

**CEN Workshop Agreement for EOD Competency Standards for  
Humanitarian Mine Action — Part 3: Competency for EOD level 1**

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## 1 KNOWLEDGE BASE

### 1.1 Explosive Ordnance Recognition

- 1.1.1 Land service ammunition and fuses - generic
- 1.1.2 Land service ammunition and fuses - detailed
- 1.1.3 Mines- generic
- 1.1.5 Submunition - generic
- 1.1.7 Air Dropped Weapons - generic
- 1.1.9 Guided Weapons - generic
- 1.1.11 Booby traps and improvised munitions awareness

### 1.2 Explosives Theory and Safe Handling of Explosives Ordnance

- 1.2.1 The differences and applications of high and low explosives.
- 1.2.2 The principles and objectives of explosive trains.
- 1.2.3 The principles of explosive power.
- 1.2.4 Blast effects and their uses.
- 1.2.5 Methods of reducing blast effects.

### 1.3 Methods of Disposal

- 1.3.1 Electrical and Non-electrical means of initiation
- 1.3.2 Use of Pyrotechnic devices to destroy by burning
- 1.3.3 Use of sufficient high explosive quantities to destroy explosive ordnance on which they have received training.
- 1.3.4 High order techniques
- 1.3.5 Ring Main
- 1.3.6 Line Main

## **1.4 Safety Precautions**

- 1.4.1 Personal and personnel safety
- 1.4.2 Equipment safety
- 1.4.3 Explosives safety distances
- 1.4.4 Protective measures

## **1.5 Storage and Transportation of Explosives**

- 1.5.1 Health and safety and explosive legislation
- 1.5.2 Environmental issues
- 1.5.3 Explosive safety
- 1.5.4 Explosive storage areas
- 1.5.5 Explosive transportation
- 1.5.6 Explosive security

## **1.8 Medical requirements**

- 1.8.1 First aid
- 1.8.2 Organisational casualty evacuation procedures

## **2 EQUIPMENT**

### **2.1 Gather and prepare search or explosive ordnance disposal equipment**

- 2.1.1 Individuals must demonstrate that they obtain the necessary information on the equipment required;
- 2.1.2 Individuals must demonstrate that they carry out tests to ensure the serviceability of the equipment, reporting any defective equipment through the appropriate channels;
- 2.1.3 Individuals must demonstrate that they prepare the equipment correctly for use;
- 2.1.4 Individuals must demonstrate that they meet operational requirements and organisational procedures;
- 2.1.5 Individuals must explain the environment in which the task will take place;
- 2.1.6 Individuals must explain how to inspect, test and prepare equipment;
- 2.1.7 Individuals must explain acceptable tolerances of accuracy of the equipment;
- 2.1.8 Individuals must explain the characteristics and hazards of the equipment;
- 2.1.9 Individuals must explain operational requirements and organisational procedures.

## **2.2 Operate search or explosive ordnance disposal equipment**

- 2.2.1 Individuals must demonstrate that they operate the equipment correctly according to the manufacturer's instructions;
- 2.2.2 Individuals must demonstrate that they take readings and measurements accurately;
- 2.2.3 Individuals must demonstrate that they challenge any inaccuracies or inconsistencies of information;
- 2.2.4 Individuals must demonstrate that they make any necessary adjustment to the equipment;
- 2.2.5 Individuals must demonstrate that they report any problems to the appropriate authority;
- 2.2.6 Individuals must explain the capabilities, limitations and uses of resources;
- 2.2.7 Individuals must explain how to operate the equipment correctly;
- 2.2.8 Individuals must explain the importance of operating the equipment correctly and the consequences of not doing so;
- 2.2.9 Individuals must explain why a reading may be incorrect and how to deal with it.

## **2.3 Maintain search or explosive ordnance disposal equipment**

- 2.3.1 Individuals must demonstrate that they carry out regular routine maintenance checks in accordance with the servicing schedule;
- 2.3.2 Individuals must demonstrate that they report any defective equipment and organise its repair or replacement;
- 2.3.3 Individuals must demonstrate that they monitor consumables continuously and arrange for their replenishment;
- 2.3.4 Individuals must demonstrate that they maintain all equipment within the specified levels at all times;
- 2.3.5 Individuals must demonstrate that they comply with operational requirements and organisational procedures;
- 2.3.6 Individuals must explain the requirements of the servicing schedule;
- 2.3.7 Individuals must explain the equipment's normal functioning and acceptable limits of deviation;
- 2.3.8 Individuals must explain operational requirements and organisational procedures;
- 2.3.9 Individuals must explain how to report any defective equipment and the importance of following up.

## **3 MANAGEMENT**

### **3.1 Initial Threat Assessment**

- 3.1.1 Individuals must demonstrate that they carry out a simple threat assessment using current National procedures;
- 3.1.2 Individuals must explain their assessment process.

### **3.4 Gather and analyse information on the location of explosive ordnance**

- 3.4.1 Individuals must demonstrate that they assess and validate the information they receive;
- 3.4.2 Individuals must demonstrate that they liaise effectively with local agencies and other interested parties;
- 3.4.3 Individuals must demonstrate that they carry out further research to fill gaps in the information or to refine further your understanding of the problem;
- 3.4.4 Individuals must demonstrate that they carry out an initial threat assessment;
- 3.4.5 Individuals must demonstrate that they assess accurately whether the task is within your capabilities and refer it to the appropriate authority or agency if it is not;
- 3.4.6 Individuals must demonstrate that they use feedback in their analysis;
- 3.4.7 Individuals must demonstrate that they categorise and allocate a priority for the area to be searched according to agreed criteria;
- 3.4.8 Individuals must demonstrate that they brief other relevant agencies at the appropriate time.
- 3.4.9 Individuals must explain the history of the area and sources of information;
- 3.4.10 Individuals must explain characteristics of the environment;
- 3.4.11 Individuals must explain the amount and type of information needed;
- 3.4.12 Individuals must explain how to interpret technical information;
- 3.4.16 Individuals must explain what are your responsibilities, capabilities and limitations;
- 3.4.17 Individuals must explain to whom to refer the task and the correct procedures for doing so;
- 3.4.18 Individuals must explain the requirements of the appropriate regulations and procedures.

### **3.8 Assist in defining the specific area to be searched**

- 3.8.1 Individuals must demonstrate that they assess and validate any additional information they receive;
- 3.8.2 Individuals must demonstrate that they assess and are able to describe satisfactorily the local environment secondary hazards if there are any;
- 3.8.3 Individuals must demonstrate that they assist in drawing up diagrams of the specific area to be searched;
- 3.8.4 Individuals must demonstrate that they assist in identifying and describing the potential access routes to the area;
- 3.8.5 Individuals must demonstrate that they mark the defined area to be searched clearly.
- 3.8.6 Individuals must explain how to interpret information (e.g. charts, maps, drawings or photographic images);
- 3.8.7 Individuals must explain the requirements of the operational directive and organisational procedures;
- 3.8.8 Individuals must explain the capabilities and limitations of personnel and equipment.

### **3.11 Identify and establish working relationships**

3.11.16 Individuals must explain their personal level of authority.

### **3.14 Identify and establish working relationships**

3.14.4 Individuals must demonstrate that they review and make recommendations for refinements to current procedures;

3.14.11 Individuals must explain their personal level of authority.

### **3.15 Provide advice on explosive ordnance disposal-related matters**

3.15.1 Individuals must demonstrate that they establish accurately the nature of the advice needed;

3.15.2 Individuals must demonstrate that they present their advice clearly in a way that their audience can readily understand and check that they have understood;

3.15.3 Individuals must demonstrate that they carry out research when necessary to enable them to provide the information satisfactorily;

3.15.12 Individuals must explain their own level of authority in releasing advice;

3.15.13 Individuals must explain to whom to refer enquirers if the request is beyond their level of responsibility or expertise.

## **4 LOCATING AND SAFE ACCESS**

### **4.1 Contribute to the identification of the specific hazard posed by the environment in which explosive ordnance are located**

4.1.1 Individuals must demonstrate that they assist in carrying out an appropriate survey of the local environment and record the findings;

4.1.2 Individuals must demonstrate that they establish objectively the nature of any personal hazard;

4.1.3 Individuals must demonstrate that they take all possible action where appropriate to assist in managing the hazards.

4.1.4 Individuals must explain the possible effects of the hazard;

4.1.5 Individuals must explain what might help to minimise to an acceptable level or eliminate the hazard;

4.1.6 Individuals must explain the capabilities, limitations and availability of resources;

4.1.7 Individuals must explain operational requirements and organisational procedures.

### **4.2 Contribute to gaining safe access to explosive ordnance**

4.2.1 Individuals must demonstrate that they contribute to the selection and use appropriate resources and personal protective equipment suitable for the task;

4.2.2 Individuals must demonstrate that they contribute to the plan to gain access to the explosive ordnance by the optimum route for the circumstances;

4.2.3 Individuals must demonstrate that they contribute to the implementation of the plan as directed;

- 4.2.4 Individuals must demonstrate that they mark the access route when appropriate to do so;
- 4.2.5 Individuals must demonstrate that they pinpoint the position of the explosive ordnance to such proximity as to enable it to be identified;
- 4.2.6 Individuals must explain the capabilities and limitations of resources;
- 4.2.7 Individuals must explain what type of personal protective equipment may be appropriate;
- 4.2.8 Individuals must explain the range of likely hazards you may be expected to encounter.

### **4.3 Contribute to the location of explosive ordnance or confirm their absence**

- 4.3.1 Individuals must demonstrate that they use appropriate equipment effectively to the recognised standards and manufacturer's instructions;
- 4.3.2 Individuals must demonstrate that they mark the location of the explosive ordnance if required to do so;
- 4.3.3 Individuals must demonstrate that they plot the location of the explosive ordnance to the prescribed accuracy if required to do so;
- 4.3.4 Individuals must demonstrate that they use appropriate sources of information to confirm their findings;
- 4.3.5 Individuals must demonstrate that they confirm that the area has been searched within the stated criteria;
- 4.3.6 Individuals must explain how to use the equipment;
- 4.3.7 Individuals must explain what is the best use of personal protective equipment if required;
- 4.3.8 Individuals must explain the capabilities of the search method used;
- 4.3.9 Individuals must explain the interaction between suites of equipment;
- 4.3.10 Individuals must explain when and why it may be appropriate to mark and plot the location of explosive ordnance;
- 4.3.11 Individuals must explain sources of information and their various strengths and weaknesses;
- 4.3.12 Individuals must explain what follow-on action is appropriate;
- 4.3.13 Individuals must explain the stated criteria for searching the area and their implications.

## **5 TRANSPORTATION OF EXPLOSIVE ORDNANCE**

### **5.2 Move explosive ordnance within the designated area**

- 5.2.1 Individuals must demonstrate that they can assist in the movement of ordnance.

## 6 FINAL DISPOSAL

### 6.1 Confirm the threat posed by explosive ordnance

- 6.1.1 Individuals must demonstrate that they achieve a positive identification of the explosive ordnance types(s);
- 6.1.3 Individuals must demonstrate that they establish objectively the status by the optimum means when possible to do so;
- 6.1.5 Individuals must demonstrate that they re-evaluate the threats posed by the explosive ordnance in the light of the additional knowledge;
- 6.1.6 Individuals must demonstrate that they identify and report the threat posed by the item as appropriate when it is beyond the scope of their expertise and the availability of resources;
- 6.1.7 Individuals must demonstrate that they record and report their findings in accordance with operational requirements and organisational procedures;
- 6.1.8 Individuals must explain the importance of establishing the status (i.e. the condition and situation) of the explosive ordnance;
- 6.1.10 Individuals must explain how to apply their in-depth technical knowledge within their own area of expertise;
- 6.1.11 Individuals must explain appropriate sources of information on other explosive ordnance types;
- 6.1.12 Individuals must explain how to interpret the possible effect posed by the explosive ordnance on the local scenario;
- 6.1.15 Individuals must explain to whom to report threats posed by hazardous non-explosive ordnance.

### 6.2 Implement protective measures

- 6.2.1 Individuals must demonstrate that they can assist in implementing protective measures.

### 6.3 Assist in the disposal of explosive ordnance

- 6.3.1 Individuals must demonstrate that they contribute to the development of an effective plan for the disposal of the explosive ordnance;
- 6.3.2 Individuals must demonstrate that they confirm the availability of resources to implement the plan;
- 6.3.3 Individuals must demonstrate that they assist in actioning or completing the “render safe” or “final disposal” procedures as appropriate;
- 6.3.4 Individuals must demonstrate that they record and report the disposal as required.
- 6.3.5 Individuals must explain the generic functioning of the explosive ordnance and the relevant “render safe” procedures where appropriate;
- 6.3.6 Individuals must explain the capabilities, limitations and uses of the resources;
- 6.3.7 Individuals must explain the effect of a successful disposal and the consequences of an unsuccessful disposal.