



## **NMAS 10.10**

# **General Guidelines for the Development of Safety and Occupational Health Systems**

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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](http://www.lebmac.org) website or by sending an email to [info@lebmac.org](mailto: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](http://www.lebmac.org) or can be obtained through contacting the LMAC via the email [info@lebmac.org](mailto:info@lebmac.org).

## Acronyms

H&S	Health and Safety
HMA	Humanitarian Mine Action
IA	Implementing Agency
IMAS	International Mine Action Standards
ISO	International Organization for Standardization
LMAA	Lebanon Mine Action Authority
LMAC	Lebanon Mine Action Center
LMAP	Lebanon Mine Action Program
MoE	Ministry of Environment
MoL	Ministry of Labor
MoPH	Ministry of Public Health
NGO	Non-Governmental Organization
NMAS	National Mine Action Standards
OHSAS	Occupational Health and Safety Assessment Series
PPE	Personal Protective Equipment
S&OH	Safety and Occupational Health
SOPs	Standard Operating Procedures
TSG	Technical Standards and Guidelines

## Introduction

The Lebanese Labor Law sets general guidelines for the protection of employees in articles 61 through 65. Realizing that the professional implementation of Humanitarian Mine Action (HMA) programs requires the application of adequate mechanisms to reduce risk and construct a safe working environment for all involved, the NMAS 10 series bases its standards on the provisions of the Lebanese Labor Law as well as on common international standards adopted in Mine Action.

In all human endeavors, the term ‘safe’ does not necessarily imply the complete removal of risk. Rather, it assumes that the risk has been reduced to an acceptable or ‘tolerable’ level. In HMA, effective risk management requires a combination of safe working practices and operating procedures, effective supervision and control, appropriate education and training, the use of appropriate equipment, and the provision of effective Personal Protective Equipment (PPE). The provision of a safe working environment includes the design and layout of a demining worksite by fencing and marking hazardous areas, controlling movements, enforcing working and safety distances and providing effective medical cover, PPE, and Casualty Evacuation (CASEVAC) procedures. All of these requirements shall be detailed in the SOPs which the IA shall submit to the LMAC for approval before using them in Lebanon. See also NMAS 07.14 *Risk Management*.

The enormous commitment that Implementing Agencies (IAs) and their employees make in contributing towards Land Release in Lebanon is appreciated. Their commitment makes it of fundamental importance that the LMAC play its part by ensuring that all actors involved are guided by appropriate Safety and Occupational Health (S&OH) standards that ensure that risk is always minimized and always no higher than what is ‘tolerable’.

NMAS 10.10 introduces the NMAS 10 series by focusing on providing definitions of key terms and the S&OH Roles and Responsibilities of all those working in HMA in Lebanon.

## General Guidelines for the Development of Safety and Occupational Health Systems

### 1. Scope

The 10 series of NMAS provides standards and guidance over Safety and Occupational Health (S&OH) issues of relevance to all organizations working in the humanitarian mine action sector in Lebanon. This NMAS introduces the 10 series with guidance about the roles and responsibilities of the LMAC, employers/IAs, and employees in the development and implementation of appropriate S&OH systems. This NMAS should be read alongside the Lebanese Labor Law, NMAS 10.20 through 10.70 and NMAS 07.14 *Risk Management*.

Implementing Agencies (IAs) intending to engage in humanitarian mine action (HMA) interventions shall abide by the standards provided in NMAS 10.10-10.70 and shall present detailed Standing Operating Procedures (SOPs) covering all relevant S&OH issues to the LMAC for assessment and approval before engaging in their intended HMA 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 standard 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 relate to S&OH, and are used in this standard:

- *Employee*: for the purpose of this NMAS, employees are people who work for an Implementing Agency (IA) involved in Humanitarian Mine Action (HMA). Such employees may be involved in management, in operational activities or in operational support activities.
- *Employer*: for the purpose of the NMAS, employers include any Implementing Agency (IA), whether governmental, non-governmental (NGO), or commercial, responsible for implementing demining projects or tasks in Lebanon.
- *Risk Assessment*: the systematic use of evidence from experience to evaluate the relative risks associated with an activity and those associated with alternative means of achieving the same end state.

- *Risk Management*: the entire process by which risks are identified, assessed and mitigated appropriately to ensure that 'all reasonable effort' has been taken to achieve a 'tolerable risk'.
- *Safety*: the reduction of risk to a tolerable level (ISO/IEC Guide 51: 2014).
- *Tolerable risk*: for the purposes of the Lebanon NMAS, tolerable risk is defined as the risk remaining after all reasonable effort has been applied to managing and mitigating risk. The 'tolerable risk' remaining after an area has been searched, cleared and released is the risk of explosive hazards being beneath the required search depth in that task area. The 'tolerable risk' to demining staff is the risk remaining after all reasonable efforts have been made to train, equip and supervise staff in the conduct of inherently safe demining procedures. All reasonable effort includes the production of a formal task risk assessment designed to ensure that appropriate measures to mitigate risk are taken. All formal risk assessments must be updated as work progresses and new information becomes known. The LMAC shall determine the level of risk that is tolerable at any task. In the event of disagreement, the final arbiters of what is 'all reasonable effort' shall be the Government and Courts of Justice in Lebanon.

In addition to the above terms, NMAS 04.10 provides a glossary of terms and definitions used across all standards and NMAS 07.14 presents *Risk Management* 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. General Requirements**

Through the NMAS, the GoL requires all Implementing Agencies (IAs) working in HMA programs in Lebanon to abide by these standards and to have SOPs that ensure the integration of all appropriate S&OH measures as part of their overall management systems.

The SOPs submitted by each IA to the LMAC for assessment and approval before being used shall:

- comply with all relevant provisions of the Lebanese Labor Law applicable at the time of submission;
- include provision for well documented and dynamic risk management systems designed to ensure that all S&OH risks are appropriately identified, managed and mitigated; and
- provide details of the IA's level of accidental injury insurance for all employees, including details of the medical expenses and long term disability provisions.



The IA's S&OH approach must cover all S&OH concerns common throughout industry in Lebanon, not only the S&OH issues arising from working with explosive hazards. This includes such concerns as providing an ergonomic office working environment, infection control in the workplace, and ensuring that all equipment is safe and fit-for-purpose.

## **5. Risk Management**

As part of their Quality Management systems, all IAs shall conduct and document a risk management process that gives confidence that all predictable risks have been identified and that all reasonable measures to avoid or minimize those risks have been taken.

While risk management is central the management of H&S concerns, it covers a far wider range than only H&S. See NMAS 07.14 *Risk Management*.

### **5.1 Risk and the community**

The primary goal of HMA is to reduce risks to non-combatants arising from the presence of EO in affected communities. The IA's risk management systems shall be integrated into its Land Release systems with the goal of ensuring that reducing risk to the community is always prioritized and that no actions are taken that may raise their risk.

Mine Risk Education and effective community liaison are essential features of risk management in HMA and should be integrated into other Land Release interventions whenever practicable.

### **5.2 Risk to the workforce**

In HMA, the avoidance of injury to non-combatants in former conflict zones is paramount and the employees of the IA are, by definition, also non-combatants.

Risks to each IA's employees include health and injury issues in the office, road traffic accidents and the risk of explosive injury during field operations.

The IA's management systems and procedures shall demonstrate that all S&OH risks to its workforce are identified and managed in a manner that ensures risk is always minimized. The maintenance of a 'risk register' listing identified risks and the measures taken to avoid or mitigate them should be a part of every IA's risk management system.

## **6. S&OH Roles, and Responsibilities**

This section provides general guidelines for differentiating between the roles and responsibilities of the LMAC, the employers (IAs), and their employees.

## 6.1 Responsibilities of the LMAC

As the coordinating body of the Lebanon Mine Action Program (LMAP), the LMAC shall ensure that S&OH measures are implemented at all times in accordance with the Lebanese Labor Law, the requirements of the Ministry of Public Health (MoPH), and the provisions of the NMAS. The LMAC shall approve regulations and SOPs covering S&OH in the mine action work environment as well as provide specific support and guidance to employers, so that they are able to ensure the appropriate management of all safety issues affecting communities and employees.

More specifically, the LMAC shall:

- following QM principles, review S&OH legislation and practices in the mine action workplace, revisions of the IMAS or ISO Standards, and advances in research or technology that may indicate a need to make changes to the national provision;
- coordinate with the relevant ministries, including the Ministry of Public Health (MoPH), Ministry of Environment (MoE), and Ministry of Labor (MoL) to ensure that knowledge of their requirements is spread throughout the HMA community and so enhance the provision of a safe working environment to employees in the HMA programs;
- assess the H&S aspects of all relevant SOPs submitted by the IA and approve their use when appropriate;
- conduct random and unannounced S&OH inspections on IAs at any time;
- review the IAs Risk Management procedures and their field risk assessments during QA/QC checks, ensuring that corrective action is taken when appropriate.

## 3.3 Responsibilities of IAs

As employers, IAs shall apply adequate safety procedures to protect the safety of their employees adhering to the NMAS and the Lebanese Labor Law.

IAs shall:

- develop S&OH SOPs (in both Arabic and English) covering safety in all of their workplaces, and obtain LMAC's approval of these SOPs: after approval they should be made readily available to every employee;
- provide all employees with adequate health and emergency medical insurance that will pay for all necessary medical treatment and, when appropriate, compensation, and provide the LMAC with copies of the insurance schedule;
- ensure that the S&OH standards laid out in the NMAS 10 series are applied, implemented and undertaken by employees at all times;

- ensure the provision and maintenance of safe work places, demining worksites, and support facilities;
- ensure that all employees are appropriately trained and equipped to conduct their duties safely: also ensuring that refresher and continuation training are provided in a QM system that pursues continual refinement/improvement;
- maintain an up to date list of hospitals and health centers closest to the place of work that are adequately equipped to provide emergency treatment if required;
- conduct systematic risk assessments and risk evaluations on a regular basis to ensure that the level of risk does not become intolerable in any workplace;
- conduct systematic field risk assessments and risk mitigation in a formal risk management procedure recorded in a 'risk register' that is made available to the LMAC; and
- provide the LMAC with full access to equipment, worksites, and policy documents upon request.

Furthermore, in accordance with the Lebanese Labor Law, IAs should facilitate the appointment of delegates and committees within the organization, to represent the employees' views on S&OH matters. Such committees should be granted access to all relevant S&OH documents and provided with adequate support on request.

### **3.4 Responsibilities of Employees**


Employees of IAs working in HMA shall:

- abide by the provisions of the NMAS 10 series and work in compliance with the LMAC approved SOPs of their employer;
- consider at all times their own safety and the safety of those around them;
- make use of the safety devices and PPE provided at all times; and
- report any potentially hazardous or unexpected situation to their supervisor immediately and, if it is necessary to remedy the situation, make the report to the LMAC.

In addition to the above responsibilities, employees working in IAs shall be granted rights including:

- the right to receive adequate and full training covering HMA workplace safety and occupational health, in accordance with the Lebanon NMAS;
- the right to refuse to work in conditions that they reasonably believe to be outside the realm of 'tolerable risk' for HMA without fear of reprisal or punishment;

- the right to request S&OH inspections by the LMAC in cases where they believe working conditions violate the terms laid out in this NMAS; and
- the right to request information from the employer regarding any possibility of risk levels being 'intolerable' in the course of HMA, and the right to request action from the employer to return the working situation to that of 'tolerable risk'.

	<b>LEBANON NATIONAL MINE ACTION STANDARDS</b>		<b>Edition 2.1</b>	<b>NMAS 10.10</b>
	<b>ANNEX A: Normative and Informative References</b>			
<b>March 2020</b>				

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);
- NMAS 07.14 Risk Management
- NMAS 10.20 Demining Worksite Safety;
- NMAS 10.30 Personal Protective Equipment;
- NMAS 10.40 Medical Support to Demining Operations;
- NMAS 10.60 Reporting/Investigation of Demining Incidents;
- NMAS 10.70 Protection of the Environment; and
- NMAS 04.10 Glossary of Mine Action Terms, Definitions, & Abbreviations used in the Second Edition of the NMAS.

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

- Lebanon National Mine Action Policy;
- Lebanese Labor Law;
- IMAS 10.10 Safety and Occupational Health – General Requirements;
- ISO/IEC Guide 51: 2014; and
- ISO 45001.

## NMAAS 10.10, Edition 2.1: Amendment Record

The NMAAS 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 NMAAS 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 NMAAS edition number.

Whenever the formal review of the NMAAS 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 NMAAS shall be posted on the Lebanon Mine Action Center (LMAC) website on [www.lebmac.org](http://www.lebmac.org).

<b>Number</b>	<b>Date</b>	<b>Amendment Details</b>
1	March 2020	General revisions throughout to achieve consistency with new NMAAS.