# Afghanistan Mine Action Standards - AMAS 05.01

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# Land Release

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#### Land Release

#### 1. Introduction:

Land Release is the process of removing hazard or suspicion of hazard through Non Technical Survey (NTS), Technical Survey (TS) and or clearance operations.

Land release process shall be based on evidences and valid information gathered and collected during the implementation of NTS, TS and clearance operations. The evidence and information shall be documented and used as facts for decision making in land release process and shall be recorded in IMSMA database. This information helps mine action organizations to avoid waste of resources in those areas which should not be fully cleared in response to remove the suspicion of hazard from a piece of land.

#### 2. Scope:

This AMAS describes the standard guidelines of land release process and related principles plus Non Technical Survey and Technical Survey requirements. The clearance standards are described in AMAS 06.01, 06.02, 06.03 and 06.04.

#### 3. Terms and Definitions:

The following terms and definitions should be used in relation to the land release process:

a) Land Release:

The term "Land Release" describes the process of applying "all reasonable effort" to identify, define, and remove all presence and suspicion of mines/ERW through non-technical survey, technical survey and/or clearance.

b) All reasonable Effort:

The term "All Reasonable Effort" describes what is considered as a minimum acceptable level of efforts including but not limited to Non Technical Survey, Community Liaison, Technical Survey, Marking and Clearance through the application of most suitable demining assets to identify and document hazardous areas or to remove the presence and or suspicion of mines/ERW hazards from the area. "All reasonable effort" has been applied when the commitment of additional resources is considered to be unreasonable in relation to the results expected.

c) Suspected Hazard Area (SHA):

The term "Suspected Hazardous Area" refers to an area where there is reasonable suspicion of mine/ERW contamination on the basis of **Indirect Evidence** of the presence of mines/ERW.

d) Confirmed Hazard Area (CHA):

The term "Confirmed Hazardous Area" refers to an area where the presence of mine/ERW contamination has been confirmed on the basis of **Direct Evidence** of the presence of mines/ERW.

e) Non-Technical Survey (NTS):

The term "Non-technical Survey" refers to 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 prioritization and decision-making processes through the provision of evidence.

Note: Nationwide Non Technical Survey is being conducted by specified Non Technical Survey teams in Afghanistan. This is the responsibility of all demining teams to conduct fresh non technical survey prior to undertake technical survey and/or clearance operations, in order to reclassify the area based on new information and evidence or to confirm available information of nationwide non technical survey intervention.

f) Technical Survey (TS):

The term "Technical Survey" refers to a dynamic process of collection and analysis of data and information about the presence, type, distribution and surrounding environment of mine/ERW contamination using appropriate technical/intrusive demining assets, in order to define better the extent and locations of mine/ERW contamination within the hazard areas and identify areas where there is no mine/ERW contamination and to support land release prioritization and decision making processes through the provision of evidence.

g) Clearance:

The term "Clearance" in the context of mine action, refers to tasks or actions to ensure the removal and/or the destruction of all mine/ERW hazards from a specified area to a specified depth.

h) Cancelled land (m2):

The term "Cancelled land" refers to a defined area concluded not to contain evidence of mine/ERW contamination following the non-technical survey of a SHA/CHA.

i) Reduced Land (m2):

The term "Reduced Land" refers to a defined area concluded not to contain evidence of mine/ERW contamination and does not require further investigation or clearance, following the technical survey of a SHA/CHA.

j) Cleared land (m2):

The term "Cleared land" refers to a defined area cleared through the removal and/or destruction of all specified mine and ERW hazards to a specified depth.

k) Area Verification:

The term "Area Verification" refers to the process of confirming the presence or absence of hazards, through objective evidence, in a reported hazard area using two accredited MDDs or an accredited machine.

I) Area Reduction:

The term "Area Reduction" refers to the process of decreasing the size of a reported hazardous area, during technical survey, through collecting more reliable information and proper assessment of the area combined with some physical intervention of either manual, mechanical or MDD assets.

m) High Threat Area (HTA):

In the context of this AMAS, the term "High Threat Area" refers to part or parts of a hazard area identified during non technical survey process that there is high probability of presence of mine/ERW hazards or high quality information indicating the presence of mine or ERW there.

n) Low Threat Area (LTA):

In the context of this AMAS, the term "Low Threat Area" refers to part or parts of a hazard area identified during non technical survey process that there is low probability of presence of mine/ERW hazards or there is low quality information about the presence of mine/ERW; however, people are afraid and uncertain to use the area because of indistinct information and evidence.

#### 4. Land Release Approaches

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

a) Land release through non-technical survey:

In this context the land can be cancelled if non-technical survey based on sufficient evidence concludes that the previously reported hazardous area does not contain any mine/ERW hazard, or that a portion of the hazardous area does not contain a mine/ERW hazard, and that there is no requirement for technical survey and clearance operations.

b) Land release through technical survey:

In this context, through the findings of technical survey, parts of the land can be reduced or the complete CHA or SHA can be released without full clearance based on analysis of evidences found as a result of technical exploration of the area.

c) Land release through clearance:

There may be situation where parts of or whole CHA require full clearance without reduction and cancellation. Full clearance shall be conducted only in those areas where actual mine/ERW hazards have been identified through technical survey.

See Annexes A and B of this AMAS for further clarification of the land release process. Annex A describes the process map and Annex B describes pictorial description of land release process.

#### 4.1 Land Release Principles

The principles of land release process that should be applied in Afghanistan are as below:

- a) Sequential response process of non-technical survey, technical survey, and clearance should be followed in land release operations until the presence or suspicion of mine/ERW hazards is removed. This enables operators to better define the area requires full clearance and resulting in effective and efficient use of demining resources.
- b) A graduated response should be undertaken when addressing a SHA/CHA. This should normally involve the prioritization of survey activities over clearance. There may be occasions when it is appropriate to progress directly to clearance, but such a response should not be the default position.
- c) Information gathered from the affected communities and other sources shall be documented and used as facts for decision making in land release process.
- d) Affected communities should be involved during all stages of land release process in order to provide confidence to them that demining quality requirements have been met and that released land is indeed safe for use

- e) Any new information relating to contamination should be assessed on the basis of evidence gathered through non-technical and/or technical survey and the analysis of any existing data relevant to the area.
- f) Hazardous areas should be classified into suspected hazardous areas (SHA) and confirmed hazardous areas (CHA) based on the availability and reliability of information and whether evidence is indirect or direct for each hazard.
- g) Inaccessible areas, or areas with limited information available, shall not be immediately recorded as SHA or CHA. Rather, all possible efforts shall be made to collect the required direct or indirect evidences so the hazard area could be classified and recorded as SHA or CHA.
- h) While fear of the suspected presence of mine/ERW contamination may lead people to avoid a particular area, fear on its own is not legitimate evidence of contamination. Fear needs to be substantiated with other evidence before an area is defined as an SHA or CHA.
- i) Effective application of the land release process means that the area remaining for clearance is better defined, therefore resulting in more efficient use of clearance assets. Clearance intervention is also an information gathering process which leads to the contaminated area being fully defined and allowing efficient decision making about when to stop clearance.
- j) Land should only be cancelled, reduced and/or handed over following clearance when it is deemed safe to use after a credible and well-documented evidence-based process has been fully implemented.
- k) Local participation, including both men and women, should be fully incorporated into the main stages of the land release process in order to ensure that land will be used following handover.

# 4.2 Associating Hazard Types with Areas

Associating specified hazard types with SHA/CHA, such as AP mines, AT mines, Cluster munitions, ERW or a combination of hazard types, ensures that reporting reflects the nature of the contamination. Identifying and associating hazard types with areas is one of the important facts that shall be covered in reporting of hazardous areas to support prioritization decisions in terms of reflecting the risks presented to the affected communities. In the event where creation of SHA can be justified, but there is insufficient evidence to determine the associated contamination type, then the hazard type should be reported and recorded as unknown.

# 4.3 Defining Hazardous Area Boundaries

In the context of mine action programme of Afghanistan, the boundaries of CHA and SHA should be defined both during Non-Technical Survey and then during Technical Survey and Clearance operations. CHA boundaries should be defined and established based on direct evidence of presence of mine/ERW and also their adjacent and surrounding parts in the ground where the probability of presence of mine/ERW hazards is high, in light of analysis of site specific contamination characteristics. The areas that present only indirect evidence of the presence of mines/ERW are defined as SHAs. In all cases, boundaries should be defined on the basis of evidence and information analysis in order to avoid including excessive areas.

# 5. Community Liaison in Land Release Operations

As per AMAS 05.04 of community liaison, involvement of communities is crucial in land release operations in terms of information exchange between mine action organization and community members; this helps organization in obtaining reliable information and evidences to be used as facts

for making appropriate decisions. Liaising with community provides clarity to the community members about the land release operations and builds their confidence that their requirements will be met and the land can be handed over to them for its intended use in a safe and efficient manner. Therefore, the community shall be consulted and fully involved in survey and clearance operations by demining organization. Community involvement should include different groups within the community including men, boys, women and girls, considering cultural limitations in the area. The appropriate local community members shall be consulted and sign off on any cancellation of a hazardous area on the Cancellation Report. See annex B to AMAS 05.02.

# 6. Land Release Criteria

The criteria to be met before releasing land may vary depending on local circumstances, but the required level of confidence that the land is free from mine/ERW contamination remains the same, whether cancelled, reduced, verified or cleared. The participation and agreement of stakeholders (DMAC and implementing demining organizations) are key to the development of accepted criteria. In general terms land release criteria will have been met when it can be shown that either:

- a) In areas where no evidence was found, the efforts applied could reasonably have been expected to find evidence of contamination had it in fact been present; and/or
- b) In areas where evidence of contamination was found, the efforts applied could reasonably have been expected to find and remove all such contamination (within specified limits).

#### 7. Confidence in Cancelled, Reduced, Verified and Cleared Land

Before land can be cancelled, reduced, verified or accepted as cleared, it should be established, with high level of confidence, that there is no longer any evidence that the area contains mine/ERW contamination. This confidence can only be gained after **all reasonable efforts** have been made to investigate whether mine/ERW contamination is present and, when contamination is found to be present, to remove it.

# 7.1 Application of "All Reasonable Efforts"

The term "all reasonable effort" refers to the level of efforts required to be expended to achieve a desired level of confidence in the output of a system. Almost all of the efforts associated with the identification of hazardous land and its subsequent cancellation, reduction and clearance processes relates to the collection, processing and analysis of information in order to support decisions about where mines/ERW are mostly located to be found (and where they are not) and where further efforts should be applied.

"All reasonable effort" in mine action represents the effort that it is reasonable to expect should be applied in order to achieve the desired level of confidence that cancelled, reduced, verified and cleared land is free of mine/ERW contamination within specified limits. The effort is 'reasonable' when it can be shown, on the basis of reason (or logic), that the efforts applied could be expected to have discovered evidence of contamination had been present, and/or could be expected to have found and destroyed/removed all contamination where it was present.

"All reasonable effort" for the cancellation, reduction, verification or release following clearance of previously recorded hazardous areas is reached at a point where sufficient and reliable information and evidences have been collected to conclude with confidence that there is **no evidence of** mine/ERW contamination anymore. A range of information analysis based on survey and clearance findings are required to reach such a point.

"All reasonable effort" may include, but not be limited to:

- a) Identifying and accessing all relevant sources of information including women, girls, boys and men, as well as historical and analytical material;
- b) Establishing and maintaining appropriate and effective information management systems;
- c) Establishing and maintaining appropriate and effective quality management systems;
- d) Carrying out appropriate practical activities, using competent resources and appropriate procedures in order to define, analyze and respond to evidence of contamination;
- e) Monitoring the performance of the land release process and improving it in light of the results of monitoring;
- f) Monitoring the quality of cancelled, reduced and cleared land and taking action to improve the process in light of the results of such monitoring; and
- g) Establishing and maintaining appropriate and effective communication systems to ensure that stakeholders understand, agree with and accept the land release process.

The following should be defined:

- a) Reasonable levels of effort required to investigate, collect, report and analyze evidence of mine/ERW contamination;
- b) Objective criteria for assessing and quantifying the individual survey value of all types of nontechnical survey information; and
- c) Criteria for the amount and reliability of information required to make survey conclusions.

# 7.2 Quality Management

The quality of land release process shall be assured by both demining organization and DMAC. Monitoring should be conducted during non technical survey, technical survey and clearance operations. Demining organization shall develop their internal QA/QC SOPs in line with AMAS 03.01.

If, following the return of land to the intended beneficiaries, evidence of remaining explosive hazards is found, then a rapid response team with appropriate assets shall be deployed to remove the remaining explosive hazards and a transparent investigation shall be conducted in order to investigate why the explosive hazard was not identified, found and cleared. The result of the investigation shall be recorded and any lesson learnt circulated within the MAPA.

# 8. Land Right

Land release contributes to increase of land value which may result to land grabbing and dispute. The land release operations shall be conducted in such a way to avoid contributing to land dispute, land grabbing, destroying the boundaries of land and use of land for illicit purposes such as cultivation of illicit crops or illegal extraction of natural resources. The mine action organizations shall make sure to find out the possible land dispute as a result of mine action intervention through maintaining proper community liaison prior to conduct of any land release operations.

No land release operation is to be conducted in areas where there is land dispute and also possibility of land dispute as a result of demining operations. The demining organization shall make sure to reflect the land right issue in their land release SOP and also reflect the required preventive actions addressing the land right issue while planning any demining project.

# 9. Documentation

The records of non technical survey, technical survey and clearance implemented throughout the land release process shall be properly documented and recorded in line with AMAS 08.02. The reported information shall be recorded in IMSMA.

# **10.** Post Demining Impact Assessment (PDIA)

Post Demining Impact Assessment should either be conducted by demining organizations involved in land release or the DMAC. This can mitigate the possible residual risk within the area.

If findings of PDIA indicated any evidence on existing of mine/ERW hazards, then a rapid response with appropriate assets shall be deployed as immediate action and also a transparent investigation process shall be conducted in order to find the main causes of this undesired issue. The result of the investigation shall be properly recorded as lesson learned.

# 11. Liability in Post Land Release Accidents

Following the land release operations by any mine action organization applied in accordance with the requirements of AMAS and DMAC approved internal SOPs, related organization should not be liable about any harm or death caused by mine or ERW especially on those areas where "no evidence of" hazard is reported and recorded. Unless it is determined, through detailed investigation that the mine action operator failed to meet the requirements of AMAS and DMAC approved SOPs.

DMAC shall convene a board of inquiry in order to technically investigate the circumstances of post land release accidents. Factual based decision shall be made about the liability of an organization about such accidents. Adhering to the land release standard guidelines and the concept of all reasonable efforts mitigate the liability of a demining organization about post land release accidents.

# 12. Land Release in ERW Hazardous Area

The same principles should be applied during the land release process of all AIED contaminated areas including Non Technical Survey, Technical Survey and Clearance operations. Decision on releasing the land using appropriate approach during surface BAC clearance is easy; however it is challenging in subsurface BAC operations; therefore, any land release approach in BAC operations shall be based on analysis of evidences and information gathered during non technical survey, technical survey and clearance operations. For ERW clearance standards, refer to AMAS 06.02 and 06.03.

# 13. Land Release in Randomly Laid Mines

Hazardous areas may contain mines laid in a random pattern, where there are no clearly identifiable mine lines mainly in AT contaminated areas; In such cases, it may not be possible to determine through non-technical or technical survey LTAs or HTAs, or exactly where clearance within a SHA or CHA is required to remove all mines. As such, it may be necessary to clear an entire SHA or CHA in order to remove all suspicion of mines.

# 14. Responsibilities and Obligations

Directorate of Mine Action Coordination (DMAC) shall:

a. Accredit the demining organisations capable of land release, through non-technical survey, technical survey and clearance operations;

- b. Maintain the national database using the information collected through the land release process.
- c. Conduct quality assurance (QA) of the process in order to make sure the land release process has been conducted in a safe, efficient and effective way.

Demining organisations shall:

- a) Gain accreditation from DMAC to perform non-technical survey, technical survey, and clearance.
- b) Adhere to the concept of land release during survey and clearance.
- c) Develop standard operating procedure (SOP) for survey and clearance.
- d) Develop training packages used for training of their relevant personal involved in survey and clearance.
- e) Deploy suitably trained and experienced team command group and supervisors to ensure effective and efficient land release through survey and clearance.
- f) Report and make available all documentation as specified by the DMAC.
- g) Establish and maintain close liaison with affected communities with regards to all survey and clearance decisions.
- h) Develop and implement proper internal QA and QC mechanism for survey and clearance operations.