

LibMAS 07.11

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LAND RELEASE

Responsible National entity:

Libyan Mine Action Centre (LibMAC)
mandated by the Ministry of Defence (MOD)

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**NOTE:**

This document is current at the date shown on this page. The Libyan Mine Action Standards (LibMAS) are subject to regular revision, so users should ensure that they are using the latest version of each document in the standards. The most recent versions of LibMAS are the versions that are posted on the LibMAS pages of the LibMAC website www.lmac.gov.ly

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Foreword

Critical safety, control and quality elements of the International Mine Action Standards (IMAS) have been retained in the Libyan Mine Action Standards (LIBMAS), so ensuring that they maintain the principles agreed in IMAS guidelines.

The work of preparing, reviewing and revising LIBMAS is conducted by a technical committee with the support of international, governmental and non-governmental organisations in Libya. The latest version of each standard can be found at the LibMAC website.

In all LIBMAS the words “must”, “shall”, “should” and “may” are used in the following way. “Must” or “shall” is used to indicate a requirement, something that must be done in order to conform to the LibMAS. “Should” is used to indicate the preferred requirements, methods or specifications, but these may be varied when reasons for doing so are given. “May” is used to indicate a possible method or course of action that should be considered but need not be applied.

In this LibMAS:

- The term “Demining Organisation” refers to any organisation (government, NGO or commercial entity) responsible for implementing demining projects or tasks. Demining Organisations include headquarters and support elements.
- The term “Mine Action Organisation” refers to any organisation (government, military, commercial or NGO/civil society) responsible for implementing mine action projects or tasks. The mine action organisation may be a prime contractor, subcontractor, consultant or agent.

For the purpose of this standard, the words “Demining Organization” and “Mine Action Organization” are interchangeable and used to describe the same body.

1. Introduction

- 1.1 The main objective of humanitarian demining is to return land that is believed to be contaminated by mines or ERW to the community. Returned land is “released land”, that is land from which the suspicion of contamination by mines and ERW has been removed. Land can be released after the use of survey or clearance procedures have given confidence that no mines or ERW are present.
- 1.2 The use of clearance procedures in areas where there are no mines or ERW must be avoided because it is very expensive and wastes human resources. Faster procedures which do not actually clear the land should be used to find the smaller areas that need to be completely cleared whenever possible. These procedures are often used during technical survey (TS). LibMAS 08.20 provides guidance on the conduct of a TS.
- 1.3 Land may be released after all reasonable effort has been made to remove any suspicion that there are mine or ERW hazards in the area. The criteria for “all reasonable effort” is defined in this standard.

2. Definitions

- 2.1 The following definitions shall be used for mine action land release in Libya:

a. Suspected Hazardous Area

An area where there is reasonable suspicion of mine/ERW contamination on the basis of indirect evidence of the presence of mines/ERW.

b. Confirmed Hazardous Area

An area where the presence of mine/ERW contamination has been confirmed on the basis of direct evidence of the presence of mines/ERW.

c. Non-technical Survey

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

d. Technical Survey

The collection and analysis of data, using appropriate technical interventions, about the presence, type, distribution and surrounding environment of mine/ERW contamination, in order to define better where mine/ERW contamination is present and where it is not, and to support land release prioritisation and decision making processes through the provision of evidence.

e. Clearance

Tasks or actions to ensure the removal and/or the destruction of all **mine** and **ERW** hazards from a specified area to a specified depth.

f. All Reasonable Effort

What is considered a minimum acceptable level of effort to identify and document contaminated areas or to remove the presence or suspicion of mines/ERW. "All reasonable effort" has been applied when the commitment of additional resources is considered to be unreasonable in relation to the results expected.

g. Cancelled land

A defined area (m²) concluded not to contain evidence of mine/ERW contamination following the non-technical survey of a SHA/CHA.

h. Reduced Land

A defined area (m²) concluded not to contain evidence of mine/ERW contamination following the technical survey of a SHA/CHA.

i. Cleared Land

A defined area (m²) cleared through the removal and/or destruction of all specified mine and ERW hazards to a specified depth

3. The Land Release Process

- a. Land release is an evidence-based decision-making process that helps determine with confidence which land needs further action and which does not. It involves the identification of hazardous areas, the cancellation of land through non-technical survey, the reduction of land through technical survey and the clearance of land with actual mine/ERW contamination.
- b. Land release in Libya must be based on evidence that is gathered and recorded and held in the LibMAC Operations office. That evidence may be records of survey or clearance. The following principles of land release apply:
 - Peoples' fear of mines and ERW may not be a good enough reason to clear an area. Fear should be supported with evidence before a technical survey takes place. All effort should be to engage with the local population during the non-technical survey phase to gather sufficient information and evidence to substantiate whether an area is hazardous or not. This should help to install confidence in the local population to use land which is considered as non-hazardous.
 - In circumstances where the non-technical survey concludes that land is non-hazardous, however the local population is still unwilling to use the land through a believe that it is hazardous, then it may be possible to conduct limited technical survey, to demonstrate that it is safe and install confidence in the local population. This shall only be on approval by the LibMAC.
 - Areas about which there is no actual evidence of the presence of mines or ERW should not be recorded as SHA.
 - In Libya, the land release process involves conducting technical survey and clearance until the suspicion that the area may contain mines or ERW is removed.

The suspicion may be removed by either using technical survey to gather enough information to be confident that there are no mines and ERW, or by clearing some or all of the area. Sometimes technical survey will not be necessary because the position of the mines and ERW is obvious. When this occurs, the area should be scheduled for clearance without technical survey being conducted;

- Technical survey may indicate areas with no pressure or movement sensitive mines or ERW. In these areas, it may be appropriate to use BACS procedures (described in LibMAS 09.11) rather than conventional manual demining procedures. This shall only be on approval by the LibMAC.

3.1 Indirect and Direct Evidence

- 3.1.1 Hazardous areas should be divided into suspected hazardous areas (SHAs) and confirmed hazardous areas (CHAs) based on the availability and reliability of information and whether evidence is indirect or direct for each hazard.
- 3.1.2 Areas presenting only indirect evidence of the presence of mines/ERW should be classified as Suspected Hazardous Areas (SHAs). Areas presenting direct evidence of the presence of mines/ERW should be classified as Confirmed Hazardous Areas (CHAs).
- 3.1.3 The LibMAC shall decide the criteria for the definition of SHAs and CHAs reflecting specific local circumstances and in the context of analysis of the local mine/ERW problem. Examples of indirect and direct evidence may include, but are not limited to:

a. Indirect evidence (SHA)

- Potentially productive land not in use.
- Verbal reports from local population/former combatants.
- Mine/ERW records, where the reliability of such records remains open to doubt or has not been assessed.
- Analysis of other known contamination areas, tactics and historical sources.
- Former combat zones.
- Evidence from previous surveys, not supported by direct evidence of the presence of contamination.
- Mine/ERW accidents or incidents where the location of the event cannot be accurately determined.

b. Direct evidence (CHA)

- Mine/ERW records, where the reliability of such records has been confirmed during previous operations.
- Visual observation of mines/ERW, mine/ERW parts, fragmentation or craters.
- Detonations during fires or by animals.
- Mine signs, fencing, ancillary equipment (boxes, canisters) etc. associated with

contamination.

- Mine/ERW accidents or incidents where the location of the event can be accurately determined.

3.2 Associating Hazard Types with Areas

3.2.1 Wherever possible hazard areas (SHA/CHA) should be associated with specified hazard types, such as AP mines, ERW (including cluster munitions), or a combination of hazard types, to ensure that reporting reflects the nature of the contamination and to ensure that prioritisation decisions reflect the risks presented to affected people. In the event that there is sufficient evidence to justify the creation of an SHA, but there is insufficient evidence to determine the associated contamination type, then the hazard type should be recorded as unknown.

3.3 Defining Hazard Area Boundaries

3.3.1 CHA boundaries should be associated with areas where there is direct evidence of the presence of mines/ERW or where reasonable extrapolation from identified contamination areas, in light of analysis of contamination characteristics, justifies doing so. Adjacent or surrounding areas that present only indirect evidence of the presence of mines/ERW should continue to be defined as SHAs. In all cases boundaries should be defined on the basis of evidence and analysis in order to avoid including excessive areas.

4. Information Gathering Methodologies

4.1 All relevant information-gathering methodologies should be used during the land release decision-making process. The principles of information gathering by non-technical survey (NTS) are described in LibMAS 08.10, and by technical survey (TS) in LibMAS 08.20. IMAS 05.10 provides further details about the principles and processes of information collation and analysis. LibMAS 09.10 provides details of clearance requirements

4.2 The Land Release process relies upon valid and reliable information to support decision making. Information will not be reliable and useful if the data upon which it is based does not itself meet quality requirements. All information gathering methodologies should include clear guidance on quality requirements for the collection, recording and reporting of data and information.

5. Land Release Criteria

- a. An SHA should only be released after a well-documented process of technical survey and/or clearance has been completed.
- b. A key principle in land release is that there should be agreement from all stakeholders

that the land is safe for use. LibMAC achieves this by approving procedures that should give confidence in the land's safety and by conducting Quality Assurance monitoring that ensure that the procedures are conducted successfully. LibMAS 08.20 provides criteria for releasing land after technical survey.

5.1 Information collation and analysis

- 5.1.1 The record of SHAs recorded in the LibMAC data management system should be accurate and up to date at all times. Possibly hazardous areas should not be recorded as SHAs unless some evidence of a hazard is available in accordance with section 3.1 above.
- 5.1.2 Information about areas demined in the past must be assessed, with regard to the procedures that were used, and whether they give confidence that the land is now safe. When the procedures used do not meet the requirements of the LibMAS, then a NTS or TS shall be conducted to determine whether there is a mine or ERW threat. If it is determined that there is no suspicion of mines or ERW then the areas shall be recorded as cancelled or reduced, depending on the survey process conducted.

5.2 Confidence in Released Land

- 5.2.1 Before land release can occur, there must be a high level of confidence that an area no longer contains mines or ERW. To have a high level of confidence, "all reasonable efforts" must have been made to investigate whether or not mines and ERW are present.

a. All reasonable efforts

"All reasonable efforts" are:

- An appropriate non-technical survey to identify SHAs from the historical record and by gathering information from local authorities and community representatives.
- An appropriate technical survey and the clearance of areas about which there is evidence that there are mines and ERW.
- The application of Quality Assurance and Quality controls that guarantee that the procedures are conducted properly and that all mines and ERW are removed to the required depth in all areas where there is evidence of mines or ERW.

5.3 Full clearance

- 5.3.1 Full clearance procedures should only be used when the presence of landmines or ERW is confirmed and the land is a confirmed hazardous area (CHA). Full clearance must involve the clearance of the area where there are mines and ERW and a defined buffer zone of not less than ten metres extending in all directions from the last mine or ERW located, unless a reduction is authorised by the LibMAC.

- 1.1.2 The LibMAC may also require an increase in the distance of the buffer zone, based on

an assessment on the likelihood of mines/ERW beyond this area. When a CHA has been identified, LibMAS 09.10 defines the requirements for clearance that must be applied. When technical survey finds that battle area clearance would be an appropriate clearance procedure, the requirements for this are detailed in LibMAS 09.11.

6. Documentation

- 6.1 Information management is an important part of the land release process. Proper management procedures, including adequate decision-making tools, recording, training, monitoring and adjustment, are essential requirements of the process. A quality documentation process is also important because:
- a. The assessment of documentation forms the basis for decisions to release land;
 - b. Documentation forms the basis for internal and external quality control;
 - c. If mines or ERW are later found on released land, the documentation used to make the decision to release the land can be examined to find the cause of any error;
 - d. Documentation can provide essential evidence when legal liability is in question. Summarised documents showing the survey assessment, analysis, findings, and the decision-making procedures should be a part of handover documents, along with maps and other relevant information; and
 - e. The handover of land should involve meetings with local authorities and representatives from the people who will use the released land. Comments from the local users and the authorities should be recorded in the final handover document.

7. Minimum Data/Information Collection Requirements

- 7.1 While the impacts of mine/ERW contamination upon a population present a wide range of social and economic features, and are reflected in important decisions about prioritisation, the physical nature of Mine/ERW contamination is essentially a geographical one.
- 7.2 Impacts are placed in a geographical context and land release efforts include the geographical targeting of resources and activities to achieve the aim of releasing land for productive use. As such it is important that geographical aspects of the problem, and responses to it, are recorded accurately and consistently.
- 7.3 In addition to recording the boundaries of SHAs and CHAs, Mine Action Organisations shall endeavour to record:

- a. What was found where and when?
 - b. What was done where and when?
- 7.4 When significant hazard items are discovered (mines, cluster munitions, specified ERW) organisations shall endeavour to record the type of device (as specifically as possible), the depth of the device, the location of the device (in geographical terms and in relation to other associated devices), and the condition of the device.
- 7.5 Significant activities, such as clearance, technical survey and non-technical survey should be recorded in relation to the areas/locations where they took place. The performance of survey and clearance assets against different hazard types should be recorded and analysed.
- 7.6 Geographical data/information should be collected with sufficient accuracy, detail and frequency to satisfy requirements to perform meaningful analysis in support of the land release process and to satisfy the requirements of report recipients.
- 7.7 Data collection and information management systems should differentiate data by activity (NTS, TS, and Clearance) and by type of contamination. Additional guidance is provided in IMAS 05.10.

8. Risks and Liability

- 8.1 Residual risk is the risk remaining following the application of all reasonable effort to identify, define, and remove all presence and suspicion of mines/ERW through non-technical survey, technical survey and/or clearance.
- 8.2 Residual risk is minimised when the land release process has been applied by competent organisations following approved procedures and processes. Residual risk may be quantified over time through the monitoring of cancelled, reduced and cleared areas to identify any incidents, accidents or evidence of missed items. The results of such monitoring should be used to maintain confidence in land release systems and to identify areas requiring improvement.

- 8.3 When mines or ERW are found in areas that have been released, questions of legal liability arise. Legal liability refers to any legal responsibility that the Mine Action Organisation has when it is found that their work was not conducted appropriately. The discovery of mines or ERW that have been missed during clearance is called a “critical non-conformity”.
- 8.4 When the demining has been conducted used procedures agreed by LibMAC, has been subject to Quality Assurance and Quality Controls, and when LibMAC has accepted the release of the land as “cleared”, the Mine Action Organisation is still bound by the terms of its contract.
- 8.5 Generally, contract terms should require that no mines or ERW are located below the ground surface and within the required clearance depth for a period of one year after LibMAC has accepted the land as cleared.
- 8.6 Incidences where mines or ERW are located on land released by Mine Action Organisations, shall be investigated, and if it is concluded that the Mine Action Organisation is responsible (i.e. ‘missed’ mines/ERW) then this shall be considered a critical non-conformity, which may result in suspension or termination of the Operational Accreditation for the particular unit (team) or Mine Action Organisation concerned. The following exceptions apply:
- a. When mines or ERW are found on the surface after LibMAC Quality Control checks of that particular area. These devices will have been placed after the clearance and will not be considered a critical non-conformity.
 - b. Mines or ERW that have obviously been buried beneath the surface after clearance will not be considered a critical non-conformity.
- 8.7 **Note:** When there is a suggestion that a rival Mine Action Organisation has placed devices to discredit another organisation, a thorough investigation must be conducted. Any organisation found to have placed mines or ERW on land cleared by a rival must have their Operational Accreditation immediately withdrawn and should face prosecutions under various Libyan laws.
- 8.8 The demining contract must include penalty clauses for the Mine Action Organisation if critical non-conformities occur. Generally, those clauses will require that the entire area cleared using the procedures that were used where the device(s) were missed must be re-cleared at the demining organisation’s cost. When a SHA is very big, it may be agreed that only a proportion of the area must be re-cleared if mines and ERW are discovered in the year following the work. When a critical non-conformity results in civilian injury within a year of the release of the land, LibMAC’s Victim Assistance capacity should assist the victim and/or their relatives in their pursuit of claims for compensation from the responsible demining organisation.
- 8.9 When mines or ERW are discovered in an area more than a year after the formal release of that land, there is no contractual liability to the demining organisation unless the contract specifies an extension of the one year default liability.
- 8.10 When mines or ERW are discovered in an area after the formal release of that land, LibMAC has no responsibility for the consequences of the discovery because LibMAC

will have done everything reasonable to ensure that the land was safe for release. When mines or ERW are discovered in a released area, LibMAC should re-survey the land to determine whether clearance must be conducted again.

9. Responsibilities and Obligations

9.1 Libyan Mine Action Centre (LibMAC)

LibMAC will:

- a. Accredit Mine Action Organisation and their procedures as being appropriate for non-technical survey, technical survey, ~~confidence building~~ and clearance; and
- b. Maintain documentation on the recorded operational use of all procedures used in demining area before they are released.

9.2 Mine Action Organisations

The Mine Action Organisation undertaking non-technical survey, technical survey, or clearance must:

- a. Gain Operational Accreditation from LibMAC for all the procedures and tools that they will use;
- b. Apply the LIBMAS;
- c. Maintain and make available documentation as required by LibMAC;
- d. Consult closely with affected communities with regards to all decisions to release land.

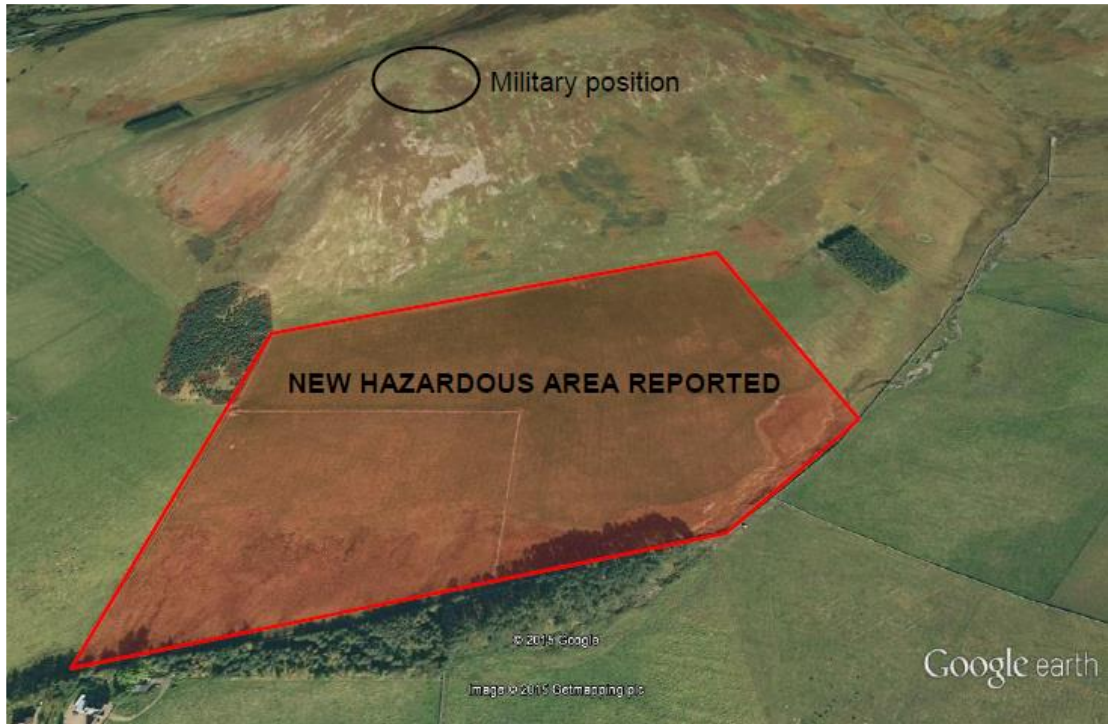


Figure 1: Example of Land Release

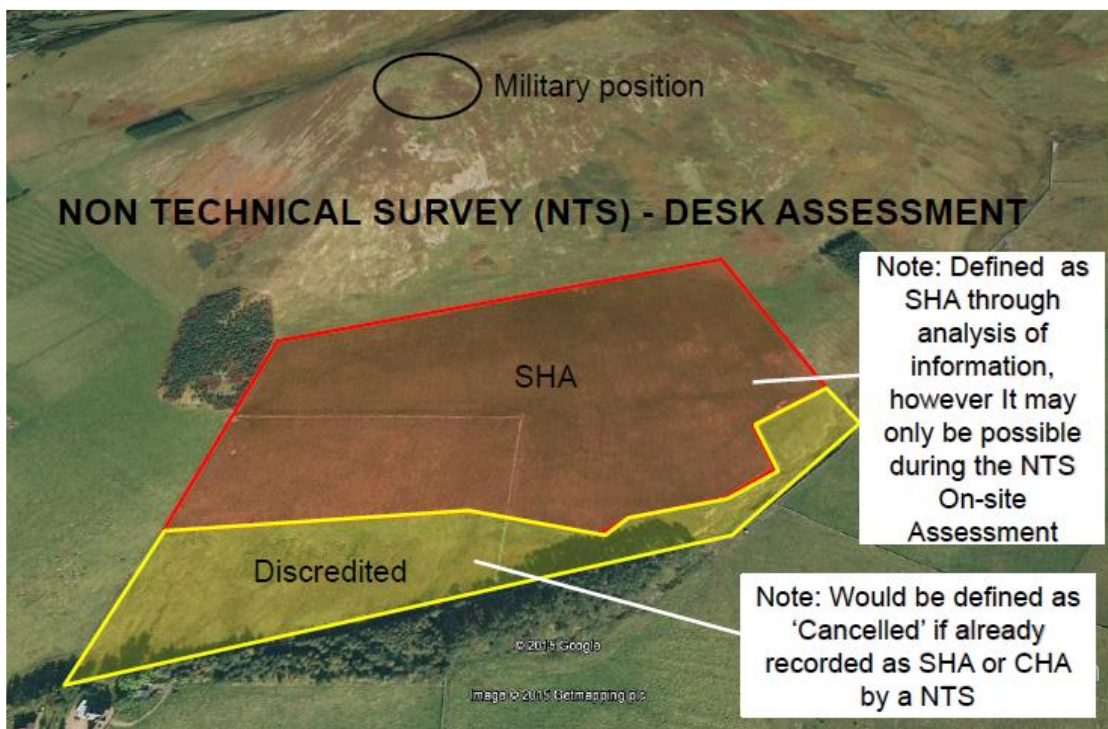


Figure 2: Example of Land Release

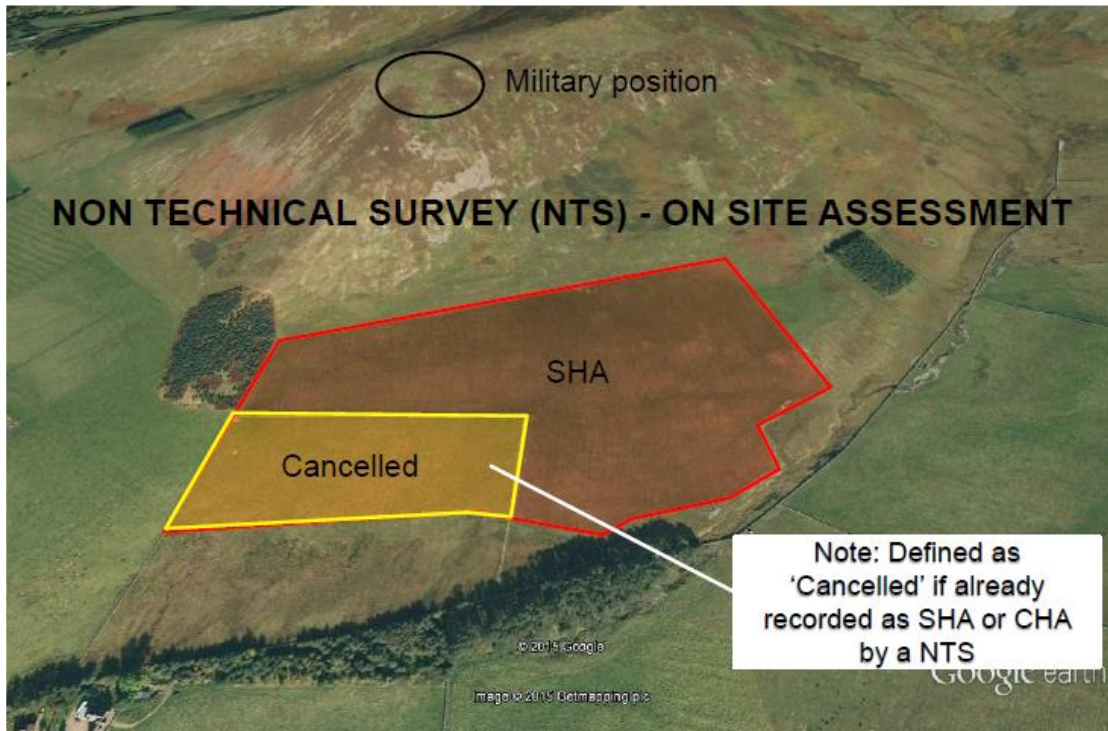


Figure 3: Example of Land Release

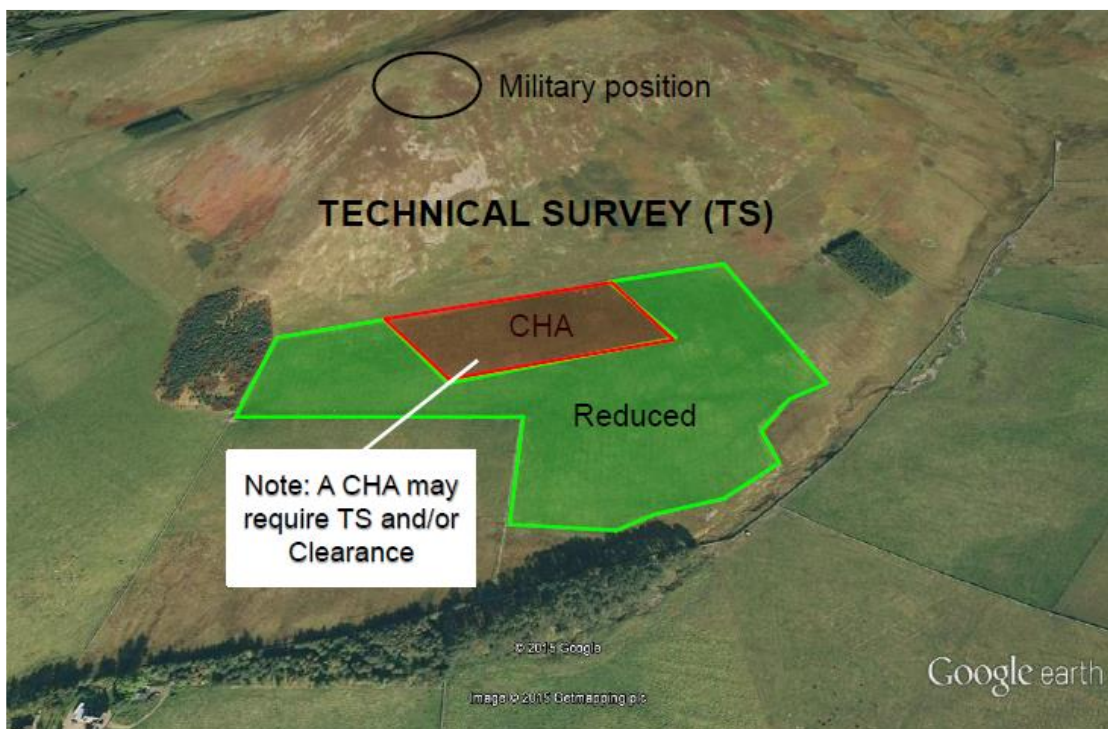


Figure 4: Example of Land Release

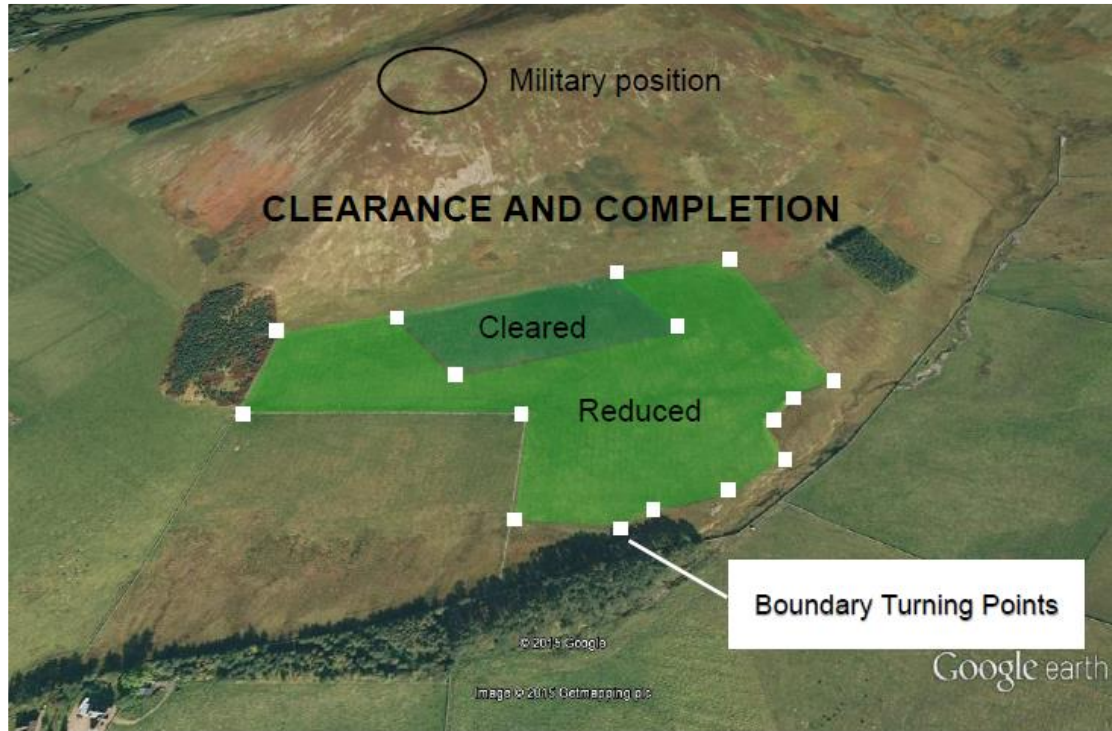


Figure 5: Example of Land Release

10. General References

- a. International Mine Action Standards (IMAS), in particular, 05.10 Information Management for Mine Action, and 07.11 Land Release.
- b. LibMAS 08.10 Non-technical Survey, 08.20 Technical Survey, and 09.10 Clearance Requirements.

11. Record of Amendments

Ser.	Date: D/M/Y	Standard	Section / Paragraph	Amended by: Name / Position / Org.	Comments
1	29/10/15	07.11 Land Release	All	Doug Ware, Chief of Ops/QA, UNMAS	Revised and add. details to existing Standard.