



NMAS 07.10

Guide for the Management of Demining Operations

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Edition 2.1

Lebanon Mine Action Center-LMAC

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Warning

This document has been released on the date shown on the cover page. The National Mine Action Standards (NMAS) of Lebanon are subject to regular review and update, so users are advised to consult the most recent version. To ensure that you have access to the current version, contact the Lebanon Mine Action Center (LMAC) through the www.lebmac.org website or by sending an email to info@lebmac.org.

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Foreword

The National Mine Action Standards (NMAS) of Lebanon were first developed in the form of Technical Standards and Guidelines (TSG). After the Lebanon Mine Action Policy was released in 2007, these TSG were edited into the first edition of the NMAS in 2010 and were written to concurrently comply with the first edition of the International Mine Action Standards (IMAS). Since then, the scope of the IMAS has been expanded to include more components of mine action and amended to mirror the most recent changes to standards as required in today's operations. These changes, as well as changes in the local context of Lebanon, have necessitated a review and update of the NMAS.

As detailed in the National Mine Action Policy of 2007, the Lebanon Mine Action Center (LMAC) has the responsibility to execute and coordinate the Lebanon Mine Action Program (LMAP) on behalf of the Lebanon Mine Action Authority (LMAA), including the development and amendment of standards. Such standards shall be developed in a participatory approach that shall involve international, governmental, and nongovernmental organizations.

The NMAS shall be reviewed as needed to reflect amendments in the IMAS as well as incorporate changes to international obligations and local requirements. Such revisions shall be regularly made available on the LMAC's website www.lebmac.org or can be obtained through contacting the LMAC via the email info@lebmac.org.

Acronyms

CHA	Confirmed Hazard Area
CL	Community Liaison
CLO	Community Liaison Officer
ER	Engineering Regiment
ERW	Explosive Remnants of War
HMA	Humanitarian Mine Action
IA	Implementing Agency
IM	Information Management
IMAS	International Mine Action Standards
IMSMA	Information Management System for Mine Action
LAF	Lebanese Armed Forces
LMAA	Lebanon Mine Action Authority
LMAC	Lebanon Mine Action Center
LMAP	Lebanon Mine Action Program
MoU	Memorandum of Understanding
NMAS	National Mine Action Standards
NTS	Non-Technical Survey
QA	Quality Assurance
QC	Quality Control
QM	Quality Management
SHA	Suspected Hazard Area
TS	Technical Survey
TSG	Technical Standards and Guidelines

Introduction

This NMAS focuses on the management requirements for demining operations. The term 'demining' is used to refer to both Technical Survey and area search and Clearance operations (including BAC and EOD spot tasks). At all times, the expression 'demining' is used in this NMAS to refer to operations conducted as part of Humanitarian Mine Action (HMA). HMA in Lebanon is implemented under the supervision and guidance of the Lebanon Mine Action Center (LMAC) which tasks teams provided by the Lebanese Armed Forces (LAF) Engineering Regiment (ER) or by other accredited Implementing Agencies (IAs) who are assigned tasks. IAs may be either national or international organizations.

This NMAS provides a set of standards and guidelines that should feature in all demining management systems designed to ensure the safe, effective, and efficient conduct of land release operations, including NTS, TS, EOD and Clearance operations. It focuses on supporting the LMAC, the Lebanese Army Engineering Regiment, and IAs to develop and apply appropriate Quality Management principles that support their management and supervision of current tasks, their review of current practices, and a process of continual improvement in their activities, while emphasizing a direct link between all field operations and impacted communities.

This NMAS should be read in conjunction with NMAS 02.10, which provides a guide for the general operation, management, and coordination of mine action projects in Lebanon.

Guide for the Management of Demining Operations

1. Scope

This NMAS sets out standards, principles and guidelines for the management of all demining operations in Lebanon. It applies to all Humanitarian Mine Action (HMA) demining activities performed under the guidance and supervision of LMAC by national and international Implementing Agencies (IAs).

While this NMAS focuses on the management of demining operations, the principles herein can be applied to managing mine risk education activities.

2. References

A list of normative and informative references is provided in Annex A.

Normative references provide cross-referencing to other standards referred to in this NMAS, and which form an integral part of the provisions of this standard.

Informative references provide a list of documents that may be consulted for a clearer understanding of this standard.

3. Key Terms and Definitions

The following key terms and definitions are used in this NMAS:

- *Accreditation*: the procedure implemented by the LMAC and by which a HMA organization or a military team becomes formally recognized as competent and able to plan, manage, and implement HMA activities safely, effectively, and efficiently.
- *Demining team*: a team of professionals approved and accredited to conduct one or more demining activities, such as technical survey, non-technical survey, area search and clearance operations and EOD spot tasks.
- *Demining organization*: an organization, national or international, accredited by the LMAC to conduct humanitarian demining activities in Lebanon. Demining organizations may also be referred to as *Employers* or *Implementing Agencies (IAs)*.

In addition to the above terms, NMAS 04.10 provides a glossary of terms and definitions used across all standards.

As in the IMAS, the terms 'shall', 'should' and 'may' are used across all standards to indicate the required degree of compliance. For any organization working in Lebanon, the use of 'shall' indicates a compulsory requirement. The term 'should' indicates the national preference which may be varied with LMAC approval. The term 'may' indicates a suggestion that is not obligatory.

4. Guidelines for the Demining Management Process

In general, the demining management process (figure 1) is initiated by the LMAC, with adequate planning to allow informed assessment of the scope and scale of the EO problem and its impact on the affected communities. Data collection and analysis allows the LMAC to set priorities and allocate tasks appropriately. After the problem and its impact has been identified and assessed, appropriate land release requirements, including non-technical survey (NTS), technical survey (TS), or search and clearance are decided and Implementing Agencies (IAs) selected and tasked. This leads to the eventual release of the land (land release) after 'all reasonable effort' has been made to ensure that the land is safe for the end-users to use. Before its final release, the land should be subject to LMAC Quality Control (QC) inspection and the LMAC Quality Management (QM) team must be satisfied that the IA has conducted the work effectively. After successful QC, the community can be advised of the task completion and a formal handover of the land scheduled.



Figure 1: Demining Management Process

The Demining Management Process may cycle back to planning if critical information is discovered as work progresses. After handover is completed and the land is released the beneficiaries' satisfaction should be assessed and the socio-economic impact of the land release process measured. The results of Post-release assessment are used to inform future resource planning to maximize benefits to the community. Throughout this process, the LMAC conducts Quality Management oversight with the aim of achieving continuous improvement to the process.

A Community Liaison Aide Memoire is available from the LMAC on request. The Community Liaison Contact Sheet that is available from the LMAC should be maintained and updated regularly throughout the demining process by the IAs.

4.1 Planning

In preparation for demining, and before task allocation to an IA, careful and comprehensive planning is conducted by the LMAC to ensure that the scope and scale of the EO contamination is accurately assessed and that the impact of any interventions on the community is identified. This informs the prioritization process and consequent task allocation and involves Non Technical Survey (NTS). For details of NTS see NMAS 08.10.

During planning, maps available in the Information Management (IM) database are used to help make informed decisions. During NTS, all relevant data should be collected from local communities and LAs, including, where possible, information about the infrastructure, terrain, general environment, and the predicted socio-economic impact of the task.

Before tasking IAs for any field intervention, the LMAC should complete the NTS assessment and determine the kinds of demining intervention that are appropriate within in or parts of the task.

4.2 Preparation

After the NTS and planning stage has been completed, the preparation stage begins. In the Preparation stage, the resources necessary to release the land are decided. This may require the use of NTS, TS, or area Clearance. The LMAC then selects an IA that is accredited to conduct the intervention and issues a task order. In some cases, the result of the intervention will be the discovery of more information which means that the type of intervention required may change.

A unique Information Management System for Mine Action (IMSMA) task number shall be allocated and a task dossier defining the activities to be implemented based issued to the IA and a plan of required activity agreed (Clearance plan).

The LMAC and the tasked IA should agree on the resources necessary, including the number of staff and the varied kinds of demining assets. Safety and Occupational Health requirements shall be considered in accordance with NMAS series 10.

4.3 Interventions as required

Following the preparation phase, the land release process may decide that it is appropriate to Cancel and release land where no further interventions are required. The NTS process ensures that all possible relevant information has been gathered and accurately analyzed to support sound decision-making before any recommendation to Cancel land is made. Cancellation of any previously recorded hazardous area shall always require proof that ‘all reasonable effort’ has been made to find evidence of explosive hazards followed by the approval of the LMAC Operations Office and the LMAC Director.

Prior to demining intervention in the field, the IA should complete a Community Liaison (CL) Contact Record in coordination with the relevant local community members and the LMAC operations office.

After accepting the Task order, the IA shall conduct the task as agreed with LMAC and report all additional information about the hazardous area that is acquired during their work. In some cases, discovered information may mean that the assets necessary to safely release the land change and the task may, at LMAC’s discretion, be varied or suspended pending the issue of a revised task order.

During the land release process, the tasked IA shall control and assure the quality of its work to ensure that the applied demining procedures and technical assets are appropriate and meet or exceed the standards required. Details of the internal and external QA/QC requirements for each demining activity are given in the appropriate NMAS providing guidance for that activity. The LMAC shall apply Quality Management oversight intended to

monitor activities in a way that guarantees quality in a cycle of continuous assessment and improvement.

At all times, the IA's community liaison representatives shall maintain communication with the local communities to ensure a high level of confidence. More details about QA/QC are provided in NMAS 07.11 and 07.12.

In addition to their obligation towards the community, IAs have an obligation to ensure the safety and health of their own staff during land release. In this respect, demining organizations shall comply with the Safety and Occupational Health standards provided in NMAS series 10.

4.4 Post-Clearance Quality Control (QC)

Before the land is handed over to the beneficiaries, the LMAC implements external Quality Control (QC) on completed task(s) to ensure that the land to be released to beneficiaries has been effectively searched and cleared. Standards for post-clearance QC are included in NMAS 07.12.

The IA shall have used authorized permanent and temporary marking to assure the respective safety of landowner(s). All required temporary markings should remain in place until the LMAC has conducted QC. The IA shall ensure that all permanent marking is accurately recorded and documented as outlined in NMAS 08.40.

4.5 Land release handover

Whenever applicable, a formal handover of land that is ready to be released should be negotiated between the IA, the community and the LMAC so that the land can be publicly released. During the formal handover, the end-users should be told what has been done to give confidence that the land can be safely used and warned of any residual risk that may remain. Typically, tolerable residual risk should be limited to unanticipated EO hazards that may be beneath the search depth.

4.6 Post-release assessment

Under the guidance and supervision of the LMAC, IAs should also conduct a formal post-project review to document lessons learned during the process and to assess the socio-economic impact of the work. Typically, a post-release assessment should be conducted three months after the release of the land release. The assessment should be submitted to the LMAC where it will be used to inform future task planning. When appropriate, the LMAC may share post-release assessments with other IAs.

When explosive hazards are found on land that has been released, the LMAC must be informed immediately and an urgent investigation conducted so that the Land Release process can be reviewed and any errors corrected. If appropriate, further search and clearance work in the area may be required.

When appropriate, LMAC may arrange for the conduct of subsequent Post-release assessments in collaboration with relevant IAs.

5. Roles and Responsibilities

5.1 Role of the LMAC

The LMAC shall:

- strive to ensure that an effective demining management process is used at all times;
- conduct careful planning prior to any task allocation;
- allocate tasks to IAs only after they have been successfully accredited to work in Lebanon and provided relevant SOPs for the LMAC to review and approve;
- perform external QA/QC on assigned tasks as appropriate, so gaining full confidence that the land to be released to beneficiaries is free from EO hazards;
- promote prompt Land Release by ensuring that handovers take place without undue delay;
- supervise and guide post-project review processes; and
- survey land use after release.

5.2 Role of Demining Organizations

Demining organizations (IAs) shall:

- establish an appropriate and effective management system for demining operations;
- abide by the MoU signed with the LMAC;
- provide detailed SOPs for the demining activities that they wish to conduct to the LMAC and receive LMAC approval of the SOPs before starting those activities;
- abide by the requirements of the task documentation provided to them by the LMAC;
- establish and manage appropriate community liaison contacts;
- perform internal QA/QC on tasks allocated to them; and
- conduct a post-project review and submit it to the LMAC as required.



ANNEX A: Normative and Informative References

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The documents listed below constitute normative references, which form an integral part of the provisions of this standard:

- Current LMAC and IMSMA reporting formats (request copies from the LMAC);
- NMAAS 02.10 Guide for the Operation, Management, and Coordination of Mine Action Projects in Lebanon;
- NMAAS 05.10 Information Management;
- NMAAS 07.11 Guide for Land Release;
- NMAAS 07.12 Quality Management;
- NMAAS 07.14 Risk Management;
- NMAAS 08.10 Non-Technical Survey;
- NMAAS 08.20 Technical Survey;
- NMAAS 08.40 Marking of Hazards;
- NMAAS 07.30 Guide for the Accreditation of Mine Action Organizations and Operations;
- NMAAS 07.40 Monitoring of Mine Action Organizations and Operations;
- NMAAS 10.10 General Guidelines for the Development of Safety and Occupational Health Systems;
- NMAAS 10.20 Demining Worksite Safety;
- NMAAS 10.30 Personal Protective Equipment;
- NMAAS 10.40 Medical Support to Demining Operations;
- NMAAS 10.60 Reporting and Investigation of Demining Incidents;
- NMAAS 10.70 Protection of the Environment; and
- NMAAS 04.10 Glossary of Mine Action Terms, Definitions, and Abbreviations used in the Second Edition of the NMAAS.

In addition to the normative references listed above, the following informative references may be consulted:

- ISO 9001: 2008.

NMAS 07.10, Edition 2.1: Amendment Record

The NMAS are subject to a comprehensive or partial review by the Review Board periodically. Changes in the context as well as safety requirements and efficiency considerations may necessitate amendments to individual NMAS standards more frequently. If this occurs, such amendments shall be given a number, dated, and detailed in the table below. The amendment should also be indicated on the header under the NMAS edition number.

Whenever the formal review of the NMAS is completed, a new edition shall be issued. Amendments that have taken place before the review date shall be incorporated in the new edition and the amendment record table cleared. Consequently, the recording of amendments shall start again until the next review.

The most recent revisions of the NMAS shall be posted on the Lebanon Mine Action Center (LMAC) website on www.lebmac.org.

Number	Date	Amendment Details
1	March 2020	Minor revisions throughout.