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Clearance requirements

Director,
United Nations Mine Action Service (UNMAS)
380 Madison Avenue, M11023
New York, NY 10017
USA

Email: mineaction@un.org
Telephone: (1 212) 963 1875
Fax: (1 212) 963 2498
Website: www.mineactionstandards.org

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Contents

Foreword

International standards for humanitarian demining programmes were first proposed by working groups at an international technical conference in Denmark, in July 1996. Criteria were prescribed for all aspects of demining, standards were recommended and a new universal definition of 'clearance' was agreed. In late 1996, the principles proposed in Denmark were developed by a UN-led working group and the International Standards for Humanitarian Mine Clearance Operations were developed. A first edition was issued by the UN Mine Action Service (UNMAS) in March 1997.

The scope of these original standards has since been expanded to include the other components of mine action and to reflect changes to operational procedures, practices and norms. The standards were re-developed and renamed as International Mine Action Standards (IMAS) with the first edition produced in October 2001.

The United Nations has a general responsibility for enabling and encouraging the effective management of mine action programmes, including the development and maintenance of standards. UNMAS, therefore, is the office within the United Nations responsible for the development and maintenance of IMAS. IMAS are produced with the assistance of the Geneva International Centre for Humanitarian Demining.

The work of preparing, reviewing and revising IMAS is conducted by technical committees, with the support of international, governmental and non-governmental organisations. The latest version of each standard, together with information on the work of the technical committees, can be found at http://www.mineactionstandards.org/. Individual IMAS are reviewed at least every three years to reflect developing mine action norms and practices and to incorporate changes to international regulations and requirements.

Introduction

Land Release is the process of applying all reasonable effort to identify or better define Confirmed Hazardous Areas (CHA) and remove suspicion of mines/ERW through non-technical survey, technical survey and/or clearance, using an evidence-based and documented approach. Clearance is the last activity in this process and should ideally only be carried out in Defined Hazardous Areas (DHA), which are normally established following a non-technical survey or technical survey.

The aim of clearance is the identification and removal or destruction of all mine and Explosive Remnants of War (ERW) hazards, (including unexploded sub-munitions), from a specified area to a specified depth to ensure the land is safe for land users. The objective is to promote a culture where the demining community seeks to achieve this target by developing and applying appropriate management procedures, by establishing and continuously improving the skills of managers and deminers, and by procuring safe, effective and efficient equipment.

The beneficiaries of humanitarian demining programmes must be confident that cleared and released land is safe for their use. This requires management systems and clearance procedures which are appropriate, effective, efficient and safe. All relevant parts and members of the local community should be involved in the process and should also receive regular briefings and explanations during the clearance operation as this acts as a very effective confidence building measure. Community Liaison (CL) is an integral part of the land release process and can be achieved by the services of a Mine Risk Education (MRE) team, or by suitably trained members of the demining organisation.

This standard adopts a two-stage approach. Stage 1, Quality Assurance (QA), involves the accreditation and monitoring of the demining organisation before and during the clearance process. To achieve this, demining organisations must establish an effective management organisation, develop and maintain procedures, and apply these procedures in a safe, effective and efficient manner. Management procedures should be transparent and auditable. Community involvement in the demining process should be monitored as part of the QA process. Stage 2, Quality Control (QC), involves the process of inspection of cleared land before it is formally released to the beneficiary for use.

This combined application of QA (before and during the clearance process) with post-clearance QC will contribute to achieving an acceptable level of confidence that the land is safe for its intended use. The quality of clearance must be acceptable to both the National Mine Action Authority (NMAA) and the local community that benefits.

Where no mines are to be expected, the guidance provided in IMAS 09.11 Battle Area Clearance (BAC) or IATG 11.30 ASA Explosions – EOD Clearance should be followed as appropriate to the situation.

Clearance requirements

1. Scope

This standard defines 'clearance' as part of the land release process and specifies the quality system (i.e. the organisation, procedures and responsibilities) necessary to determine that land has been cleared by the demining organisation in accordance with its contractual obligations.

IMAS 09.11 provides guidance for Battle Area Clearance. IATG 11.30 ASA Explosions – EOD Clearance provides guidance on clearance of the area around an ammunition storage site after an undesired explosion.

2. References

A list of normative references is given in Annex A. Normative references are important documents to which reference is made in this standard and which form part of the provisions of this standard.

3. Terms, definitions and abbreviations

A complete glossary of all the terms, definitions and abbreviations used in the IMAS series of standards is given in IMAS 04.10.

In the IMAS series of standards, the words 'shall', 'should' and 'may' are used to indicate the intended degree of compliance. This use is consistent with the language used in ISO standards and guidelines:

a) 'shall' is used to indicate requirements, methods or specifications that are to be applied in order to conform to the standard;

b) 'should' is used to indicate the preferred requirements, methods or specifications; and

c) 'may' is used to indicate a possible method or course of action.

The term ‘National Mine Action Authority (NMAA)’ refers to the government entity, often an inter-ministerial committee, in a mine-affected country charged with responsibility for the regulation, management and coordination of mine action.

Note: In the absence of a NMAA, it may be necessary and appropriate for the UN, or some other recognised international body, to assume some or all of the responsibilities, and fulfil some or all the functions, of a MAC or, less frequently, an NMAA.

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, and comprise one or more sub-units.

The term 'monitoring body' refers to any organisation that monitors the work of the demining organisation and its sub-units on behalf of the NMAA.

The term 'inspection body' refers to any organisation taht conducts post-clearance QC on behalf of the NMAA by applying random sampling procedures, or other appropriate and agreed methods of inspection.

4. Specification of clearance

Land shall be accepted as 'cleared' when the demining organisation has ensured the removal and/or destruction of all mine and ERW hazards, (including unexploded sub-munitions), from the specified area to the specified depth.

The specified area to be cleared shall be determined by a non-technical and/or technical survey or from other reliable information which establishes the extent of the mine and ERW hazard area. See IMAS 08.21 for non-technical survey and IMAS 08.22 for technical survey.

Note: The priorities for clearance shall be determined by the impact on the individual community balanced against national infrastructure priorities.

The specified depth of clearance shall be determined by a technical survey, or from other reliable information, which establishes the anticipated depth of the mine and ERW hazards, and an assessment of the intended land use. When there is no reliable information on the depth of the local mine and ERW hazards, the NMAA should consider adopting a default depth. For the clearance of minimum metal mines, and when metal detectors are to be used, this default depth should be based on the effective detection depth of the metal detectors in use. Independent tests have shown that minimum metal mines can be detected, with modern metal detectors, at search depths of 130mm below the original surface level. Therefore, the default depth should not be less than 130mm. The required clearance depth may be adjusted as clearance work progresses. Any amendment shall be agreed between with the NMAA and the demining organisation, and shall be formally recorded.

When mines and ERW are anticipated at depths greater than can be reliably detected with the available metal detectors, an alternative or combined method of clearance shall be selected.

The specified area to be cleared and the required depth of clearance should be presented to the demining organisation by the NMAA in a site-specific tasking order. The tasking order may also indicate:

a) any additional activities required, e.g. marking;

b) the demining resources to be used;

c) how long the demining organisation is expected to work on the task

d) any additional clearance quality requirements; and

e) the requirements for monitoring and inspection.

The removal and/or destruction of all mine and ERW hazards in the specified area to the specified depth shall be ensured by:

f) using accredited demining organisation(s) with operationally accredited capabilities, such as manual clearance, MDD teams, mechanical systems and community liaison teams. Guidelines on accreditation of demining organizations are given in IMAS 07.30;

g) using appropriate management practices, and applying safe and effective operational procedures. Guidelines on demining worksite safety and safety distance are given in IMAS 10.20. Information on Personal Protective Equipment is provided in IMAS 10.30. IMAS 09.30 provides guidelines on Explosive Ordnance Disposal (EOD). IATG 11.30 ASA Explosions – EOD Clearance provides advice on the clearance after ammunition storage area explosions;

h) monitoring the demining organisation and its sub-units. Guidelines on the monitoring of mine action organisations are given in IMAS 07.40; and

i) conducting a process of post-clearance inspection of cleared land.- A system for conducting post clearance sampling is explained in IMAS 09.20, if required.

The contractual arrangements should specify the area to be cleared, the clearance depth, and the requirements for monitoring and inspection. These should be specified by the NMAA, and agreed during the contractual arrangements.

Note: Specifying clearance depths will depend on the intended land use, the likely mine or ERW hazard in the area to be cleared and other environmental factors. For example:

- Mines and ERW, including unexploded sub-munitions, may be on the surface of the ground. In this case, the specification may call for the removal and or destruction only of surface laid mine and ERW hazards. When no mines are expected, see IMAS 09.11 BAC.
- Clearance in urban areas may require the removal of many metres of rubble as part of the clearance process.
- In situations where large bombs and missiles and cluster munitions have been used, the depth of clearance may be several metres.
- Shifting sands in desert areas or coastal areas may require clearance to a depth of 1.0m or 2.0m to locate and destroy mines which were originally laid at a depth of no more than 10cm.

Note: If the ground level has changed since mines were originally emplaced, then the contractual arrangements shall be written in such a way as to ensure that there is no misunderstanding over the required clearance depth.

Note: There may be circumstances where a demining organisation is funded to operate in an area with a mandate to identify its own clearance tasks based on general priorities provided by the donor and/or NMAA. In such circumstances, the demining organisation should use guidelines provided in IMAS 08.20 Land Release, in advance of clearance, and should formally record the area and depth of the intended clearance.

Note: Community Liaison is intended to ensure the mine action programmes are sensitive and responsive to community needs and priorities including the special needs of men, women, boys or girls. It should also ensure that the mine-affected communities understand and support mine action.

5. Responsibilities

5.1. National Mine Action Authority

The NMAA shall:

a) specify the area to be cleared and depth of clearance in contracts and agreements;

b) specify the standards and guidelines for QA and QC to be applied to clearance contracts and agreements;

c) accredit demining organisations as fit to undertake clearance;

d) provide for a system to monitor the work of the demining organizations; and

e) maintain a registry of cleared and uncleared land showing the clearance status for each hazardous area.

5.2. Demining organisations

The organisation undertaking clearance shall:

a) gain from the NMAA accreditation to operate as a clearance organisation;

b) apply the NMAA clearance standard. In the absence of national standards, the clearance organisation shall apply the IMAS, or such standards as are specified in their contract or agreement;

c) maintain and make available documentation of clearance as specified by the NMAA;

d) apply management practices and operational procedures which aim to clear land to the requirements specified in the contract and agreement(s); and

e) ensure that the mine affected community is fully cognisant of all demining activities in the area and the specific implications for the men, women and children of the community.

In the absence of a NMAA, the demining organisation shall assume additional responsibilities. These include, but are not restricted to:

f) for each hazardous area, and prior to any clearance, agree the requirement and formally document the area of the intended clearance and the depth of the intended clearance;

g) establish and apply a system of monitoring the clearance activities, and post-clearance inspections of cleared land; and

h) assist the host nation, during the establishment of a NMAA, in framing national standards for clearance quality.

5.3. Monitoring body

The monitoring body shall:

a) gain from the NMAA accreditation to operate as a monitoring body;

b) monitor the demining organisation and its sub-units in accordance with IMAS 07.40 and the requirements of the NMAA; and

c) maintain and make available documentation of monitoring inspections as specified by the NMAA.

5.4. Inspection body

The inspection body shall:

a) gain from the NMAA accreditation to operate as an inspection body;

b) apply sampling procedures in accordance with IMAS 09.20 and the requirements of the NMAA; and

c) maintain and make available documentation of inspections as specified by the NMAA.

Annex A
(Normative)
References

The following normative documents contain provisions, which, through reference in this text, constitute provisions of this part of the standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of the standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid ISO or EN:

a) IATG 11.30 ASA Explosions – EOD Clearance;

b) IMAS 04.10 Glossary of mine action terms, definitions and abbreviations;

c) IMAS 07.30 Accreditation of demining organization;

d) IMAS 07.40 Monitoring of demining organisations;

e) IMAS 08.20 Land release;

f) IMAS 08.21 Non-technical survey;

g) IMAS 08.22 Technical survey;

h) IMAS 09.11 Battle Area Clearance;

i) IMAS 09.20 Inspection of cleared land: guidelines for the use of sampling procedures;

j) IMAS 09.30 Explosive Ordnance Disposal;

k) IMAS 10.20 S&OH demining worksite safety; and

l) IAMS 10.30 Personal Protective Equipment.

The latest version/edition of these references should be used. GICHD hold copies of all references used in this standard. A register of the latest version/edition of the IMAS standards, guides and references is maintained by GICHD, and can be read on the IMAS website (http://www.mineactionstandards.org/). NMAA, employers and other interested bodies and organisations should obtain copies before commencing mine action programmes.

Amendment record

Management of IMAS amendments

The IMAS series of standards are subject to formal review on a three-yearly basis, however this does not preclude amendments being made within these three-year periods for reasons of operational safety and efficiency or for editorial purposes.

As amendments are made to this IMAS they will be given a number, and the date and general details of the amendment shown in the table below. The amendment will also be shown on the cover page of the IMAS by the inclusion under the edition date of the phrase *'incorporating amendment number(s) 1 etc.'*

As the formal reviews of each IMAS are completed new editions may be issued. Amendments up to the date of the new edition will be incorporated into the new edition and the amendment record table cleared. Recording of amendments will then start again until a further review is carried out.

The most recently amended IMAS will be the versions that are posted on the IMAS website at www.mineactionstandards.org.

Number	Date	Amendment Details
1	01 Dec 2004	1. Formatting changes. 2. Minor text editing changes. 3. Changes to terms, definitions and abbreviations where necessary to ensure that this IMAS is consistent with IMAS 04.10.
2	24 Jan 2007	1. Minor changes/additions to the first and second paragraph of the foreword. 2. Removal of quality from clause 4 specification of clearance 3. Clause 4, inclusion of a new fourth paragraph concerning tasking orders. 4. Addition of bullet "d" to clause 5.1 National Mine Action Authority (NMA). 5. Inclusion of the term 'mines **and ERW**'. 6. Removal of the term 'threat' from throughout the IMAS.
3	01 Mar 2010	1. Minor changes throughout. 2. Changing definition of NMAA. 3. Removal of Annex B and its reference in Clause 3. 4. Integration of the land release concept and inclusion of references to land release from IMAS 08.20, 08.21 and 08.22. 7. Inclusion of sub-munitions/cluster munitions to ensure cluster munitions issues. 8. Ensuring inclusion of gender and diversity issues -minor additions to that effect. 9. Inclusion of a normative reference to UNDP/SEESAC RAMD/S 05.55.
	01 Aug 2012	1. Inclusion of IATG 11.30 in introduction, scope, clause 4 and as a normative reference in Annex A. 5. Removal of UNDP/SEESAC RAMD/S 05.55 as a normative reference. 6. Reviewed for impact of IATG development. 7. Minor typographical amendments.