

# NATIONAL TECHNICAL STANDARDS AND GUIDELINES (NTSGs)

AND

## QUALITY MANAGEMNET

The National Technical Standards and Guidelines (NTSGs) for Mine Action in Lebanon are essential to enable the Lebanon Mine Action Center (LMAC) to plan and assess the Demining operations within Lebanon.

The aim of the TSGs is to provide humanitarian Demining Organisations with a reference for the conduct of field operations. It has been produced using experiences gained locally and incorporates lessons and best practices learned in other theatres worldwide.

The document is not intended to replace or replicate Standard Operating Procedures (SOP's) nor do they absolve Demining Organisations from the responsibility to produce their own SOPs. Conversely, the Guidelines and Technical Standards are intended to be used as an aid in developing SOP's, by detailing the minimum standards and accepted methods for conducting demining operations in Lebanon.

Variations in procedures and methods of operation are to be expected amongst the different organisations. The **NTSG** provides an example of practices accepted by the LMAC and a basis for comparison during the Accreditation process. Mine Action Organisations that do not conform to the minimum **requirements** outlined in this document shall not be accredited by the LMAC to work in Lebanon.

The document is designed to be a "living" document. The procedures and practices shall be continually reviewed in order to ensure they remain relevant to the current Mine and ERW situation, and keep up with advances in technology.

Where necessary the document meets and exceeds those minimum standards set out in the International Mine Action Standards (IMAS).

### NATIONAL TECHNICAL STANDARDS AND GUIDELINES IN USE:

<b>Chapter</b>	<b>Subject</b>
<b>Introduction</b>	Objective and Summary of Document
<b>Glossary</b>	Glossary of Terms used in TSG's
<b>Chapter One</b>	Mine/UXO Survey
<b>Chapter Two</b>	Site Preparation
<b>Chapter Three</b>	Marking Systems
<b>Chapter Four</b>	Mine Clearance Techniques
<b>Chapter Five</b>	House Clearance
<b>Chapter Six</b>	Demolitions of Mine/UXO
<b>Chapter Seven</b>	Medical Support and Casualty Evacuation
<b>Chapter Eight</b>	Reporting
<b>Chapter Nine</b>	Accreditation and Quality Assurance
<b>Chapter Ten</b>	Mechanical Assistance
<b>Chapter Eleven</b>	Mine Detection Dogs
<b>Chapter Twelve</b>	Communications
<b>Chapter Thirteen</b>	Transport and Storage of Explosives

<b>Chapter Fourteen</b>	Battle Area Clearance
<b>Chapter Fifteen</b>	Training
<b>Chapter Sixteen</b>	Investigating of mine/UXO accident
<b>Chapter Seventeen</b>	IMSMA
<b>Chapter Eighteen</b>	Environmental Management
<b>Chapter Nineteen</b>	Community Liaison
<b>Chapter Twenty</b>	Safety and Occupational Health – Demining Worksite Safety
<b>Chapter Twenty One</b>	Central Demolition Sites
<b>Chapter Twenty Two</b>	Personnel Protective Equipment
<b>Chapter Twenty Three</b>	Cancellation of Reported Dangerous Areas and Minefields
<b>Chapter Twenty Four</b>	Minefield Clearance Methodology
<b>Chapter Twenty Five</b>	Booby Trap Clearance Methodology
<b>Chapter Twenty Six</b>	Clearance Site Administration

## **ACCREDITATION**

Following an amendment to IMAS 07.30, Ed No2, 2003, the previous terms of Accreditation and Licensing have been amended to Organisational Accreditation and Operational Accreditation. Organisational Accreditation is the procedure by which a demining organisation is formally recognised as competent and able to plan and manage demining activities safely, effectively and efficiently. The LMAC shall accredit all organisations before any clearance being conducted in Lebanon. The LMAC shall be the Operational Accreditation Certification issuing body for all organisations wishing to work in Lebanon

Operational Accreditation is the procedure by which a demining organisation is formally recognised as competent and able to carry out demining activities. The granting of Operational Accreditation assumes that the capability shall not change beyond the scope or intention of the original Operational Accreditation. The LMAC shall conduct a field assessment of all operational assets and then recommend to the LMAC Director that a Provisional Operational Accreditation Licence be issued prior to that asset for a period of one month. At the completion of the one month probation period if the clearance asset is conducting clearance in accordance with the clearance organisations accredited SOP's and has been subject to a minimum of four acceptable QA evaluations on an operational site then the LMAC QA/QC Section shall recommend that the LMAC Director issues a full Operational Accreditation Licence.

## **QUALITY ASSURANCE**

Quality Assurance (QA) covers the whole process of mine/UXO clearance while Quality Control (QC) is a combination of activities during or after as in the case of Sampling to provide the overall confidence levels in the process. All mine/UXO clearance shall be according to National TSG's as established in the LMAC, and according to individual SOP's that have been submitted and approved by the LMAC.

The guidelines and standards have been established to ensure that procedures provide operations with a maximum degree of safety and that once the land has been cleared, it is

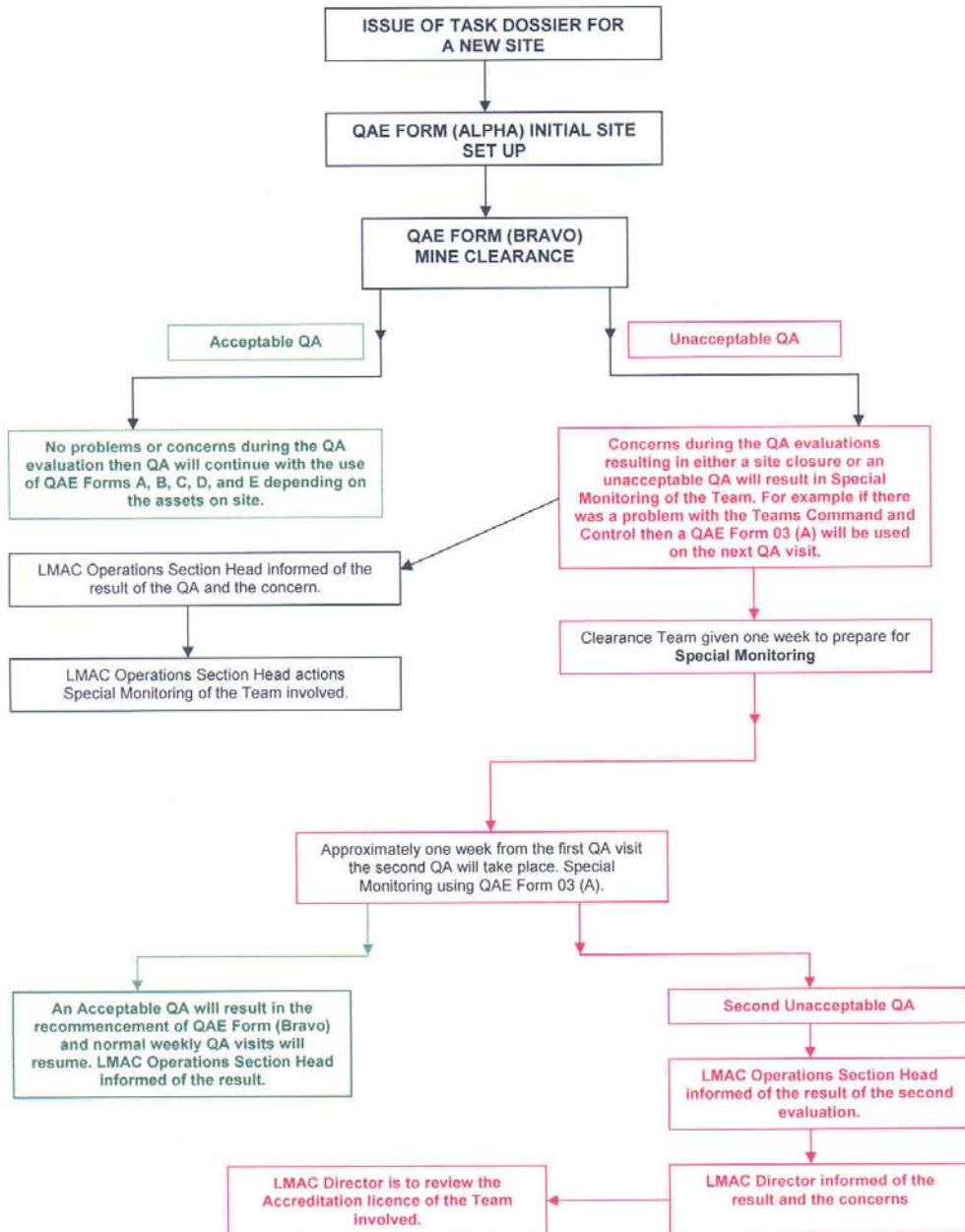
indeed free of mines or UXO to a minimum depth of 20 cm from the natural ground and is safe for use by civilians.

Determining the amount of QC and establishing an acceptable degree of QA, requires good common sense and practicality be applied. Otherwise the process becomes difficult to implement in a timely manner and extremely costly in terms of resources and associated funding. It is understood that QC shall vary depending on the clearance technique such as explosive detection dogs, mechanical options, manual clearance and the local conditions such as the mine/UXO threat and the soil conditions.

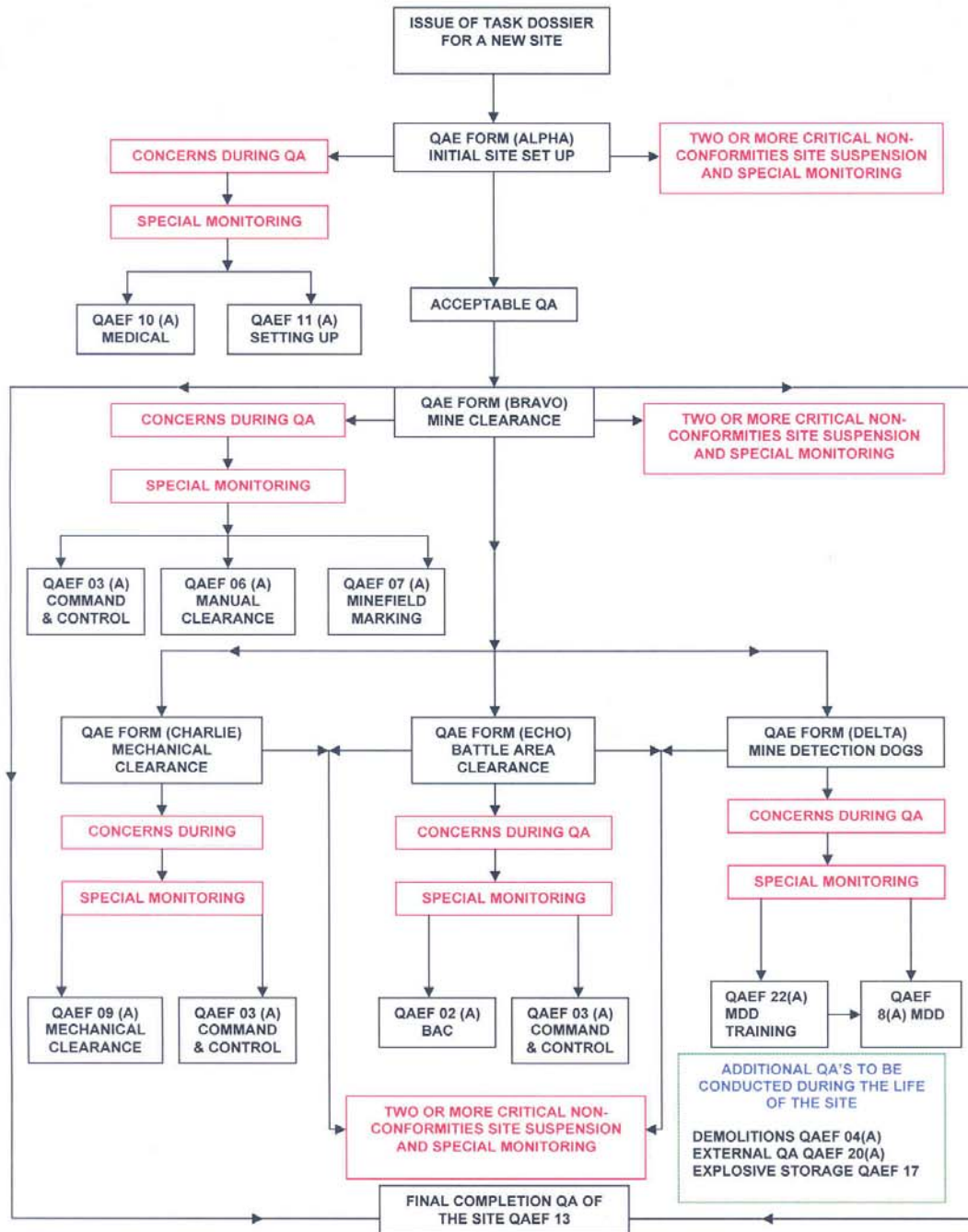
The basic framework for meeting humanitarian standards in Lebanon and the degree of QC is as follows:

- a. Adherence to Training Standards and enforcement of these standards.
- b. Adherence to the National TSG's laid down by the LMAC.
- c. Adherence to individual SOPs accredited and approved by the LMAC.
- d. Evaluation of capacities before clearance (evaluation of dogs, mine detectors, and demonstration of the use of mechanical means).
- e. Discipline in the danger area.
- f. Levels of supervision and the associated internal QC checks.
- g. The mine/UXO threat.
- h. The final use of the land shall determine the depth of clearance, which is set at a minimum of 20 cm from the natural ground in Lebanon.

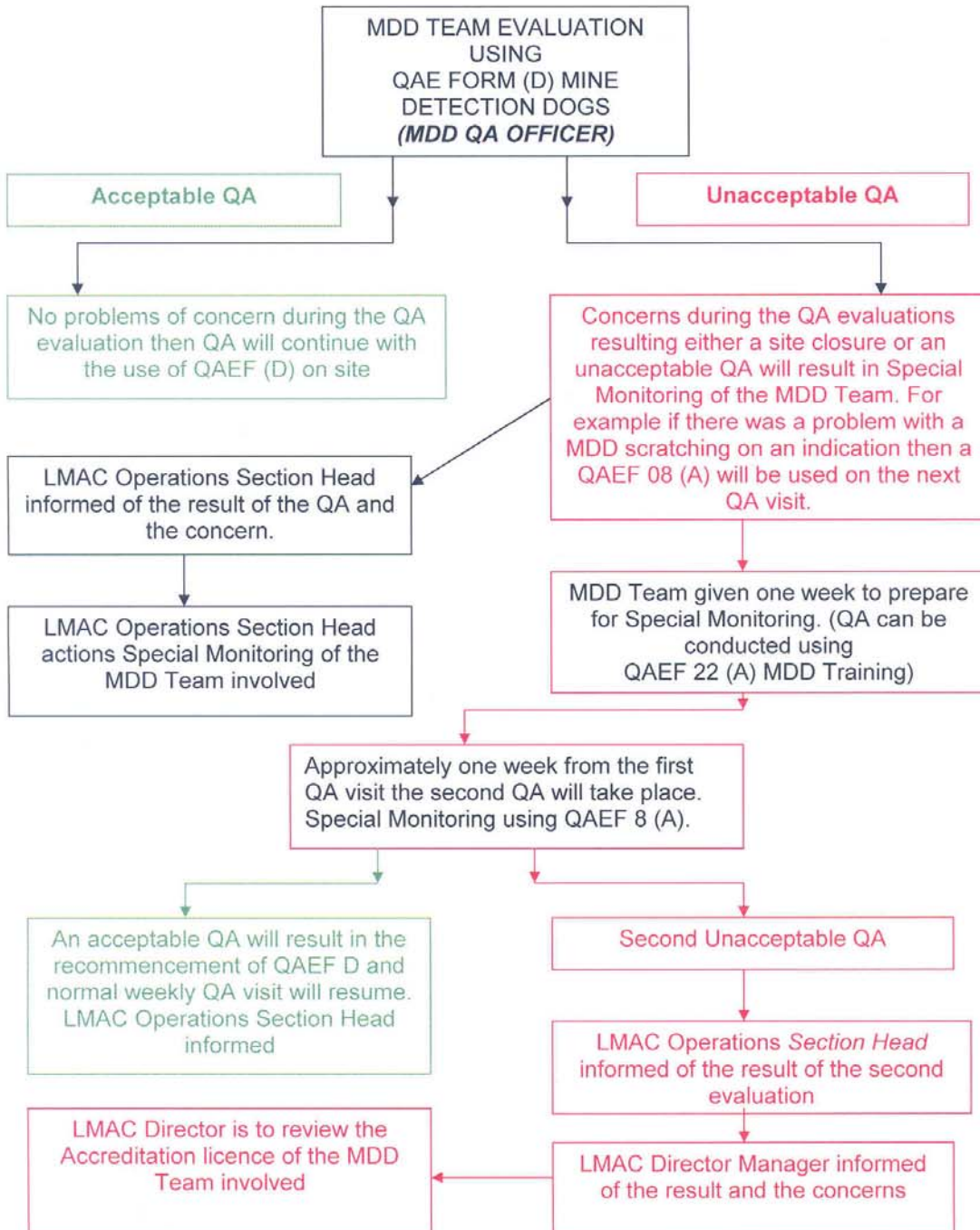
# QUALITY ASSURANCE SEQUENCE OF EVENTS



# QUALITY ASSURANCE EVALUATION PROCESS



## MDD QUALITY ASSURANCE SEQUENCE OF EVENTS



# QUALITY ASSURANCE EVALUATION PROCESS

