

SLNMAS 04

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Land Release

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Contents

1. Scope	5
2. Terms and definitions	5
3. General requirements	7
3.1 Land Release Process.....	7
3.2 Land Release Principles	7
4. Criteria for classification of hazardous areas	8
4.1 General	8
4.2 Sources of information.....	9
4.3 Boundaries of hazardous areas	9
5. All Reasonable effort	10
5.1 General.....	10
5.2 Identification of hazardous areas	11
5.2.1 Non-technical survey	11
5.2.2 Marking of hazardous area by NTS team.....	11
5.2.3 Technical survey	11
5.2.4 Multi-task survey.....	12
6. Products of land release	12
6.1 General.....	12
6.2 Cancelled land.....	12
6.3 Reduced land	13
6.4 Cleared land	13
6.5 Specific case: EO hazard spot tasks.....	13
6.6 Handover of land release products	13
7. Risk and Liability.....	14
8. Quality management.....	15
8.1 General.....	15
8.2 Quality assurance.....	15
8.2.1 Accreditation.....	15
8.2.2 Monitoring of MA operators	15
8.3 Quality control.....	15
8.3.1 Quality control of SHA and CHA classification.....	15
8.4 Post land release actions.....	15
8.5 Information management.....	16
8.6 Safety and occupational health.....	16

8.7 Liaison with the local population 16

8.8 Specific efforts..... 16

 8.8.1 Environmental management 16

 8.8.2 Lands of historical and cultural value 17

 8.8.3 Human remains 17

Annex A– Minimum data requirements 19

Annex. B the Land Release Process Map 27

Introduction

A principal objective of mine action is to remove the Explosive Ordnance (EO) from areas where they have been laid or abandoned. Removal of EO from the contaminated areas can be done using manual clearance teams, animal detection system and mechanical asset, either individually or in combination. To ensure effective and efficient use of mine action assets, it is important to develop appropriate processes and methodologies to identify and define the hazardous areas and then deploy the required asset/s to remove the EO hazard from the area.

Although achieving such efficiency might be challenging when dealing with the complex EO contamination in Sri Lanka, however, if properly managed, then the concept and practice of land release will make it possible.

Land Release (LR) is the process of applying all reasonable effort to identify, define, and remove all presence and suspicion of explosive ordnance through non-technical survey, technical survey and/or clearance.

Application of the land release process consists of establishing and improving the definition of where EO are to be found (and where they are not) through the application of all reasonable effort, until it can be shown with justifiable confidence that EO are either not present in an area or, if they were found to be present, have all been destroyed or removed from that area.

In Sri Lanka mine action programme, the LR process consists of three main activities, Non-Technical Survey, Technical Survey and Clearance. The different methodologies for releasing land are detailed in the below relevant chapter of Sri Lanka National Mine Action Standards (SLNMAS):

1. SLNMAS 04.10 Non-technical Survey
2. SLNMAS 04.20 Technical Survey
3. SLNMAS 04.30 Manual Mine Clearance
4. SLNMAS 04.40 Mechanical Demining
5. SLNMAS 04.60 Battle area clearance

1. Scope

This standard describes the land release process in Sri Lanka and establishes the minimum requirements, reasonable efforts, and responsibilities for land release management in Sri Lanka.

This standard was developed based on the International Mine Action Standards (IMAS).

2. Terms and definitions

The following terms and definitions are applicable to this standard, and it is very important that these terms are understood and used during implementation of the Land Release Process.

In this Sri Lanka National Mine Action Standard (SLNMAS) series, the words “shall”, “should” and “may” are used to indicate the intended degree of compliance:

- **shall** is used to indicate requirements, methods or specifications that are to be applied in order to conform to the standard.
- **should** is used to indicate preferred requirements, methods, or specifications; and
- **may** is used to indicate a possible method or course of action.

2.1 all reasonable effort

A minimum acceptable level of effort to identify and document contaminated areas and to remove the presence or suspicion of explosive ordnance. All reasonable effort has been applied when the commitment of additional resources is considered to be unreasonable in relation to the results expected.

2.2 cancelled area

A defined area concluded not to contain evidence of explosive ordnance contamination following the repeated non-technical survey of a suspected hazardous area or a confirmed hazardous area.

2.3 clearance

tasks or actions to ensure the removal and/or the destruction of all Explosive Ordnance from a specified area to a specified depth or other agreed parameters as stipulated by the NMAA/Tasking Authority.

2.4 cleared area

A defined area cleared through the removal and/or destruction of all specified Explosive Ordnance hazards to a specified depth.

2.5 community liaison

Liaison with men and women in communities affected by explosive ordnance to exchange information on the presence and impact of explosive ordnance, create a reporting link with the mine action programme and develop risk reduction strategies. Community liaison aims to ensure that the different community needs and priorities are central to the planning, implementation and monitoring of mine action operations.

2.6 confirmed hazardous area

An area where the presence of explosive ordnance contamination has been confirmed on the basis of direct evidence of the presence of Explosive Ordnance.

2.7 direct evidence

Observations, facts, testimonials and documents confirm the presence of explosive ordnance.

2.8 explosive ordnance risk education

Activities which seek to reduce the risk of injury from EO by raising awareness of women, girls, boys and men in accordance with their different vulnerabilities, roles and needs, and promoting behavioural change. Core activities include public information dissemination, education, and training.

2.9 indirect evidence

Observations, facts, testimonials and documents that indicate the probable presence of explosive ordnance.

2.10 land release

Process of applying all reasonable effort to identify, define, and remove all presence and suspicion of explosive ordnance through non-technical survey, technical survey and/or clearance.

2.11 mine action centre

organisation that, on behalf of the national mine action authority, typically is responsible for planning, coordination, overseeing and in some cases implementation of mine action projects.

2.12 National Mine Action Authority (NMAA)

refers to the government entity, often an interministerial committee, in an EO-affected country charged with the responsibility for broad strategic, policy and regulatory decisions related to mine action.

2.13 non-technical survey (NTS)

Refers to the collection and analysis of data, without the use of technical interventions, about the presence, type, distribution and surrounding environment of explosive ordnance contamination, in order to define better where explosive ordnance contamination is present, and where it is not, and to support land release prioritization and decision-making processes through the provision of evidence.

2.14 reduced land

A defined area concluded not to contain evidence of explosive ordnance contamination following the technical survey of a SHA/CHA.

2.15 residual risk

risk remaining following the application of all reasonable effort to identify, define, and remove all presence and suspicion of explosive ordnance through non-technical survey, technical survey and/or clearance.

2.16 suspected hazardous area (SHA)

An area where there is reasonable suspicion of explosive ordnance contamination on the basis of indirect evidence of the presence of explosive ordnance.

2.17 technical survey (TS)

collection and analysis of data, using appropriate technical interventions, about the presence, type, distribution and surrounding environment of explosive ordnance contamination, in order to define better where explosive ordnance contamination is present, and where it is not, and

to support land release prioritization and decision-making processes through the provision of evidence.

3. General requirements

3.1 Land Release Process

The mine action land release process relies on collection and analysis of information to make evidence-based decisions about explosive ordnance (EO) contaminated areas. The process shall ensure effective and efficient use of demining resources without compromising the quality and safety requirements.

Any decision related to the land release process shall be based on the analysis of information and evidence collected during implementation of NTS, TS and clearance operations.

It includes decisions concerning:

- the identification and classification of hazardous areas which are or certainly contaminated by EO; and
- the release of these areas through NTS, TS, and clearance operations.

The following approaches should be applied during the land release operation as applicable:

a. Initial information screening

Although initial screening of available information does not form part of the LR process, it is a key step to be followed for removal of redundant, incorrect, or duplicate hazard area entries in the databases. This will help better planning and implementation of NTS, TS and subsequent clearance operations.

b. Land release through non-technical survey.

In this context the land can be released through cancellation if NTS based on the analysis of sufficient and justifiable evidence concludes that all or part/parts of the previously recorded SHA or CHA does not contain any EO hazard, and that there is no need for TS and clearance operations.

c. Land release through technical survey:

In this context, land can be released through reduction if technical survey findings based on the sufficient and justifiable analysis of evidence concludes that the whole, or part/parts of the SHA or CHA can be reduced without the need for further clearance operations.

d. Land release through clearance:

There may be situations where parts or whole CHA require full clearance. Full clearance shall be conducted only in those areas where actual EO hazards have been identified through the NTS and TS operations.

The NMAC possesses the authority to direct the MA Operators for carrying out full clearance operation directly, based on the intensity of the EO Contamination.

An illustration of Sri Lanka land release process is available in **Annex B** of this document.

3.2 Land Release Principles

Below are the principles of land release in Sri Lanka mine action programme:

- a) Land release operations (NTS, TS & Clearance) shall be conducted by well trained and qualified staff equipped with the required equipment.
- b) Any new information about previous SHA/CHA or the hazardous areas not recorded in the past shall be assessed and analyzed on the basis of collected evidence.
- c) Hazardous areas should be recorded as SHA and CHA based on the availability, reliability, and analysis of evidence and whether evidence is indirect or direct for each hazard.
- d) Application of effective and efficient NTS and TS should ensure to identify the actual EO contaminated area for clearance operations.
- e) As a normal practice, the land release process should follow a sequential approach and survey should be prioritized over the clearance operations.
- f) Cancelled, reduced, and cleared land shall only be handed over to the community after an evidence-based quality management process certified the output of land release process
- g) Meaningful participation of local communities, including men, women, girls, and boys, should be fully incorporated into the main components of the land release process in order to ensure that information is collected from as a diverse group as possible land that community members have confidence in the land release product following handover, facilitating land use.
- h) All required measure shall be taken to prevent damage to properties, environment, and infrastructures during land release operations.
- i) Marking of the hazardous areas should be considered a key component throughout the land release process to ensure avoiding unintentional entry of local community members into the hazardous areas.

4. Criteria for classification of hazardous areas

4.1 General

Identifying and classifying hazardous areas rely on the analysis of evidence collected from all relevant sources of information to objectively classify the hazardous areas as suspected, confirmed or spot EO hazard.

Any decisions for classification of hazardous areas shall be based:

- On the type, relevance, and credibility of sources of information including the number of key informants; and
- The nature of evidence and their analysis.
- Credibility of sources

The NMAC should organise review of criteria for the classification of hazardous areas considering the findings from comparison and analysis of NTS, TS and clearance results. Classification of hazardous areas to SHA and CHA shall be based on the collection and analysis of EO evidence from reliable and relevant sources.

- a) When the analysis of collected information indicates only indirect evidence or reasonable extrapolation indicates the probable presence of explosive ordnance in a given area, the area shall be classified as a SHA.

- b) When the analysis of collected information indicates direct evidence or reasonable extrapolation indicates the confirmed presence of explosive ordnance in a given area, the area shall be classified as CHA.
- c) If an area is inaccessible, or if there is insufficient and limited information available about EO contamination, then such areas should not by default be recorded as SHA. Rather, SHAs shall be reported and recorded on the base of sufficient and justifiable indirect evidence.
- d) An area shall not be reported as SHA/CHA only because people are not using it due to the fear of EO contamination. Rather, fear needs to be substantiated with collection and analysis of other evidence before an area is recorded as an SHA or CHA.

It is important to note that if the analysis of collected information indicates only a spot EO hazard, then EO hazard spot should be reported.

When no evidence is collected during NTS operations, no classification applies and no hazardous area or EO hazard spot shall be recorded.

4.2 Sources of information

Identifying and accessing all relevant sources having potential information on the presence or the absence of EO is part of all reasonable efforts. Evidence may be obtained from various sources including:

1. Key informants.
 - Military or other combatants who have been involved in fighting and know about the background of EO contamination.
 - Community members who have been injured as a result of EO contamination.
 - Community members who have witnessed EO accidents involving humans or livestock.
 - Community members who physically observed the EO hazard items
 - Other community members who know about the conflict history and EO contamination in the village
2. historical records of NTS, TS and clearance operations
3. available military maps or records of EO contamination.
4. satellite imagery.
5. Social media.

Annex A of SLNMAS 4.10 on NTS provides more details about possible sources and their categorisation.

4.3 Boundaries of hazardous areas

The MA operators involved in the land release should ensure to properly identify the boundaries of the SHA and CHA. The boundaries of CHA shall be associated with areas where there is direct evidence of the presence of EO in light of analysis of contamination characteristics, justifies doing so. Adjacent or surrounding areas that present only indirect evidence of the presence of EO should continue to be defined as SHA. In all cases boundaries should be defined on the basis of evidence and analysis in order to avoid including excessive areas.

5. All Reasonable effort

5.1 General

As part of all reasonable efforts, a well-documented and evidence-based land release process should be established. Land release operations should ensure with a sufficiently high level of confidence, that the EO contaminated areas have been identified, recorded and released from suspicion or presence of EO and that there is no longer any evidence that the area contains EO contamination.

The required level of confidence that the land is free from EO contamination shall remain the same, whether cancelled, reduced or cleared.

In the land release process, all reasonable effort includes but not limited to:

- a. Identification and assessing all available sources of information.
- b. Establishing and maintaining liaison with the community
- c. Deployment of qualified and gender balanced teams for information collection with the capability to speak Tamil and reach all different groups of community informants.
- d. Undertaking efforts to understand the nature and characteristics of contamination within the area.
- e. Proper identification and development of suitable mechanism of access to all relevant sources of information, including available historical records, former combatants, affected female and male community members
- f. Analysis of previous and newly collected data to make evidence-based decisions.
- g. Establishing a well-functioning quality management system for accreditation of MA operators and monitoring of land release operations
- h. Mine action organizations involved in land release shall be accredited to ensure they can meet the requirements for all reasonable effort.
- i. Prioritizing the use of most productive assets and methodologies for land release operations that should also meet minimum requirements for safety and effectiveness.
- j. Monitoring of land release operations should demonstrate that all reasonable efforts are applied in accordance with the accreditation agreement and the requirements issued through the tasking order.
- k. Quality control (QC) of land release outputs shall demonstrate that the requirements for the application of all reasonable efforts have been met.
- l. Establishing and maintaining well function Information management system including developing field operations reporting forms
- m. Establishing and maintaining appropriate and effective communication systems to ensure that stakeholders understand, agree with and accept the land release process.

5.2 Identification of hazardous areas

NTS and TS shall be used to identify and confirm the precise location and boundaries of hazardous areas for clearance operations.

5.2.1 Non-technical survey

The NMAC coordinates the completion survey of selected GNs, based on interviews with key informants to identify any unidentified/unreported/unrecorded EO contamination. If GN visits result in evidence and/or suspicion of further EO contamination, completion survey teams will inform NMAC before appropriate land release activities (NTS, TS and/or clearance) are implemented.

The NMAC shall direct MA operators to conduct NTS to confirm or deny the suspicion of EO presence reported by the completion survey teams. This may include further refinement of the precise location and boundaries of new or previously recorded SHA or CHA.

NTS methodology should include:

- a. Desk assessment and analysis of available information including historical data, military records, satellite imagery, existing minefield maps and records, the new information collected through completion survey process.
- b. Planning the survey including coordinating with the relevant community members
- c. Meeting with female and male community members and interviewing the key informants.
- d. Visiting the suspected hazardous area from a safe location.
- e. Analysing the findings
- f. Completing relevant reports
- g. Debriefing the community.
- h. Final check of the reports and submission of the reports

MA operators conducting the NTS operations shall report the NTS activities to NMAC using the standard reporting forms.

5.2.2 Marking of hazardous area by NTS team

- a. The marking of SHA and CHA shall effectively warn the population and prevent unintentional entry into the EO hazardous area.
- b. MA operators conducting NTS shall mark the SHA and CHA identified by their own NTS teams.
- c. At minimum, NTS teams shall be capable of installing improvised marking on the outside of the SHA and CHA in a safe place.
- d. Once a NTS team identified a SHA or CHA, it shall:
 - Install improvised marking from a safe place; and
 - Inform the local population about the SHA or CHA and the installed marking.
- e. NTS team may limit the installation of improvised marking to places from which known or assessed land users would normally access the hazardous area.
- f. Once the hazardous area report is accepted by the NMAC, the relevant MA operator should install temporary marking as soon as possible.
- g. Once a hazardous area is cancelled, reduced or cleared, the marking shall be removed from the perimeter of the cancelled, reduced or cleared area before releasing it to the beneficiaries through the land release certificate.

5.2.3 Technical survey

SLMAS 04.20 details national requirements and preferences for TS.

- a. A technical survey task may be conducted using a single capacity such as manual demining, mechanical assets, animal detection systems or a combination of several capacities.
- c. In any case, the methodology for a technical survey task shall meet the requirements as per the accreditation and task order issued by the NMAC.
- d. Upon receipt of the task order issued by the NMAC, the MA operator shall prepare and submit a task implementation plan to the NMAC. The task implementation plan shall be approved by the NMAC before the technical survey starts.
- e. In areas classified as SHA in accordance with the present standard, a technical survey shall be conducted. If explosive ordinance is confirmed during the technical survey, the area shall then be classified as a CHA. If no explosive ordinance is detected, then the area shall be reduced.
- f. In areas classified as CHA in accordance with the present standard, technical survey shall be conducted when:
 - (1) The nature and condition of the contamination is unknown or not sufficiently known.
 - (2) The boundaries of the CHA remains open to doubt. Areas of a CHA that are confirmed not to contain direct physical evidence of the presence of EO shall be reduced.

5.2.4 Multi-task survey

NTS and TS are two separate tasks. However, multi-disciplinary teams may also be employed to conduct NTS and TS as part of a single task to promote efficiency and productivity.

In this case, multi-disciplinary teams shall meet the requirements, including the certification, for both NTS and TS.

6. Products of land release

6.1 General

The MA operator involved in the land release operations shall establish high degree of confidence that the land release product whether it is cancelled land, reduced land, or cleared land has no more evidence of EO contamination and is safe for use by the community. This assurance can only be obtained after all necessary steps have been taken to investigate the presence of EO contamination and, if confirmed, to remove it. Accordingly, at the initial survey conducted by the MA operators, they should determine the expected use of land which may lead to better specify the depth of clearance as depth may have different effects based on the use of the land.

6.2 Cancelled land

Cancelled land is the product of NTS operations conducted in the previously recorded hazardous area. This is referred to as repeated survey of the SHA or CHA. The decision to conduct a repeated survey should be based on the collection and analysis of new information indicating that the initial identification or classification could be incorrect and needs to be updated; for example, information indicating that part/parts or an entire area classified as SHA/CHA is now actually used by locals.

The entire SHA or CHA should be cancelled if cancellation criteria met for the entire area. The area should be partially cancelled if cancellation criteria met for a portion of the area only. When an area is partially cancelled the coordinates of the remaining SHA or CHA shall be reported to the NMAC.

The low impact of a SHA or CHA on the community shall not be used as criteria for cancellation of the area. Rather it should be given a low priority for future TS or clearance operations.

Criteria for cancellation are defined in the annexe C of SLNMAS 4.10 on Non-Technical survey.

Cancelled land shall be handed over in conformance with section 6.6 of this standard.

6.3 Reduced land

If the TS concludes that no evidence indicates the presence of EO, the SHA or CHA shall be reduced. The entire area shall be reduced if no evidence was found in the entire area. The area shall be partially reduced if evidence was collected for a portion of the area only. When an area is partially reduced the coordinates of the remaining CHA shall be reported to the NMAC. Reduced land shall be handed over in conformance with section 6.6 of this standard.

6.4 Cleared land

Removing the EO hazard through clearance operations should only be conducted in the area specified following conduct of NTS or TS.

Clearance may be conducted using a single capacity such as manual demining, mechanical assets, animal detection systems or a combination of several capacities. In any case, the methodology for a clearance task shall meet the requirements for clearance as per the accreditation and task order issued by the NMAC.

Upon receipt of the task order issued by NMAC, the MA operator shall prepare and submit an **initial** Task Execution Plan (TEP) to the NMAC. The initial TEP Shall be approved by the NMAC before the clearance starts. A **detailed** TEP can then follow, once clearance is underway and the effect of local conditions has been accounted for.

Clearance may include reduction of areas where no evidence indicates the presence of EO. Land reduced as part of a clearance task shall be reported and recorded as reduced.

Cleared land shall be handed over in conformance with section 6.6 of this standard.

6.5 Specific case: EO hazard spot tasks

EO hazard spot tasks should be conducted on EO hazard spots. This shall be reported and uploaded to the IMSMA System through the proper EOD spot task form and not as a reduction or clearance. When an EOD spot task is conducted on isolated EO of a given type, the EOD team shall conduct a threat assessment to determine the possible presence of other EO. If the threat assessment concludes the possible presence of additional EO, a NTS should be conducted to determine the classification and size of the hazardous area.

The EOD team should immediately conduct the NTS if certified to do so. Otherwise, NTS shall be subsequently conducted by a NTS team from a MA operator certified to conduct NTS.

6.6 Handover of land release products

Once certified and accepted by the NMAC, the cancelled, reduced and cleared land shall be transferred to their owners and/or users through the appropriate Government Authority i.e., District Secretary and Divisional Secretary to Grama Niladhari (GN).

Cancelled land shall not be handed over before the quality of the cancellation report is controlled and certified by the NMAC. Reduced land shall not be handed over before certification and acceptance by NMAC.

Cleared land shall not be handed over before inspection, certification and acceptance by the NMAC. The NMAC shall issue a certificate for the land users and landowners. The marking (other than the permanent marking) shall be uninstalled before the cancelled, reduced or cleared land is handed over.

In case of subsequent discovery of EO, incident or accident in handed over cancelled, reduced and cleared land, the NMAC should conduct an independent investigation. If this investigation finds that no negligence or wilful misconduct took place against the SLNMAS and any other applicable text, then the relevant MA operator should be relieved from liability.

7. Risk and Liability

Resolving liability questions can be complex after hand over of cancelled, reduced and cleared land released through NTS, TS and clearance operations. There is always an element of risk that EO may remain, and even full clearance operations cannot guarantee that an area is completely free of EO.

The following definition is relevant: “Residual risk” is the risk remaining following the application of all reasonable effort to identify, define, and remove all presence and suspicion of explosive ordnance through NTS, TS and/or clearance”.

Below principles shall apply in determining liability:

- a. EO contamination is primarily and ultimately a national responsibility and, as such, the state of Sri Lanka has a responsibility to accept accountability and liability for victims in all areas affected by EO. This includes known as well as unknown areas, areas that have been cleared and handed over to the local population following verification and acceptance by NMAC.
- b. The quality of land release operations conducted through NTS, TS and clearance as described in the relevant SLNMAS shall be the main determining factors when liability is to be addressed.
- c. The appropriate application of the principles of the Sri Lankan land release process by land release operators and the acceptance of handover by the NMAC implies that the level of EO risk in the area after survey or clearance is deemed tolerably low by the Sri Lankan government.
- d. If EO are found in areas that have previously been released, liability disputes should in principle be settled based on how well organizations have implemented the Sri Lankan land release process as described in this SLNMAS. The appearance of an explosive hazard does not automatically imply that the organization should be held liable.
- e. A MA operator shall not be liable in cases of missed EO or accidents if an investigation shows that the Sri Lankan land release NMAS has been implemented appropriately and that the organization has made all reasonable effort to ensure that the area was safe before release.
- f. A MA operator shall in principle be liable in cases of missed EO or accidents caused by missed EO if an investigation revealed that:
 - missed EO or the accident was caused by willful or criminal misconduct, gross negligence, reckless misconduct or a conscious, flagrant indifference to the rights or safety of the individual(s) harmed.
 - the organization was not accredited to carry out the NTS, TS or clearance operations.
 - the organization willfully infringed prevailing national standards; and

- the organization has conducted gross procedural errors or grossly deviated from national standard.

8. Quality management

8.1 General

Requirements defined in SLNMAS 08 Quality Management apply to land release.

In addition, the NMAC should facilitate the comparison of results between NTS, TS and clearance to facilitate the permanent improvement of land release operations.

8.2 Quality assurance

8.2.1 Accreditation

Land release activities shall be conducted only by accredited MA operators in accordance with SLNMAS 08 Quality Management.

8.2.2 Monitoring of MA operators

MA operators shall ensure the internal monitoring of their activities and processes in accordance with SLNMAS 08 Quality Management.

8.3 Quality control

8.3.1 Quality control of SHA and CHA classification

The NMAC shall verify the quality of NTS reports including the analysis of evidence.

As part of continual improvement, the NMAC shall compare the results of subsequent TS and clearance with the initial classification of land resulting from the NTS.

Based on this comparison the NMAC shall:

- a) Provide feedback to the MA operators which conducted NTS.
- b) Request corrective action where relevant; and
- c) In consultation with the operators revise the criteria for the classification of hazardous areas, including sources of information and nature of evidence.

Internal and external QC of land release products including the analysis of evidence shall be conducted before handover to the community.

Internal QC of the reduced and cleared land shall be conducted by the relevant MA operator and the external QC of reduced land and cleared shall be conducted by the NMAC before handover to the community.

8.4 Post land release actions

Sri Lanka NMAC should ensure to monitor cancelled, reduced, and cleared land following handover to the community through the process of Post Clearance Impact Assessments (PCIA) which may start after three months from the date of handing over. This will facilitate NMAC to monitor the proper land use and the efforts are not wasted of the MA operator. Furthermore, NMAC may conduct Post Demining Impact Assessment (PDIA) to monitor the effectiveness of National Mine Action Programme based on the geographic locations of the hazardous areas.

The information about new contamination not identified before should be properly analysed and the NMAC shall ensure to coordinate conduct of a proper investigation.

8.5 Information management

NMAC shall ensure to document and maintain the records of all the activities and the decisions made throughout the land release process.

Annex A details the minimum data requirements applicable to land release. The NMAC may require additional data.

8.6 Safety and occupational health

The safety and occupational health risks related to land release operations shall be identified, assessed, prevented and mitigated. Refer to the IMAS 10.10 – Safety and Occupational Health for the references.

8.7 Liaison with the local population

Liaison with the local population shall be an integral part of all the phases of land release and shall contribute to:

- a) The collection of information and evidence on the presence of EO.
- b) Confirming the requirements for land release.
- c) The safety of the population.
- d) Ensure confidence from the population in:
 - the classification of hazardous areas and
 - the quality of land release products

Throughout the land release process, the MA operators shall liaise with the local population in an inclusive manner, consulting with as wide range of informants as reasonable, including both women, men, landowners, land users, accident survivors, different age groups (including children where relevant and in conformance with applicable laws and regulations) and community members from different livelihood groups as part of reasonable efforts to identify hazardous areas, ensure safety of populations, and ensure confidence.

This inclusive approach shall be applied throughout the land release process and in particular during NTS and handover stages.

To facilitate information sharing, personnel directly liaising with the population of the community, shall have the relevant competencies. The composition of the teams directly liaising with the population of the community should be mixed gender to ensure access to women, girls, men and boys and should take into account the local variety of languages (Tamil and Sinhala).

Measures to build the confidence of the population in land release may include:

- a) Public communication by the NMAC
- b) The provision of information by MA operators to the community

All communication and measures to build confidence should target a wide cross-section of the affected population, adopting an inclusive approach to reach women, girls, boys, and men, and a wide range of ages, backgrounds and different livelihood groups, as well as those with disabilities.

8.8 Specific efforts

8.8.1 Environmental management

Land release operations shall be conducted in a manner that minimises the adverse impact on the environment and is safe for mine action staff and communities. Planning for mine

action operations shall identify and assess relevant environmental aspects and determine appropriate and effective measures to mitigate adverse environmental impacts.

With regards to EO contamination, land release operations shall leave land in a state whereby it is suitable for its intended use once mine action operations cease.

8.8.2 Lands of historical and cultural value

Land release may be conducted in lands of cultural or historical value. In this case, land release operations shall be conducted in a manner that prevent damage to these lands.

8.8.3 Human remains

Land release operations shall be conducted in a manner that preserves and respect human remains.

For any given task, mine action organisations shall assess the risk to encounter human remains and plan methodologies accordingly.

Where the likelihood to find human remains is high, the methodology shall not include methods and equipment that would disturb, damage or destroy human remains. However, the chosen methodology shall maintain the safety of the staff conducting land release. In case there is a conflict between the safety of the staff conducting land release and the preservation of human remains, the NMAC shall ensure the liaison with the relevant authorities.

When human remains are found during TS and clearance, the MA operator shall:

- a) report the discovery to the NMAC
- b) not move the human remains; and
- c) mark their location and cease mine action operations till getting further direction from the NMAC.

9. Responsibilities

9.1 NMAC

- a) Shall keep update the national land release policy and relevant standards.
- b) Shall Conduct QA of the land release process
- c) Shall establish mechanism for accreditation of MA operator involved in conduct of land release operations (NTS, TS and Clearance)
- d) Shall develop land release reporting forms
- e) Shall conduct external QA and QC of land products
- f) Shall ensure entry of land release reports into the national database
- g) Should keep all stakeholders update periodically as determined by NMAC and as and when requested by stakeholders.

9.2 MA Operator

- a) Shall get accreditation from NMAC to perform NTS, TS, and clearance operations.

- b) Shall develop standard operating procedure (SOP) for NTS, TS and clearance operations.
- c) Shall develop land release training package and get it approved by the NMAC
- d) Shall ensure to conduct effective and efficient land release operations by deploying well trained and experienced field staff
- e) Should provide required land release reporting as specified by the NMAC.
- f) Should establish and maintain liaison with affected communities throughout the land release operations
- g) Should develop and implement proper internal QA and QC mechanism for the land release operations

Annex A– Minimum data requirements

This annex defines the minimum data requirements that shall be collected and reported for land release.

A1. Activities

A1.1 Non-technical survey

The element Non-Technical Survey is used to record data about the activity itself. Any data related to identified contamination or cancelled land is recorded through the elements for contaminated area, spot task or land release product.

An NTS activity shall be reported even when no evidence is found.

Information	Data field
Report info	NTS ID
	NTS report date
Location	Geographic location reference point
	Province
	District
	Division
	Grama Niladari
Organization /department/entity	Organization
Progress	Operational start date
	Operational end date
	Activity status
Engagement with key informants	Engagement with authorities
	Engagement with the head of the community
	Engagement with key informants from the population
Evidence found	Result of the NTS: no evidence, cancellation, SHA, CHA
Repeated NTS	Repeated NTS ID

NTS result :

- SHA ;
- CHA ;
- No Evidence of contamination found; or
- Cancellation.

Activity status :

- Completed ;
- Ongoing ; or
- Interrupted.
- **Suspended.**

A.1.2 Technical survey

The element Technical Survey is used to record data about the activity itself. Any information related to resulting confirmed hazardous areas, contaminated locations or reduced land is recorded through the elements for contaminated area, spot task or land release product.

Information	Data field
Report info	TS ID
	TS report date
Location	Geographic location reference point
Organization /department/entity	Organization
Progress	Operational start date
	Operational end date
	Activity status

A.1.3 Clearance

The element of clearance is used to record data about the activity itself. Any information related to remaining contaminated area or cleared land is recorded through the elements for contaminated area or land release product.

Information	Data field
Report info	Clearance ID
	Clearance report date
Location	Geographic location reference point
Organization /department/entity	Organization
Progress	Operational start date
	Operational end date
	Activity status

A.1.4 Spot task

The element Spot Task is used to record data about locations that are contaminated by spot EO and the activity to remove or destroy that EO. No area should be recorded for spot tasks.

Information	Data field
Report info	Spot task ID
	Spot task report date
Location	Geographic location reference point
Organization /department/entity	Organization
Type	Type of task
Progress	Activity status
	Operational start date

	Operational end date
EO	Type
	Category
	Sub-category
	Fuze or switch (only IED)
	Model
	Geographic location
	Quantity
	Depth
	Condition
	Destruction/disposal method
Beneficiaries	Direct female adult beneficiaries
	Direct male adult beneficiaries
	Direct female child beneficiaries
	Direct male child beneficiaries
	Indirect female adult beneficiaries
	Indirect male adult beneficiaries
	Indirect female child beneficiaries
	Indirect male child beneficiaries

A.2 Hazardous area

The element Hazardous Area is used to record data about areas where contamination is suspected or confirmed to be present. A hazardous area should be linked to the activity that led to it being recorded.

Information	Data field
Report info	Contamination ID
	Contamination report date
Location	Geographic location benchmark
	Intended land use
Contaminated area	Type of contaminated area
	Marked
	Type of contamination
	Suspected quantity of EO
	Suspected year of contamination
	Area polygon
Progress	Contaminated area status

	Date of release
Evidence	Category of evidence
	Location of evidence

Intended land use

Use of land following demining operations. Intended land use categories include:

- a) residential – rehabilitation/building of housing, compounds, temporary shelters, makeshift shelters or temporary housing. Beneficiaries are defined as the number of people who are living, will be living, are settled or will be settled in existing or new communities, compounds, housing or shelters on the cleared or reduced land.
- b) agricultural – cultivation, market gardens and intensively grazing animals (where relevant to the country). Beneficiaries are defined as the number of people in households, including labourers if relevant, who are using or will use the cleared or reduced land to cultivate crops, market gardens or to intensively graze animals.
- c) community/public services – provision and use of public services, such as health facilities, playgrounds and play areas, shops and markets, community/administrative buildings, and cultural, religious and recreational sites. Beneficiaries are defined as the number of people who use, will use, are working or will work in facilities on the cleared or reduced land.
- d) natural resources – hunting, foraging, collecting natural materials, using natural water sources (including domestic use such as cooking, bathing or watering animals, and fishing). Extensively grazing animals may fit in this category if most relevant to the country. Beneficiaries are defined as the number of people in households who frequently use or will use the cleared or reduced land to forage, fish, hunt, collect material, use natural water sources or extensively graze animals.
- e) infrastructure – land released for the safe use or building of small- and medium-scale infrastructure, such as irrigation systems, bore holes, wells, local power lines, etc. Beneficiaries are defined as the number of people in households who frequently use or will use small- or medium-scale infrastructure, bore holes, wells, local power lines or sources, telecoms infrastructure, etc., on the cleared or reduced land.
- f) access – land released for the safe use, construction or renovation of access routes, including pathways, roads and bridges. Beneficiaries are defined as the number of people in households who use or will use the pathways, roads or bridges as a primary access route, and/or the number of people who will transit through the released land to access another land one time or more per week.

Type of contamination: the main type of contamination for a SHA or CHA mainly contains:

- a) Antipersonnel mine (conventional or improvised).
- b) Antivehicle mine (conventional or improvised).
- c) cluster or dispenser.
- d) submunition.
- e) Unexploded Ordnance (UXO).
- f) Abandoned Explosive Ordnance (AXO).
- g) Small arms ammunition (SAA) (<20mm).
- h) Improvised Explosive Device (IED).
- i) Explosives.

EO categories:

- a) Antipersonnel mine.
- b) Antivehicle mines.

- c) Booby trap.
- d) Improvised explosive device.
- e) rocket.
- f) mortar.
- g) grenade.
- h) projectile.
- i) aircraft bomb.
- j) rocket.
- k) cluster munition.
- l) component:
- m) SAA.
- n) Explosives.
- o) other not listed above.
- p) A combination of the above.

Marked:

- a) Temporary marking.
- b) Durable marking.
- c) Improvised marking.
- d) No marking.

Status of the contaminated area:

- a) Open.
- b) Worked on.
- c) Closed.

A.3 Land release product

The element Land Release product is used to record data about cancelled, reduced or cleared land. The land release product should be linked to the activity that produced it.

Information	Data field
Report info	Land release ID
	Land release report date
Location	Geographic location benchmark
Progress	Operational start date
	Operational end date
Method	Operational method
Processed area	Area polygon
	Minimum clearance depth
	Type of land release
EO	Type
	Category
	Sub-category
	Fuze or switch (only IED)
	Model

	Geographic location
	Quantity
	Depth
	Condition
	Destruction/disposal method
Beneficiaries	Direct female adult beneficiaries
	Direct male adult beneficiaries
	Direct female child beneficiaries
	Direct male child beneficiaries
	Indirect female adult beneficiaries
	Indirect male adult beneficiaries
	Indirect female child beneficiaries
	Indirect male child beneficiaries

Type of land release: the type of land release a land release product record refers to. Type of land release include:

- a) cancelled area (m²).
- b) reduced area (m²).
- c) cleared area (m²).

Operational method: the method or the combination of methods used to reduce or clear an area. Operational methods include:

- a) manual demining.
- b) animal detection systems.
- c) mechanical.
- d) battle area clearance.

EO type: whether EO is conventional or improvised. Both types of EO can be categorized using the same EO categories. Types of EO include:

- a) conventionally manufactured.
- b) improvised.

EO categories:

- a) Antipersonnel mine.
- b) Antivehicle mines.
- c) Booby trap.
- d) Improvised explosive device.
- e) rocket.
- f) mortar.
- g) grenade.
- h) projectile.
- i) aircraft bomb.
- j) missile.
- k) cluster munition.
- l) component:
- m) SAA.
- n) other not listed above.

- o) A combination of the above.

EO subcategories:

- a) mine, booby trap or other device (as defined by CCW amended protocol II).
- b) unexploded ordnance (UXO).
- c) abandoned ordnance (AXO).

EO condition. Whether EO is found in a condition safe to move or not. EO condition include:

- a) safe to move.
- b) not safe to move.

EO depth: the depth in centimeters at which the top of the EO was found.

EO destruction/disposal method: the method used to destroy or dispose of the EO. EO destruction/disposal method include:

- a) destroyed in situ.
- b) destroyed in central demolition site.
- c) stored for destruction.

Annex. B the Land Release Process Map



