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Management of training

Director
United Nations Mine Action Service (UNMAS)
1 United Nations Plaza
New York, NY 10017
USA

E-mail: mineaction@un.org
Telephone: +1 (212) 963 0691

Website: www.mineactionstandards.org

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Director
United Nations Mine Action Service (UNMAS)
1 United Nations Plaza New York,
NY 10017 USA
E-mail: mineaction@un.org
Telephone: +1 (212) 963 0691
Website: www.mineactionstandards.org

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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 organizations. The latest version of each standard, together with information on the work of the technical committees, can be found at 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

Through delivery of well-prepared training, competences made up of knowledge, skills and attitudes are acquired. Competences are essential to safe, efficient mine action. There is a direct relationship between safety, conformity, productivity and competences. Training improves performance at programme and organizational level through professional development of staff. Acquiring new competences or maintaining and updating existing ones requires training that is thoughtfully designed, professionally delivered, sympathetically monitored and constructively evaluated.

Management of training

1 Scope

This standard provides guidelines to the national mine action authorities, mine action centres and mine action organizations for the identification, planning, delivery, control and evaluation of training. It is intended to be applied to formal training relevant to mine action competences.

2 Normative 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 complete glossary of all the terms, definitions and abbreviations used in the International Mine Action Standards (IMAS) series is given in IMAS 04.10.

In the IMAS series, the words “shall”, “should” and “may” are used to indicate the intended degree of compliance:

- “shall” is used to indicate requirements, methods or specifications that are to be applied in order to conform to the standard;
- “should” is used to indicate preferred requirements, methods or specifications; and
- “may” is used to indicate a possible method or course of action.

3.1

competence

competency

combination of knowledge, skills and attitudes necessary to perform a task

3.2

skill

ability to perform a task or activity with a specific intended outcome acquired through education, training, experience or other means

[SOURCE: ISO 29995:2021, 3.4.18, modified – the term ‘B’ skill has been changed to skill.]

3.3

knowledge

facts, information, principles or understanding acquired through experience, research or education

[SOURCE: ISO 29995:2021, 3.4.19]

3.4

attitude

inclination of mind and behaviours towards things, persons and situations acquired through experience and training

3.5

training

distinct set of teaching and learning activities, designed to attain defined learning objectives

3.6

formal training

training that is structured around specific learning objectives, is documented and where the assessment of students upon completion is supervised

3.7

informal training

training that occurs outside of a formal, structured environment

3.8

training needs analysis

identification of competences necessary to meet a performance standard, and the training required to attain these competences

3.9

training management package

set of documents that provide all the information necessary to run formal training

3.10

learning objective

competences to be acquired through training

4 Training management cycle

The key elements of the management of training process are:

- training needs analysis;
- definition and planning of the learning objective(s);
- design of the training course(s);
- delivery of the training course(s);
- assessment of learning;
- evaluation of the outcome of training.

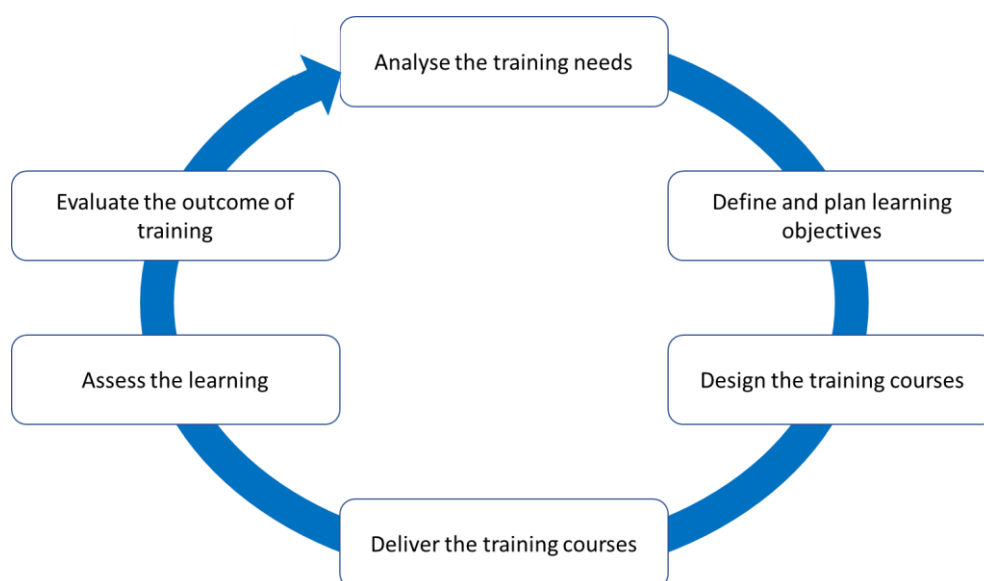


Figure 1 – Training management cycle

Risk management, including safety and occupational health risks, and quality management apply to training and throughout the entire cycle.

5 Training needs analysis

The training needs analysis (TNA) shall be conducted at the programme, organizational, unit, team and individual levels.

The TNA shall start with the analysis of competences required to ensure each different role or function is effective. Based on this analysis, the TNA should determine:

- the competences which already exist and the additional competences which are required;
- how these competences can be maintained, improved or updated;
- how the competences are expected to be applied at the programme, organizational, unit, team or individual levels.

The TNA shall take the following into account:

- the national mine action strategy, policy and standards, any other applicable standard, contractual, applicable legal and regulatory requirements, including accreditation requirements;
- the results of monitoring, particularly actual and potential nonconformities;
- the investigation and reporting of accidents, incidents and near misses at demining worksites (see IMAS 10.60);
- the analysis of performance (see TNMA 07.12.01 and TNMA 07.11.02); and
- existing protocols for the testing and evaluation of competences.

The TNA shall refer to existing competences as a baseline, where these are described in the Test and Evaluation Protocols (currently limited to explosive ordnance disposal (EOD), improvised explosive device disposal (IEDD) and animal detection systems (ADS) competences). Where the Test and Evaluation Protocols do not describe all required competences, the TNA shall be expanded to include other required competences, as deemed necessary by the responsible organization.

The TNA is part of a continual improvement process and, as such, shall be undertaken at different stages including:

- when starting a mine action programme or project;
- when planning new types of operations, for example, planning to integrate mechanical assets for technical survey or clearance;
- upon identification of major or critical nonconformities that need to be rectified and corrected if inappropriate competences are identified as a cause;
- after demining incidents, accidents and reported near misses if inappropriate competences are identified as a cause;
- when poor or unsatisfactory performance, that is not related to nonconformity, is identified;
- when new equipment, systems, standards or procedures are put in place.

The TNA shall involve staff with competences in the considered areas of training (for example, EOD) and in training and educational matters.

The organization designing the training shall determine the learners' current level of competence, or set and communicate the prerequisite.

The TNA shall identify any barriers to learning or accessing the training faced by potential trainees, including language, disability status, gender, literacy and educational background. Access considerations can include physical accessibility of the training site and digital accessibility in the case of online training.

6 Definition and planning of learning objectives

6.1 General

Learning objectives shall be expressed as a brief and clear statement of what a learner is expected to know or be able to do at the completion of the training.

Learning objectives to be achieved through training shall be identified at relevant levels throughout the organization.

6.2 At the organizational and programme levels

Defined learning objectives serve as criteria to monitor the relevance and quality of training.

Planning shall include the identification and assessment of the risks that can affect the effective delivery of training activities.

It may be necessary to divide training programmes into separate training courses. For example, to develop EOD Level 3 competences, it is necessary to plan the delivery of training courses for EOD Level 1, EOD Level 2 and EOD Level 3, unless learners already have an EOD Level 1 and Level 2 certifications. Such a programme may include additional training to develop other enabling competences such as the provision of basic care.

6.3 At the team and individual levels

The learning objectives should be measurable against predetermined criteria. competences detailed in relevant Test and Evaluation Protocols shall be referenced to determine and document learning objectives. Where they do not exist, the organization developing the training, shall determine and document the intended learning objectives.

7 Design of the training courses

7.1 General

Formal training may be in the form of:

- in-person training (the trainers and the learners are in the same place);
- virtual training (the trainers and the learners interact remotely over the internet);
- a combination of the above, often referred to as blended training.

The following does not fully apply to self-paced learning – including self-paced e-learning – if it is not deemed to be formal training (see 7.4).

NOTE: The value of self-paced learning to develop and reinforce competences is recognized. Self-paced learning may complement formal training to reinforce it. When self-paced training is conducted on its own, it is not recognized as a formal training for the purpose of this IMAS.

The design of a training course shall be documented in a training management package (TMP). As a minimum, the TMP shall include the intended learning objectives (see Clause 6), a schedule of the sessions, a plan for each session, learning materials, means of assessment and safety measures.

TMP design shall involve:

- trainers who are competent in the subject matters to be taught;
- staff who are competent in the development of training. Organizations designing training may seek support from external instructional designers.

It shall take into account:

- 1) the results of the training needs analysis and the learning objectives;
- 2) the schedule and method(s) of training (face-to-face, practical, theoretical);
- 3) the risk assessment (see Clause 9);
- 4) the criteria, intended means and procedures for assessing the learning (see 7.4);
- 5) the ratio of trainers to learners;
- 6) the resources and responsibilities to optimize learning;
- 7) if applicable, the type and content of a certificate of completion (see 7.4);
- 8) if applicable, any relevant contractual modalities, memoranda of understanding and other relevant agreement;
- 9) if applicable, any adjustments that are required to overcome barriers to learning identified during the TNA.

7.2 Training schedule and sessions

The schedule shall indicate the title of each training session and its duration.

The schedule should indicate:

- the specific learning objectives of each session;
- the form of learning (theory or practice).

7.3 Learning material

The learning material shall:

- fit the TMP and methods of training;
- be up to date, reflecting the current application of the course subject outside the course;
- comply with relevant copyright regulation about the photocopying and use of printed and digital material;
- be safe;
- be in a language accessible to learners.

The learning material should:

- be accessible to learners with disabilities;
- take into account the social and cultural background of the learners.

7.4 Assessment of the learning

The degree to which learners acquired the competences shall be measured. The assessment is the gathering of data to determine to which extent learners meet the learning objectives.

This is achieved through testing and evaluating learners' proficiency. Both testing and evaluation shall be conducted against specified criteria determined during the design of course (see 7.1.). Testing applies measurement against these criteria. Evaluation applies judgement against these criteria.

In designing assessments, the following shall be considered:

- 1) the intended use of the assessment (for example, operational accreditation);
- 2) the knowledge, skills and attitudes to be measured;
- 3) the standards to be measured against;
- 4) the methods of assessment (test or evaluation);
- 5) the scoring and reporting;
- 6) the interested parties involved in or affected by the assessment.

Prior to, or at the beginning of, the course, a baseline assessment should be made of the learner's level of competence in the subject to be learned.

The progress of learners shall be assessed throughout and at the end of the course. Feedback shall be given to learners.

For formal training, the assessment shall be supervised.

The organization delivering the training shall issue a certificate of completion which includes but is not limited to:

- the name of the learner;
- the title and the learning objectives of the training;
- the level of achievement of the learning objectives;
- the number of hours of training;
- the dates of the training;
- the organization delivering the training should keep records of assessments.

8 Delivery of the training courses

8.1 Resources

- *Training staff:* the training shall be delivered by trainers who are competent in the taught subject matters in question, and are trained in the use of the teaching methods and materials. A lead trainer should be appointed to manage other trainers and ensure the quality of their delivery.
- *Language:* The teaching language shall be agreed. The training material shall be translated in the agreed language. Translators may be used during the training. Translation shall be subject to quality assurance and quality control.

- *Training explosive ordnance*: the use of training EO shall be strictly regulated and controlled to avoid incidents and accidents (see IMAS 10.50).
- *Training environment*: the training environment shall guarantee the safety of the trainees and trainers. It shall also be conducive to learning.
- *Accommodation*: when it is provided to learners, accommodation should be appropriate for the needs of learners, considering gender, disability and other diversity factors identified in the TNA. Separate accommodation shall be provided for women and men.
- *Inclusion*: when specific barriers are identified, resources should be allocated to address these barriers (for example, temporary childcare, accommodation for chaperon).

8.2 Training records

The organization delivering the training should maintain records including, as a minimum:

- the names of the trainers;
- the number of learners disaggregated by sex, age and disabilities;
- the dates;
- the learners' level of achievement.

When delivering training to a third party, the organization should share the certificate of completion with this third party. This third party should keep records of the certificates of completion.

9 Risk management

When planning training, the organization and the trainer responsible for the training shall identify and assess risks associated with the training management. They shall also determine what treatment measures will be applied for each of the risks. Risk may be identified and categorized using the six stages of the training management cycle (see IMAS 07.14).

In addition, the organization and the trainer shall identify, assess and mitigate safety and occupational health risks (see IMAS 10.10). Where applicable, these include fire hazards, ventilation and heating, natural disasters, ergonomic or biological (such as viruses, bacteria, insects, animals, etc.). Safety briefs and safety drills covering the identified risks should be developed and delivered to all participants orally or in writing.

The risk assessment and the risk treatment measures should be documented.

10 Quality management of training

While training contributes to the overall quality of mine action programmes, it is also subject to quality management. Both external and internal quality management apply to training.

- Quality assurance:
- accreditation of the mine action organizations to develop and deliver training;
- approval of the TMP;
- internal standing operating procedures;
- monitoring of the training courses being delivered: external and internal.
- Quality control: thorough assessment of the learning content (see 7.3.).

- Quality improvement:
- evaluation of the learners' satisfaction through formal feedback;
- long-term monitoring of individual and organizational performance.

11 Responsibilities

11.1 National mine action authorities

The NMAA or the organization acting on its behalf shall:

- 1) identify which areas of competences are required to meet the national mine action strategy, policy, standards and other applicable requirements, such as national laws and regulations;
- 2) identify the managerial, operational and technical competences needed for staff working in organizations that are managed, overseen or coordinated by the NMAA or organization acting on its behalf;
- 3) establish and maintain national standards, regulations and procedures for the management of training within their programmes. These procedures should be consistent with the relevant national and international standards, regulation and requirements;
- 4) ensure that capacity development forms an essential part of the work of each national mine action centre, NMAA or organization acting on its behalf, and mine action organization;
- 5) approve TMPs and the CVs of trainers before training begins, when these have not already been covered as part of the accreditation process;
- 6) perform periodic external assessment of training conducted by the mine action organizations to ensure the training is in accordance with the TMP and the national standards; and
- 7) maintain records of training and certificates of completion with disaggregation, at a minimum, by gender and disability status.

The NMAA or organization acting on its behalf should:

- 1) develop relevant strategies and policies aiming at identifying, developing, monitoring and maintaining the competences;
- 2) prioritize training based on the results of TNA.

11.2 Mine action organizations

Mine action organizations shall:

- 1) ensure that all training is based on a training needs analysis;
- 2) produce comprehensive TMPs that are in compliance the organization's SOPs and with the national standards;
- 3) submit TMPs to the NMAA or organization acting on its behalf for approval prior to any training taking place, unless the training is carried out centrally under the control of the NMAA or organization acting on its behalf;
- 4) identify the managerial, operational and technical competences needed to meet the objectives of projects and any relevant requirement;
- 5) support the NMAA or organization acting on its behalf in the identification of required competences and subsequent training needs;

- 6) ensure that capacity development forms an essential part of their work and the work of technical advisors providing support to any training;
- 7) ensure training activities, whether formal or on-the-job, are written into the strategic and work plans of the organization;
- 8) conduct internal monitoring and evaluation as an essential part of the training;
- 9) maintain records of training for the life of the programme. If the organization ceases to work in a particular country, the training records shall be transferred to the NMAA or organization acting on its behalf, and;
- 10) ensure the training is being delivered by qualified and experienced trainers and that the needs of both men and women are addressed.

11.3 Donors

Donors, where relevant, should ensure that capacity development is a key activity of each organization they fund and that they conduct training in accordance with the national requirements.

Annex A (normative)

References

The following normative documents contain provisions, which, through reference in this text, constitute provisions of this standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this 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.

- [1] IMAS 04.10, *Glossary of mine action terms, definitions and abbreviations*
- [2] IMAS 07.12, *Quality management in mine action*
- [3] IMAS 07.14, *Risk management in mine action*
- [4] IMAS 10.10, *Safety and occupational health – General requirements*
- [5] IMAS 10.50, *Storage, transportation and handling of explosives*
- [6] IMAS 10.60, *Safety and occupational health – Investigation and reporting of accidents and incidents*
- [7] ISO 29995:2021, *Education and learning services — Vocabulary*
- [8] TNMA 07.11.02, *Key performance indicators (KPIs) for land release and stockpile destruction operations*
- [9] UNMAS Gender Guidelines for Mine Action Programmes

The latest version/edition of these references should be used. GICHD holds 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 organizations should obtain copies before commencing mine action programmes.

Annex B (informative)

Guidance on the definition of learning objectives

B.1 General

A learning objective represents the competences to be acquired through training. It is a statement that represents the knowledge, skill(s) and attitude(s) to be demonstrated by the learner. Learning objectives should be developed for the training course and for each session.

Some learning objectives are described in Test and Evaluation Protocols (T&EP), such as T&EP 09.30/01/2022 Conventional Explosive Ordnance Disposal (EOD) Competency Standards. This annex provides guidance for the definition of learning objectives that are not described in a standardized way.

B.2 Categories

Learning objectives can belong to several categories. The examples of learning objective categories as shown below¹ in bold may be used to support the development of learning objectives:

- **Knowing or remembering** – identify different ordnance categories and sub-categories (rocket, mortar, grenade, projectile, aircraft bomb, missile, etc.) as per various forms of categorization, such as NATO, CORD, Treaties, IMAS, etc.² (explosive ordnance disposal).
- **Understanding or comprehending** – explain behavioural change (explosive ordnance risk education).
- **Applying or do** – query data in the database with the intention of identifying incomplete information (information management quality control).
- **Analysing** – classify an area based on the findings of a survey (non-technical survey).
- **Evaluating** – assess the likelihood and impact of a risk (mine action management).
- **Creating** – design suitable EOD reporting forms³ (explosive ordnance disposal).

B.3 Brief and clear statements

The learning objectives are used to describe what a learner is expected to know or be able to do at the completion of the training. The description of learning objectives should use action verbs to be centred on the learners. For each of the above categories, different action verbs can be used. These verbs should also frame the assessment. The learning objectives should be specific, measurable or observable, achievable by the learners (see Table 1).

¹ Inspired by Bloom's Taxonomy. Anderson, Lorin W.; Krathwohl, David R., eds. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.

² T&EP 09.30/01/2022 Conventional EOD Competency Standards, competence number 1.318.945.1 for EOD level 1.

³ T&EP 09.30/01/2022 Conventional EOD Competency Standards, competence number 6.329.178.3 for EOD level 3.

Table 1 – Brief and clear statements

Example of statements	Comment
Understand behavioural change	This is a correct but large objective. The learner may be expected to have a wide and thorough understanding of behavioural change. Here, the verb “understand” may be subject to interpretation. It may be needed to be more specific
Explain behavioural change	This objective is more specific about what the learner is expected to perform as a result of the learning. As a matter of assessment, the learner would be asked to explain behavioural change.
Explain behavioural change in the scope of EORE	This objective describes what the learner is expected to perform in the context of EORE: the level of understanding should be sufficient to be capable to explain behavioural change. As a matter of assessment, the learner would be asked to explain behavioural change in the scope of EORE. It means that the trainer will adjust the teaching to this specific objective.

Below are examples of action verbs applicable to the description of learning objectives.

Category	Action verb	Example of learning objective (based on T&EP 09.30/01/2022)
Remembering	Describe, list, name, define, recognize, memorize, draw, write, recite, recall	List the different ordnance categories and sub-categories.
Understanding	Explain, outline, distinguish, compare, describe, put into your own words, demonstrate	Put in your own words the application of quality control to clearance.
Applying	Use, do, apply, manipulate, perform, operate, locate, maintain, ask, report	Identify models, categories and subcategories of common ordnance found in the area of operations.
Analysing	Analyse, examine, compare, investigate, categorize, differentiate, deduce	Analyse operational data to assist in operations management, quality management and risk management of EOD tasks.
Evaluating	Select, assess, evaluate, argue, recommend, prioritize, predict	Select a render safe procedure.
Creating	Design, plan, create, compose	Design a demolition plan for multi-item demolition.

Annex C (informative)

Example of a session plan: Operate current metal detectors

Training: Formal basic demining training for future Deminers – 11–15 February 2008

- Learning objective: Operate and maintain current (A and B) metal detectors safely Training session: Operate metal detector A safely
- Date of session: 12 February 2008
- Time for session: 8.00–12.00
- Location: Classroom and mine training field at mine action training centre
- Number of trainees: 25

Time	Method for lesson	Content and activity of lesson	Learning objectives	Equipment/Support/references
8.00–9.00	Lecture, discussion and Q&A	Theoretical session on mechanics of the metal detectors.	1) Unpack and pack metal detectors for storage. 2) Identify parts of metal detectors. Include the serial numbers. Keep serial numbered parts together. Know the battery maintenance regime (rechargeable batteries) or replacement regime (disposable batteries). 3) Set up for operation. Assemble with batteries. Use the earpiece/headphones (when supplied). Demonstrate range of signals, when possible. 4) Set sensitivity, sound volume and test the metal detectors against the test piece. Prepare metal detector for operations following sequence in manufacturer's guide or detailed SOPs.	Equipment: 1) Metal detectors complete with batteries and test pieces (if required). One detector per two trainees 2) Lane marking equipment. Pegs, tape and hammer 3) Metallic objects for trainees to locate 4) Marking materials for marking readings 5) Tape measure
9.00-10.00	Practical demonstration in classroom	First take apart both detectors, demonstrate mechanical functioning as well as parts and components. Second, ask trainees to reassemble both detectors.		
10.00-10.30	Coffee break			

10.30-12.00	<p>Practical demonstration of metal detectors in mine training field</p> <p>Practice with metal detectors</p>	<p>Demonstrate how to operate the detector in practice mine clearance lane.</p> <p>Trainees clear lane with practice mines while using the metal detector A.</p>	<p>5) Know the frequency of testing required to ensure confidence in performance. Periodically recalibrate and test during the working day. Know the influence of high temperature, soil, and humidity variations and electromagnetic disturbances over the working period.</p> <p>6) Determining the rate of search-head advance; explain the area searched under the search-head and how the shape and depth of the area interrogated varies according to the target</p> <p>7) Operate in clearance lane maintaining:</p> <ul style="list-style-type: none"> a) Speed of search-head movement (especially when using a detector in "dynamic" mode. b) Height of search-head above ground c) Minimum distance between working metal detectors. (This distance will vary between detector models, and some models can switch frequency to avoid any interference.) d) Overlapping lane sides e) Moving forward in the lane (Rate of search-head advance) f) Detection positions, standing, squatting or kneeling. <p>8) Pinpoint and mark indications</p> <p>Remind trainees of safety requirements (training objective 1.1.2)</p>	<p>Support:</p> <p>Five instructors. See test instruction for staff assistance during testing</p> <p>References: Current metal detector SOPs.</p>
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	Title	Doc. number
Documents	<p>1) Metal detector operations and service manual and/or relevant section of SOPs. (metal detector manuals are guidelines and should be adapted and expanded as required.)</p> <p>2) Operations SOPs.</p>	<p>1) Metal detector manual</p> <p>2) SOP</p>
Audio-visual materials	Electronic presentation on mechanics to support theoretical session on mechanics of the metal detector and its principle of operation (static/dynamic/switch-able); search-head configuration (loop/double-D); and the area interrogated under the ground surface related to the targets being sought (dictates search-head advance).	<p>1) Electronic presentation</p> <p>2) Videos</p>
Other materials needed	Flipchart and crayons	<p>1) Charts</p> <p>2) Diagrams</p>
Remarks	Correct use of the metal detectors is to be monitored during the practical exercises conducted during the training	
Observations		

Annex D (informative)

Example of a training testing plan

Training: Formal basic demining training for future Deminers – 11–15 February 2008

Training objective: Operate and maintain current (A and B) metal detectors safely

- Date of test: 15 February 2008
- Time for session: 8.00–9.00
- Location: Mine training field at mine action training centre
- Number of trainees: 25

Training objective	Conditions for testing	Result statement	Remarks
Operate current (A and B) metal detectors safely	<ol style="list-style-type: none">1) In a practical test: conduct mine clearance drills – specify a realistic time per trainee per metal detector.2) Given:<ol style="list-style-type: none">a) Metal detector complete with batteries and test piece (if required).b) Demining tool kits complete.c) One metre wide clearance lane laid out 10 metres long containing five relevant metallic targets (accurate stimulants or FFE mines with simulated detonators).d) No more than the time specified per metal detector.3) Without access to reference material.4) Without assistance.	<ol style="list-style-type: none">1) Safely operate each one of the two current metal detectors by demonstrating the ability to: Criteria:<ol style="list-style-type: none">a) Assemble and prepare the metal detectors for operation.b) Carry out the one-person clearance drill to locate all five metallic objects in the lane.c) Carry out the signal excavation drill to uncover the objects.d) Mark the location if a mine or metal signal is located.e) Operate each of the detectors without breaching safety.	<ol style="list-style-type: none">1) Practical testing on the operation of current metal detectors is carried out at the same time as testing on the use of current mine clearance equipment, that is, training objective 1.6.1. One day is allocated for this test.2) Final practical test – Conduct mine clearance drills.

Annex E (informative)

Guidance on training needs analysis

E.1 General

The primary intention of conducting training for mine action staff is to acquire knowledge, skills and attitudes in order to satisfactorily fulfil the duties and responsibilities assigned to them. Beyond immediate needs, training also contributes to the development of career paths.

A training needs analysis consists of:

- identifying the gap between the existing and the desired competences necessary to meet a performance standard;
- suggesting a solution to meeting the performance standards.

The two possible outcomes are: a training need, and a non-training need (that is, revision of standards processes or procedures, revision of communications mechanisms, change in the use of equipment, supervision, etc).

This annex proposes minimum guidance on steps – from general to specific analysis – necessary to determine the potential needs for training. This guidance is intended to be adaptable to the capacity and resources of any organization. Thus, the proposed guidance can be further detailed and use different techniques that are not developed here (for example, job analysis, interviews, direct observation, desk research, questionnaires, etc.)

E.2 Reason for a training needs analysis

There are several possible reasons to conduct a training needs analysis. For example, a TNA can be undertaken to react to an issue or to anticipate threats and opportunities. Below are a few possible reasons and examples.

- The organization starts a new mine action programme, project, or operations.
- Major or critical nonconformities have been identified.
- An incident, accident or near miss has happened.
- A poor or unsatisfactory performance has been identified.
- A new equipment, system, standard or procedure is about to be or has been put in place.
- The context has changed.
- New staff has been recruited.
- Staff is considered for promotion.
- The organization wants to develop its staff's competences.
- A request from another organization for the development of training has been received.

EXAMPLE 1: An EORE operator was conducting EORE for conventional ammunition. It needs to include EORE for improvised explosive devices.

EXAMPLE 2: A new type of explosive ordnance unknown from deminers and EOD staff is encountered.

EXAMPLE 3: A new national mine action standard on victim assistance is entering into force.

EXAMPLE 4: The organization will use a new geographic information system.

EXAMPLE 5: An internal quality assurance inspection identified a tendency to complacency with occupational health and safety measures.

EXAMPLE 6: The organization needs to fill in a vacancy through internal promotion.

The TNA may be conducted at organizational, tasks or individual levels and should contain four mandatory steps,

- 1) identify what knowledge, skills and attitudes are required to complete an objectives, a process or a task;
- 2) assess existing competence levels;
- 3) determine the training gap;
- 4) suggest a proposed solution or action.

E.3 Organizational analysis

If the TNA and training are conducted by a third-party organization, the analysis should be done for the benefiting organization.

The main objective is to identify the difference between the expected and the actual performance of the organization.

The analysis of organizational needs is to:

- identify the level and nature of the organization (that is, a well-established national mine action centre, a newly deployed country project, an emerging local NGO, a commercial operator, etc.);
- identify the type of activities conducted by the considered organization (for example, land release, stockpile destruction, explosive ordnance risk education, victim assistance, support to capacity development in one or several of these areas);
- identify the requirements, such as the ones imposed by international or national mine action standards and standing operating procedures;
- identify the objectives of this organization and to which extend these objectives or achieved or likely to be achieved:
 - operational objectives (outputs and outcomes);
 - policy objectives, such as promotion of equal opportunities independently of age, gender, disability and diversity;
 - human resource planning, such as planning of training in anticipation of turnover;
 - diversification or expansion of its capacities.

The analysis of the organizational needs may also consider other factors such as:

- the in-house training capacity;
- the capacity to maintain competence and to retain staff.

E.4 Task analysis

The objective is to identify the key tasks and the related competences necessary to meet:

- the performance objective of the organization;
- the requirements imposed by international or national mine action standards and standing operating procedures;
- a change in procedure, technique or equipment.

The analysis should determine if the conduct of tasks is below, equal to or above performance indicators.

If the organization had already identified and documented key tasks and competences, for example, through job descriptions, the analysis should establish if these are relevant and sufficient to meet the performance objectives.

In particular, where new key tasks are identified, existing Test and Evaluation Protocols describing competences should be used as a reference to determine competences.

E.5 Individual level needs

The objective is to compare the competence level of individuals with the competences required to perform the identified tasks. For a given position, role or function are the required competences identified? Have gaps been identified?

If gaps have been identified, then at the individual level:

- What are the existing competences?
- What are the demographics (age, gender, disability and diversity)?
- What are the linguistic, literacy and numeracy competences?
- Are there barriers to learning or accessing training faced by potential trainees?

E.6 Response to the need

As a final step to this analysis, it is essential to determine if training is the best solution to meet performance objectives. Depending on the identified gaps, solutions other than formal training may be considered, such as informal training, mentoring, improvement of the quality of current training, recruitment, the revision of standards processes or procedures, revision of communications mechanisms, change in the use of equipment, supervision, etc.

If training is identified as necessary, then the objectives of the training, type of training and the training delivery methods should be identified.

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 are given a number. The date and general details of the amendment shown in the table below. The amendment is also shown on the cover page of the IMAS by the inclusion under the edition date of the phrase "*incorporating amendment #.*"

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

The most recently amended IMAS are posted on the IMAS website at www.mineactionstandards.org.

Number	Date	Amendment details