported to be more effective than in previous years, with defined action points and follow-up.¹⁰³

In 2023, NPA, together with other operators and capacity development partners such as UNDP and Tetra Tech, supported the NRA in a review of the NMAS on IM (Chapter 24), funded by the PM/WRA capacity development project. A review of the final draft of the revised NMAS was carried out in February 2024 and as May was awaiting translation and sign off from the NRA board.¹⁰⁴

The NRA has identified the need for better quality control of data in the IMSMA database.¹⁰⁵ Expanding the use of IMSMA to support survey planning and the review of all historical operational data (both electronic and paper), will help ensure that NTS is followed up by robust TS operations.¹⁰⁶ The NRA continued to improve data quality in 2023, and new forms and processes have now been streamlined for operators to feed information into IMSMA in a coordinated centralised format.¹⁰⁷

A 2017 report by Sterling International, the former US contractor before Janus and Tetra Tech, said analysis of data

in the NRA IMSMA database found errors affecting up to 9,300 entries, or 14% of the 67,000 entries on the database. Sterling believed that the errors could affect 22% of the area recorded in the database as cleared or technically surveyed. The errors included operators' misreporting of coordinates and mistaken entry of reports into IMSMA. Other errors included use of the wrong GPS format or the wrong map datum. The result was to put many tasks in the wrong location. Sterling found that the errors occurred mostly with UXO Lao's work, and mostly between 2004 and 2010, but that it affected "many" organisations.¹⁰⁸ Efforts to correct historical data within IMSMA (including incorporation of correct current data) are ongoing. In 2023, a common approach and methodology for addressing the UXO historical data correction process was established. Additionally, a tracking system was set up to reflect the progress of the historical data correction by relevant operators. International operators reported a noticeable improvement in the quality of data in IMSMA in 2023.¹⁰⁹

With support from Tetra Tech, UXO Lao aims to improve the quality of data by providing electronic tablets to all field operation teams, using Survey123 for data capture and analysis. In 2024, UXO Lao and Tetra Tech planned to conduct a trial, training UXO Lao staff in Survey123, to test the new system before expanding to all nine provinces in 2024–25.¹¹⁰

Operators reported that data submitted to the NRA were typically updated in a timely manner and accurately.¹¹¹ In a positive development, the IMSMA database has now been made fully accessible to all operators via the IMSMA virtual private

96 Email from Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

97 Emails from William Hunter, HALO, 30 May 2024; Katherine Harrison, MAG, 8 May 2024; Aubrey Sutherland, NPA, 18 May 2024; and Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

98 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 27.

99 Email from Katherine Harrison, MAG, 8 May 2024.

100 Email from William Hunter, HALO, 30 May 2024.

101 Emails from Bouala Thongsavanh, NRA, on behalf of Phoukhieo Chanthasomboune, NRA, 30 April 2018; and Aubrey Sutherland, NPA, 25 March 2019; NRA, draft "Lao PDR UXO Survey Procedures", 20 September 2017; interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018; and interview with Hugh Hosman and Marco Heuscher, Sterling International, Vientiane, 2 May 2018.

102 CCW Protocol V Article 10 Report (covering 2023), Form B.

103 Email from Aubrey Sutherland, NPA, 18 May 2024.

104 Emails from Yvon Le Chevanton, HI, 8 May 2024; Katherine Harrison, MAG, 8 May 2024; and Aubrey Sutherland, NPA, 18 May 2024.

105 2019 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 4.

106 Ibid., p. 3.

107 Email from Katherine Harrison, MAG, 8 May 2024.

108 "Data errors on IMSMA", Nigel Orr, Technical Adviser, (then with) Sterling International, 26 April 2017.

109 Email from Aubrey Sutherland, NPA, 18 May 2024.

110 Email from Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

111 Emails from Cameron Imber, HALO, 7 April 2020; Julien Kempeneers, HI, 25 March 2020; and Katherine Harrison, NPA, 9 May 2023.

network (VPN), which has improved the accessibility of data, the speed and quality of data entry, and the reporting process, with cross-checks raising discrepancies for correction.¹¹²

NPA is helping enhance the IM capacity of the provincial authorities in nine provinces and fifty-five districts within the framework of a three-year capacity development project funded by PM/WRA.¹¹³ Full implementation of the planned activities started in January 2023.¹¹⁴ Required equipment was provided to the NRA, PRAs, and district regional authorities (DRAs) in Attapeu, Champassak, Khammouane, Savannakhet, Xekong, and Xiengkhouang provinces. In addition, IM training

courses were conducted in these provinces between May 2023 and April 2024.¹¹⁵ This capacity development project adjusted to the new leadership of the UXO Sector, and in 2024, the recipients of the support and equipment are the Department of Foreign Affairs. There is ongoing discussion to consider an expansion of this project in five additional provinces.¹¹⁶

Lao PDR provides regular updates on its progress in Article 4 implementation, both in its annual Article 7 transparency reporting and in statements at the CCM meetings of States Parties.

PLANNING AND TASKING

In 2018, Lao PDR began a national CMRS baseline survey of populated areas, with funding from the United States. Proactive, systematic CMRS of villages in five provinces in the south (Attapeu, Champassak, Saravan, Savannakhet, and Xekong) has now been concluded and CMRS was still underway in Xiengkhouang. CMRS is also being undertaken in five other provinces (Bolikhamsai, Houaphanh, Khammouane, Luang Prabang, and Vientiane provinces), although not systematically, as funding for TS/CMRS has been sporadic in these provinces, rather than targeted for full completion as in other provinces. Of the remaining seven provinces, three (Oudomxay, Vientiane Capital, and Xaisomboun) are known to have significant contamination but do not currently have funding for TS/CMRS. In the fourth remaining province of Phongsaly, HI began CMRS in two districts from the start

of 2023.¹¹⁷ The remaining three provinces (Bokeo, Luang Namtha, and Xayabouli) are either not thought to have CMR contamination or have low levels of contamination and are therefore deprioritised.¹¹⁸

A new 10-year National Strategy for the UXO Sector (2021–30), "Safe Path Forward III", was developed under the leadership of the NRA.¹¹⁹ The new strategy was adopted in January 2023.¹²⁰ The target, by 2030, is to have identified 2,500km² of CHA and cleared 1,000km² of land for agricultural and development purposes.¹²¹ This is an ambitious target, which is more than double the current clearance output, and one that far exceeds predicted clearance outputs in Lao PDR's 2024 Article 4 extension request, detailed below.

WORK PLAN FOR ARTICLE 4 IMPLEMENTATION IN 2025–30

Lao PDR's 2024 CCM Article 4 extension request includes a five-year work plan for survey and clearance (see Table 3), with progress dependent maintaining current funding levels. Clearance is taking place simultaneously with survey activities to identify CHAs containing CMR.¹²² Lao PDR estimates that it will clear a total of 325km² of cluster munition-contaminated area between 1 August 2025 and 31 July 2030 (65km² per annum), with the predicted destruction of approximately 375,000 submunitions in total (75,000 per annum). Lao PDR plans to simultaneously conduct CMRS on a total of area of 1,000km². These outputs are based on a total cost of US\$225 million (US\$45 million per annum) from international funding, in addition to in-kind national support.¹²³

112 Emails from Yvon Le Chevanton, HI, 8 May 2024; Katherine Harrison, MAG, 8 May 2024; and Aubrey Sutherland, NPA, 18 May 2024.

113 Email from Katherine Harrison, NPA, 11 May 2022.

114 Email from Katherine Harrison, NPA, 9 May 2023.

115 Email from Aubrey Sutherland, NPA, 18 May 2024.

116 Email from Olivier Bauduin, US Embassy Vientiane, 24 July 2024.

117 Email from Alexandra Letcher, HI, 6 April 2023.

118 Article 7 Report (covering 2022), Form F.

119 Statement of Lao PDR on National Implementation Measures, Second CCM Review Conference (Part 1, virtual meeting), 25–27 November 2020; email from Chomyaeng Phengthongsawat, NRA, 21 June 2021; and Lao PDR, "Safe Path Forward III", p. 2.

120 Statement of Lao PDR on victim assistance, CCM Tenth Meeting of States Parties, Geneva, 30 August–2 September 2022; and Lao PDR, "Safe Path Forward III", p. 2.

121 Lao PDR, "Safe Path Forward III", p. 14.

122 2019 Article 4 deadline Extension Request, Executive Summary.

123 2024 Article 4 deadline Extension Request, Part A, Executive Summary; and Part B, Detailed Narrative, Annex 1.

Table 3: Planned Survey and Clearance in 1 August 2025–31 July 2030 (based on 2024 CCM Article 4 extension request data)¹²⁴

Year	Total clearance (km ²)	Total submunitions to be destroyed	Total area to be surveyed through CMRS (km ²)	NTS (no. of villages)	External funding (US\$)
2025 (1 Aug to 31 Dec)	27.08	31,250	83	62.5	18.75
2026	65	75,000	200	150	45
2027	65	75,000	200	150	45
2028	65	75,000	200	150	45
2029	65	75,000	200	150	45
2030 (1 Jan to 31 July)	37.92	43,750	117	87.5	26.25
Totals	325	375,000	1,000	750	225

Planned 2025–2030 clearance and survey output in Lao PDR’s 2024 extension request is realistic and in line with current output, based on existing capacity. This is in contrast to Safe Path Forward III (2021–2030) and to the 9th NSEDP 2021–2025 five-year plan, which both set overly ambitious targets for survey and clearance, which have not been met. It is also in contrast to the overly ambitious clearance outputs in its 2019 extension request, which have not been fully realised, as Lao PDR only achieved the annual CMR clearance target of 50km² envisaged in the request, for the first time in 2022.

In its 2024 Article 4 extension request, Lao PDR expects to increase productivity in UXO clearance year on year,

through the application of good practice, the adjustment of national standards to respond to evidence and best practice in-country, and better use of data over the forthcoming years.¹²⁵ If achieved, this may result in increased clearance output compared to the extension request work plan.

The number of CHAs containing CMR will continue to increase during the five-year period of the extension request, as CMRS continues, but there is now an increased focus on clearance. This is largely thanks to increased US funding to support the Lao government’s strategic plan to clear more high-priority CHAs.¹²⁶ Survey teams have been converted to clearance teams and additional clearance teams recruited and trained.

PRIORITISATION

In a positive development, a first-ever sector-wide annual work plan for Lao PDR for 2018 was developed in an inclusive manner and approved by the NRA Board.¹²⁷ There were sector-wide work plans in 2022, 2023, and 2024¹²⁸ but they were not shared with international NGOs.¹²⁹

The NRA sets operators yearly targets and they in turn develop their own work plans, but tasks sometimes overlap.¹³⁰ HALO shares its work plan with UXO Lao to avoid any overlap of CHAs.¹³¹ HI developed its 2023 work

plan in close collaboration with the provincial NRA and with the district authorities in HI’s areas of operations.¹³² MAG continues to collaborate with provincial and district authorities to improve historical data and ensure that tasking between MAG and UXO Lao is deconflicted and to avoid overlapping.¹³³ The NRA uses operator work plans to facilitate a sector-wide planning process.¹³⁴ In January 2024, the NRA provided a centralised format for operators to use to prepare and submit annual work plans.¹³⁵

¹²⁴ Ibid.

¹²⁵ 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, pp. 24 and 25.

¹²⁶ Email from Olivier Bauduin, US Embassy Vientiane, 13 July 2022.

¹²⁷ Email from Bouala Thongsavanh, NRA, on behalf of Phoukhieo Chanthasomboune, NRA, 30 April 2018; and interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018.

¹²⁸ Email from Chanmy Keodara, NRA, 13 July 2024.

¹²⁹ Emails from Cameron Imber, HALO, 31 March 2022; William Hunter, HALO, 30 May 2024; Katherine Harrison, MAG, 8 May 2024; and Katherine Harrison, NPA, 9 May 2023.

¹³⁰ Emails from Katherine Harrison, NPA, 9 May 2023; and Portia Stratton, MAG, 15 May 2023.

¹³¹ Email from William Hunter, HALO, 8 May 2023.

¹³² Email from Alexandra Letcher, HI, 6 April 2023.

¹³³ Email from Portia Stratton, MAG, 15 May 2023.

¹³⁴ CCW Protocol V Article 10 Report (covering 2023), Form A.

¹³⁵ Emails from Yvon Le Chevanton, HI, 8 May 2024; and Katherine Harrison, MAG, 8 May 2024.

Prioritisation of clearance is a critical step in the land release cycle. However, at present no comprehensive national-level guidance on the prioritisation of clearance tasks yet exists and prioritisation systems and criteria vary markedly between the operators. Currently, each operator has its own prioritisation system, but considerable time is allocated to discussing annual work plans for humanitarian operators with provincial and district authorities.¹³⁶ In the new Safe Path Forward III strategy (2021–2030), the NRA has committed to develop a policy for determining national priorities, and said it considers UXO clearance on agricultural land a top priority, and that UXO clearance is especially crucial for the development of educational, community and government facilities, public infrastructure and tourism sites.¹³⁷ At the SWG meeting in September 2022, the Deputy Chairperson of the NRA Board said Lao PDR will create a national prioritisation system to help ensure that UXO sector activities contribute to the socio-economic development plan.¹³⁸

Tetra Tech is supporting the NRA in the development of the nationwide prioritisation matrix.¹³⁹ Work on the national prioritisation system (district training, consultation workshop with line ministries) was initiated in the first half of 2022.¹⁴⁰ The NRA had aimed to launch a national prioritisation process in 2023,¹⁴¹ but this was not realised. In its 2024 Article 4 extension request, Lao PDR said that development of a forthcoming National Standard on prioritisation will further prioritise high impact clearance within each individual village. Lao PDR believes that focus of clearance on facilitating rural development projects within confirmed CHAs can foster poverty alleviation.¹⁴² The government will also strive to ensure that hard-to-reach communities are served by survey and clearance to ensure equal access to support, irrespective of location of village.¹⁴³ At the micro level, prioritisation of clearance tasks in Lao PDR is in part dictated by the wet and dry seasons. During the dry season, operators are able to access and clear paddy fields, while in the wet season, they focus on clearing grazing and community land, or on higher elevations.¹⁴⁴

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

The “Lao PDR UXO Survey Standards” (UXO Survey Standard No. 21/NRA) specify the minimum requirements for the survey of all cluster munition-contaminated areas in Lao PDR.¹⁴⁵ The standards were officially approved by the NRA in 2018.¹⁴⁶ They are said to conform with IMAS¹⁴⁷ and are fully reflected in the SOPs of clearance operators, who confirm their relevance to the local threat and context.¹⁴⁸ There is, however, scope to further strengthen the standards, based on best practice.

According to its 2019 Article 4 extension request, the NRA had planned to formally review the national standards at least every three years.¹⁴⁹ In 2021, operators were invited by the NRA to submit recommendations to update the national standards,¹⁵⁰ but no changes to the standards were made in

2022¹⁵¹ or in 2023, with the exception of revisions to the IM NMAS, which as at May 2024 were still awaiting endorsement by the NRA board.

At the SWG meeting in September 2022, UNDP called for the revision of national standards to be “fast-tracked”, highlighting that the updated standards would improve the effectiveness and efficiency of UXO operations by having the best practices effectively disseminated across all operators. According to UNDP, the current standards are out of date and as a result the productivity of the operators has been compromised.¹⁵² The review of the standards is planned to begin in 2024, in collaboration with operators and other stakeholders.¹⁵³ The Geneva International Centre for Humanitarian Demining (GICHD) will support Lao PDR on the revision and development

136 Comments by Rupert Leighton, UNDP, minutes of the UXO Sector Working Group meeting, 16 September 2022; and Lao PDR, “Safe Path Forward III” (2021–2030), p. 5; and emails from Olivier Bauduin, US Embassy Vientiane, 21 July 2023; Aubrey Sutherland, NPA, 18 May 2024; and William Hunter, HALO, 30 May 2024.

137 Lao PDR, “Safe Path Forward III” (2021–2030), p. 5.

138 Comments by Padeumphone Sonthany, MoLSW, minutes of the UXO Sector Working Group meeting, 16 September 2022.

139 Emails from Alexandra Letcher, HI, 6 April 2023; Katherine Harrison, NPA, 9 May 2023; and Portia Stratton, MAG, 15 May 2023.

140 Presentation by Chomyaeng Phengthongsawat, NRA, minutes of the UXO Sector Working Group meeting, 16 September 2022.

141 Statement of Lao PDR on clearance, CCM Tenth Meeting of States Parties, Geneva, 30 August–2 September 2022; and email from Khammoungkhoun Southivong, NRA, 8 June 2023.

142 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 27.

143 *Ibid.*, pp. 21 and 22.

144 Interviews with international and national operators, Laos, 1–12 May 2018.

145 NRA, draft “Lao PDR UXO Survey Procedures”, 20 September 2017; and 2019 Article 4 deadline Extension Request, Executive Summary, p. 3.

146 Emails from Olivier Bauduin, UNDP, 10 July 2018; and Nigel Orr, (then with) Janus Global Operations, 13 July 2018; interviews with international operators, Lao PDR, 1–12 May 2018; and Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018; and Statement of Lao PDR on National Implementation Efforts, CCM Eighth Meeting of States Parties, Geneva, 3 September 2018.

147 2019 Article 4 deadline Extension Request, Executive Summary, p. 2; and Part B, Detailed Narrative, pp. 9 and 17; and CCW Protocol V Article 10 Report (covering 2023), Forms B and G.

148 Emails from Saomany Manivong, UXO Lao, 10 May 2019; Cameron Imber, HALO, 7 April 2020; Katherine Harrison, NPA, 6 May 2020; and Simon Rea, MAG, 17 June 2020.

149 2019 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 18.

150 Emails from Julien Kempeneers, HI, 30 March 2022; Rebecca Letven, MAG, 30 March 2022; and Cameron Imber, HALO, 31 March 2022.

151 Emails from Khammoungkhoun Southivong, NRA, 8 June 2023; William Hunter, HALO, 8 May 2023; Katherine Harrison, NPA, 9 May 2023; and Portia Stratton, MAG, 15 May 2023.

152 Presentation by Catherine Phuong, UNDP, minutes of the UXO Sector Working Group meeting, 16 September 2022.

153 Emails from William Hunter, HALO, 30 May 2024; Katherine Harrison, MAG, 8 May 2024; and Aubrey Sutherland, NPA, 18 May 2024; and CCW Protocol V Article 10 Report (covering 2023), Form A.

of NMAS.¹⁵⁴ In July 2024, the NRA reported that review of the national standards was ongoing.¹⁵⁵

Prior to 2014, UXO operators in Lao PDR primarily conducted general survey on areas intended for clearance and roving clearance tasks, based on requests and reports from villagers.¹⁵⁶ CMRS has resulted in clearance being directed to confirmed cluster munition strikes, across land boundaries where necessary, and away from the clearance of areas with low or no CMR contamination. There has been a significant improvement in the number of CMR destroyed per hectare cleared since 2015.¹⁵⁷

The survey approach has been strengthened over the last couple of years, with more emphasis on desk assessment of historical data and comprehensive NTS. TS is only conducted based on CMR evidence points.¹⁵⁸ HALO, MAG, and NPA all conduct TS on whole villages, whereas in 2018, UXO Lao stated it does not conduct TS of whole villages, due to their limited TS capacity. Typically UXO Lao will, over the years, go to the same villages on multiple occasions, but they do not "complete" CMRS of the whole village in the same way that HALO, MAG, and NPA do. Rather, UXO Lao's TS teams identify CHAs for their area clearance teams.¹⁵⁹

TS works outwards from the initial evidence point, searching no less than 50% of each 50 metre by 50 metre box with a detector, with emphasis on finding a submunition. As soon as a submunition is found, TS moves to the adjacent boxes. If cluster munition fragments are found, searching must continue until a submunition is found or at least 50% of the box is covered.¹⁶⁰

Operators continue to refine their CMRS methodology in a bid to accelerate operations, including using the technique of "skipping boxes", in which teams finding CMR in one survey box skip one or more of the immediate neighbouring boxes and then survey the next box. Skipping boxes is permitted in the national survey procedure, and, where appropriate, has become standard practice for TS teams, where the focus is on identifying the boundaries of CHAs.¹⁶¹ CHAs are established based on red boxes and include a 50-metre fade-out from the place submunitions are found during TS, unless fade-out extends into inaccessible or commercial concession areas (responsibility for survey and clearance in commercial concession areas is then that of the concession holder).¹⁶²

According to the national survey standards, clearance must only be conducted in CHAs, unless either "official agreements with the NRA permit a dispensation" or "the UXO clearance is being paid for by a client and 100% clearance without survey is a requirement of the agreement".¹⁶³ The NRA maintained the need to retain some flexibility to accommodate donor stipulations which sometimes require full clearance of UXO in non-CHAs, for development projects such as schools, and there is an official procedure for such instances.¹⁶⁴ In 2016, Prime Ministerial Order No. 43 stipulated that development projects in provinces and districts affected by UXO must benefit from survey and clearance before project implementation and that these projects must allocate funding for survey and clearance.¹⁶⁵

Except in the case of permanently inaccessible land or commercial concession areas, CHAs that are incomplete or have not been created using the TS process are not to be entered into IMSMA.¹⁶⁶ Interpretation and understanding as to what constitutes "inaccessible" is not clearly defined and can vary between clearance operators,¹⁶⁷ but according to the national survey standards, dense vegetation and seasonal flooding are not valid reasons for the NTS.¹⁶⁸ Clearance teams deployed to CHAs are required to have the knowledge and necessary equipment to operate in difficult areas such as steep hillsides and dense jungle terrain, which requires strong monitoring to ensure the physical obstacles do not reduce the quality of the survey and clearance.¹⁶⁹

According to the national mine action standards, the minimum clearance depth in Lao PDR is 25cm, which is intended to capture all surface and shallow CMR contamination.¹⁷⁰ A study on ordnance depth distribution in Lao PDR, commissioned by UNDP and conducted by FENIX Insight, found that the current default clearance depth of 25cm captures 97% of UXO finds.¹⁷¹ Operators have been collecting data on the depth at which CMR are found.¹⁷² HI Laos continued to generate interesting results from using the Minelab F3 (with large coil and yellow end cap) detectors, successfully demonstrating that operators are able to work swiftly and still pick up full BLU-26 submunitions buried 35cm deep in rice fields.¹⁷³ In 2023, HI continued to excavate fully functional BLU 26 buried below 25cm and sometimes up to 48cm from the surface, mostly in rice fields. HI noted the possibility that deeply buried items could be particular to

154 Email from Namrita Singh, GICHD, 21 May 2024.

155 Email from Chanmy Keodara, NRA, 13 July 2024.

156 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018.

157 2019 Article 4 deadline Extension Request, Executive Summary, p. 2; and Part B, Detailed Narrative, p. 9.

158 NRA, draft "Lao PDR UXO Survey Procedures", 20 September 2017; and emails from Cameron Imber, HALO, 11 June 2017; Rebecca Letven, MAG, 18 June 2017; and Katherine Harrison, NPA, 18 June 2017.

159 Email from Olivier Bauduin, US Embassy Vientiane, 21 July 2023.

160 NRA, draft "Lao PDR UXO Survey Procedures", 20 September 2017.

161 *Ibid.*, p. 17; interviews with Neil Arnold, MAG, Phonsavanh, 6 May 2018, and Robby Dehondt, Sterling International, Sepon, 11 May 2018; and email from Ulric Eriksson, NPA, 1 May 2018.

162 NRA, draft "Lao PDR UXO Survey Procedures", 20 September 2017.

163 *Ibid.*

164 Interviews with Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018 and 7 February 2019, Geneva.

165 Statement of Lao PDR on National Implementation Efforts, CCM Seventh Meeting of States Parties, Geneva, 4-5 September 2017.

166 NRA, draft "Lao PDR UXO Survey Procedures", 20 September 2017.

167 Interviews with international operators, Laos, 1-12 May 2018.

168 NRA, draft "Lao PDR UXO Survey Procedures", 20 September 2017.

169 2019 Article 4 deadline Extension Request, Executive Summary, p. 5; and Part B, Detailed Narrative, pp. 24-25.

170 2019 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 17.

171 FENIX Insight, "A study on ordnance depth distribution in Lao PDR", July 2023, pp. 8 and 12.

172 Email from Katherine Harrison, NPA, 9 September 2020.

173 Email from Alexandra Letcher, HI, 6 April 2023.

the rice fields in the north of Laos, which are located in low land, where mud from the steep flank of hills and mountains has built up year after year.¹⁷⁴ HI believes that the 25cm default clearance depth is not safe everywhere for all land users, as modern tractors can reach items buried deeper and displace them to the surface.¹⁷⁵ Based on empirical evidence analysed as part of the 2023 study, FENIX Insight concluded there was no clear or compelling case to increase the default (25cm) clearance depth.¹⁷⁶ There is broad agreement on this conclusion among mine action stakeholders in Lao PDR.¹⁷⁷

With regard to completion of CHAs/cluster munition footprints, international clearance operators reported difficulty conducting CMRS in certain areas, due to national security or restrictions to access land due to cultural sensitivities and beliefs.¹⁷⁸ Furthermore, in TS tasks in areas of massive contamination, with overlapping strikes, it is not always possible to continue to fade-out, as the confirmed areas extend too far.¹⁷⁹

Discussions were ongoing to consider testing new predictive tools and other possible adjustments to survey methodology to accelerate the completion of the survey, particularly in Xiengkhouang province. The NRA is exploring means to better use existing data to maximise clearance outputs, including better examination and analysis of existing US bomb data. This is especially pertinent in Xiengkhouang province where levels of contamination have meant that identifying stand-alone CHAs has been challenging and where massive contamination has led to the identification of 'never-ending' CHAs. Close examination of data may mean that resources dedicated to CMRS process could go straight to clearance, potentially hastening clearance outputs and reducing costs. The NRA is considering this concept.¹⁸⁰

With regards to the discovery of landmines during CMRS, HI developed a "clearance while surveying" (CWS) procedure, to allow for safe release of CMR contamination in areas where there is a potential risk of landmines where random mines are reported and there is no evidence of systematic mine-laying or the presence of minefields. CWS involves the commencement of full clearance from the evidence point.¹⁸¹ HI revised its clearance SOP to integrate CWS. The SOP has yet to be formally approved, but the NRA had deemed the procedure as being adequate, including during quality

assurance (QA) and quality control (QC) inspections and during a TWG presentation. HI has also proposed to the NRA that a modification is made to the national standards.¹⁸²

HI understand the importance and relevance of systematic CMRS to provide important information on the size and location of contamination to inform long-term planning and resource mobilisation by the national authorities. At the same time, HI highlights that CWS will be quicker and require less paper work overall compared to CMRS during which CHAs are recorded in IMSMA, but not tasked for immediate clearance.¹⁸³ HI has suggested that clearance could replace CMRS earlier where it is well established that there is CMR contamination, as clearance would cover the entire CHA in any event, including a 50 metre buffer zone until green boxes are reached. In locations where operators are called back year-on-year to destroy submunitions found by farmers, HI believes evidence-based clearance could be commenced directly, rather than needing to first conduct CMRS. HI believed that the remoteness of target villages in Houaphanh and the presence of landmines and anti-handling fuzes (M83 submunitions) discovered in 2021, justifies that it continued to conduct a CWS approach when there is a risk to personnel engaged in CMRS procedures. In Houaphanh province, HI did not conduct CMRS strictly village by village, but instead focused on highest priority areas first, as it is working in very remote forested areas, with steep terrain.¹⁸⁴

HI is concerned that when TS occurs and items are excavated and left behind, this leads to submunitions becoming visible for children and the local population, exposing them to risk. This had been raised during the TWG on the Technical Note for CMRS.¹⁸⁵ As a standard practice, HALO tries to destroy all items found on the day they are found. If this cannot be done, HALO posts staff to guard the items overnight and then destroys them the next day.¹⁸⁶ Other international operators reported that items identified during TS are clearly marked as a hazard and are disposed of as soon as operationally possible (subject to availability of explosives), typically within a few days.¹⁸⁷ HI also raised concerns around clearance of land for construction and the risk of BLU-26s posing a risk to workers digging by hand or even for an excavator operator without personal protective equipment (PPE). HI believes there should be a requirement for land to be searched and released layer by layer, with each layer searched down to the

174 Email from Yvon Le Chevanton, HI, 8 May 2024.

175 Emails from Alexandra Letcher, HI, 6 April 2023; and Yvon Le Chevanton, HI, 13 July 2024.

176 FENIX Insight, "A study on ordnance depth distribution in Lao PDR", July 2023, p. 12.

177 Interview with Aubrey Sutherland, Sasa Jelacic, and Nguyen Thi Dieu Linh, NPA, online, 10 July 2024; and emails from Eli Mechanic, Country Director, MAG, 12 July 2024; and William Hunter, HALO, 19 July 2024.

178 Interviews with Ulric Eriksson, NPA Laos, Saravan, 4 May 2018; and Olivia Meader, HALO, Sepon, 11 May 2018.

179 Interview with Neil Arnold, MAG, Phonsavanh, 6 May 2018.

180 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, pp. 10 and 11; and meeting between the CCM Article 4 Analysis Group and the MoFA and NRA, Geneva, 30 April 2024.

181 Emails from Julien Kempeneers, HI, 25 March 2020; and Yvon Le Chevanton, HI, 13 July 2024.

182 Emails from Julien Kempeneers, HI, 30 March 2022; and Alexandra Letcher, HI, 6 April 2023.

183 Email from Yvon Le Chevanton, HI, 8 May 2024.

184 Emails from Julien Kempeneers, HI, 30 March 2022; and Alexandra Letcher, HI, 6 April 2023.

185 Email from Alexandra Letcher, HI, 6 April 2023.

186 Email from William Hunter, HALO, 19 July 2024.

187 Interview with Aubrey Sutherland, Sasa Jelacic, and Nguyen Thi Dieu Linh, NPA, online, 10 July 2024; and email from Eli Mechanic, MAG, 12 July 2024.

maximum clearance depth of the detector in question (e.g. 40–45cm) and then down to the required clearance depth (e.g. 120 cm), rather than the land being released to 120cm in a single search by shallow-search detectors.¹⁸⁸

According to the NRA, understanding of the CMRS process, especially at the local and field levels, is sometimes limited.¹⁸⁹ Stakeholders across the mine action sector in Lao PDR agreed on the importance of strengthening coordination with village authorities as an integral component of the survey process, ensuring that communities understand and accept

the results of survey. It is especially important that villagers fully understand that, despite demolition of UXO during the CMRS process, CHAs identified through survey remain hazardous until full clearance has taken place, which may not be for many years.¹⁹⁰

UXO Lao is focusing its TS on its annual clearance work plan, which is based on the needs of local authorities and communities.¹⁹¹ For development projects, clearance is conducted without TS having first taken place.¹⁹²

OPERATORS AND OPERATIONAL TOOLS

Land release operations in Lao PDR are conducted by a range of implementing partners, which includes humanitarian operators such as the national operator UXO Lao; international NGOs, HALO, HI, MAG, and NPA; and humanitarian teams of the Lao People's Army (Unit 58). In addition, 24 accredited commercial clearance companies support commercial activities, such as infrastructure development and extractive industries.¹⁹³

In the last couple of years survey capacity in Lao PDR has been reduced, and clearance capacity increased, in order to address a higher proportion of the CHAs already identified. With respect to survey capacity in 2023, HALO deployed five CMRS teams, totalling 55 personnel.¹⁹⁴ HI had one NTS

team of two people and one MTT team of 6 personnel, from January to July 2023.¹⁹⁵ MAG had an average of seven NTS teams in 2023, totalling 15 people and 17 TS teams totalling 130.¹⁹⁶ NPA had eight CMRS teams (totalling 48 personnel) and four EORE/community liaison teams.¹⁹⁷ UXO Lao had 7 NTS teams totalling 21 personnel and 12 TS teams totalling 91 personnel.¹⁹⁸ The Lao People's Army (Unit 58) deployed two TS teams totalling fourteen personnel, and two NTS teams totalling ten personnel in 2023.¹⁹⁹

According to Lao PDR's 2024 extension request, the average daily clearance rate is 811m² per team per day, based on an average 13 people per team and with an average 22 working days per month.²⁰⁰

Table 4: Operational clearance capacities deployed in 2023²⁰¹

Operator	Manual teams	Total clearance personnel	Machines	Comments
Lao People's Army (Unit 58)	3	39	0	
HALO	89	890	0	Each team has two deminers trained as medics.
HI	3	24	0	HI's three multi-task teams are used to conduct TS, clearance, or roving tasks, as required. HI had three MTT teams in January–July 2023, and its capacity was then reduced to two teams totalling 16 personnel to the end of 2023, when HI moved to Phongsaly province.
MAG	49	432	0	Based on an average of June and December data.
NPA	42	589	0	
UXO Lao	73	438	9	Two cluster munition demolition machines and seven brush cutter machines which provide support to area clearance operations, by preparing access roads and vegetation cutting where this cannot be done by hand.
Totals	Approx. 259	Approx. 2,412	9	

188 Emails from Yvon Le Chevanton, HI, 8 May and 13 July 2024.

189 Email from Bouala Thongsavanh, on behalf of Phoukhieo Chanthasomboune, NRA, 30 April 2018.

190 Response to Mine Action Review questionnaire from Olivia Meader, HALO, 11 May 2018; and interview with Olivier Bauduin, UNDP, Vientiane, 2 May 2018.

191 Email from Saomany Manivong, UXO Lao, 11 May 2021.

192 Email from Noupin Phimmasy, UXO Lao, 4 June 2022.

193 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 15.

194 Email from William Hunter, HALO, 30 May 2024.

195 Email from Yvon Le Chevanton, HI, 8 May 2024.

196 Email from Katherine Harrison, MAG, 8 May 2024.

197 Emails from Aubrey Sutherland, NPA, 18 May 2024; and Sasa Jelacic, NPA, 10 July 2024.

198 Email from Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

199 Email from Chanmy Keodara, NRA, 13 July 2024.

200 2024 Article 4 deadline Extension Request, Annex 2.

201 Emails from Chanmy Keodara, NRA, 13 July 2024; Yvon Le Chevanton, HI, 8 May 2024; William Hunter, HALO, 30 May 2024; Aubrey Sutherland, NPA, 18 May 2024; Katherine Harrison, MAG, 8 May 2024; and Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

HALO's survey and clearance efforts are focused on Savannakhet province. HALO's Clearance capacity continued to increase significantly in 2023 and it trained and deployed an additional 250 cluster munition clearance personnel between May and September 2024, under its PM/WRA contract.²⁰²

HI is deploying MTTs which can conduct TS, area clearance, or roving tasks.²⁰³ HI had been conducting survey and clearance in Houaphanh province up until 2023, when it relocated to Phongsaly province.²⁰⁴ HI also implements projects in Champassak, Savannakhet, and Vientiane provinces, relating to other fields (such as disability inclusion, health, and rehabilitation).²⁰⁵

MAG is operational in Xiengkhouang province in the north and Khammouane province in the south. In 2023, MAG had to reduce the number of teams deployed due to the funding situation in Khammouane province. It made four clearance teams redundant at the end of June 2023 and another two teams redundant in December. Some staff were absorbed to other teams that had staff vacancies and one clearance team was re-established as a TS team.²⁰⁶

NPA is operational in the four southern and heavily contaminated provinces of Attapeu, Champassak, Saravan, and Xekong. In 2021, NPA shifted its focus from CMRS to clearance of CHAs identified through survey. In 2023-24, NPA received significantly increased funding from PM/WRA to double its clearance capacity (from 20 to 40 teams). NPA is now deploying 42 BAC teams (two funded by the NMFA and the remainder by PM/WRA).²⁰⁷

In 2023, the government organisation, UXO Lao, was fully operational in four provinces (Attapeu, Khammouane, Savannakhet, and Xiengkhouang) and partially operational in three others (Champassak, Saravan, and Xekong). In Houaphanh and Luang Prabang provinces field operations were suspended throughout 2023 due to lack of funding. PM/WRA funding to both provinces restarted in November 2023 to support reopening of the provincial offices and the planning and mobilisation of operations. Field operations in Houaphanh and Luang Prabang then restarted in March 2024 after delivery of all related trainings and equipping of the teams, with support from Tetra Tech's Technical Advisors.²⁰⁸ The United States now funds UXO Lao in six provinces.²⁰⁹ UXO Lao planned to increase its survey and clearance capacity in 2024, due to PM/WRA resuming funding in Houaphanh and Luang Prabang provinces and funding from Japan

enabling UXO Lao to implement at full operational capacity in Champassak, Saravan, and Xekong provinces.²¹⁰

According to Lao PDR's 2024 deadline extension request, the Lao armed forces humanitarian demining teams (Unit 58) has three clearance teams, each with thirteen personnel, in addition to two roving teams, each with nine personnel.²¹¹ The extension request also said that Unit 58 was being expanded, with the support of KOICA and UNDP, to have a total of 20 clearance, survey, and risk education teams by the end of 2023.²¹² According to data provided by the NRA to Mine Action Review in July 2024, Unit 58 now has seven clearance teams.²¹³ The NRA has said that Unit 58 teams are a valuable asset, conducting survey and clearance in the same way as national and international clearance operators, and with good coordination between the NRA and the army. In addition, the army was being trained to use IMSMA.

Lao Army teams (completely separate to the humanitarian "Army 58" teams) and not coordinated by the NRA, started clearance of UXO in 2017 to enable construction work on the US\$6 billion Laos-China high-speed railway to proceed in safety.²¹⁴ According to an online media source, since 2018, specialists from the International Mine Action Center (IMAC) of the Russian Armed Forces have been clearing UXO in Laos, and have surveyed 0.17km² and cleared 2,300 items of explosive ordnance. Since November 2023, the unit has cleared 0.10km² of land and located 656 pieces of UXO (including submunitions) in two areas of Kasy district, Vientiane province. The unit is also reported to have cleared UXO in Bolikhamxai, Khammouane, and Xiengkhouang provinces.²¹⁵

The use of drones for mine action operations, including survey, clearance, and EOD is not currently permitted. The restriction on the use of drones reportedly originates from high levels within the Government of Lao PDR and is beyond the control of the NRA.²¹⁶ MAG had previously secured a drone permit in late 2019, and used drones in 2020 to assess the ground situation and to serve as a safety asset for MAG's rapid EOD response teams, providing an aerial perspective to inspect cordons and excavations.²¹⁷ However, MAG has not received approval from the NRA to deploy drones in 2022 or 2023.²¹⁸ Similarly, HALO, HI, and NPA have consistently been refused permission to use drones, including to ensure the safety radius when disposing large items of explosive ordnance.²¹⁹ The use of drones, including large surveillance drones is, however, permitted in other contexts and by other

202 Email from William Hunter, HALO, 30 May 2024.

203 Email from Julien Kempeneers, HI, 30 March 2022.

204 Email from Alexandra Letcher, HI, 6 April 2023.

205 Emails from Julien Kempeneers, HI, 25 March 2020 and 16 June 2021.

206 Email from Katherine Harrison, MAG, 8 May 2024.

207 Email from Aubrey Sutherland, NPA, 18 May 2024.

208 Email from Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

209 Email from Olivier Bauduin, US Embassy Vientiane, 24 July 2024.

210 Email from Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

211 2024 Article 4 deadline Extension Request, Annex 2.

212 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, p. 22.

213 Email from Chanmy Keodara, NRA, 13 July 2024.

214 S. Vaenko, "Army deployed to clear UXO for Laos-China railway", *Vientiane Times*, 6 January 2017; and email from Bouala Thongsavanh, NRA, on behalf of Phoukhieo Chanthasomboune, NRA, 30 April 2018.

215 "Lao, Russian army personnel remove 656 UXO items in Kasy", *Vientiane Times*, 22 January 2024, at: <https://tinyurl.com/228zj47r>.

216 Email from Katherine Harrison, MAG, 8 May 2024.

217 Email from Rebecca Letven, MAG, 26 March 2021.

218 Emails from Portia Stratton, MAG, 15 May 2023; and Katherine Harrison, MAG, 8 May 2024.

219 Emails from William Hunter, HALO, 30 May 2024; Yvon Le Chevanton, HI, 8 May 2024; and Aubrey Sutherland, NPA, 18 May 2024.

government ministries, such as by the company Vientiane Geomatic Services, including to locate bomb craters.²²⁰

NPA has continued to seek permission to use innovations already approved in Lao PDR's National Standards, such as the use of MDDs as a tool for QM and rapid response, as well as in areas of high metal density, or around powerlines,

where the use of metal detectors can be disrupted.²²¹ In June 2023, NPA organised a visit of a high-level delegation from the NRA and Lao Ministries of Defence and Foreign Affairs to NPA's Global Training Centre for MDD in Bosnia-Herzegovina in June.²²²

LAND RELEASE OUTPUTS AND ARTICLE 4 COMPLIANCE

LAND RELEASE OUTPUTS IN 2023

According to data reported by NRA to Mine Action Review, CMR clearance output in Lao PDR in 2023 was almost 56.67km². A total of 58,382 submunitions were destroyed during area clearance, TS, and spot tasks,²²³ together with a large number of other items of UXO and small number of anti-personnel mines.

Lao PDR's most recent Article 7 report declared more than 61.9km² of CMR was cleared in 2023, with the destruction of 58,735 submunitions, 73 big bombs, 23,693 other items of UXO, and 67 mines.²²⁴

The 58,735 submunitions destroyed in 2023, as reported in Lao PDR's Article 7 report, was significantly less than the total number of submunitions reported by humanitarian operators (excluding the Army Unit 58)) to Mine Action Review (see Tables 6 and 9), which came to 64,410 submunitions (11,358 through TS; 38,272 through clearance; and 14,780 through spot tasks).²²⁵

SURVEY IN 2023

According to the NRA data reported to Mine Action Review, a total of almost 238km² of CHA containing CMR was identified in 2023 (see Table 5).²²⁶ This is an increase on the 211km² of CHA identified in 2022.²²⁷

According to Lao PDR's Convention on Certain Conventional Weapons (CCW) Protocol V transparency report, 206.68km² of CHA was identified in 2023 across 11 provinces.²²⁸

Table 5: Technical survey of CMR-suspected area in 2023 (based on NRA data)²²⁹

Operator	Area surveyed (m ²)	Area identified (m ²)	Submunitions destroyed	Other UXO destroyed	Mines destroyed
Lao People's Army (Unit 58)	4,570,000	666,000	102	0	0
HALO	5,592,500	1,598,200	502	118	0
HI	1,377,500	782,500	228	9	0
MAG	186,040,438	182,626,283	5,406	48	0
NPA	4,917,500	2,180,205	175	207	0
UXO Lao	69,251,522	50,051,218	5,119	1,397	1
Totals	271,749,460	237,904,406	11,532	1,779	1

* Already included in EOD roving task total

According to the data reported to Mine Action Review by humanitarian clearance operators (with the exception of Army Unit 58), almost 238km² of CHA containing CMR was identified in 2023 (see Table 6).

220 Vientiane Geomatic Services (VGS) website and Facebook page, accessed 5 June 2024, at: <https://bit.ly/3lZSnG4>, and <https://bit.ly/3D5eRC5>.

221 Email from Katherine Harrison, NPA, 19 June 2021.

222 Emails from Aubrey Sutherland, NPA, 18 May 2024; and Sasa Jelacic, NPA, 10 July 2024.

223 Email from Chanmy Keodara, NRA, 13 July 2024.

224 Article 7 Report (covering 2023), Form F. The total of the clearance Table in Article 7 report is 62,096,837m², however the sum of the individual lines comes to 61,904,288m².

225 Emails from Yvon Le Chevanton, HI, 8 May 2024; William Hunter, HALO, 30 May 2024; Katherine Harrison, MAG, 8 May 2024; Aubrey Sutherland, NPA, 18 May 2024; and Vilaivanh Thongmanivong, UXO Lao, 14 June 2024.

226 Email from Chanmy Keodara, NRA, 13 July 2024.

227 Email from Khammoungkhoun Southivong, NRA, 8 June 2023.

228 CCW Protocol V Article 10 Report (covering 2023), Form A.

229 Email from Chanmy Keodara, NRA, 13 July 2024.

Table 6: Technical survey of CMR-suspected area in 2023 (based on operator data)²³⁰

Operator	Area surveyed (m ²)	Area identified (m ²)	Submunitions destroyed	Other UXO destroyed	Mines destroyed
Lao People's Army (Unit 58)	N/R	N/R	N/R	N/R	N/R
HALO	7,732,500	2,265,991	434	117	0
HI	1,377,500	782,500	228	9	0
MAG	186,040,438	182,626,283	5,406	48	0
NPA	4,825,000	2,180,205	177	207	0
UXO Lao	69,954,022	50,546,001	5,113	1,398	1
Totals	269,929,460	238,400,980	11,358	1,779	1

N/R = Not reported

CLEARANCE IN 2023

According to the NRA data reported to Mine Action Review, a total of more than 56.67km² of cluster munition-contaminated area was cleared in 2023, excluding commercial clearance. During the year, a total of 58,382 submunitions were destroyed during technical survey, clearance, and spot tasks, together with a large number of items of UXO and a small number of anti-personnel mines.²³¹

The 2023 clearance output reported by the NRA to Mine Action Review of 56.67km² was an increase on the 50.72km² of CMR clearance identified for 2022 by Mine Action Review.²³² The increase in clearance in 2023 compared to the previous year is due to increased funding and thus capacity.²³³

Table 7: CMR clearance by operator in 2023 (based on NRA data)²³⁴

Province	Operator	Area cleared (m ²)	Submunitions destroyed during clearance	Submunitions destroyed during spot tasks	UXO destroyed	AP mines destroyed
Attapeu	NPA	3,743,477	1,556	137	169	0
	UXO Lao	3,481,934	1,779	941	68	0
Bolikhamxai	Lao People's Army (Unit 58)	256,392	220	226	167	0
Champassak	NPA	1,286,939	785	90	429	1
	UXO Lao	330,985	343	103	328	0
Houaphanh	HI	901,792	1,589	111	519	0
Khammouane	MAG	2,801,048	1,792	2,368	1,154	0
	UXO Lao	2,396,593	1,304	1,876	1,455	0
Phongsaly	HI	163,993	222	158	283	4
Saravan	NPA	1,704,758	1,282	46	64	0
	UXO Lao	3,123,943	3,569	1,046	639	0

230 Emails from Yvon Le Chevanton, HI, 8 May 2024; William Hunter, HALO, 30 May 2024; Katherine Harrison, MAG, 8 May 2024; Aubrey Sutherland, NPA, 18 May 2024; and Vilaivanh Thongmanivong, UXO Lao, 14 June 2024.

231 Email from Chanmy Keodara, NRA, 13 July 2024.

232 Email from Khammoungkhoun Southivong, NRA, 8 June 2023.

233 Emails from William Hunter, HALO, 30 May 2024; Yvon Le Chevanton, HI, 8 May 2024; Katherine Harrison, MAG, 8 May 2024; and Aubrey Sutherland, NPA, 18 May 2024.

234 Email from Chanmy Keodara, NRA, 13 July 2024.

Table 7 Continued

Province	Operator	Area cleared (m ²)	Submunitions destroyed during clearance	Submunitions destroyed during spot tasks	UXO destroyed	AP mines destroyed
Savannakhet	HALO	8,928,767	6,199	1,972	6,391	1
	UXO Lao	3,947,976	1,561	1,243	880	0
Vientiane Province	Lao People's Army (Unit 58)	56,410	100	17	532	3
Vientiane Capital	Lao People's Army (Unit 58)	0	0	9	953	0
Xaisomboun	Lao People's Army (Unit 58)	23,459	3	35	172	0
Xekong	NPA	2,622,657	4,322	258	395	0
	UXO Lao	589,702	441	248	99	0
Xiengkhouang	MAG	13,831,241	4,631	6,861	2,618	1
	UXO Lao	6,481,973	5,995	2,944	5,954	3
Totals		56,674,039	37,693	*20,689	23,269	13

* Believed to include submunitions destroyed during technical survey.

According to Lao PDR's CCM Article 7 report covering 2023, a total of 61.9km² of cluster munition-contaminated area was cleared (presumably including humanitarian and commercial clearance) in 2023 across 15 provinces, with the destruction of 58,735 submunitions, 73 big bombs, 23,693 other items of UXO, and 67 mines (see Table 8).²³⁵ Commercial clearance, unlike humanitarian clearance, tends to involve clearance of land in which no or very few submunitions are destroyed. It is not targeted clearance of CHAs, but instead clearance at the request of clients of often uncontaminated land, required for confidence building for construction and development projects. Mine Action Review does not consider this as CMR clearance.

The CCM Article 7 data vary slightly from the almost 62.1km² reported as cleared in Lao PDR's CCW Protocol V transparency report covering 2023 (with the destruction of 58,739 CMR, 72 bombs, and 67 mines), and which reports that approximately 90% of clearance was of land used for agricultural purposes and 10% for land used for development.²³⁶ It also varies from the almost 57.9m² of CHA cleared in 2023, with the destruction of 38,272 submunitions during clearance and 14,780 submunitions during spot tasks, as per data reported to Mine Action Review by clearance operators (excluding Unit 58 of the Lao People's Army) (see Table 9).

Table 8: CMR clearance by province in 2023 (Article 7 data)²³⁷

Province	Area cleared (m ²)
Attapeu	7,596,413
Bolikhamxai	256,392
Champassak	1,758,006
Houaphanh	907,884
Khammouane	7,159,586
Luang Namtha	0
Luang Prabang	0
Oudomxay	408,291
Saravan	4,924,456
Savannakhet	13,774,510
Vientiane Province	18,286
Vientiane Capital	9,568
Xaisomboun	1,250,037
Xekong	3,523,445
Xiengkhouang	20,317,414
Total	61,904,288

²³⁵ Article 7 Report (covering 2023), Form F. The total of the clearance table in Article 7 report is 62,096,837m², however the sum of the individual lines comes to 61,904,288m².

²³⁶ CCW Protocol V Article 10 Report (covering 2023), Form A.

²³⁷ Article 7 Report (covering 2023), Form F. The total of the clearance table in Article 7 report is 62,096,837m², however the sum of the individual lines comes to 61,904,288m².

Table 9: CMR clearance by operator in 2023 (based on operator data)²³⁸

Operator	Area cleared (m ²)	Submunitions destroyed	Submunitions destroyed in spot tasks	UXO destroyed	AP mines destroyed
Lao People's Army (Unit 58)	N/R	N/R	N/R	N/R	N/R
HALO	10,134,427	6,746	1,538	5,274	2
HI	1,050,526	1,811	266	795	11
MAG	16,581,470	6,420	9,232	1,097	1
NPA	9,622,664	8,363	348	1,038	1
UXO Lao	20,472,904	14,932	3,396	7,007	3
Totals	57,861,991	38,272	14,780	15,211	18

HALO reported that of the cluster munition-contaminated area it cleared in 2023, 75 tasks totalling 1km² proved not to contain CMR. Fourteen of the 75 tasks, totalling 55,885m², were development tasks requested by the government of Lao PDR.²³⁹ HI found submunitions in all its CHA clearance tasks in 2023. HI also cleared one small development task of 2,100m² in Houameuang district in which no items of explosive ordnance were discovered, but this task was not part of a CHA.²⁴⁰ MAG reported that 35 tasks, totalling 226,079m², were completed in 2023 in which no further CMR were discovered during clearance.²⁴¹ According to MAG, the majority were tasks outside of CHAs, which it cleared at the request of the Implementation Management Committee (IMC)/provincial authorities for development priorities.²⁴² NPA cleared twelve tasks in 2023 which proved to contain no CMR, with a total size of 407,815m².²⁴³ All these NPA clearance tasks had been established as CHAs due to the discovery of submunitions during TS. NPA said that it is possible that TS had already identified and destroyed all items down to national clearance depth of 25cm and any remaining items were at a greater depth. Alternatively, items found during TS might have been moved from another location in the past. This is hard to confirm as this may have occurred decades ago.²⁴⁴ UXO Lao said it found CMR in all its CHA clearance tasks in 2023.²⁴⁵ UXO Lao also supports development projects, for which the areas requested for clearance by local authorities sometimes do not contain CMR, and clearance is conducted to ensure the areas were free from UXO in order for development projects to take place.

Compared to the previous year, and based on operator data, HALO, HI, MAG, and NPA's clearance output increased in 2023.²⁴⁶ However, UXO Lao's CMR clearance in 2023 was a 17% decrease on the previous year, due to lack of funding.²⁴⁷

HI increased the area it technically surveyed in 2023 by 22%, compared to the previous year and also achieved a more than 50% increase in clearance – achieving its highest annual clearance output to-date in Laos. HI said that its increased clearance in 2023 compared to the previous year was due to the land topography of task sites, with rice paddies being less time-consuming to clear; cooperation from the villagers in supporting with vegetation cutting; favourable weather conditions; the use of large coil on the Minelab F3 detector, which reduced detection of scrap metal located close to the surface and the need for unnecessary excavations; and the proximity of the clearance site to the office.²⁴⁸

HALO achieved a 42% increase in the amount cleared in 2023, compared to the previous year, as a result of the significant expansion of the programme which saw the addition of 250 clearance staff in June 2023.²⁴⁹ MAG saw an 8% increase in clearance output in 2023 compared to 2022, due to small improvements in its approach to supervision, management training, and QM aspects of its clearance assets.²⁵⁰ NPA increased its annual clearance output by 21% compared to 2022, which was the result of the increase in clearance capacity from 22 to 42 teams in 2023 (staggered deployment of 10 new BAC effective as from 1 June 2023, and 10 more from 1 December 2023 respectively).²⁵¹

238 Emails from Yvon Le Chevanton, HI, 8 May 2024; William Hunter, HALO, 30 May 2024; Katherine Harrison, MAG, 8 May 2024; Aubrey Sutherland, NPA, 18 May 2024; and Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

239 Email from William Hunter, HALO, 26 July 2024.

240 Email from Yvon Le Chevanton, HI, 8 May 2024.

241 Email from Katherine Harrison, MAG, 8 May 2024.

242 Email from Katherine Harrison, MAG, 8 July 2024.

243 Email from Aubrey Sutherland, NPA, 18 May 2024.

244 Email from Sasa Jelacic, NPA, 10 July 2024.

245 Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

246 Emails from William Hunter, HALO, 30 May 2024; Yvon Le Chevanton, HI, 8 May 2024; Katherine Harrison, MAG, 8 May 2024; and Aubrey Sutherland, NPA, 18 May 2024.

247 Email from Vilaivanh Thongmanivong, UXO Lao, 8 June 2024.

248 Email from Yvon Le Chevanton, HI, 8 May 2024.

249 Email from William Hunter, HALO, 30 May 2024.

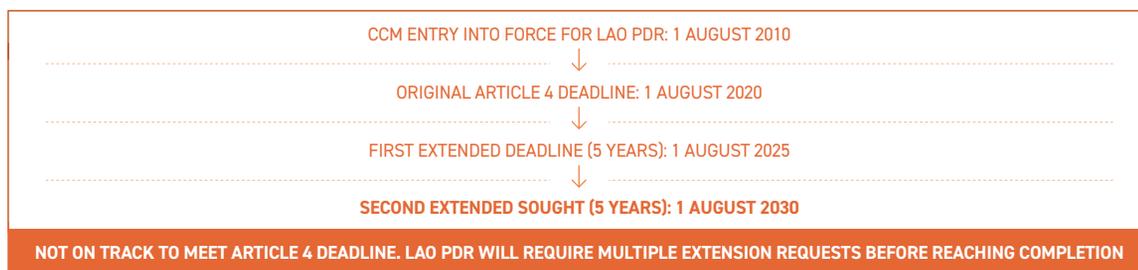
250 Email from Katherine Harrison, MAG, 8 May 2024.

251 Email from Aubrey Sutherland, NPA, 18 May 2024.

All clearance organisations in Lao PDR are required to have a documented internal QM system, covering both QA and QC procedures. The NRA conducts external QM inspections of clearance organisations.²⁵² The NRA doubled its QM capacity

in 2022, from two QM teams to four (with five people per team),²⁵³ but capacity is still under-resourced given that these four teams cover sector-wide clearance.

ARTICLE 4 DEADLINE AND COMPLIANCE



Under Article 4 of the CCM, Lao PDR is required to destroy all CMR in areas under its jurisdiction or control as soon as possible, but not later than 1 August 2025, having been granted a five-year extension (the maximum that can be requested per extension request under the CCM) in 2019. Lao PDR has requested a five-year extension of its deadline until 1 August 2030, which will be considered by States Parties at Twelfth Meeting of States Parties in September 2024. Due to the massive extent of CMR contamination, and based on current capacity and output, Lao PDR will require multiple extensions to its Article 4 deadline.

As at end of 2023, Lao PDR had cleared 19% of the CHAs identified to-date, and if the most heavily contaminated province of Xiengkhouang is excluded from calculations, almost a third of CHAs identified to-date have been cleared.²⁵⁴ As at end of 2023, a total of almost 1,996km² of CHA had been identified through the ongoing nationwide survey.²⁵⁵ The rate in which land is currently being confirmed as contaminated through CMRS is far quicker than the rate of clearance of the CHA identified, and the baseline will continue to increase. The NRA has said that it will take decades of clearance, based on current clearance capacity output.²⁵⁶

An estimate of the true extent of CMR contamination will not be known until the nationwide CMRS is completed,²⁵⁷ which is still many years away and which does not cover survey of unpopulated areas, such as uninhabited forested and mountainous areas. It is a notable achievement that to-date, the proactive survey phase (i.e. systematic CMRS of assigned villages) has been completed in five of the most heavily contaminated provinces in the south and good progress is also being made in Xiengkhouang. In addition, some CMRS is also being conducted to a varying, but far lesser, extent in five additional contaminated provinces, but in the four other contaminated provinces, no survey is yet being undertaken.

Clearance of CMR in Lao PDR will take many decades and will require long-term national and international capacity and funding. According to Lao PDR's 2024 Article 4 extension request, the predicted annual clearance output based on current capacity and resources available is 65km².²⁵⁸ While annual humanitarian clearance output over the last five years has been far less (see Table 10), clearance capacity was significantly increased in 2023, resulting in increased clearance output in 2023 and a further increase in output in 2024.

Table 10: Five-year summary of CMR clearance

Year	Area cleared (km ²)
2023	*56.67
2022	*50.72
2021	*46.68
2020	*42.90
2019	*45.77
Total	242.74

* Excluding commercial clearance

FCDO-funded clearance operations in Lao PDR in 2019 helped increase clearance output, but funding subsequently decreased dramatically April 2021.²⁵⁹ Since 2021, the United States has, however, shifted its focus to clearance of CHAs generated by CMRS, and has funded increased clearance capacity of both international clearance operators and UXO Lao,²⁶⁰ which resulted in a significant increase in clearance capacity, in particular for HALO, MAG, and NPA. The combined number of US-funded area clearance teams across operators in Lao PDR has tripled, from 70 in 2020 to 210 in

252 NRA, draft "Lao PDR UXO Survey Procedures", 20 September 2017.

253 Email from Khammoungkhoun Southivong, NRA, 8 June 2023.

254 Email from Chanmy Keodara, NRA, 13 July 2024.

255 Ibid., pp. 11 and 17. However, the Table on p. 8 of the 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative indicates almost 1,844 of CHA had been identified as at the end of 2023. There is also a discrepancy compared to the Article 7 report (covering 2023), which said almost 1,964km² had been confirmed as containing CMR as at the end of 2023.

256 2024 Article 4 deadline Extension Request 2024, Part B, Detailed Narrative, p. 22.

257 Interview with Phoukhieo Chanthasomboune, NRA, Vientiane, 2 May 2018.

258 2024 Article 4 deadline Extension Request, Part A, Executive Summary; and Part B, Detailed Narrative, Annex 1.

259 Emails from Rebecca Letven, MAG, 20 June 2022; and Cameron Imber, HALO, 28 June 2022.

260 Interview with Olivier Bauduin, US Embassy Vientiane, in Geneva, 13 February 2020.

March 2024.²⁶¹ Nonetheless, existing clearance capacity is not sufficient to address the significant area of CHA already identified for through CMRS, and the size of CHA being added to the database annually far outstrips the area being released through clearance, even taking into account the increased clearance capacity since 2023. The NRA is seeking international assistance for the ongoing CMRS and clearance efforts, including to expand teams and provide equipment to deploy clearance teams nationwide; to further build the capacity of national humanitarian operators (Unit 58 of the army) and UXO Lao; and to upgrade its data and IM systems.²⁶²

In addition to insufficient clearance capacity, Lao PDR also cites mountainous terrain (which can impede comprehensive survey to accurately identify the location and size of

CMR-contaminated area and make clearance more complex and time-consuming) and inadequate and unpredictable funding (which sometimes results in the halting of operations or reduction in number of employees), as challenges to implementation of Article 4. According to the NRA, the limited number of clearance teams, means that for most villages, clearance is required on multiple separate occasions before the entire village is completed.²⁶³ According to operators, challenges in clearance tasks also include heavy rains during the wet season; high scrap-metal contamination and fragmentation from other UXO; difficulty accessing tasks due to flooding and vehicles getting stuck in the mud; and the proximity of high-voltage pylons and power lines.²⁶⁴

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Lao PDR is still determining the extent of its baseline of CMR contamination and is many decades from fulfilling its Article 4 obligations. The GICHD believes the NRA would still, however, benefit from taking a strategic view on how to prepare for transition to a more reactive phase, and ultimately for completion within the same framework. The GICHD organised a regional workshop in south-east Asia in May 2023, on Risk Management and Liability in Land Release and the Management of Residual Contamination.²⁶⁵ In its 2024 Article 4 extension request, Lao PDR said that the government is committed to working with national capacities to develop long-term solutions to residual contamination issues, most notably deployment of the clearance capacity of Unit 58 of the Lao People's Army.²⁶⁶

²⁶¹ Email from Olivier Baudoïn, US Embassy Vientiane, 24 July 2024.

²⁶² Presentation by HALO, Sepon, 10 May 2018.

²⁶³ Article 7 Reports (covering 2022 and 2023), Form F.

²⁶⁴ Article 7 Report (covering 2023), Form F.

²⁶⁵ Email from Namrita Singh, GICHD, 21 May 2024.

²⁶⁶ 2024 Article 4 deadline Extension Request, Part B, Detailed Narrative, pp. 4 and 22.