IMAS 10.60

First Edition
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Reporting and investigation of demining incidents

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Foreword

In July 1996, international standards for humanitarian mine clearance programmes were proposed by working groups at a conference in Denmark. Criteria were prescribed for all aspects of mine clearance, 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 into International Standards for Humanitarian Mine Clearance Operations. A first edition of these standards was issued by the UN Mine Action Service (UNMAS) in March 1997.

This second edition reflects changes to operational procedures, practices and norms which have occurred over the past three years. The scope of these standards has been expanded to include the other components of mine action, in particular those of mine risk education and victim assistance.

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 is the office within the United Nations Secretariat responsible for the development and maintenance of international mine action standards (IMAS).

The work of preparing, reviewing and revising these standards 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 www.mineactionstandards.org. IMAS will be reviewed at least every three years to reflect developing mine action norms and practices, and to incorporate changes to international regulations and requirements.
Introduction

The need to report and investigate demining incidents in a clear, comprehensive and timely manner is an essential part of mine action management.

The effective management and supervision of mine action programmes will reduce the likelihood of harm, but there will always be the potential for demining incidents to occur. There are legal and moral obligations on managers at all levels in mine action to ensure that the likelihood of harm is reduced to the lowest realistic levels. Effective reporting and the thorough investigation of demining incidents can play an essential part in meeting this objective. Information collected and presented in a clear and accessible format will contribute to the ‘lessons learned’ process, assisting emergency response, improving the quality of the demining process and reducing the likelihood of future demining accidents.

The aim of this standard is to provide specifications and guidance on the minimum requirements for the reporting and investigation of demining incidents. The document is in three parts: Clauses 1 to 3 define the scope, references and terms used in the standard; Clauses 4 and 5 define the requirements, specifications and responsibilities; and the annexes provide additional detailed information and guidance on how the standard can be applied.
Safety & occupational health  
Reporting and investigation of demining incidents

1 Scope

This IMAS provides specifications and guidance to national mine action authorities and demining organisations on the minimum requirements for the reporting and investigation of a demining incident. It includes definitions for categorisation of demining incidents, which should assist in drawing lessons that will benefit the wider demining community.

This standard is applicable only for the reporting and investigation of incidents that occur at the demining workplace. It is not applicable to incidents away from the workplace (see terms and definitions below). Neither does it apply to investigations carried out to satisfy national or police requirements, though the relevant authority may choose to adopt elements as appropriate.

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 and definitions

A list of terms and definitions used in this standard is given in Annex B. A complete glossary of all the terms and definitions 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 which are to be adopted in order to satisfy the standard in full.
b) 'should' is used to indicate the preferred requirements, methods or specifications.
c) 'may' is used to indicate a possible method or course of action.

The term 'accident' refers to an undesired event which results in harm.

The term 'incident' refers to an event that gives rise to an accident or has the potential to lead to an accident.

The term 'demining incident' refers to an incident at a demining workplace involving a mine or UXO hazard (c.f. mine incident).

The term 'mine incident' refers to an incident away from the demining workplace involving a mine or UXO hazard (c.f. demining incident).

4 Incident reporting and investigation requirements

4.1 Incidents

4.1.1 General requirements

The following incidents shall be reported to the national mine action authority:

a) an accident in which a mine or UXO harms a demining employee, visitor or member of the local population at a demining workplace;
b) an incident in which a mine or UXO damages equipment or property at a demining workplace;

c) the discovery of a mine or UXO located in an area previously cleared, recorded as cleared, marked as cleared or previously recorded as always being clear, regardless of whether harm has resulted from the missed mine or UXO;

d) where demining employees, visitors or the local population are exposed to intolerable risk that results from the application of documented standards or SOPs, including the failure of equipment issued to employees; and

e) any unplanned detonation of mine or UXO on a demining worksite irrespective of the cause or outcome.

Authorities receiving reports of incidents that highlight inadequacies of equipment, standards or approved SOPs, or that indicate the presence of new types of hazard, shall disseminate a general warning to all demining organisations applying the same equipment, standard or SOP, or likely to meet the same new hazards. In the absence of a national demining authority the demining organisations themselves shall assume this responsibility.

Note: A national mine action authority may also feel it necessary to fully investigate the circumstances surrounding a mine incident in terms of evaluating the risk taking behaviour of a community. This will then enable them to better evaluate the value or relevance of a specific MRRE message or programme.

4.1.2 Reporting format

The demining incident report shall include the following information, as a minimum:

a) the demining organisation and demining unit (however named or identified);

b) the location of the incident, including any hazard area identification code or reference number;

c) the nature of the incident (for example missed mine, demining accident or suspected inadequacy of documented standards or SOPs, or suspected breach of SOPs);

d) the type of munition (if known);

e) harm resulting from the incident (injury or death of deminer, supervisor, visitor or member of the local population);

f) damage resulting from the incident (for example equipment, stores, PPE or property);

g) description of events leading to the incident;

h) name and contact details of witnesses or people who may be able to assist in the subsequent investigation of the incident; and

i) description of immediate actions taken to assist the injured.

An example of an incident report is included in Annex C. (This report format will shortly include additional requirements for specific victim information and risk behaviour analysis information).

4.2 Investigations

4.2.1 General requirements

The following incidents should be subject to investigation by an appropriately qualified and experienced third party:

a) demining incidents resulting from the application of approved standards or procedures, a mine or UXO hazard missed during the clearance process;

b) demining accidents resulting in injury or death;

c) damage to property;
4.2.2 Investigation procedures

The aim of the demining incident investigation is to identify problems or opportunities to improve the safety and quality of the demining process. It is neither a criminal investigation nor an investigation to assist in the assessment of a current or possible future insurance claim. As such, all employees of demining organisations should be encouraged to provide complete and accurate information about the circumstances surrounding the incident and opinions on ways to improve procedures that may assist in preventing a similar incident occurring.

The authority initiating a demining incident investigation should ensure that:

a) the investigation commences as soon as possible;

b) the investigating officer or investigating team has the qualifications, experience and skills needed to meet requirements specified in the terms of reference for the investigation;

Note: for investigation of fatal accidents, a team of 3 individuals – comprised of a MAC representative, an independent person and a representative of the organisation suffering the accident, but not a member of the immediate site workforce or its chain of command be organised to conduct the inquiry.

c) the investigating officer is independent from, and has no affiliations with, the demining organisation(s) involved in the incident

d) a copy of the terms of reference is provided to the demining organisation(s) that may be asked to assist the investigating officer or investigating team in the investigation and the development of recommendations on improvements to the demining process under investigation;

e) the incident site is preserved as far as possible, until released by the investigating officer or investigation team, in order to prevent loss of valuable information;

f) photographs of the incident site are taken immediately; and

g) unless exceptional circumstances exist, the investigation report is submitted on time and that it is complete, clear, concise and accurate (including conclusions and recommendations for improvement.

An example of an investigation SOP is included in Annex D.

4.3 Reporting and dissemination

The following information should be widely distributed:

a) the circumstances contributing to and harm resulting from the incident;

b) an analysis of the information collected during the investigation; and

c) the findings of the investigation (i.e. the conclusions and recommendations drawn from the investigation process).

The national mine action authority, or an organisation acting on its behalf, shall disseminate information on demining incidents. In the absence of a national mine action authority, demining organisations should make this information available to other demining organisations through UNMAS. In the event of the identification of new hazards, the dissemination of information should be immediate.
5 Responsibilities

5.1 National responsibilities

The national mine action authority shall:

a) establish and maintain procedures for the reporting and investigation of demining incidents. The procedures should be based on this standard and other relevant standards and national regulations;

b) appoint an independent investigating officer;

c) disseminate the findings of all investigation reports to all demining organisations operating in the country, and to other national mine action authorities through UNMAS; and

d) ensure that the results of any medical examination, post mortem or coroners report are made available to the parent demining organisation.

Note: It is highly probable that this information will be made available for public release after the completion of the initial accident investigation. Should the medical results cast any doubt on the initial findings, then the national mine action authority shall re-open the investigation to take into account this new evidence.

5.2 Employers' responsibilities

Demining employers shall:

a) report demining incidents to the national mine action authority in a timely manner;

b) take immediate photographs of demining incident site, and then preserve it until the site is inspected and released by the investigating officer;

c) provide access, and if necessary administrative support to incident investigation teams;

d) make available to the investigation team the original worksite records, SOPs, training records and radio log;

e) assist staff appointed to investigate demining incidents; and

f) in the absence of a national mine action authority, make the findings of investigations available to other demining organisations through UNMAS.

5.3 Employees' obligations

Demining employees shall:

a) apply appropriate standards and SOPs designed to prevent demining incidents;

b) report perceived weaknesses in equipment training and procedures;

c) report reportable incidents; and

d) assist in the investigation of incidents.
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) IMAS 10.10 S&OH - General requirements;
b) IMAS 10.20 Demining worksite safety; and
c) IMAS 09.30 Explosive ordnance disposal.

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: (See www.mineactionstandards.org). National mine action authorities, employers and other interested bodies and organisations should obtain copies before commencing mine action programmes.
Annex B
(Informative)
Terms and definitions

B.1.1 accident
an undesired event which results in harm
Note: modified from definition in OHSAS 18001:1999,

B.1.2 deminer
a person, including a public servant, qualified and employed to undertake demining activities or work on a demining worksite.

B.1.3 demining accident
an accident at a demining workplace involving a mine or UXO hazard (c.f mine accident)

B.1.4 demining incident
an incident at a demining workplace involving a mine or UXO hazard (c.f mine incident)

B.1.5 demining workplace
workplace where demining activities are undertaken
Note: Includes sites where survey, clearance and EOD activities are undertaken including centralised disposal sites used for the destruction of mines and UXO identified and removed during clearance operations.

B.1.6 incident
an event that gives rise to an accident or has the potential to lead to an accident [ILO C155]

B.1.7 mine accident
an accident away from the demining workplace involving a mine or UXO hazard (c.f demining accident)

B.1.8 mine incident
an incident away from the demining workplace involving a mine or UXO hazard (c.f demining incident)

B.1.9 workplace
all places where workers need to be or to go by reason of their work and which are under the direct or indirect control of the employer.
Annex C
(Informative)
Example demining Incident report procedure

Title: Demining incident reporting
No: IMAS 10.60
Date: 01/10/01

Intent: Efficient and accurate reporting of demining incidents providing information required to assist in emergency response and initiation of investigation procedures

Process user: Operations manager
Process owner: Director operations

<table>
<thead>
<tr>
<th>Process description</th>
<th>Site manager</th>
<th>Demining Org</th>
<th>MAC</th>
<th>Other Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demining Incident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement appropriate emergency response SOP and incident-site preservation SOP.</td>
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</tr>
<tr>
<td>Collect data and prepare incident report</td>
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<tr>
<td>To include photographs, a list of witnesses, the equipment or technology that may have failed, details of harm caused (who &amp; what and estimate of extent of damage).</td>
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</tr>
<tr>
<td>Submit initial report</td>
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<td>(1)</td>
</tr>
<tr>
<td>Submit initial report by fastest practical means, follow up with written report. See annex A for a report format.</td>
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<tr>
<td>Does incident identify an intolerable risk.</td>
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<tr>
<td>a. in documented standards or approved SOPs?</td>
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<tr>
<td>b. an unforeseen hazard (new device or technique used in minelaying or boobytrapping)?</td>
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<tr>
<td>Send general warning message</td>
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<tr>
<td>General warning message shall advise caution on the application of the standards SOP or technology, or unforeseen hazard (new device or technique used in minelaying or boobytrapping).</td>
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<tr>
<td>Is a formal investigation required?</td>
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<tr>
<td>See IMAS 10.60 for a guide on the decision making process. Advise demining org to submit detailed report.</td>
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<tr>
<td>Submit detailed report</td>
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<tr>
<td>Compile and submit detailed report.</td>
<td></td>
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</tr>
<tr>
<td>See annex B for report format</td>
<td></td>
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</tr>
<tr>
<td>Appoint a board of inquiry or investigation officer</td>
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<td></td>
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<tr>
<td>See IMAS 10.60</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Investigate Incident</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>See IMAS 10.60</td>
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<tr>
<td>Demining organisation shall assist investigation team.</td>
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<tr>
<td>Submit to police or other national authority as required or as appropriate.</td>
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</tbody>
</table>

Legend
- Documents (multiple)
- Process Decision
- Multiple responsibility Connector

Page no 1 of 6 Authority Initials
7
### MINE CASUALTY/DAMAGE REPORT

1. **Organisation, site office/Project number, Team name/number:**
2. **Location (Province, District, Village, Task No.):**
3. **Date and time of incident:**
   - a. *Description of injuries:* (See Note:)
   - b. *Treatments given:* (See Note:)
   - c. *Current condition of casualties:* (See Note:)
4. **Evacuation Routes and Destinations:**
5. **List equipment/facilities damaged:** (See Note:)
6. **Describe how the incident occurred:** (See Note:)
   - a. Did the incident occur in a cleared, safe or contaminated area?
   - b. *Device type (if known):*
   - c. *Other information? (See Note:)*

### Notes:
- **Provide contact details of the person responsible for coordination of immediate response to the demining incident and coordination of investigation activities. E.g. operations manager (callsign, telephone number as appropriate).**
- **Highlighted portions should be reported by radio/telephone procedure as soon as possible, the complete information should be confirmed by fax or email as appropriate. Fax or email messages should be accompanied by a telephone call advising that the fax or Email will be/has been sent.**
- **Date and time the report is submitted (this is used to assist in tracking the reporting system and assisting in identifying ways to improve the reporting system)**
- **For demining workers, include title of employment category (deminer, team leader, surveyor, medic, driver etc). For others include contact details of the injured party.**
- **List injuries for each person separately.**
- **List the equipment or facilities damaged, include a short description of the extent of the damage and where appropriate the name and contact details of the owners of each item.**
- **Include a short description of the incident. E.g. "The incident occurred while prodding for a PMN mine. The mine was in an area covered by bamboo. It appeared that the deminer had difficulty cutting away and removing the roots of the bamboo when he initiated mine."**
- **In the case of a missed mine incident include details of how the missed mine was discovered. E.g. mine reported after clearance, or mine located during acceptance sampling or mine discovered in safety lane cleared by survey organisation.**
- **Provide as much information as possible about the circumstances surrounding the incident. E.g. information which would assist in making decisions on the requirement to send out a general warning about a new device found or the inadequacies of a standard or SOP. Submission of the report should not be prolonged in an effort to collect and analyse information regarding the incident.**
# Demining incident– Detailed report

## Part 1 – Description of the incident

1. **Organisation name** Team No
2. **Incident date** / / Time
3. **Location of incident:** Province District
   - Village
   - Project or task No
3. **Name of site manager or team leader**
4. **Type of incident:**
   - missed mine/UXO
   - uncontrolled detonation of a mine/UXO
5. **Device was detonated by:**
   - not applicable
   - deminer/surveyor
   - mine dog
   - team leader
   - vehicle
   - other (specify)
5a. **Device detonated while:**
   - detecting
   - prodding/excavating
   - preparing a charge
   - moving
   - other (Specify)
6. **Device was found in an area classified as:**
   - Not applicable
   - a usable area
   - a known hazardous area
   - an unknown area
   - a cleared area
   - (go to 7)
6a. **Provide accurate location of incident and name of organisation that did the clearance, if known**

## Part 2 – Injuries

8. **Did the incident result in any injuries?**
   - Yes
   - No
9. **List people injured and nature of injury**
   - Name
   - Occupation
   - Injury
   - Activity

Note: Activity refers to the activity being performed at the time of the incident, eg. supervising deminer, prodding, using metal detector, using dog to search under building etc.

Note: Attach an injury data sheet for each injured person (See Attachment 1)

## Part 3 – Equipment damages

10. **Did the incident result in any damage to equipment or property?**
   - Yes
   - No
11. **List any mine action equipment or property damage**
   - Item (and Serial No)
   - Condition

Page no 3 of 6

Authority Initials
12. List damage to equipment or property owned by a member of the public or the government. Include contact details of the owner or responsible person.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

**Part 4 – Explosive hazard**

13. Provide details of mines/UXO/other devices that were involved in the incident.

- **Device Type:** AP (Frag) Mine
  - **Method:** Buried
  - **Determined by:** Direct observation

- **Device Type:** AP (Blast) Mine
  - **Method:** Surface
  - **Determined by:** Fragments found

- **Device Type:** AT Mine
  - **Method:** Tripwired
  - **Determined by:** Suspected only

- **Device Type:** UXO
  - **Method:** Booby Trapped

- **Device Type:** Booby Trap
  - **Method:** Unknown

14. State specific device (if known):

<table>
<thead>
<tr>
<th>Type</th>
<th>Qty</th>
<th>Remarks (including mine types)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Pers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anti-Tank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UXO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Comments (include measurements of any crater resulting from the explosion)

**Part 5 - Site conditions**

16. Describe the conditions at the site at time of the incident

<table>
<thead>
<tr>
<th>Ground/Terrain:</th>
<th>Weather:</th>
<th>Vegetation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft</td>
<td>Flat</td>
<td>Clear</td>
</tr>
<tr>
<td>Medium</td>
<td>Uneven</td>
<td>Cloudy</td>
</tr>
<tr>
<td>Hard</td>
<td>Hillside</td>
<td>Raining</td>
</tr>
<tr>
<td>Wet</td>
<td>Snow</td>
<td>Bush</td>
</tr>
<tr>
<td>Dry</td>
<td>Open</td>
<td>Windy</td>
</tr>
<tr>
<td>Confined</td>
<td>Calm</td>
<td></td>
</tr>
</tbody>
</table>

**Part 6 – Team and task details**

17. Last QA monitoring inspection of team

Month/Year ___ / ___

18. Qualifications of deminer(s) involved in the incident:

<table>
<thead>
<tr>
<th>Name</th>
<th>Occupation</th>
<th>Course attended</th>
</tr>
</thead>
</table>

19. How long had this team been:

a. At this site? days weeks months

b. working on this task? days weeks months

c. working on the day? hours
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Detector type:</td>
<td>Serial Number:</td>
<td>Detector status:</td>
</tr>
<tr>
<td>Passed to</td>
<td>for technical inspection at</td>
<td>(location) on</td>
</tr>
<tr>
<td>Tripwire feeler used?</td>
<td>Yes ☐ No ☐</td>
<td></td>
</tr>
<tr>
<td>21. Handtool/Prodder type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. PPE:</td>
<td>Helmets ☐</td>
<td>Visor ☐</td>
</tr>
<tr>
<td>23. Comments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Part 7 - Medical & first aid**

Medical treatment required  yes ☐ no ☐ (go to 28)

25. Medical Support at Incident Site: Medic ☐ 1st Aid Kit ☐ Stretcher ☐ Ambulance ☐ Safety Vehicle ☐ Radio to call forward medic ☐

26. Was a Mine Incident Drill carried out? Yes ☐ No ☐ (Go to 27)

27. Time and distance data
   a. Time from incident to initial First Aid (at site) minutes ☐ hours ☐
   b. Time spent at site administering treatment minutes ☐ hours ☐
   c. Time from evacuation at site to arrival at field medical facility or local hospital minutes ☐ hours ☐ km
   d. Time evacuated from local hospital administering treatment minutes ☐ hours ☐ km
   e. Time evacuated from local hospital to final medical treatment facility minutes ☐ hours ☐ km

**Part 8 – Reporting procedures**

Reported by (name) to (agency) by (method)
on (date) at (time)

Report compiled/translated by: (Signature)

Printed Name

Organisation Date

**Attachments:**

- Statements by Injured Members yes ☐ no ☐
- Statements by Witnesses yes ☐ no ☐
- Sketch Plan of Incident Site yes ☐ no ☐
- Photographs of Injuries yes ☐ no ☐
- Injury data sheet(s) yes ☐ no ☐
- Photographs of Incident Site yes ☐ no ☐
- Copy of Survey Map yes ☐ no ☐
- Copy of Incident Report yes ☐ no ☐
- Copy of Medical Report yes ☐ no ☐
- Copy of Injury Card yes ☐ no ☐
- Technical Details of Device yes ☐ no ☐

Page no 5 of 6 Authority Initials
1 Square(5mm) = 1 meters

**Checklist**
- Marked area
- Useable areas
- Cleared areas
- Unknown areas
- Location of victims equipment damage at time of incident.

**Legend**
- device •
- Primary victim ⊙
- Secondary victims ◎, ⊙ etc
- Equipment building damage II
Casualty Name: 

Victim Number (see legend on incident sketch map) 

Date Time Location 

Male ☐ Female ☐ Age: 

Severity of Injury: FATAL ☐ SEVERE ☐ MINOR ☐ 

Cause of Injury: mine ☐ UXO ☐ Shell ☐ Bomb ☐ Other ☐ 

Place X in code box if there is no apparent injury from this incident. 

Place an injury code in the code box to indicate the type of injury suffered from the accident.

Legend 

Code Meaning 

A Abrasions 

AM Amputation 

TAM Traumatic amputation 

B Burn/discolouration 

D Dislocation 

F Fracture 

FR Fragment 

H Haemorrhage 

IH Internal Haemorrhage 

L Laceration 

LO Loss of Function 

head 

neck 

Upper arm 

Upper arm 

Pelvis/buttocks 

Upper leg 

Right side 

Left side 

Chest 

Hearing 

abdomen 

Left side 

Right side 

Lower arm 

Hand/finger 

Lower arm 

Hand/finger 

Lower leg 

Foot/toes 

Lower leg 

Foot/toes
### Annex D

**Example of demining incident investigation SOP**

<table>
<thead>
<tr>
<th>Title: Investigation of demining incidents</th>
<th>No: IMAS 10.60</th>
<th>Date: 01/10/01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intent: Improve safety and quality in demining through the collection and analysis and dissemination of information on the circumstances leading to a demining incident.</td>
<td>Process user: Operations manager</td>
<td>Process owner: Director operations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process description</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demining incident report</strong></td>
<td>Demining organisation</td>
</tr>
<tr>
<td>Implement appropriate emergency response SOP and incident-site preservation SOP. Submit incident report.</td>
<td></td>
</tr>
<tr>
<td><strong>Determine type of investigation required</strong></td>
<td></td>
</tr>
<tr>
<td>See decision guide, Annex A</td>
<td></td>
</tr>
<tr>
<td><strong>Draft terms of reference (TOR)</strong></td>
<td></td>
</tr>
<tr>
<td>See guide attached as Annex B</td>
<td></td>
</tr>
<tr>
<td><strong>Appoint investigating Office (IO)</strong></td>
<td></td>
</tr>
<tr>
<td>Provide IO with TOR, copy to organisation(s) involved Provide IO with administrative support needed. Transport accommodation and meals.</td>
<td></td>
</tr>
<tr>
<td><strong>Investigating officer to undertake investigation</strong></td>
<td></td>
</tr>
<tr>
<td>In accordance with TOR and support and assistance of the organisations and employees involved in the incident.</td>
<td></td>
</tr>
<tr>
<td><strong>Is the Investigation and report completed on time</strong></td>
<td></td>
</tr>
<tr>
<td>no</td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td></td>
</tr>
<tr>
<td><strong>Submit interim report</strong></td>
<td></td>
</tr>
<tr>
<td>Provide update on progress to date, advise reason for delay and expected date of completion</td>
<td></td>
</tr>
<tr>
<td><strong>Submit final report</strong></td>
<td></td>
</tr>
<tr>
<td>Ensuring that report is accurate, clear, concise and complete.</td>
<td></td>
</tr>
<tr>
<td><strong>Analyse report and disseminate information on findings</strong></td>
<td></td>
</tr>
<tr>
<td>Send information to demining orgs and UNMAS (if required)</td>
<td></td>
</tr>
<tr>
<td><strong>Document report in data base</strong></td>
<td></td>
</tr>
<tr>
<td>Analyse trends. Disseminate information on trends Include incident on agenda of next technical working group.</td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

- **Document** (multiple)
- **Process**
- **Decision**
- **Multiple responsibility**
- **Connector**

Page no 1 of 1  
Authority  
Initials
## Annex A
### Guide to selecting an appropriate level for an investigation

<table>
<thead>
<tr>
<th>Type of investigation</th>
<th>Board</th>
<th>Independent IO</th>
<th>Internal IO</th>
</tr>
</thead>
</table>

1. **Demining incident**
   - a. resulting from the application of approved standards or procedures.
   - b. a mine or UXO hazard missed during the clearance process.
   - c. which could attract media attention or media report

2. **Demining accident** resulting in:
   - a. minor injury of a deminer
   - b. serious injury of a deminer
   - c. death of a deminer.
   - d. injury of a non-deminer.
   - e. death of a non-deminer
   - f. damage to demining organisation equipment (less than US$ 5,000.00)
   - g. damage to demining organisation equipment US$ 5001.00 to US$50,000
   - h. damage to demining equipment more than US$50,000
   - i. damage that may result in a major claim for compensation from a member of the public.
   - j. major event causing significant damage.

**Note:** Board of inquiry will include three appropriately qualified members of the senior management or technical management. One from the MAC, and two from separate third party demining organisations.

**Note:** The IO will be an appropriately qualified appointee of the MAC.

**Note:** The Internal IO will be an appropriate qualified member of the demining organisation.
Annex B

Example terms of reference

1. You (name) of (Organisation) are hereby appointed by (name) of the MAC to investigate the circumstances surrounding the following mine incident.

<table>
<thead>
<tr>
<th>Serial No:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date/Time:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Location:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Organisation detail:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Personnel involved:</th>
</tr>
</thead>
</table>

2. Your investigation and report are to cover the following:
   a. When, where, how and why the incident occurred.
   b. The cause, nature and extent of injuries caused as a result of the incident.
   c. The cause, nature and extent of damage to any mine action programme or private property.
   d. The level of training and experience of the people involved in the incident.
   e. The work timings for the period leading up to the incident. Include the time of commencement of work on the day of the incident, and if there had been a rest period during the time proceeding the incident. If so, state the duration of the rest period.
   f. The dates of the last leave period for deminers preceding the incident.
   g. The dates of the last monitoring mission of the team involved in the incident and the results of that mission.
   h. The dates of the last revision training for the team, and if the members involved in the incident attended that revision training.
   i. The safety equipment worn or used by the people involved in the incident, and whether the equipment was worn or used correctly. Attach photographs of any damaged equipment.
   j. Whether, in your opinion, the use of the safety equipment contributed to a reduction of injuries.
   k. Whether medical treatment and evacuation were adequate or in any way contributed to the injuries or death.
   l. Whether the death, injury or damage was contributed or caused by:
      m. Neglect, carelessness or misconduct by the member or other persons involved, the use of drugs or medication,
      n. Any non-compliance with orders, instructions or safety procedures, malfunctioning of explosive devices or equipment being used,
      o. Any shortfall in training of members involved,
      p. Any weakness in the method of command and control,
      q. The prevailing weather conditions or any other cause.
      r. Whether any immediate action is required to prevent recurrence of the incident.
      s. Health of deminer(s) involved in the accident
      t. Any provision of food, water and protection from elements on site
      u. Frequency of deminer rotation in lanes and time of last rotation prior to the incident.

3. The report is to make conclusions on the following:
   a. The key factors which contributed to the incident including any shortfalls in training, procedures, equipment or management.
   b. Whether there is any fault, neglect or carelessness on the part of mine action agencies and, if so, which members are responsible.
4. The report is to make recommendations on:
   a. modifications to training or procedures,
   b. modifications to equipment,
   c. disciplinary or corrective action to be taken against mine action agencies or personnel,
   d. any other immediate or longer-term action that should be taken to prevent such incidents from occurring in the future.

5. The following documents are to be attached to your report:
   a. copy of these terms of reference
   b. copy of the casualty report
   c. copy of the initial investigation report
   d. statements of the concerned personnel/witnesses
   e. photographs and site diagram/sketch map of the site (if the incident occurred in or near a surveyed area, a copy of the survey map is to be attached)
   f. photographs of injured personnel and damaged equipment if available.

6. Your report is to be submitted by (date):

7. In the event that you are unable to submit the completed report on the above date you are to submit an interim or progress report on that date and provide an update report every ( ) days until the completed investigation report is submitted to the MAC

Signed

Dated