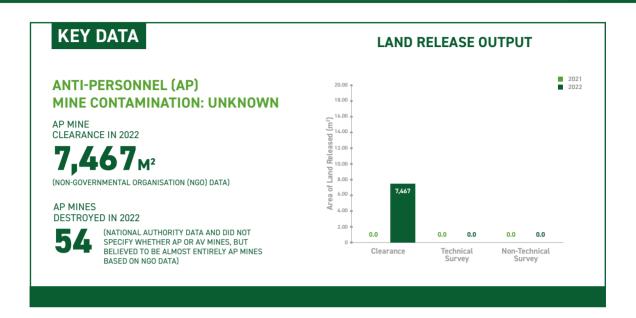
LAO PDR





KEY DEVELOPMENTS

In 2022, two dedicated mine clearance teams from The HALO Trust (HALO) were clearing a former Royal Lao Army military base in a district of Savannakhet province. As at August 2023, Humanity & Inclusion (HI) was awaiting funding for a project to enable it to build national capacity, in partnership with UXO Lao, for landmine survey and clearance in Houaphanh province. The National Regulatory Authority (NRA) is developing capacity to be able to undertake quality assurance (QA)/quality control (QC) of mine clearance with the support of the United Nations Development Programme (UNDP).

RECOMMENDATIONS FOR ACTION

- The Lao People's Democratic Republic (Lao PDR) should accede to the Anti-Personnel Mine Ban Convention (APMBC) as a matter of priority.
- Lao PDR should clear anti-personnel (AP) mines in areas under its jurisdiction or control as soon as possible, consonant with its obligations under international human rights law.
- Lao PDR should commission and publish a detailed assessment of mined areas.
- In light of the continuing reports by clearance operators of AP mines being encountered during cluster munition remnant survey (CMRS) and roving tasks, the NRA should consider convening a sector-wide meeting to discuss National Standards, accreditation, and procedures for addressing mine contamination. This process might benefit from the establishment of a technical working group specifically for landmines.
- The NRA should ensure that its Information Management System for Mine Action (IMSMA) database can easily disaggregate AP mines from anti-vehicle (AV) mines.

DEMINING 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 & Inclusion (HI)

- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)
- Commercial operators

OTHER ACTORS

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

UNDERSTANDING OF AP MINE CONTAMINATION

While by far the greatest contamination in Lao PDR is from explosive remnants of war (ERW), in particular cluster munition remnants (CMR)¹, Lao PDR is also contaminated by AP mines and AV mines. The extent of the contamination is not, however, known. During the Indochina conflicts of the 1960s and 1970s, all sides in the war laid AP mines, particularly around military installations and patrol bases. Mined areas also exist in some border regions as a legacy of disputes or tensions with or within neighbouring countries.²

A 1997 survey by HI found mines in all 15 provinces it surveyed, contaminating a total of 214 villages.³ AP mines it discovered included United States (US)-manufactured M7, M16, and M14 mines; Vietnamese MBV-78A1 mines; and Soviet POMZ mines.⁴ In 2023, HI also found M2A1 bounding fragmentation mines.⁵ As at March 2022, HI had identified 54 suspected mined areas in 22 villages in Houamuang district of Houaphanh province, where it is currently operating.⁶ The figure remained the same as at April 2023, and HI was awaiting confirmation of funding for a national capacity building project, in partnership with UXO Lao, on landmine survey and clearance in Houaphanh province.⁷

Across Lao PDR as a whole, the NRA has reported that "gravel mines" (US air-dropped AP mines) had all degraded, but remaining mine types included M14 blast mines, M16 bounding fragmentation mines, M18 claymore mines, and M15 and M19 blast AV mines, as well as Soviet or Chinese PMN blast AP mines, POMZ fragmentation mines, and TM41, TM46, and TM57 AV mines.8 HI has found increasing evidence that few of the M16 mines are still in a full working state. Most were exposed to fire, the expelling charge is missing, or there was no longer a trip wire present.9

The remote location of many mined areas means that mines have negligible impact and are not a clearance priority. The NRA, however, had formerly observed that "with a steady expansion of land use 'mined areas' will become areas for growing concern." Demographic pressures regarding land will lead to people accessing remote places that could be mined. Action on locating and recording mined areas therefore needs to occur before the older generations that know about the presence of landmines disappear.

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 and is chaired

by the Minister of Labour and Social Welfare.¹² A 2018 decree, "On the Organisation and Operations of the National Regulatory Authority for UXO in Lao PDR" defines the

- See Mine Action Review's Clearing Cluster Munition Remnants 2023 report on Lao PDR for further information.
- 2 NRA website, "UXO types: Mines", accessed 9 March 2020 (page no longer online).
- 3 HI, "Living with UXO, National Survey on the Socio-Economic Impact of UXO in Lao PDR", Vientiane/Brussels, 1997, p. 7.
- 4 Emails from Julien Kempeneers, Humanitarian Mine Action Coordinator, HI, 27 August 2019, and 25 March and 29 June 2020.
- 5 Email from Yvon Le Chevanton, Technical Survey/Clearance Operations Manager, HI, 10 August 2023.
- 6 Email from Julien Kempeneers, HI, 30 March 2022.
- 7 Email from Alexandra Letcher, Regional Armed Violence Reduction (AVR) Specialist Mekong and Myanmar-Thailand, HI, 6 April 2023.
- 8 NRA website, "UXO types: Mines", 9 March 2020 (page no longer online).
- 9 Email from Alexandra Letcher, HI, 6 April 2023.
- 10 NRA website, "UXO types: Mines", 9 March 2020 (page no longer online).
- 11 Email from Julien Kempeneers, HI, 25 March 2020.
- 12 Convention on Cluster Munitions (CCM) Extension Request 2019, Part B, Detailed Narrative, p. 18.

position, role, duties, rights, organisational structure, and the working principles and methods of the NRA.¹³ A new National Decree on unexploded ordnance (UXO) management was endorsed by the government in July 2022.¹⁴ In an important development for the UXO sector, the NRA was set to be moved from under the Ministry of Labour and Social Welfare to the Ministry of Foreign Affairs from August 2023, which would likely demand a period of transition.¹⁵

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, and coordination of the implementation of the national strategy nationwide, as well as NRA planning and coordination functions at the provincial and district levels. The current director of the NRA has been in post since June 2019.

The main focus of the NRA is on addressing the massive contamination from CMR and other ERW. However, responsibility for the clearance of mined areas in Lao PDR is also led by the NRA. According to the National Strategy for the UXO Sector (2021–30), "Safe Path Forward III", from the beginning of formal UXO clearance in 1996 until 16 December 2021, a total of 2,379 landmines were destroyed (AP mines and AV mines were not disaggregated in the data). 19

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. Enther 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. Additionally, with US financial support, NPA is providing assistance to the NRA under a three-year IM Capacity Development project for 2022–2024. The project aims to develop and strengthen the information management

capacity of the NRA at the national, provincial and district levels, in nine provinces and fifty-five districts.²²

In 2022, UXO Lao received a range of capacity development support through various implementing partners.²³ HI provides capacity development support to the provincial NRA in Houaphanh and Phongsaly provinces.²⁴

In 2019, Lao PDR reported it had begun to create a Country Coalition "by modifying the existing mechanism through the Round Table Meeting process". However, progress had been delayed by the outbreak of COVID-19.25 In May 2022, Lao PDR announced during the Convention on Cluster Munitions (CCM) intersessional meetings that a Country Coalition had been set up under the existing name of the "UXO Sector Working Group" (SWG), which the national authorities had developed from their existing coordination mechanism.26

International clearance operators continued to have good cooperation and coordination with the NRA at the national, provincial, and district levels,27 but the multiple layers of bureaucracy in Lao PDR remained a challenge. Humanitarian clearance operators are involved in key decision-making processes by the NRA, including through participation in sector meetings and Technical Working Groups (TWG) meetings, and through discussions during other formal and informal meetings and field visits.²⁸ There are four TWGs: for survey and clearance, IM, explosive ordnance risk education (EORE), and victim assistance (VA), each of which meets quarterly.²⁹ One of the biggest challenges encountered by operators in Lao PDR continues to be the procedure for memoranda of understanding (MoUs), which remains lengthy, complex, and labour-intensive. That said, UXO Sector MOUs are regularly approved quicker than most of the other sectors of Development Cooperation in Lao PDR30 and the NRA is attempting to improve the situation (See the Mine Action Review's Clearing Cluster Munition Remnants 2023 report on Lao PDR for further information).

- 15 Email from Olivier Bauduin, UXO Program Advisor, US Embassy Vientiane, 21 July 2023.
- 16 CCM Extension Request 2019, Part B, Detailed Narrative, p. 18.
- 17 Email from Olivier Bauduin, US Embassy Vientiane, 29 September 2020.
- 18 Email from Douangsy Thammavong, Deputy Director, NRA, 20 June 2022.
- 19 Lao PDR, "Safe Path Forward III", p. 5.
- 20 Email from Rupert Leighton, Chief Technical Advisor, UNDP, 14 August 2023.
- 21 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.
- 22 Email from Katherine Harrison, Programme Coordination, NPA, 15 August 2023.
- 23 Email from Vilaivanh Thongmanivong, Chief of Programme Office and Public Information Unit, UXO Lao, 25 May 2023.
- 24 Email from Alexandra Letcher, HI, 6 April 2023.
- 25 Statement of Lao PDR on International Cooperation and Assistance, Second Convention on Cluster Munitions (CCM) Review Conference (Part 1, virtual meeting), 25–27 November 2020.
- 26 Statements of Lao PDR on International Cooperation and Assistance, CCM Intersessional meetings, Geneva, 16–17 May 2022; and CCM Tenth Meeting of States Parties, 30 August-2 September 2022.
- 27 Emails from William Hunter, HALO, 8 May 2023; Alexandra Letcher, HI, 6 April 2023; and Portia Stratton, MAG, 15 May 2023; and Katherine Harrison, NPA, 9 May 2023.
- 28 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.
- 29 CCM Extension Request 2019, Part B, Detailed Narrative, p. 25; and emails from Alexandra Letcher, HI, 6 April 2023; and Rupert Leighton, UNDP, 18 July 2023.
- 30 Email from Olivier Bauduin, US Embassy Vientiane, 21 July 2023.

¹³ Government Decree No. 67, dated 12 February 2018; CCM Extension Request 2019, 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.

¹⁴ Government Decree No. 210, dated 29 July 2022. Presentation by Chomyaeng Phengthongsawat, Director General, NRA, minutes of the UXO Sector Working Group meeting, 16 September 2022.

ENVIRONMENTAL POLICES AND ACTION

Lao PDR has a national mine action standard (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 with which UXO sector activities should comply.³¹ In the new Safe Path Forward III strategy, the NRA says that climate change is a challenge to addressing UXO issues in the Lao PDR.³² It also reiterates that mine action activities have to be "compliant with national standard and Environmental Protection Law (EPL) of Lao PDR.³³

For more details on measures being taken by HI, HALO, Mines Advisory Group (MAG), Norwegian People's Aid (NPA), and UXO Lao, to take the environment into consideration during the planning and tasking process for survey and clearance of explosive ordnance in Lao PDR, see Mine Action Review's *Clearing Cluster Munition Remnants* 2023 report on Lao PDR.

GENDER AND DIVERSITY

For details regarding gender and diversity in Lao PDR's survey and clearance programme, please see Mine Action Review's *Clearing Cluster Munition Remnants 2023* report on Lao PDR.

INFORMATION MANAGEMENT AND REPORTING

In November 2019, Lao PDR stated at the Fourth Review Conference of the APMBC in Oslo, that it was in the process of preparing a voluntary APMBC Article 7 report.³⁴ However, as at July 2023, a voluntary report had yet to be submitted. The only voluntary Article 7 report submitted previously by Lao PDR was in 2011.

As yet, no distinction is made in the NRA's reporting between AP mines and AV mines. The NRA records all mines as landmines. In the national IMSMA database, an item is first registered as a landmine (rather than as an AP mine or AV mine), and then the model type/number is recorded, from which it is then possible to extrapolate AV and AP mines.³⁵

For details regarding Information Management and Reporting in Lao PDR's survey and clearance programme more broadly, please see Mine Action Review's *Clearing Cluster Munition Remnants 2023* report on Lao PDR.

PLANNING AND TASKING

A new 10-year National Strategy for the UXO Sector (2021–30), Safe Path Forward III, was developed under the leadership of the NRA with support from UNDP and in consultation with relevant stakeholders. The new strategy, which was adopted in January 2023, was developed based on the results of the evaluation of the implementation of the previous ten-year strategy, Safe Path Forward II and in line with Sustainable Development Goal (SDG) 18 under the 2030 SDG agenda. The target by 2030, is to have identified 250,000 hectares (2,500km²) of confirmed hazardous area (CHA) and conducted clearance of 100,000 hectares (1,000km²) of land for agricultural and development purposes. While Safe Path Forward III includes reference to landmines, it does not set out any specific strategy or targets for the survey or clearance of mined areas.

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.³⁹ Consultative workshops to support the development of annual sector-wide work plans have taken place to varying degrees in subsequent years. While there were sector-wide work plans in 2022 and 2023,⁴⁰ the NRA had not shared these with international non-governmental organisations (NGOs).⁴¹

- 31 Email from Katherine Harrison, NPA, 9 May 2023.
- 32 Lao PDR, "Safe Path Forward III", p. 12.
- 33 Ibid., p. 17.
- 34 Statement of Lao PDR, Fourth APMBC Review Conference, Oslo, 29 November 2019.
- 35 Email from Rupert Leighton, UNDP, 14 August 2023.
- 36 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.
- 37 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.
- 38 Lao PDR, "Safe Path Forward III", p. 14.
- 39 Email from Bouala Thongsavanh, NRA, on behalf of Phoukhieo Chanthasomboune, NRA, 30 April 2018; and interview with Phoukhieo Chanthasomboune, NRA, Vientiane. 2 May 2018.
- 40 Email from Khammoungkhoun Southivong, NRA, 8 June 2023.
- 41 Emails from Amanda Shiel, UXO Unit Programme and Partnership Support Officer, UNDP, 4 September 2020; Olivier Bauduin, US Embassy Vientiane, 29 September 2020; Rebecca Letven, MAG, 26 March 2021 and 30 March 2022; Katherine Harrison, NPA, 22 March 2021 and 9 May 2023; Julien Kempeneers, HI, 16 March 2021; and Cameron Imber, HALO, 31 March 2022.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Lao PDR's National Standards make a clear distinction between UXO clearance (including CMR) and mine clearance, and, for the purpose of the National Standards, "UXO does not include hand-laid mines but it may include disposal of 'one off' mines located during EOD roving tasks." As such, the National Standard on UXO clearance only relates to UXO clearance and not to mine clearance. According to Lao PDR's National Standard on Mine Clearance Operations (Chapter 12), "the systematic locating and clearing of hand-laid mines in known or suspected mined areas, are not commonly conducted in Lao PDR. However, it is known that mined areas exist in Lao PDR and at some stage in the future these areas will have to be cleared."

According to Chapter 7 of the National Standards, if a mine is located during UXO clearance, work is immediately ceased and "the clearance supervisor should then assess the situation and determine if the mine is a random one or part of a mined area. If the mine is assessed as being part of a mined area, work on the site is to cease and the matter reported to the tasking authority. Details of mined areas are to be reported by the clearance organisation concerned to the NRA head office and the NRA provincial office." The standards also note that: "Some relatively small-scale mine clearance has been carried out by UXO Lao and by commercial operators in the past but mine clearance operations are not regularly carried out as a deliberate mine action activity in Lao PDR."

According to the National Standards: "Mine clearance operations are considerably more dangerous than UXO area clearance operations and the requirements and procedures for mine clearance are more stringent. When mine clearance operations are necessary, they are only to be carried out by accredited mine clearance organisations with personnel with the appropriate training and equipment and specific mine clearance operating procedures."

With respect to landmines, the National Standards are in need of being brought up to date in accordance with the latest International Mine Action standards (IMAS). According to its most recent reporting under Protocol V of the Convention on Certain Conventional Weapons (CCW), covering 2021, the standards section of the NRA reviews the national standards at least every three years and all mine action stakeholders are invited to participate in these reviews. According to Lao PDR's Protocol V transparency report, UXO/mine action organisations and other UXO/mine action stakeholders are encouraged to make written recommendations for changes to the national standards at any time, on which the NRA will seek input from other stakeholders and consider the recommendation and the inputs received.

HALO and HI have both provided the NRA with suggested amendments to the national standards regarding landmine survey and clearance.⁴⁹ The NRA has said that the national standards related to AP mines were being reviewed.⁵⁰ While the current national standards do already allow for mine clearance and set parameters for safe distances and other relevant issues, there is a need to strengthen national institutional knowledge on mine clearance, including in relation to QA and training.⁵¹ UNDP, with Canadian funding, is supporting the development of a revised national standard on landmines, in addition to supporting a QA/QC project which will involve training the QM department of the NRA to be able to undertake QA/QC of landmine clearance. The planned start date for the project was Q4 2023.⁵²

NGO clearance operators in Lao are not currently formally accredited for mine clearance and permission for explosive ordnance disposal (EOD) is given on a case-by-case basis when landmines are found.⁵³ UXO Lao said that, working in collaboration with Tetra Tech, it was revising its standard operating procedure for addressing mine contamination. It expected the updated standard operating procedure (SOP) to have been completed by the end of 2022,⁵⁴ but as at May

⁴² Lao PDR National UXO/Mine Action Standards (NS), "Chapter 0: Introduction and Glossary", accessed on NRA website on 29 July 2021, p. xi.

⁴³ Lao PDR NS, "Chapter 7: UXO Clearance Operations", accessed on NRA website on 29 July 2021, p. 5.

⁴⁴ Lao PDR NS, "Chapter 12: Mine Clearance Operations", accessed on NRA website on 29 July 2021, p. 5.

⁴⁵ Lao PDR NS, "Chapter 7: UXO Clearance Operations", p. 13.

⁴⁶ Lao PDR NS, "Chapter 12: Mine Clearance Operations", accessed on NRA website on 29 July 2021, p. 5, note 1.

⁴⁷ Ibid., p. 5.

⁴⁸ CCW Protocol V Article 10 Report (covering 2022), Form F.

⁴⁹ Emails from Cameron Imber, HALO Laos, 31 March 2022; and Julien Kempeneers, HI, 30 March 2022.

⁵⁰ Email from Chomyaeng Phengthongsawat, NRA, 21 June 2021.

⁵¹ Email from Rebecca Letven, MAG, 26 March 2021.

⁵² Rupert Leighton, UNDP, 14 August 2023.

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

⁵⁴ Email from Nouphin Phimmasy, UXO Lao, 4 June 2022.

⁵⁵ Email from Vilaivanh Thongmanivong, UXO Lao, 25 May 2023.

2023 this had still to occur.⁵⁵ HALO drafted a mine clearance SOP and submitted it for approval to the NRA in 2021.⁵⁶ As at May 2023, HALO had yet to receive any feedback on the SOP.⁵⁷ though it had received the tacit approval of the NRA to start mine clearance. HALO's first dedicated mine clearance teams were deployed in

November 2021.58

In 2022, two HALO mine clearance teams were conducting operations on the first dedicated mine clearance task in Lao PDR, a former Royal Lao Army military base in Phalanxai district, Savannakhet province, where there was significant contamination from fragmentation mines. HALO said it was eager to work with the NRA and other operators to help them build capacity in this area.⁵⁹ HALO conducted a manual mine clearance training course in June 2022, attended by 20 HALO staff, two NRA QM staff, and two personnel from HI.⁶⁰ HI reported good discussions between HALO and HI EOD relating to methodologies, equipment, detectors, and training.⁶¹

HI believes that reporting on the presence of landmines needs to be strengthened, and that survey is needed before defining an area as a minefield and areas should instead be referred to as suspected mined areas until completion of survey.62 HI said that, in practice, determining whether a mine is part of a bigger mined area can prove challenging, especially if field-based personnel are not trained (or equipped) to address AP mines. Landmines may, for example, have been left behind, moved by villagers, or washed away by water, and areas where there is no strong evidence that further mines are planted or emplaced might be reported or wrongly interpreted as mined areas.63 HI also noted that "additional information should be gathered to add weight to the conclusions; namely the location of wartime military bases and location of other landmine finds",64 as well as whether mines discovered by members of the local community had been moved.

During non-technical survey (NTS) and risk education visits, HI interviews older generations to understand the village history during the war, including anti-aircraft gun and other military positions; often M16 and M14 mines were laid around defensive positions. HI also collects information on injuries sustained in forests from mines and on areas

not developed or which are not accessed due to previous accidents or reports of injured animals, or mines being detonated by fires during "slash and burn" operations. In some instances, villagers had collected or moved mines they had discovered.⁹⁵

HI suggests that specific markings should be displayed where the mine was found/an accident happened. 66 At the July 2019 TWG meeting on clearance, HI proposed an addendum to the national standard to help address community interaction with mines. 67 Landmines continue to be a regular topic of discussion in TWG meetings and other meetings, and HI believes it would be useful to have a TWG with the NRA and interested operators, specifically for landmines, as had been suggested by the NRA at one point. 68 However, as at May 2023, no such TWG had yet been established. 69

In addition, HI believes that the NRA should coordinate and organise training, and adjust the standards accordingly, with regard to CMRS in areas also affected by mines. HI developed a "clearance while surveying" (CWS) procedure, to allow for safe release of CMR in areas where there is a potential risk of landmines. CWS involves the commencement of full clearance from the evidence point. To HI revised its clearance SOP to integrate CWS. As at April 2023, the SOP had yet to be formally approved, but the NRA had deemed the procedure adequate, including during QA and QC inspections and during a TWG presentation.

With respect to spot tasks, HI will only destroy mines that are clearly identified in a location where the munition can be accessed safely.72 If mines are discovered during cluster munition survey or clearance operations, the task is immediately suspended and the discovery reported to HI's Operations Manager, who then visits the site to assess the situation. If the discovered mine was not emplaced and was found in land used for agriculture it is destroyed. Additional information is obtained about the threat of mines from the landowner and a risk assessment conducted before deciding whether or not operations are allowed to resume. If the mine found is emplaced and is in an area which has not been developed, the task is halted, additional data collected, and external boundaries of the site are tentatively identified (historically safe tracks). A mine report is then submitted by HI to the NRA.73

- 56 Email from Cameron Imber, HALO, 14 March 2021.
- 57 Email from William Hunter, HALO, 8 May 2023.
- 58 Email from Cameron Imber, HALO, 31 March 2022.
- 59 Ibid.; and email from Olivier Bauduin, US Embassy Vientiane, 23 August 2022.
- 60 Email from William Hunter, HALO, 8 May 2023.
- 61 Emails from Julien Kempeneers, HI, 30 March 2022; and Alexandra Letcher, HI, 6 April 2023.
- 62 Email from Alexandra Letcher, HI, 6 April 2023.
- 63 Emails from Julien Kempeneers, HI, 27 August 2019 and 30 March 2022.
- 64 Emails from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020; and Minla Nanthavong, HI, 2 August 2021.
- 65 Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020.
- 66 Email from Alexandra Letcher, HI, 6 April 2023.
- 67 Email from Julien Kempeneers, HJ, 27 August 2019.
- 68 Email from Julien Kempeneers, HI, 16 March 2021.
- 59 Emails from Khammoungkhoun Southivong, NRA, 8 June 2023; William Hunter, HALO, 8 May 2023; Alexandra Letcher, HI, 6 April 2023; Portia Stratton, MAG, 15 May 2023; and Katherine Harrison, NPA, 9 May 2023.
- 70 Email from Julien Kempeneers, HI, 25 March 2020.
- 71 Emails from Julien Kempeneers, HI, 30 March 2022; and Alexandra Letcher, HI, 6 April 2023.
- 72 Email from Julien Kempeneers, HJ, 25 March 2020.
- 73 Email from Julien Kempeneers, on behalf of Yvon Le Chevanton, HI, 25 March 2020.

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; commercial clearance operators; and humanitarian teams of the Lao People's Army (Unit 58).

Survey and clearance by the humanitarian operators focus almost exclusively on addressing contamination from CMR and other ERW. HALO does, however, have two mine clearance teams with 34 operational staff (including team leaders) and one survey team that has been trained in NTS of suspected mined areas.²⁴

For further details on CMR survey and clearance capacity of humanitarian operators, see Mine Action Review's *Clearing Cluster Munition Remnants 2023* report on Lao PDR.

LAND RELEASE OUTPUTS AND PROGRESS TOWARDS COMPLETION

LAND RELEASE OUTPUTS IN 2022

HALO reported clearing 7,467m² through manual mine clearance in Phalanxai district of Savannakhet in 2022, destroying 13 AP mines. All other mines found and destroyed by NGOs and UXO Lao in 2022 were during EOD spot tasks.

Lao PDR's CCM Article 7 report covering 2022 declared more than $54.37 \,\mathrm{km^2}$ of CMR clearance, with the destruction of 64,516 submunitions, 89 big bombs, 20,473 other items of UXO, and 54 mines. This compares to 56 mines destroyed from a total of 81,646 items of explosive ordnance in 2021. Humanitarian demining organisations reported finding and destroying a total of 50 AP mines and 1 AV mine in 2022, compared to 62 AP mines reported in 2021. This excludes AP mines destroyed by the Lao army.

SURVEY IN 2022

Neither HI, MAG, NPA, nor UXO Lao surveyed any mined area in 2022.

HALO confirmed the remnants of a large minefield on the outskirts of Savannakhet city, the second largest city in Laos. The minefield had been laid to protect the Royal Laos Army's Military Region 3 Headquarters Weapons Depot. Though most of the minefield has long ago been ploughed or levelled for housing, a few sections of the minefield remain untouched. Locals reported many accidents in the area involving people and animals between 1975 and 1990. As the NRA has not yet created a mechanism for the reduction or cancellation of land, no release of mined area through survey took place in 2022.⁷⁷

CLEARANCE IN 2022

With the exception of HALO, none of the other humanitarian demining organisations (HI, MAG, NPA, and UXO Lao) cleared any mined area in 2022. However, they did each discover a small number of AP mines during CMR survey, clearance, or EOD spot tasks in 2022 (see Table 1). According to operator data a total of 50 AP mines and 1 AV mine were discovered and destroyed in 2022. This excludes mines found and discovered by the Lao People's Army (Unit 58).

According to data contained in Lao PDR's CCM Article 7 transparency report, 54 mines were cleared in 2022, with no disaggregation between AP and AV mines.⁷⁸

- 74 Email from William Hunter, HALO, 8 May 2023.
- 75 CCM Article 7 Report (covering 2022), Form F.
- 76 Email from Douangsy Thammavong, NRA, 20 June 2022; CCW Protocol V Article 10 Report (covering 2021), Form A; CCM Article 7 Report (covering 2021), Form F; and NRA Annual Project Progress Report for 2021 reporting period.
- 77 Email from William Hunter, HALO, 8 May 2023.
- 78 CCM Article 7 Report (covering 2022), Form F.

Table 1: Mines discovered in 2022 (based on operator data)79

Operator	AP mines	AV mines	Comments
HALO	17	0	Thirteen AP mines were discovered and destroyed during clearance. In addition, one surface AP mine was found and destroyed during survey, and a further three surface AP mines were destroyed by HALO during EOD spot tasks.
н	4	0	All found and destroyed during EOD spot tasks.
MAG	19	0	Seventeen AP mines were found and destroyed during clearance; one during technical survey; and one during an EOD spot task.
NPA	9	1	Four AP mines and one AV mine were destroyed during CMRS; one AP mine during clearance; and four AP mines during EOD spot tasks.
UXO Lao	1	0	
Totals	50	1	

HALO cleared 7,467m² through manual mine clearance in Phalanxai district of Savannakhet in 2022, destroying 13 AP mines. In addition, HALO destroyed three surface AP mines during EOD spot tasks (one in Atsaphangthong district and two in Phalanxai district) and one surface AP mine during survey in Champhon district. HALO did not find any AV mines in 2022. While locals reported seeing "plate-shaped" items of UXO in Phalanxai and Nong districts, HALO was not able to confirm whether any of these items were AV mines.⁸⁰

HI found and destroyed 4 emplaced AP mines during roving spot tasks in 2022. Three were found in Houameuang district, Houaphanh province (one POMZ-2M mine with its fuze corroded and peg broken and two M16 mines) and one M16 mine in Phongsaly province. The latter was found in a water course and had lost its fuze.

In addition, HI found four M2A1 bounding fragmentation mines during clearance of a development project in Khao District, Phongsaly province in July 2023. However, some of the 60mm mortar used as the fragmentation projectile was found buried separately from the canister pots, therefore these mines are not considered as having been emplaced. Some were completely buried under the local road. The area where the mines were discovered was found to be in the surroundings of an old French military position. HI halted clearance of the task, upon discovery of the mines.⁸¹

HI did not find any AV mines in 2022, but did find an emplaced M7 AV mine at the end of 2021, in a CHA CMR clearance site in

Houameuang, Houaphanh province. The mine was discovered on a steep area where no tanks/vehicles could access. According to HI, the M603 pressure fuze is given to function under pressure of between only 63kg and 109kg.82

MAG discovered 19 AP mines in 2022: 17 during clearance, 1 during an EOD spot task, and 1 during technical survey, all of which were reported to the NRA. No AV mines were discovered during the year. Discovery of mines did hinder CMRS, as in some cases operations were suspended when it was suspected that the AP mine was an indication of a mined area. In these instances, MAG created and submitted an ESHA to the NRA for further action, and conducted basic EORE safety messaging on mines awareness to the affected communities.⁸³

NPA found and destroyed 9 AP mines in 2022: four during CMRS (one in Houayko village and three in Nalan village, Pathoumphone district, Champasak province); one during clearance in Houayset village, Paksong district, Champasak province; and four during roving EOD tasks (two in Houayset, one in Nongkha village, Paksong district, Champasak province, and one in Nalan village, Pathoumphone district, Champasak province).⁸⁴ In addition, NPA found and destroyed 1 AV mine during CMRS in 2022 in Lichuang village, Paksong district, Champasak Province.⁸⁵

UXO Lao located and destroyed an AP mine in Phin district of Savannakhet province in 2022. $^{86}\,$

PROGRESS TOWARDS COMPLETION

Lao PDR has not set a deadline for completion of AP mine clearance.

⁷⁹ Emails from William Hunter, HALO, 8 May 2023; Alexandra Letcher, HI, 6 April 2023; Yvon Le Chevanton, HI, 10 August 2023; Portia Stratton, MAG, 15 May 2023; Katherine Harrison, NPA, 9 May and 15 August 2023; and Vilaivanh Thongmanivong, UXO Lao, 25 May 2023.

⁸⁰ Email from William Hunter, HALO, 8 May 2023.

⁸¹ Email from Yvon Le Chevanton, HI, 10 August 2023.

⁸² Emails from Alexandra Letcher, HI, 6 April 2023; and Yvon Le Chevanton, HI, 24 August 2023.

⁸³ Email from Portia Stratton, MAG, 15 May 2023.

⁸⁴ Emails from Katherine Harrison, NPA, 9 May and 15 August 2023.

⁸⁵ Email from Katherine Harrison, NPA, 15 August 2023.

⁸⁶ Email from Vilaivanh Thongmanivong, UXO Lao, 25 May 2023.